A Cross-National Comparison of Perceptions of Aging and Older Adults

by

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Volume I

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This manuscript has been read and accepted for the
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Abstract

A Cross-National Comparison of Perceptions of Aging and Older Adults

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Adviser: Professor Irwin Epstein

This study provides an overview of perceptions of aging and older people from five different countries. It focuses on demographic variables that have been shown to have an influence on how people perceive aging and older people. It explores the perceptions of aging and older adults in a cross-national context. The study conducts a quantitative analysis of a database consisting of survey responses from five countries conducted by Harris Interactive, Inc. for the International Longevity Center – USA in 2000. The five countries compared are: the Dominican Republic, France, Japan, the United Kingdom, and the United States. There are four categories of attitudes: Perceptions of Aging and Older People; Perceptions of Life Satisfaction for Self; Perceptions of Quality of Life for Self; and Perception of Quality of Life for People Sixty-five and Older. Data from each of the five countries are analyzed separately and are then compared and analyzed.

This study is a secondary analysis of a database consisting of responses from 7,161 people between 18 and 99 years of age (Dominican Republic *N* = 1,001; France *N* = 1,004; Japan *N* = 1,118; United Kingdom *N* = 990; United States *N* = 3,048). The independent variables are: age, gender, marital status, and income levels. The dependent variables are the four attitude domains of: Perceptions of Aging and Older People; Perceptions of Life Satisfaction for Self; Perceptions of Quality of Life for Self; and Perception of Quality of Life for People Sixty-five and Older. Each country is separately analyzed using one way Analysis of Variance, Chi-Square, or Independent T-Tests. The results of the analysis are then compared with the other countries and discussed.

This study demonstrates that perceptions of aging and older adults differ when viewed through the cultural lenses of various countries.

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Dedication

Robert N. Butler, MD
1927-2010

Myrna I. Lewis, PhD
1938-2005

This work is dedicated to the memory of Bob and his wife Myrna,

both of whom had a profound influence on my life, my career, and this dissertation.

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Chapter 1: Introduction and Rationale for a Cross-National Comparison of Perceptions of Aging and Older Adults

A. Introduction

In this era of cultural differences both among and within countries, we as citizens of the world are all experiencing a common yet unprecedented demographic phenomenon, population aging. Starting in 2011, every day 7,000 people in the United States will turn 65 (Baby Boomer, 2010). And the United States is a relative late comer in comparison to other countries that have already experienced a rise in the proportion of older people. Japan has been the forerunner with 20% of its population 65 and over for the past ten years; the United States can expect to reach that percentage in 2030. European countries, such as the United Kingdom and France, are following close behind with currently 17% of their population 65 and older. Developing countries such as the Dominican Republic, which have historically been "younger" than developed countries, are experiencing an age boom that will have major consequences on their fiscal and social capabilities as, unlike developed countries, developing countries will become older before they become richer (Alvarez, 2000).

This demographic shift will affect every country and society, as well as every individual and family. The social work profession is best able to assist individuals, families, and societies in meeting the challenges and opportunities of an older population. Not only is it imperative that all social workers have basic knowledge of aging and older people within their own country, but much can be learned from other countries that have

already experienced population aging as well as from countries that are just now beginning to experience it. The first step in gaining knowledge from one's own country as well as from other countries is to have an understanding of the countries' perceptions of aging and older people. It is helpful to realize that each country's culture is different from another; there are similarities and there are differences. Knowing what we don't know is the beginning of understanding. This study explores the perceptions of aging and older people among five countries in order to lay the groundwork to begin to know what we don't know about population aging.

Population Aging and Globalization

The population of the world is growing older. Not only are there more people over sixty-five throughout the world than ever before in human history, but they are living longer. It is now commonplace for people to live well into their eighties. Prior to the second half of the 20th century only a rare few lived to celebrate their 80th birthday. Two unprecedented phenomena that began in the 20th century are having a major impact on societies around the world: population aging and globalization (Commission on the Status of Women, 1999). Globalization refers to the process by which economic, financial, technical, and cultural transactions among different countries and communities throughout the world become increasingly interconnected and embody common elements of experience, practice, and understanding (Pearson, 2000). These two phenomena are already having an impact on societies around the world as governments struggle to keep abreast of changing demographics and dynamics. The United Nations has twice recognized the need for governments to work together in order to establish international

plans of action on aging. The first World Assembly on Ageing took place in Vienna in 1982 and the second World Assembly on Ageing convened in Madrid in 2002. Both assemblies are evidence that world governments acknowledge that population aging affects economies and public policies and that collaborative efforts will assist societies in meeting the global and local needs of older citizens. While governments can learn from each other and share information on public policies, it is important to consider that culture plays a role in developing and implementing public policy. One aspect of a country's culture is how its citizens view aging within the context of its increasing older population. This paper investigates how countries differ in perceptions of aging and older people.

The Genesis of Population Aging

It is estimated that over two-thirds of the improvements in longevity in the entire world, from prehistoric times until the present, have taken place since 1900 (Riley and Riley, 1986). The world's population age 65 and older is growing by 800,000 people a month (Census Bureau and NIA, 2001). Today there are more than 575 million people worldwide over the age of 60 (Commission on the Status of Women, 1999). In 1982 (when the First World Assembly on Ageing was held), the ratio of elderly people 65 years old to the total world population was 5.9 percent. In 2000 the ratio was 6.9 percent and it is expected to increase to 14 percent in 2040. Yet, despite the large numbers of older people and the predictions of further increases both in their numbers and percentages, it would appear that with the exception of demographers and gerontologists, relatively few people are concerned with population aging and its impact on society.

However, population aging is more than a demographic phenomenon; it affects the social, political, economic, and cultural conditions of life for the entire society (Bengtson and Putney, 2000).

Like globalization, the impact of population aging on society will have subtle and overt consequences. The overt consequences will be the sheer numbers of older people throughout the world. At the beginning of the 20th century, older people were marginalized because they were so few in number, but now in the 21st century, the impact of the increasing population over 65 is beginning to be identified in many aspects of society, such as in healthcare, the workforce and the pension systems. Among the covert consequences of population aging will be the shift in perceptions on how the human lifespan is being perceived, either positively or negatively, and how such perceptions will influence public policy (Pifer, 1986).

Globalization

In addition to the demographic revolution of population aging, globalization will have a major impact on all of the world's societies. Globalization is setting major new challenges in terms of the interaction between individuals, communities and nation states (Estes, Biggs and Phillipson, 2003). All economies are influenced by the economies of other countries; the increasing numbers of older people will have an impact on the economy of any given country. We can no longer view population aging as only a microcosm within one society, but as a macro level phenomenon with far reaching implications (Estes, Biggs and Phillipson, 2003). We will all be affected by the aging of populations and by societies' response to it. Globalization has produced a stage in the

social history of aging in which there is a growing tension between nation state-based solutions about growing old and global institutions (Estes, Biggs and Phillipson, 2003). According to Nancy Gordon, the Census Bureau's associate director for demographic programs, "global aging is occurring at a rate never seen before and we will need to pay close attention to how countries respond to the challenges and opportunities of growing older" (Census Bureau and NIA, 2001).

Countries' Perceptions of Aging and Older People

The United Nations First and Second World Assemblies on Ageing (1982 and 2002 respectively) brought representatives of the member countries together to discuss the challenges and opportunities of global population aging. While many speeches and papers discussed the various impacts of population aging on individual countries, there were no papers or presentations discussing the differences or similarities of how people from different countries perceived aging and older people or what their attitudes were toward this demographic. There is a clear need to study how different societies are responding to an older population and this paper proposes to analyze the perceptions of aging and aging issues as seen by a representative sample of citizens within one nation and then compare those perceptions with those of other countries.

There are several reasons why a study of cross-national comparisons on perceptions of aging is important to social work practice in the United States. First, these perceptions will have an impact on social policies for older people. Second, the United States is becoming increasingly multicultural; by understanding different cultural attitudes towards aging, social workers who have an understanding of a culture's core

beliefs, norms and assumptions as they relate to older persons will be in a better position to address the needs of that culture's aging population. Third, cross-national comparisons can shed light on cultural attitudes that might not be revealed in single-nation studies.

Impact of Population Aging on Society and Social Policy

It is reasonable to assume that cultural conceptions of age and the aged will exert some influence on how a nation approaches the issue of population aging and how it handles this challenge (Kim, 2000). Cultural assumptions affect the role of the state and the kinds of policies put into place (Bengtson and Putney, 2000). For instance, a prevailing cultural stereotype of Eastern societies, such as Japan, is that historically old age was revered and that elderly persons were typically well taken care of by the family and the community (Kim et al, 2000). But as the numbers of older people increase and the relative numbers of young, middle-age and old shift, societal norms will change, and the family and the community will not be able to sustain what had once been smaller numbers of older relatives (Neugarten and Neugarten, 1986). However, traditional stereotypes may still persist regarding who cares for whom in these types of societies and the difference in expectations may cause tension among family members and the communities in which they live. Every society has cultural stereotypes of one form or another regarding certain social categories of people, and to the extent these stereotypes are manifested in prejudicial attitudes and discriminatory behavior, there are consequences that result in barriers to receiving assistance (Kim, 2000). Cultural stereotypes of old age will also have some bearing on the ideas and policies that each society develops in order to deal with its increasingly older population (Kim, 2000). The

cultural values that define state and family responsibilities may be the most consequential factor in determining a society's response to population aging (Bengtson and Putney, 2000). By studying the perceptions of aging and aging issues one may be able to determine how a society is responding to its aging population.

The position of elderly persons in the larger society is shaped by numerous factors, including the composition of the older population, and the structure of major social institutions, such as familial, economic, political, and religious (Uhlenberg, 1992). Members of each age cohort have historically made common decisions and have exerted a collective force when pressing for alterations in social roles and social values (Riley and Riley, 1986). As the numbers of older people increase and make up a significant percentage of the overall population, many of the prevailing attitudes remaining from earlier times will be totally out of kilter (Pifer, 1986). The perceptions of what it means to be an older person will necessarily change as the societal norms change. For instance, the perception in our nation that people past sixty-five are "over the hill" or ready to be "put out to pasture" might now be seen as an out-dated concept as more and more older people continue to work into their seventies. Negative stereotypical attitudes that may have prevailed prior to the second half of the 20th century when there were fewer older people in the population will be challenged in the 21st century as the ratio of older people to younger people increases.

Today, while it may be acknowledged that a certain number of older people do continue to remain productive in the labor force, we may see this as an anomaly or as unique to these particular individuals. By looking at society's attitudes as a whole towards population aging we will be able to gain a broader perspective. A critical

perspective of social policies towards older people and aging will challenge the dominant and mainstream thinking that tends to reduce aging to an individual issue while overlooking broad social, economic, and political factors and structural arrangements (Estes, Linkins, Binney, 2001).

The first survey that studied the "Myths and Realities of Aging" was conducted in 1982. Subsequently, Senator Claude Pepper sponsored a bill that theoretically put an end to age discrimination in the workplace. By studying a representative sample of the American population researchers found that older people wanted to continue working, but that corporate policies undermined these efforts. Since it may be possible to affect change in public policy by studying public opinion of the perceptions and expectations regarding certain public policies, it is important to investigate societies' attitudes towards older people (Kisor, McSweeney, and Jackson, 1999). It is imperative to study the future of public welfare with regard to older people in all industrial societies, because it is more important than ever to understand the relationship between old age and public policy (Walker, 1999).

The population in the United States is becoming increasingly multicultural

Historically, immigrants populated the United States. In the past two centuries large numbers emigrated from European countries, while today a large number of individuals emigrate from Asian, Caribbean, and Latin American countries. In the year 2000, nearly one in every three Americans was a member of a minority group (Torres-Gil and Moga, 2001) and that ratio will continue to shrink. As people migrate from their countries of origin they carry with them their traditions and cultures. Many immigrants

move into neighborhoods that have already been established by previous immigrants and which continue the traditions of their home country. In New York City, and many other cities across the country, these neighborhoods are identified by the countries from which the residents hail. For instance, in New York City Little Italy is shrinking and becoming engulfed by Chinatown. Also in New York City there are Little India and Korea-town which is growing in population with the Asian immigrants. And Washington Heights of Upper Manhattan is known for its Dominican bodegas and restaurants.

According to Torres-Gill and Moga, by the year 2050, the United States will see the convergence of two trends – the aging of its population and its growing diversification (Torres-Gil and Moga, 2001). Not only will there be a doubling of the retirement population, but 40% of that population will consist of older Hispanics (Torres-Gil and Moga, 2001). They also project dramatic increases in Asians and Pacific Islanders as well as African Americans and Native Americans (Torres-Gil and Moga, 2001).

New immigrants often bring their older parents with them. Both younger immigrants and their older relatives will bring to their new home the expectations and attitudes about aging that had been prevalent in their home countries. In today's increasingly multicultural world, it is essential that social workers understand and respect the different racial and ethnic groups and help them to maintain and take pride in their group identities. It is reasonable to also expect that social workers understand the multiculturalism of aging and to respect each group's attitudes towards aging and its older members (Torres-Gil and Moga, 2001). A comparative study focusing on the

similarities and differences in attitudes towards aging would provide useful insight for social workers working in an increasingly multicultural society.

Understanding cultural expectations regarding care for older people would also be beneficial in planning for care for a diverse racial and ethnic client load. For instance, people from Latin American countries for the most part do not consider putting their older relatives in nursing homes, yet this is acceptable in Korean culture as there are several nursing homes specifically for older Koreans in the New York City borough of Queens.

The role of social workers

A major contribution social workers can make in helping the United States prepare for an aging and multicultural population is to inform policymakers regarding the development of a longer-term perspective that can aid in assessing and preparing for these trends (Torres-Gil and Moga, 2001). Torres-Gill and Moga suggest that "the field of social work should not look at aging and diversity as separate issues for research and policy, but as two intertwined phenomena that can inform gerontological social work."

Cross-National Comparisons

Cross-cultural comparative analysis of attitudes towards aging and older people offers insights into countries' challenges and opportunities of aging populations. Why consider culture? Within cultures people learn about themselves and others, and learned messages may impact on general attitudes of one's own future old age (O'Hanlon & Coleman, 2001). It is only by comparing one country to another that we can obtain the

objective point of view of evaluating the cultural implications of population aging. Research within a single society often fails to reveal the influence of culture as a social force. Certain cultural aspects of the esteem and treatment accorded to the elderly will be made more obvious by studying the practices of a country and comparing it to those of other countries (Kim, 2000). By comparing the attitudes toward aging of citizens in several countries we can obtain insight into the underpinning (historic, political, philosophical, religious, etc.) of a society's social policies designed for their aging population. A comparative perspective can provide insight into whether or not the cultural beliefs of a country contribute to the sense of responsibility for elderly persons which in turn could play a role in the kinds of state policies that are enacted to address population aging (Bengtson and Putney, 2000).

Also, by conducting comparative social research we can create a fundamental basis for extending our general understanding of population aging and its effects on society (Myers, 2000). Only by gathering information about one society's attitudes toward aging and older people can we begin to see differences and similarities that may help us understand the nuances of cultural beliefs. Without conducting an analysis of the myths and realities of attitudes towards aging and older people we might erroneously assume that there are only differences among countries, when in fact there may also be similarities that can significantly broaden our understanding. Longevity and a healthy life are among the most commonly shared values of all human societies (Kim, Bengtson, Myers, Eun, 2000), and yet governments may vary in their approach to social policies for older people. However, by learning more about the differences or similarities in attitudes and in the approaches to social policies, researchers and government officials can develop

new ideas in devising policies that will accommodate this demographic. "Younger" countries (i.e., countries with a smaller percentage of older persons), such as the Dominican Republic, may learn from the experiences of "older" nations, such as the United Kingdom, France, and especially Japan, which has the highest percentage of older people of any country (20%). Even countries with divergent cultural backgrounds and historic experiences may learn from the experiences of other nations as a way to deal with social policies for an aging population (Kim, Bengtson, Myers, Eun, 2000). For example, in Eastern societies, such as Japan, where historically age was revered, and where for the most part elderly persons were taken care of by the family and the community, are now having to move away from exclusive reliance on the family and expand the role of the state as the source of support for the aged (Kim, Bengtson, Myers, Eun, 2000). Japan's policies are looking more like those of the West, including the United States, where governments have already started to assume more responsibilities and devise various public pension and health insurance programs to collectively provide for elderly persons (Bengtson and Putney, 2000). Another similar issue that Eastern and Western nations are beginning to face in the 21st century is the severe strain that population aging will put on public resources (Bengtson and Putney, 2000).

Japan currently has the highest percentage of older people, but in 2025 the United States will also have 25% of its population over the age of 65. The United States can learn from Japan; however, given that these two countries have starkly different cultural histories it is likely that the people in these countries will have differing views towards aging and older people. Given that there will be differences in cultural attitudes, what kinds of differences could there be and could there also be similarities?

B. Concepts

Culture

The most important aspect in analyzing cross-national studies is of course cultural differences and similarities. Culture, however, is a very amorphous concept, one that is difficult to define. Therefore, when conducting a cross-natural study one must first attempt to define culture. One author succinctly summarized the issue, stating that it has been a difficult term to use in both everyday and scientific discourses in the history of human societies because the term implies some constructive modification of the natural course of affairs and the cultivation of "nature" by human efforts (Valsiner, 2003). Therefore, it is necessary to address and attempt to define the issue of culture in this paper and come to an understanding of what culture is and what part it will play in the proposed study.

In reviewing the literature on culture (specifically in the aligned fields of aging, social work, sociology, and psychology) there seem to be as many definitions as there are disciplines that study it. The word "culture" can be used, diffusely, as the generalized values of a society, or more narrowly to define the activities of a small group (Price-Williams, 2002). One definition found in the psychology literature, attempted to encompass the broader scope of the meaning of culture on a personal level. Culture was defined as having three meanings: First, it designates some group of people who belong together by value of shared history and customs; second, it is a systemic organizer of psychological systems of individual persons that assists them in functioning in their personal life; and third, it defines how the person and the environment are interrelated

(Valsiner, 2003). In her writings on culture, Fry seems to concur with the second meaning above by stating that culture has come to be understood as a phenomenon people use in the practice of daily life (Fry, 1988). More explicitly, culture is a set of meanings attached to people, things, places words, actions and interactions created by social groups in response to shared common experiences (Kelty, Hoffman III, Ory, and Harden, 2000).

One of the fascinating aspects of culture is that it is reciprocal. Cultures are created by individuals in societies, and in turn the culture of a society influences individuals. Individuals grow up within a particular culture and are socialized in ways that internalize key aspects of that culture (Smith, 2002). Conversely, an accumulation of innumerable individual actions may cause cultures to change over time. Through its institutions, rituals, socialization practices, and patterning of interactions, culture provides the guidance and rewards that systematically shape individual social cognition, yet culture is certainly constructed, perpetuated, and modified by the actions and beliefs of individuals (Singelis, 2000).

Culture can also be split into material and subjective culture. Material culture consists of such elements as dress, food, houses, highways, tools, and machines; subjective culture consists of ideas about what has worked in the past and thus is worth transmitting to future generations (Triandis, 2002).

The essential core of culture consists of traditional ideas and especially their attached values; cultural systems may on the one hand be considered as products of action, on the other as conditioning elements of further action (Singelis, 2000). Culture is also both conditioning and conditioned, and both an independent and dependent variable

(Singelis, 2000). Culture is the programming of the collective mind that distinguishes the members of one group or category of people from others. When a researcher uncovers a collective pattern of behavior or beliefs it can probably be assumed that the underlying commonality may be attributed to their culture (Hofstede, 2002). This last definition of culture is most applicable to this study. An identified pattern of responses from a representative sample of individuals from a specific country can be attributed to the culture of that specific country.

C. Historical Development

The Development of Culture and Aging Studies

One of the many reasons to study aging through a cultural lens is that aging is experienced within a cultural context. Age, aging and the aged are a complicated part of the human experience because they are subject to cultural interpretations (Fry, 1999). It is culture and the meaningful, symbolic structuring of time, maturation, and the courses of life that inform us about age and shape the experience of aging (Fry, 1988). Age is an essential ingredient of all cultures, since age is an ascribed characteristic of all individuals (Fry, 1980). A cross-national comparative gerontological study promises to provide an understanding of aging that is divorced from the narrow boundary of a single case (Sokolovsky, 1990). Cross-national studies enable us to determine what is unique about how aging is experienced in a particular culture and what conditions are responsible for that situation (Fry, 1988).

Because culture comprises primarily a blend of shared values, meanings and interpretations of behaviors, we cannot understand it adequately simply by studying

samples of individuals; we must apply a conceptual framework that enables us to classify how samples differ (Smith, 2002). A population is the abstract full representation of all members of the given social unit (society, community, ethnic group, etc.); it is hoped that the data that characterizes the population also characterizes the culture (Valsiner, 2003). Therefore comparative cultural studies can greatly contribute to the knowledge of a nation's social values by examining the differences and similarities of an aggregate analysis of individually held beliefs.

The phenomenon of looking at aging by way of culture is a relatively new field of study. Only relatively recently have researchers addressed the question of how people in a culture view the elderly (Fry, 1988 and Sokolovsky 1990). Although historically anthropologists have been interested in "age", interest was not focused on the process of aging or of the aged themselves, but rather as a principle of social organization, which differentiated roles and status in the human cultures being studied (Fry, 1988). However, studying how the cultural context influences the way people grow old creates a nuanced reality of the meaning and perception of aging in a specific culture, what aging means, and how it is perceived (Sokolovsky, 1990). Today interest in aging is emerging among anthropologists because our nation is becoming more conscious of the inequalities that older persons experience and the problems we are facing as the population ages (Fry, 1988).

The Association of Anthropology and Aging is a new professional organization that investigates the culture, the experience, and the activities of older people, in contrast to this demographic as a principle of social organization (Bohannan, 1980). Anthropological methodology is contributing to our understanding of aging. Social

anthropologists and cultural anthropologists, with their view of the many societies of the world as so many experiments in human adjustment and survival in a variety of physical environments, are now including in their studies each society's adjustment to the issues that accompany growing old and the societal accommodations of its aged populations (Holmes, 1980). These pioneering anthropological gerontologists are finding that many generalizations and concepts developed by social gerontologists on the basis of life in one society (usually the United States) are valid only for that society and do not apply to humankind as a whole (Holmes, 1980). Although there is a paucity of distinctive anthropological literature on aging, the anthropological perspective using cross-cultural influences on aging has been studied (Bohannan, 1980). Landmark studies, however, can be counted on one hand: Simmons' 1945 classic, *The Role of the Aged in Primitive Society*, Cowgill and Holmes' *Aging and Modernization*, the essays in Keemier's *Aging and Leisure*; Clark and Anderson's *Culture and Aging* and a few ethnographies such as Benet's *Abkhasians: Long-Living People of the Caucasus* and Ross's *Old People: New Lives* (Bohannan, 1980).

In *The Role of the Aged in Primitive Society*, Simmons was able to bring together information from 71 different ethnographically known non-Western cultures and correlate over 100 sociocultural variables with 112 variables related to the status of treatment of the elderly (Fry, 1980). His goal was to discover cross-cultural regularities and to ascertain the determinants of favorable or unfavorable conditions for older members of primitive societies (Fry, 1980).

Perhaps the initial crystallization of a commitment to investigate aging and the aged from an anthropological perspective was Clark and Anderson's *Culture and Aging*

(Fry, 1980). Clark and Anderson stated that cultural theories of aging can be divided into three phases defined by the problems of concern: (1) old age, (2) aging, and (3) age. During that same year, Clark published "*The Anthropology of Aging, A New Area for Studies of Culture and Personality*" in the Gerontologist, which was later reprinted in Bernice Neugarten's Middle Age and Aging (Neugarten, 1968).

Among those to consider the effect of major social structural changes upon the elderly, the most comprehensive work is that of Cowgill and Holmes, *Aging and Modernization* (Fry, 1980). In 1976 Holmes conducted a study about age which paralleled Simmons' in focusing exclusively on old people and in looking at status, esteem, prestige, and treatment. In general, it was found that modernization and its associated features are inversely related to the status and treatment of the elderly (Fry, 1980). In other words, as society becomes more modernized the treatment of the elderly becomes poorer or more backward and the status of the older person is diminished. As a result of his research we now have more definitive answers on the comparative treatment and position of older adults in society (Fry, 1980).

In two separate studies, researchers found that in some societies older people are treated with respect. In 1970, Maxwell and Silverman investigated the status of the elderly in twenty-six widely distributed societies and concluded that the esteem of the elderly is related to the useful knowledge they control (Fry, 1980). And in a 1972 study in Mesoamerican peasant communities, Press and McKool determined that roles and status generate prestige (Fry, 1980).

Cross-cultural images and attitudes have been investigated by Arnoff, Leon, and Lorge (1964) and by Bengtson, Dowd, Smith and Inkeles (1975). As in Holmes' study (1976) negative images of aging tend to be associated with modernization (Fry, 1980).

Although not an anthropologic and aging study, *Culture's Consequences,* published in 1980, represented a new paradigm in social science research by analyzing survey-based values data at the national level and quantifying differences between national cultures (Hofstede, 2002). This paradigm inspired a number of other studies looking into dimensions of national cultures (Hofstede, 2002).

However, while these studies may have broken new ground in anthropology and aging by analyzing aging and older people within certain societies, they do not compare aging across cultures in modern societies. One of the first of such efforts was *Old People in Three Industrial Societies,* based on work carried out in the early 1960s in England, Denmark, and the United States (Shanas, Townsend, Wedderburn, Friis, Milhoj, and Stehouwer, 1968). Even in the early 1960s, each of these industrialized countries had substantial numbers of people over age sixty-five: Britain = 11.7%, Denmark = 10.6%, and the United States = 9.2%. The study population consisted of 2,500 persons in each country aged 65 and over and living in private households. The study sought to develop and test hypotheses about old people that could draw on descriptive correlations between variables such as age, incapacity, social interaction, social class, and income. The researchers argued that because other studies were concerned with special populations among the aged such as the sick or destitute that it was difficult to draw general conclusions of national or cross-national applicability from them. They felt that as a result the research suffered from a lack of basic knowledge about the aged in general and

certain popular assumptions or myths were perpetuated in the public mind. It was hypothesized that the conditions and conduct of older people would change with advancing age in all three countries because of the differing cultural and socio-structural situations in which old people lived. By focusing on the country level the researchers were able to characterize the broader environmental and social context within which individuals are socialized (Smith, 2002). Patterns of correlation at the country level, that would not have been evident at the individual level, were more clearly discerned (Hofstede, 2002). When similar data are collected from several countries and compared across domains, the striking differences that may be apparent can be attributed to the culture of the countries. Shanas and colleagues were concerned that comparative studies in the social sciences tried to establish general laws about social life that were independent of cultural settings. They stressed that investigators must be vigilant in their comparative methods in order to determine whether a phenomenon that occurs under a given set of circumstances occurs in all societies or whether it is relevant for that society only. They stated that "in the present investigation we tried to avoid some of the errors of other cross-national investigations of social phenomena by employing comparable samples and sampling methods, comparable methods of interviewing, comparable questionnaires, and similar methods of data analysis and tabulation" (Shanas, Townsend, Wedderburn, Friis, Milhoj, and Stehouwer, 1968).

By taking a global perspective through cross-national and cross-ethnic aging research, (which are conceptually linked), our knowledge about aging will be broader and less ethnocentric (Jackson, 2002). Jackson proposes a new conceptual framework that is sensitive to national, ethnic and cultural boundaries. Some of the studies reviewed for

this literature review seem to use culture and ethnicity interchangeably. Other studies treat the two as separate. Researchers should be aware that ethnicity and culture are not necessarily equivalent (Kelty et al., 2000).

The acceptance of culture as an essential ingredient in understanding social behavior can benefit social work studies, especially in understanding the behavior, customs, and expectations of people from other countries. As more scholars understand its importance, it is anticipated that they will incorporate culture into their theories and studies, leading to even greater interest in the area (Singelis, 2000).

Certainly one of the best, if not the only, method for studying attitudes toward aging is by conducting a cross-national survey. Age is a cultural domain and perceived differences between older and younger people are not just biological (Fry, 1988). Differences are also socially and culturally constructed; they are reinforced through a culturally contoured system of values (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). Culturally specific factors influence views of older people as well as one's own individual feelings about his or her aging (Singelis, 2000).

When doing cross-national or cross-cultural comparisons of attitudes toward aging, two basic issues can be explored: (1) regularities and patterns can be isolated, and (2) major cultural changes on how the elderly are seen can be examined (Fry, 1988).

Perceptions of Age and Aging Throughout History

The contemporary experience of aging is profoundly different from earlier historical periods, exemplified by changes in the social and economic roles of older persons, their interactions with families and the larger social system where they live

(Hooyman and Kiyak, 2002). Throughout time the authority and power of older adults in society have also shifted. The experiences of older adults today differ cross-culturally as well as historically, with significant cultural variations affecting their social position. For example, perhaps the greatest differences in the status of older adults are between traditional societies and those of the modern Western world, with its rapidly changing values and norms (Hooyman and Kiyak, 2002).

A brief look at how the status of older people changed throughout history is informative, providing clues about how cultures and attitudes shifted and were dependent on the social and political conditions of that time. This observation that variations in social conditions affect the status and treatment of older people underscores the observation that this process is malleable and hence responsive to some degree of human intervention and control (Kelty et al., 2000).

In ancient societies when older people could no longer contribute to the common welfare and look after themselves they were viewed as useless or "already dead" and were sometimes treated brutally (Hooyman and Kiyak, 2002). This is also true in some modern, but primitive societies, where older people are expected to leave the security of their villages and not return. In Greek and Roman cultures old age was defined as age 65 and over. In that culture age implied power in the ancient cities, which were ruled by councils of elders who derived their authority from their advanced years (Hooyman and Kiyak, 2002). But this prestige was only granted to the elite, not to the elderly peasants over whom they ruled (Hooyman and Kiyak, 2002). During the colonial era in the United States, old people were treated with deference and respect, in part because living to old age was so rare (Hooyman and Kiyak, 2002). This attitude of reverence persisted

until about 1770 when attitudes toward the older population began to change and the relative status of youth was elevated (Hooyman and Kiyak 2002). For over two hundred years, there has been a "youth culture" in the United States. With the aging of the population, it is conceivable that older people will be revered once again.

D. America Today

Multicultural America

As stated earlier, not only will America's population become increasingly older, it will also become more diverse. In the 21st century, the face of America will slowly be represented by aged persons of color (Hinrichsen, 2006). In 2000, 84% of people over sixty-five were white, 8% were Black, 6% were Hispanic, 2% were Asian and 0.4% were American Indian (Hinrichsen, 2006). The annual growth rate for older minority persons is much higher than that of white persons. Projected growth rates between 1997 and 2050 for different older racial groups in the United States are as follows: white = 106%, Black = 202%, American Indian = 659%, Asian = 570%, and Hispanic = 659% (Kamilar et al., 2000). By 2030, this growth rate will have altered the ethnic mix so that 25% of the older population will be comprised of minority groups (United States Bureau of the Census, 1992). It is predicted that in the year 2050, 64% of the aged will be white, 12% will be Black, 16% will be Hispanic, 7% will be Asian and 0.6% will be American Indian (Hinrichsen, 2006). This increase in older minority groups is occurring not only because people of different ethnicities are growing older and living longer, but also because younger immigrants are bringing their older relatives into the United States so that they can better care for them. In the future, increasing numbers of foreign-born older adults

will likely be from Latin America and Asia, and compared with native-born Americans, they are likely to be less educated, more likely to live in poverty, and less likely to obtain health care coverage (Hinrichsen, 2006).

As the racial and ethnic mix of the United States' population changes, sensitivity has increased for consideration of and respect for cultural and ethnic traditions and differences (Kelty, Hoffman III, Ory, and Harden, 2000). The broadest-based examination of the relation of ethnicity and aging centers on the premise that varying ethnic lifestyles will alter the way old age is encountered, perceived, and acted out (Sokolovsky, 1990b). Some perspicacious gerontologists have raised concerns that not enough attention has been devoted to racial, ethnic, and other dimensions of social diversity in the field of gerontology and that much work remains to be done (Hinrichsen 2006). La Veist, who has been studying aging and ethnicity since 1991, has noted that race is most commonly employed as a categorical variable, serving as a marker of homogeneous cultural and social characteristics. He posits that race actually represents two underlying heterogeneous factors: social and individual level behaviors that can be linked to cultural norms (La Veist, 2002). Race, ethnicity and culture are fluid concepts whose meanings vary and should be understood in a particular social context. A number of researchers have pointed out the need to understand the diversity among "white" elderly. Often bunched together as a homogeneous body, those of European background retain substantial differences that reflect on how they deal with the aging process (Sokolovsky, 1990).

Impact of Multiculturalism on Interventions

Race and ethnicity already figure in clinical practice with older adults in ways that may not be immediately apparent (Hinrichsen, 2006). Until recently interventions were not designed specifically for different ethnic groups; rather they were based on research using white middle-class participants (Kelty et al., 2000). Without fully understanding the cultural norms and their social context, social work interventions with older people of minority status may at best be inappropriate, and at worst marginalizing. Individuals of minority ethnic groups may choose not to participate in the intervention if they perceive it to be culturally irrelevant (Kelty et al., 2000). Future studies conducted by gero-anthropologists will contribute to social works understanding of the complex web of relationship between poverty, minority group status, ethnicity, and the varying patterns of aging within groups characterized by all of these factors (Fry, 1988).

While geropsychologists have underscored the importance of understanding how age differences (or similarities) might affect client perceptions and behaviors of therapists and vice versa, relatively little attention has been paid to the ethnic and/or racial differences between therapist and older client (Hinrichsen, 2006). Although geropsychologists are encouraged to recognize that they may hold attitudes and beliefs that can detrimentally influence their perception of and interactions with individuals who are ethnically and racially different from themselves, the field has been slow to develop research paradigms and models for the delivery of psychological services to racial and ethnic minorities (Hinrichsen, 2006). This may also be true for social workers. As the co-chair of the Gerontological sub-committee of the New York City Chapter of the National Association of Social Workers, I have noted in meetings that almost all of the

social work members are Caucasian, yet we are constantly discussing the need for cultural competency in dealing with the growing minority elderly population. This is troubling on two levels: one, there are no perfect paradigms for teaching cultural competency without fully understanding the world view of the country of origin of the older person and her/his family; and two, equally troubling is that the field of geriatric social work is not attracting social workers of varying ethnic origins.

Chapter 2: Literature Review of Cross-Cultural and Cross-National Studies

A literature review was conducted searching for cross-cultural or cross-national studies that focused on perceptions of aging and older adults. Other terms used for the search included: stereotypes, attitudes, concepts, definitions, images and myths of aging. The search was conducted using library databases containing references for social work, social sciences, sociology, gerontology, psychology, and anthropology. The search included journals in related subjects such as the International Journal of Aging and Human Development, the Journals of Gerontology, and the Journal of Social Issues. It also utilized the vast resources of the Internet, which produced interesting online lessons in Psychology and Culture. One of the most valuable methods for identifying additional studies was researching the references of appropriate articles. Additionally, searches were conducted in venues of unpublished works such as dissertations and papers given at professional international and national conferences.

This literature search resulted in few cross-cultural or cross-national studies that focused on aging and perceptions of aging. Therefore, in order to broaden my perspective and to provide information on how cross-cultural and cross-national studies are conducted I reviewed studies that were related to my topic of interest. These studies will be mentioned when discussing certain variables into which they offer insight. Although there were few cross-cultural or cross-national studies on aging, there are essays and articles on aging and culture that informed this study.

Fry and Sokolovsky, who have been quoted extensively already, are two of the few authors who have examined culture and aging. Of course, one of the dilemmas of being American and living in the United States is that there seems to be a tendency to ignore other countries or cultures. Most American researchers focus their projects on Americans. Even in other Western cultures, there are not many cross-national comparisons. Dasen and Mishra, in their article "Cross-cultural views on human development in the third millennium" (Dasen and Mishra, 2000), complain that the study of human development is still heavily dominated by a Western, or Eurocentric, perspective and that the "mainstream" developmentalists have shown little sign of interest in studying other cultures. The other conundrum is that it is difficult to obtain studies that are conducted in other countries. The studies that were found involve an American researcher conducting a comparative study of Americans with citizens of other countries. Also, the literature search is limited to articles written in English.

There are some studies that have taken age and culture into account, but the focus is not on perceptions or attitudes. Rodwin and Gusmano are conducting a "World Cities Project" (WCP) using New York, London, Paris, and Tokyo as laboratories for a comparative analysis to study urban health (Rodwin and Gusmano, 2002). They are comparing world cities in wealthier nations because of the global trends in urbanization, emerging health risks and population aging. In order to conduct their study, the authors are using aggregate data at the level of the nation-state because that is the level at which the key policy decisions are made. They argue that this is appropriate when thinking about welfare, social security, and national health insurance because these programs affect whole countries.

In another study conducted by Cooke, the main focus is also on social policies. This study involved a multidisciplinary, cross-national comparison of Information Technology employment and workforce aging in Canada, the United States, the European Union and Australia. Cooke found that although the European countries studied are somewhat older than the populations in Canada, the United States and Australia, they all share the fear that an aging population threatens continued economic growth (Cooke, 2003). The perception of this threat was influenced by two key issues: the belief that increased public spending will be required to support an older population and the belief that a shrinking labor force will lead to increased labor costs and reductions in industrial productivity. Cooke's study, while not completely relevant to the study at hand, does indicate that public perceptions about aging and economic dependency in different countries can be similar because of similar demographic trends and that those perceptions can impact public policy.

Culture as a Variable

This study explores culture as the collective beliefs or attitudes of people from different countries. It is important to distinguish cross-national studies from cross-cultural studies. Cross-national studies take as the unit of analysis the nation-state and compares countries by measuring, through survey questionnaires, a large array of primarily demographic, interactional and health related variables (Sokolovsky, 1990b). In contrast, cross-cultural studies of the aged tend to focus on small-scale societies or individual communities within industrial societies (Sokolovsky, 1990). Although there is a difference between cross-cultural studies and cross-national studies, some of the studies

in this review do not differentiate between the two terms. Therefore, the term that is used in any particular study will be used here in referencing it.

Five tangential studies were found that spoke to the importance of studying culture when attempting to understand differences among different cultures and ethnicities. In these studies culture was found to play a significant role in how people view and interpret health and mental health issues (Lawrence et al, 2006 and Furnham and Akande, 1999), how people assess who they are within a society (Ng, Loong, Liu, and Weatherall, 2000), how people process information (Park, Nisbett, and Hedden, 1999) and how nursing home residents perceive their care (Duffy, Duffy and Kilbourne, 1997).

In the cross-cultural study on depression conducted by Lawrence and colleagues in the United Kingdom, the perspectives of Black Caribbean, South Asian, and White British older adults were analyzed (Lawrence, Murray, Banerjee, Turner, Sangha, Byng, Bhugra, Huxley, Tylee and Macdonald, 2006). Using a multicultural approach they studied a broad range of socioeconomic and ethnic diversity among the populations in five South London Boroughs. The researchers found that ethnic differences were evident in the conceptualization and attributions of depression. They stated that the results of their study indicated that screening for, and treatment of, depression with citizens of different ethnic backgrounds have more positive outcomes if they are culturally appropriate. The researchers recommended that health and social care professionals need to be sensitive to the language of depression used by different ethnic groups.

The study relating to beliefs about health and illness in three countries showed that cultural factors influence the perception, labeling and explanation of illness.

Furnham and Akande surveyed five hundred participants from three countries: Britain (*N* = 195, mean age = 26.91 years), South Africa (*N* = 152, mean age = 24.81 years) and Uganda (*N* = 153, mean age = 25.14 years) in order to examine the idea that people from developing countries had more social, fatalistic and supernatural explanations for health and illness than people from developed countries (Furnham and Akande, 1999). Analysis of covariance showed significant differences with each of the three groups. There were significant differences in sex, marital status, present level of stress and history of serious illness. Two items are notable in this study. First, that the respondents were young and many had already experienced serious illness and, second, that it discussed the difficulties of conducting cross-national studies. The authors stated that a major disadvantage of the study was the way in which some non-western issues may have been described in the attitude statements, and that some issues/topics were left out. Surely, this could be a detriment to any cross-national/cross-cultural study.

The results of Ng's study of family support in eight nations or regions showed that there was a systematic East-West difference between Hong Kong, Japan, the Philippines, and South Korea (the East) on the one hand, and Australia, Canada, New Zealand, and the United States (the West) on the other (Ng, Loong, Liu, and Weatherall, 2000). The study determined that cultural-political, socialization, and identification processes were involved. Ng and colleagues recommended that "as aging is rapidly becoming an issue of global concern, advances in research can best come through multidisciplinary research across nations and across subcultures within nations."

Another study on the effects of culture on the perceived exchange of social support resources compared responses of young, midlife, and older adults in the United

States with those in Japan (VonDras, Pouliot, Malcore & Iwahashi, 2008). The results of the survey administered to participants in both countries suggest that culture and age influence the designation of important life goals and that relationships between the perceived exchange of social support and perceptions of control and success in achieving life goals indicated different intracultural influences.

The Park study focused on aging and culture. Their hypothesis was that there are cultural differences in information processing styles between East Asians and Westerners (Park, Nisbett, and Hedden, 1999). They argued that these styles are so pervasive that they affect cognitive function and have provided a theoretical framework for understanding the impact of aging on cognitive function cross-culturally. Park and colleagues state that "understanding cultural differences has tremendous implications for the development of successful international efforts and policies, as well as for accurate interpretations of information and events across cultures." This study proves that there are cultural differences between East Asians and Westerners that affect the way older people in these cultures process information, therefore there are different cultural expectations about cognitive ability that affects what people in these cultures expect when they grow old and what younger people expect of them, too.

The cross-national study of 306 nursing home residents in the United States (159 women and 47 men) and the United Kingdom (73 women and 27 men) examined the similarities and differences in their perceptions of the quality of service they received in the homes (Duffy, Duffy and Kilbourne, 1997). The service quality was defined as the differences between expectations about the service, and the actual perceptions of the services delivered. T-tests were used to determine if there were differences between the

United States and the United Kingdom groups in terms of demographic data as well as resident satisfaction with facility variable. A series of one-way analyses of variance were used to study differences between the groups in the expectations, perceptions, and evaluation of service quality dimensions. The analysis found that the two groups differed in their expectations for quality and their perceptions of service quality, with the United States residents rating the quality lower in all respects. The results suggest that either the United States residents had lower evaluations of the service being provided (perceptions), or they had higher expectations of what the level of service should be in a nursing home.

Findings from a cross-national study comparing perceptions of aging between South Koreans and Americans indicated that culture plays a significant role in anxiety about aging (Yun & Lachman, 2006). The Anxiety about Aging scale was administered to 153 Americans and 167 South Koreans. This study examined the differences in culture, age, and gender. Participants were both male and female and were in three age groups of young, middle-aged, and old. As predicted, Koreans portrayed higher levels of overall anxiety about aging. The culture by age group interaction for fear revealed that younger Koreans had a higher fear of older people while older Americans feared older people more than did younger Americans. Contrary to predictions, a culture by gender interaction revealed that within the United States, women showed significantly more signs of anxiety about aging than did men (Yun & Lachman, 2006).

Demographic Variables (age, gender, income level)

Culture isn't the only variable that affects how one views aging; studies have shown that demographic variables such as age, gender, level of education and income

also affect one's perception and attitudes toward age and aging and whether or not one is considered to be aging successfully. The review of the research suggests that cultural norms and values regarding aging and old age influence perceptions of aging and attitudes toward older adults, and that gender and age interact to trigger differences in attitudes associated with aging (McConatha, Schnell, Volkwein, Riley, and Leach, 2003).

In their replication of the MacArthur Model study on successful aging, which was first conducted in the United States (Rowe and Kahn, 1998), Andrews and colleagues also found that in their Australian study, basic demographic groupings such as age, gender, educational level and income did affect whether or not one was considered to be aging successfully (Andrews, Clark, and Luszcz, 2002). Univariate analysis showed that successful aging was associated with having a lower age, being male, and having more education and assets. Also, it was found that those aging most successfully not only lived longer, but also experienced a better quality of life.

This Australian study, as well as subsequent studies identified in the literature review, shows that independent demographic variables, such as age, gender and income level, affect attitudes towards aging and older people. Below I will describe the studies that inform particular aspects of my study and how age, gender and income level are expected to impact perceptions of aging and older adults in the five countries being studied.

The search for cross-national or cross-cultural studies that focused on aging, culture, and other demographic variables such as level of education, income, or socioeconomic status did not uncover a significant number of studies, therefore; I focused the search on other aspects of culture and aging which my study investigates: perceptions,

attitudes, stereotypes, quality of life, and life satisfaction. Below I will discuss the findings from cross-national or cross-cultural studies, as well as studies that are neither, but that are informative in analyzing these variables.

Age

Age is the only social category in which an individual progresses unavoidably from one category (i.e., young) to another (i.e., old) over time (Hummert, Garstka, Shaner, and Strahm, 1994).

Culture plays a role in perception of old age. In McConatha and colleagues, comparison of Germans and Americans, Germans perceived old age as starting later than did Americans (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). In response to the question asking participants at what age they would consider themselves to be old, mean scores for German participants were higher than the United States participants' scores The average age at which the German participants stated that they would consider themselves old was 64 for men and 60 for women, whereas in the United States the age was 50 for men and 48 for women. Women also tended to be considered "old" at younger ages than men. This study suggests that age and views towards aging may be influenced by one's culture.

In another cross-national comparison, Yun and Lachman found that age was significant when measuring perceptions of older people (Yun & Lachman, 2006). In their study of 153 Americans and 167 South Koreans divided into three age groups of young (18-39), middle-aged (40-59), and older (60-91), they found that younger Korean

adults had a greater fear of older people, while older Americans had a greater fear of old people.

While not focusing on cross-national comparisons, but including age and ethnicity in their study, Haughty and colleagues examined students' knowledge and attitudes about older adults across school grades and states (Haughty, Walls, Laney, Leavell and Stuzen, 1999). They surveyed 954 elementary, middle, and high school students (grades 3, 6, 9, and 12) in West Virginia and Texas. The investigators questioned whether or not students at different grade levels possess different types of knowledge and attitudes about older adults. The findings indicated that age does indeed play a role in attitudes towards older adults, with students at higher educational levels tending to have less negative bias and more positive attitudes about aging. Elementary school children showed a more negative bias toward older adults. Their findings also suggested that gender and ethnicity affect aging-related bias. Female adolescents showed a more positive bias compared to male adolescents and white adolescents With regard to ethnicity, Hispanic adolescents tended to show more negative bias than white or black adolescent students.

In examining the impact of generational differences and the aging process on perceptions of adults, Slotterback found that young adults tended to view other generations differently from the way they viewed their own (Slotterback, 1996). Two hundred seventy undergraduate students (age range 17 to 25 years old, 50% male, 50% female, and 82.6% white) participated in a study that found that attitudes toward older generations differed from attitudes towards younger generations and that the negative aspects they perceive of the aged or the aging process will not happen to their own generation or will occur to a lesser extent. However, overall, attitudes toward the older

generation or age period were more positive than negative. This study focused more on attitudes in the form of perceptions of personality and assessed the impact of the target generation and target age period on attitudes. The researchers concluded that some of the discrepancies regarding attitudes toward older people may be a result of the respondents' holding varying images in mind when answering the questions.

Jackson and Sullivan examined the effects of information that contradicted age stereotypes on evaluations of old and young targets of either gender by old and young Americans (Jackson and Sullivan, 2001). They surveyed 102 older people (42 men and 60 women, average age = 70) and 81 young adults (28 men and 53 women, average age = 21) to determine whether or not older people were typically viewed as being physically ill, mentally slow, inactive, unproductive, bothersome, and self-deprecating. The results indicated that older respondents were more favorable in their evaluations overall and were uninfluenced by the targets' age or gender. The results also suggested that young respondents used age rather than gender as the primary basis for evaluating the targets. The researchers cautioned about the generalizability of the findings because their hypotheses were based on the negative stereotypes of the aged in contemporary American society. They suggest that quite different results may be obtained in cultures where the aged are held in high regard.

In a study by Kite, Deaux and Miele the findings showed that age does outweigh gender in the stereotypes of young and old when they examined stereotypes of age and gender with 35 year old and 65 year old men and women as target persons (Kite, Deaux and Miele (1991). The study involved college students (N = 98, 45 men, 52 women and 1 of unspecified sex, mean age = 22 years) and older community residents (N = 100, 31

men, 62 women, and 7 of unspecified sex, mean age = 70 years). The results indicated that the most striking correlations were between same-age groups, rather than between same-sex groups. Target age had the greater impact, while target sex played a relatively minor role in the stereotyping of older people. In their discussion the authors state that "despite decades of research on beliefs about the elderly, and an even larger body of research on gender stereotyping, almost no work has examined the interrelationship between the two" (Kite, Deaux and Miele, 1991).

Celejewski and Dion also believed that age as a variable was more powerful than gender in predicting stereotypical perceptions of older people. They conducted a study on self-perception and perception of age groups by young and elderly adults (Celejewski and Dion, 1998). Two hypotheses were tested: that compared to young adults, elderly adults would evaluate their own age group more positively, and that the respondent's self-evaluations would be more positive than the evaluations made of "others in general" (Celejewski and Dion, 1998). There were two separate samples of respondents. The young adult sample consisted of 101 university undergraduates, 57 females and 44 males with the mean age of 19.68. The second sample consisted of 68 elderly adults, 38 female and 20 males, with their mean age of 72.69 years. Proving both hypotheses, the researchers found that the young adults rated elderly persons less positively than did the elderly respondents and elderly respondents rated themselves more positively than other older people.

Monteparte and Lachman in their study "You're only as old as you feel" found that actual age, subjective age, and their interaction were significant predictors of fears of aging for both men and women (Monteparte and Lachman, 1989). The respondents in

the Monteparte and Lachman study (N = 188 men and women with an age range from 14 to 83), were asked questions about how old they felt, looked, acted, and desired to be, as well as their personal fears of aging and present life satisfaction. Their study revealed that discrepancies between subjective and actual age of young respondents were associated with personal fears of aging. (The results of this study actually complement the findings in Celejewski and Dion's study mentioned above, that younger respondents rated older adults less positively. It could be an indication that not only do young respondents view older people negatively, but that they may actually fear being old.) Regarding possible gender differences in perception of aging, it was found that with increasing chronological age, women respondents experienced greater discrepancies between their actual and subjective age than did the male respondents. This difference between the genders was significant in predicting life satisfaction. The study found that younger men and younger women with the oldest age identities reported the greatest life satisfaction. The reverse was found for older women; however, those who reported younger age identities had the lowest levels of satisfaction. Counter to their prediction, no relationship was found between subjective age and life satisfaction with older men.

Kite and Blair conducted a meta-analysis of the literature to examine the question of whether the elderly are viewed more negatively than younger persons (Kite and Blair, 1988). They stated that certain independent variables were not included because so few studies included them, that of the sex and age of the subject (thereby corroborating my discovery that few studies exist). The variables they did include were: evaluative dimension, type of target person, type of design, work relatedness, study quality, author age, year of publication and age of target. Their meta-analysis indicated that older people

are viewed more negatively than younger people. The authors stated that age seemed to be less important however in determining attitudes toward the elderly than other types of information and felt that the perception of the elderly can be influenced by factors such as type of design used, the type of evaluative ratings made or experimental setting (in the lab versus in the field for instance). They did suggest that more research was needed to determine which factors influenced beliefs and attitudes toward older people because of the paucity of these types of studies.

Gender

In addition to age being a ubiquitous variable in the study of culture and aging, gender also plays a major role, for as a nation ages a "gender gap" develops (Rossi, 1985). The fact that women now live longer than men means that the larger the proportion of elderly in a population, the greater will be the tendency to a female majority in that population (Rossi, 1985).

A limitation of most studies that are conducted on stereotypes of the elderly is their neglect of the effects of gender, and, conversely, studies on gender stereotypes have often not considered the effect of age (Canetto, Kaminski and Felicio, 1995). Studies that did focus on stereotypes of older adults included only older males, not older females (Canetto, Kaminski and Felicio, 1995). Canetto, Kaminski and Felicio conducted a study to examine the beliefs of young adult and older adult respondents about aging and gender stereotypes. The participants included 232 young adults (average age = 20 years, 169 women and 63 men) and 233 older adults (average age = 72 years, 147 women and 81 men and 5 who did not identify themselves as either female or male). The findings

supported the hypotheses that the perceptions of typical aging varied, depending on the age of the target, the gender of the target, and the age of the respondent. It was found that the overall effect of the target gender was significant; respondents judged typical older people differently based on gender. However, the findings indicated that there was no significant effect for respondent gender and perceptions of aging. The authors concluded that stereotypes of the elderly are very complex and that this complexity is even greater when one examines stereotypes of gender and aging.

A study conducted by Yun and Lachman comparing the perceptions of aging between Americans and Koreans found that gender was significant in determining anxiety about aging (Yun & Lachman, 2006). In their study of 153 Americans (70 males and 83 females representing all age groups) and 167 South Koreans (71 males and 91 females in all age groups) American females showed more anxiety about aging than their male counterparts, while no gender differences were found for Koreans.

In the *Handbook of Gender, Culture, and Health*, Kamilar, Segal and Qualls write that gender and culture dramatically influence the ways in which families relate to, and care for, aging members (Kamilar, Segal and Qualls, 200). While culture is a powerful factor in familial relationships and expectations, gender roles are deeply embedded within cultural rules, profoundly influencing the ways in which families are structured and function. Antonucci and colleagues examined gender differences in social relations during later life in four nations (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most research on gender differences in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are

related to norms in one country versus the extent the differences would be found from a comparison among cultures and countries.

Antonucci and colleagues analyzed regionally representative samples data from France (*N* = 553), Germany (*N* = 516), Japan (*N* = 491) and the United States (*N* = 514). One of the four hypotheses was that there would be few gender differences in the quantity of social relations since close relationships tend to be among the same people (i.e., spouse, children, friends) for both men and women. Because the investigators were using data sets from each of the four countries they did not compare means across the countries within the same analyses, but instead limited their analyses to an examination of gender differences within each country. The one-way analyses of variance conducted separately by country revealed no gender differences, which proved their hypothesis. However they did find that there were gender differences in resource deficits; women experienced more resource deficits than did men. In addition to focusing on gender differences and culture, this study imparted additional information important to my proposed study; it capitalized on the availability of parallel data from four countries in order to explore gender differences in quantitative and qualitative aspects of social relations. The authors stated that while this data was available across cultures it was limited in scope, with only very few ostensibly comparable support questions to compare across nations. Therefore, having data that is similar and comparable would be advantageous in comparing gender differences across cultures.

In the study conducted by McConatha and colleagues on "Attitudes toward aging: a comparative analysis of young adults from the United States and Germany" it was found that there were significant country and gender differences (McConatha, Schnell,

Volkwein, Riley, and Leach, 2003). The purpose of the study was to evaluate similarities and differences in the anxiety associated with four measureable dimensions of ageism: fear of old people, psychological concerns associated with aging, concern over changes in physical appearance as a result of aging, and fear of losses associated with aging. The second purpose was to evaluate the age at which young adults from these countries might consider themselves to be "old"; this perception is also significant to my proposed study and will be discussed in Chapter Three. The representative sample included 254 undergraduate students from both countries; the United States (*N* = 97, 50 women and 47 men with a mean age of 24.8) and Germany (*N* =157, 73 women and 84 men, with a mean age of 21.8) were surveyed. Ninety percent of the participants were from a middle-class socioeconomic background and were white with European ancestry. The investigators examined the following variables in relation to cultural attitudes: gender, age, income, religion, educational goals, nationality and ethnicity. They found that race, ethnicity, socioeconomic status, health and knowledge of the aging process affect perceptions of aging. The researchers stated that gender plays a major role in the construction of age-related beliefs and practices. The results also indicated significant gender differences, with women in both countries showing more concern with age-related changes in their physical appearance than did men. The authors state that the results of their study support previous findings that cultural factors influence perceptions of age and anxiety associated with aging. However, this study is limited by its small and limited sample size. The authors suggest that further cross-national studies include a larger and more varied sample, especially with regard to ethnicity, age and socioeconomic status,

which would provide a more comprehensive understanding of how people of different countries feel about the aging process.

Socioeconomic Status

Socioeconomic status (SES) is a major factor shaping the multiple strands of life, including family, work, and health, in other words – Culture (Barrett, 2003). Because SES is a primary determinant of the subjective experience of aging, it shapes the way an individual thinks about age and the stages of life in general and his or her own age and life stage in particular (Barrett, 2003).

The literature review uncovered just one cross-national study and one recent American study that contained findings regarding the relationship between socioeconomic status and cross-national attitudes toward aging.

In the American study, Barrett states that little is known about potential age differences in the effect of SES on age identity. The data from her study was drawn from the National Survey of Midlife Development in the United States (N = 3,032, with an age range of 25 to 74). The indicators of SES were education, household income, and perceived financial well-being. The sociodemographic variables associated with age identity included as controls were age, gender, and race. The findings of this study suggested that individuals of lower socioeconomic status tended to have older identities than those in the higher socioeconomic strata. The findings also indicated that the less economically advantaged have older identities primarily because they hold less optimistic views of their health. The study also found that socioeconomic differences in age identity, as indicated by education and perceived financial well-being were greatest

among older adults. Therefore SES does play a significant role in how younger people perceive aging and how they see themselves aging and how older people perceive their own well-being.

The cross-national study (Slaughter-Defoe, Kuehne, and Straker, 1992) was conducted in Canada and the United States and examined the concepts of old age held by young children. The respondents consisted of 104 fourth grade children from four elementary schools, two in Evanston, Illinois (N = 42), one in Chicago, Illinois (N = 32) and one in Alberta, Canada (N = 30). The respondents from Evanston were predominantly Anglo-American, the respondents from Chicago were predominantly African-American and the students from Alberta were predominantly Anglo-Canadian. No exact numbers were given regarding ethnic ratios and the same was true for socioeconomic status. The article only mentions that the "two Evanston schools serve many middle and upper income families," the Chicago school is located in an "African-American neighborhood characterized by a poverty rate of at least 39 percent", and that "according to the principal, 87 percent of the children qualified for free or reduced lunch costs" in the Alberta school (Slaughter-Defoe, Kuehne, and Straker, 1992). Contrary to one of the research hypotheses, which predicted that socioeconomic status (operationalized as the child's report of parental occupation) would not be the sole factor accounting for any obtained differences between the three groups, the results indicated that socioeconomic differences in occupational prestige favored the parents of the Anglo-American children (Slaughter-Defoe, Kuehne, and Straker, 1992). The researchers stated that their findings are "congruent with notions advanced by contemporary researchers that Anglo-American and Anglo-Canadian children may have greater attitudinal

similarities than Anglo-American and African-American children because the family systems of Anglo-Western children are organized to address more similar socioeconomic conditions" (Slaughter-Defoe, Kuehne, and Straker, 1992). The researchers concluded that "the possibility that the most significant findings in this study were due to socioeconomic status differences in the school populations, irrespective of cultural or national contexts, cannot be dismissed" (Slaughter-Defoe, Kuehne, and Straker, 1992).

The studies mentioned above indicate that socioeconomic status does have an effect on attitudes toward aging; this proposed study will include an analysis of whether or not socioeconomic status plays a role in the differences in attitudes toward aging across cultures.

In searching for studies and articles on culture and attitudes toward aging, the following terms were employed: attitudes, stereotypes, perceptions, and self-perceptions. My intent was to determine how these variables affected or were affected by the demographic variables of age, gender, and socioeconomic status. Additionally, I included perceptions of quality of life, life satisfaction, and subjective well-being in the belief that when individuals perceive old age they are perceiving an acceptable/unacceptable quality of life or life satisfaction; and when one has a self-perception of her/his own aging she/he is imaging a level of well-being that is entirely subjective.

Perceptions and Attitudes

The second hypothesis of the Slaughter et al. 1992 study mentioned above involved whether or not there were cross-national (American versus Canadian) or cross-

cultural (Anglo-American and Anglo-Canadian versus African-American) differences in attitudes toward older people held by elementary school children. Regarding cross-cultural differences, it was found that, consistent with their hypothesis, Anglo-American and Anglo-Canadian children were found to be more similar in their attitudes toward older people than African-American children. However, no cross-cultural differences were found with regard to attitudes toward older people. It was predicted that African-American children would have the most positive attitudes toward older persons, but the one-way ANOVA revealed no significant group differences. The researchers concluded that "children are not reared in isolation from attitudes held and treatment given elderly persons in their cultures, but rather they develop views of aging from those with whom they have contact," giving credence to the basis of this paper that cultural beliefs affect attitudes towards older people.

In a study mentioned above cultural differences in attitudes of students in college were examined (McConatha, et al., 2003). The results of this study indicated several significant differences between the participants surveyed in Germany and those surveyed in the United States. Differences were found on three of the four sub-scales – those measuring fear of older people, psychological concerns about aging and fear of losses associated with aging. Germans appeared to have more psychological concerns about aging than Americans. German participants tended to view aging much more negatively than did American participants. German men and women scored higher than American men and women on fear of old people.

Another cross-national study comparing attitudes on aging by older people was pilot tested when developing the Attitudes to Ageing Questionnaire (Laidlaw, Power,

Schmidt and the WHOQOL-OLD Group, 2006). Fifteen centers worldwide recruited 1,356 participants to answer a 24 item questionnaire that encompassed psychological growth, psychosocial loss, and physical change. The main purpose of this research study was to assess negative stereotyping of aging by taking into account cross cultural attitudes. A total of 5,566 respondents were collected from 20 of the World Health Organisation Quality of Life Group – OLD centers with ages ranging from 60-100 years, 59% being female, 43% of the sample living alone, and 72% of the sample describing themselves as subjectively healthy (Laidlaw, Power, Schmidt and the WHOQOL-OLD Group, 2006). The unique cross-cultural approach to the development of the measure enables comparisons to be made between different cultures.

In an article on psychology and culture, Hills stated that attitudes are quite complex and that a number of factors such as context and culture should be taken into account before any accuracy of findings can be claimed (Hills, 2002).

Stereotypes

Attitudes toward aging or older people can be influenced by commonly held stereotypes or pre-conceptions of old people. Stereotypes about aging and old people will certainly influence how older people are treated in different cultures. Understanding these stereotypes can inform social workers as to whether family members or even older people themselves will either impede or assist in any planned interventions.

In addition to having specific attitudes about aging and older people, people also may view aging and older people through the lens of stereotypes. Hinrichsen in his article "*Why multicultural issues matter for practitioners working with older adults*"

states that “as a group, older adults have been the object of widespread stereotypes on the part of the general public as well as health professionals” (Hinrichsen, 2006). He suggests that some stereotypes that persist today include the following: older adults are homogeneous, are alone and lonely, are sick, frail and dependent, are depressed, are rigid in their ways and are unable to cope. In his article he debunks each of these myths about older people.

Informative to the study of culture-based stereotypes is the work conducted by Yoon and colleagues. Their study focused on the role of culture-based stereotypes about aging and the effect it has on differences in memory (Yoon, Hasher, Feinberg, Rahhal, 2000). In addition, they assessed attitudes toward aging and investigated whether positive views toward aging lead to better memory performance among older adults. Yoon and colleagues hypothesized that positive cultural views of aging may preserve memory performance among older adults. They selected two groups for comparison: Anglophone Canadians and Cantonese-speaking Chinese. The participants consisted of 56 younger adults (aged 19-28 years) and 48 older adults (60 – 88 years) living in the Toronto area. Half the participants in both the younger and the older group were English-speaking Canadians and the other half were Cantonese-speaking Chinese individuals who had lived in Canada for less than 5 years. To the extent possible they made every effort to match the two cultural group samples in terms of socio-educational dimensions. The dependent measures were memory and view of aging; the independent variables were culture and age. The mediator variable was whether or not there was a positive view of aging. It was assumed that the Chinese held a more positive view of aging, due to the results of an earlier study by Levy and Langer which confirmed that the Chinese-hearing

and the American Sign Language participants did indeed view older people more positively than their American-hearing counterparts (Yoon et al., 2000). The findings of the study by Yoon and colleagues were consistent with those of Levy and Langer; Chinese individuals did hold more positive views of aging than their North American counterparts. The only significant relationship obtained was the effect of culture on the positive view of aging. Regarding the effect positive views had on memory in later years, the analysis also showed that there is a direct path between age and memory, which was statistically significant in a negative direction. Younger adults in both cultural groups outperformed their older comparison group on all memory tests. While it was clear that membership in a cultural group influences a person's view of aging, the data did not support the existence of a relationship between a positive view of aging and memory performance.

Hummert in her study of multiple stereotypes of elderly and young adults confirmed the existence of multiple stereotypes of both old and young respondents (Hummert, 1990). She conducted two studies involving two groups of college students. The first study focused on multiple stereotypes of the elderly and the results documented the existence of age-related stereotypes rather than general ones. The second study extended the investigation of stereotypes of elderly and young adults. In contrast to the results of the first study, the informants in the second study did not view the negative stereotypes as more typical of elderly adult. However, the respondents did assign the negative stereotypes to the old age ranges more often than they did the positive stereotypes. These results provide evidence that age associations are an integral part of each stereotype. Hummert suggests that the ways in which individual stereotypes are

activated remain to be identified and that more research should focus on identifying the behaviors and characteristics (e.g., age, sex, and appearance) that activate the stereotypes. It should be noted that with this study, Hummert set out to replicate and extend the research conducted by Schmidt and Boland in 1986. In that study, Schmidt and Boland examined the possibility that people held multiple stereotypes of the elderly. Their subjects were male and female college students. The results of their study suggested that the attitude toward older adults is not universal, that it depended on the specific stereotype(s) held by an individual, and on which stereotype is salient when the attitude is assessed (Schmidt and Boland, 1986). They stated that the presence of multiple stereotypes suggests that society may react to older adults in a multiplicity of ways. Hummert felt that the results of her study substantiated and expanded upon Schmidt and Boland's findings.

In a later study, Hummert and her colleagues found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In their two-part study the investigators extended the research on multiple stereotypes of elderly adults by examining the perceptions of young, middle-aged, and older persons. In all there were two hundred forty participants, ranging in age from 18 to 85. The first study, on the trait-generation task, included 40 young adults (ages 18 – 22, 20 males and 20 females), 40 middle-aged adults (ages 35-51, 18 males and 25 females) and 40 older adults (ages 60-85, 15 males and 25 females). The second, study on the trait-sorting task included 40 young adults (ages 18-24, 20 males and 20 females), 40 middle-aged adults (ages 36-50, 20 males and 20 females) and 40 older

adults (ages 62-84, 20 males and 20 females). The results of both studies demonstrated that young, middle-aged and older adults share many of the same stereotypes of the elderly, even though the two older groups have more complex stereotype sets than do young adults. In general, the age groups showed a greater degree of consensus on the nature of the positive stereotypes than negative. The investigators noted that despite the similarities in stereotypes across age groups, the results also revealed some differences, which indicate increasingly complex stereotypes sets with age. They suggested that future research be conducted to gather the views of adults of all ages on such issues as attitudes toward stereotypes and their representativeness of the stereotypes.

Self-Perception

Pervasive negative stereotypes of aging and older people may play a role in how one views one's own aging and life satisfaction. Neugarten has suggested that stereotypes about aged individuals can lead to fears about aging itself and contribute to ageism (Neugarten, 1976).

One aspect of life satisfaction is how individuals feel about their health (self-perception). Sarkisian and colleagues set out to examine how one's attitude toward aging may influence future health and health related behaviors. In their study, they found that expectations regarding aging may be a causal factor in older adults missing out on health care likely to improve their quality of life (Sarkisian, Steers, Hays and Mangione, 2005). The study consisted of two samples of respondents; one in 1999 consisted of 429 people with a mean age of 77 years; 76% white; and the other in 2001 consisting of 643 adults

with a mean age of 78 years; 37% Latino, 16% African American. The results were consistent across ethnic differences.

O'Hanlon and Coleman presented their findings on "A cross-Cultural Study Exploring General and Specific Attitudes to Own Perspective Old Age" at the Gerontological Society of America's annual meeting, November 2001 (O'Hanlon and Coleman, 2001). They stated that it is important to consider culture in studies on aging because people learn about themselves and others within cultures, and learned messages may impact on general attitudes to one's own future old age.

The literature review indicates that attitudes, stereotypes, and self-perceptions of aging have an effect on the perceptions and the reality of life satisfaction, subjective well-being and quality of life.

Perceptions of Life Satisfaction, Subjective Well-Being, and Quality of Life

Although life satisfaction, subjective well-being and quality of life have different connotations, they are interrelated. Each term seems to hold the same meaning for younger people (when they are asked to comment on how they perceive the lives of older people), and older people (when asked how they perceive their own old age and that of others). In some studies these terms are interchangeable. Kahn and Juster (2002) state that "cross-national research on aging should include an overall measure of subjective well-being (life satisfaction)." In gerontological research, subjective well-being has become synonymous with life satisfaction and related concepts (for example, "happiness" and "morale") (George and Clipp, 1991).

Since life satisfaction is the oldest, most persistently investigated issue in the social scientific study of aging (Maddox and Wiley, 1976), it seems quite important to include it in a study comparing cross-national perceptions of aging. Also, the United Nations now recognizes that the health and well-being of older people is one of the most pressing and universal social issues of our time (Antonucci, Okorodudu, and Akiyama, 2002).

In examining cross-cultural/cross-national attitudes towards aging, it is important to ascertain if and how different cultural attitudes affect the perceptions of life satisfaction or the quality of life in the later years. In the *Handbook of Gender, Culture, and Health*, gender and culture are two factors said to have an impact on life satisfaction in the elderly because they organize so many facets of daily life, including social roles, health, and economic resources which influence life satisfaction (Kamilar, Segal, and Qualls, 2000). With regard to gender differences in life satisfaction in old age, the studies show mixed results, with some studies suggesting that males have a higher life satisfaction than females and others showing the opposite (Kamilar, Segal, and Qualls, 2000). In addition, other variables such as health, finances, locus of control, activities, and employment have also been found to have significant effects on life satisfaction (Kamilar, Segal, and Qualls, 2000). While good health appears to be the primary factor related to positive life satisfaction in the elderly, a stronger relationship is subjective or perceived health as opposed to an objective measure of health (Kamilar, Segal, and Qualls, 2000).

Regarding differences in ethnicity, again the studies are mixed. One study found that ethnicity (black or Hispanic) had no significant effect on any dimension of life

satisfaction; however, black and Hispanic elderly with higher incomes had significantly greater life satisfaction than those with lower incomes (Kamilar, Segal, and Qualls, 2000). In another study, it was noted that black older adults had lower levels of life satisfaction than white older adults; however, no differences in life satisfaction were found when education, occupation, and income were controlled (Kamilar, Segal, and Qualls, 2000).

In a study of Canadian Chinese elders and Anglo-Canadians, Wong and Reker found that Chinese older adults found growing old a more stressful experience and reported lower psychological well-being (Wong and Reker, 1985).

In their study investigating the association of social relations and depressive symptoms among American and Japanese older adults, Sugisawa, Shibata, Sugihara, Hougham, and Liang found that having more social ties with spouse, friends, neighbors and relatives was associated with less depression in both countries (Antonucci, Okorodudu, and Akiyama, 2002). However, there were also differences: the availability of a spouse made a much greater difference to the presence of fewer depressive symptoms in the United States than in Japan, whereas the presence of children was associated with less depression in Japan but not in the United States (Antonucci, Okorodudu, and Akiyama, 2002).

In a study that included two large sets of international data (61 nations, N = 62,446) Suh et al. found that emotions and life satisfaction correlated significantly more strongly in more individualist nations (Suh, Diener, Oishi, and Triandis, 1998). In collectivist cultures, norms and emotions were equally strong predictors of life

satisfaction. The authors noted that their findings suggest that culture may exert a significant influence on the construct of life satisfaction.

Diener and Diener showed that at the cultural level, the richest nations in the world are the ones in which subjective well-being is reported (Diener and Diener, 1995). However, when they subdivided their sample into richer and poorer nations, different predictors were found. In the poorer countries, wealth was a significant predictor of well-being, while in the richer nations satisfaction with home life was a stronger predictor (Oishi, Diener, Lucas, and Suh 1999). . This finding is consistent with findings in the United States: very rich people do not report greater life satisfaction than less rich persons; instead, the types of emotions that people experience are more predictive of life satisfaction (Smith, 2002).

In another study, Diener, Diener and Diener found that high income, individualism, human rights, and societal equality correlated strongly with each and with subjective well-being (Diener, Diener and Diener, 1995). They examined four subjective well-being surveys which encompassed 55 countries and included 100,000 respondents. They found that at least at the level of self-report the various scales used for measuring subjective well-being tended to yield similar results across the nations.

The influence of economic status, education, physical health, cultural identity and practice, and family structure for immigrants and natives, and emotional well-being at mid-life was explored in a cross-cultural study involving relatively large ethnic immigrant and native groups from Asia, Cuba, Mexico, and Western Europe/Canada/Australia and natives who were African-American, Mexican-American, and non-Hispanic white (Hao and Johnson, 2000). Using data from the 1992 wave of the

Health and Retirement Study, the authors found that economic factors and human capital variables are the most important determinants of emotional health for both immigrants and natives. The results indicated that cultural factors can enhance emotional well-being.

Using data from the Berlin Aging Study, Smith and colleagues conducted a study on health and well-being in the young old (70-84 years) and oldest old (85 – 103 years) (Smith, Borchelt, Maier, and Jopp, 2002). The 516 respondents were a locally representative sample of men and women aged 70 to 103. The study included equal numbers of men and women with equal numbers of young old and oldest old. Overall, 63% of the participants reported that they were satisfied or very satisfied with their life and 83% reported that they were satisfied or very satisfied when they looked back over their life. There were significant differences, however, between the young old and the oldest old. The young old reported higher positive well-being than the oldest old. Gender differences were also found; men reported higher life satisfaction and satisfaction with their own aging.

Another study involving Germany and the United States examined age identity and subjective well-being (SWB). Westerhof and Barrett investigated the relationship between age identity and SWB in a cross-national context and found that feeling younger than one's actual age is considered a self-enhancing illusion that contributes to SWB (Westerhof and Barrett, 2005). The respondents who participated in the National Survey of Midlife Development in the United States (N = 2,006) or the German Aging Survey (*N* = 3,331) were between 40 and 84 years of age. The results revealed that feeling younger than one's actual age is related to higher levels of life satisfaction and positive affect and to lower levels of negative effect, even when controlling for socio-demographic

variables. Because both cultures are thought to be youth oriented, it was expected that age identity would be related to SWB in both countries; however, country-specific analyses indicated that the relationship between age identity and negative affect held only for the United States. In this study, there were no significant differences found for gender or for socioeconomic status. There were no national differences in the association between age identity and positive measure of SWB.

In yet another study comparing Germany with the United States, Staudinger, Fleeson and Baltes looked at predictors of subjective physical health and global well-being (Staudinger, Fleeson and Baltes, 1999). As Germany and the United States are viewed as similar cultures in that they are Western industrialized nations that are youth oriented, it was therefore predicted that there would be similarities. However, it was also predicted that because of the differences in the economic and social systems, as well as cultural background, there would be differences. There were three sets of predictive variables: socio-structural (age, gender and socioeconomic status), trait-like personality dimensions, and self-regulatory characteristics. Global well-being was the mean of three items: life satisfaction, satisfaction looking back over one's life, and subjective mental health. Results showed that the weakest predictors were the socio-structural characteristics. Therefore in both countries, age, gender and socioeconomic status had less predictive power for subjective physical health than did personality characteristics or self-regulatory indicators. However, there was one cultural difference: socioeconomic status had a stronger positive relationship to global well-being in the United States than in Germany. The authors suggest that their study illustrates how a comparison between seemingly similar countries may be quite informative.

In an American study, Davis and Douglas also examined the relationship between age and life satisfaction (Davis and Douglas, 2004). They studied the knowledge of aging and life satisfaction of 400 young-, middle- and old-old respondents, 83% white, 13% African-American, and 4% other. In analyzing the results of a series of quizzes dealing with life satisfaction and objective aging knowledge in the physical, psychological, and social domains, they found that there were significant age group, gender and life satisfaction differences for all three domains. The greater the knowledge of aging, the higher the life satisfaction. Interestingly the results reported that older men have more objective knowledge of aging than older women. Other demographic variables, such as education, financial status, health and living arrangements were also found to be significant covariates for knowledge of aging. Seemingly in contrast to these results, in the McConatha study previously mentioned, Germans seemed to be more pessimistic about the likelihood of finding contentment in old age and expected not to feel good about life when they got older (McConatha et al., 2003).

The Five Countries to be Studied

The five countries to be included in this proposed study are the Dominican Republic, France, Japan, the United Kingdom and the United States. These countries were selected because they were all included in an ombuds survey conducted by Harris Interactive for the International Longevity Centers in 2000. Information on the survey instrument is detailed in the Methodology section below.

Below is information on the population in each of the countries (United Nations).

Table 1: Population Information of the Five Countries

Country	Population in Thousands in 2000	% Population 65 and over in 2000	% Population 65 and over in 2025
Dominican Republic	8,830	5.0	8.9
France	59,128	16.1	22.6
Japan	126,706	17.2	29.7
United Kingdom	58,907	15.9	19.4
United States	287,842	12.4	18.1

Common Themes

In researching the culture of aging in each of these five countries, a few common themes emerged (International Longevity Center, 2000). Each country indicated that ageism is a problem. The Dominican Republic states that older people are seen as a burden to society and are portrayed in the media as either senile or perverted. The United States reports that there is massive ageism that is commonly seen in imagery, language and attitudes.

Ageism is most prevalent in the workplace. In the Dominican Republic there is a belief that older people are not productive, that has been narrowly defined in terms of economic potential. In France, companies that are facing heightened competition due to economic globalization are declaring that people who are not even 55 are “old” and unfit to hold a job (International Longevity Centers, 2000). Currently, Japan has a mandatory retirement age of 65. The United Kingdom indicated that there is ageism in the workplace, but that there is no anti-aging legislation. The United States is the first country to legislate against age discrimination in the work place.

Although France and Japan did note that some ageism exists, their culture seems to hold older people in higher esteem. The report on longevity from France states “most people, young or retired, take a favorable view of the gain in longevity, and hope to

benefit from it because old age begins to have a new look" (International Longevity Centers, 2000). Terms that describe the elderly in more positive ways are emerging. This is also true in Japan where negative language in referring to older people is not favored. Instead new phrases are becoming more prevalent, such as "jitsunen – fruitful old age", and "yutori sedai – pressure free generation" (International Longevity Centers, 2000).

The Dominican Republic and the United States report that there are differences in attitudes towards aging based on whether people live in urban or rural environments.

However, significantly, all five countries indicate that there is a trend towards a quest for youth and an interest in anti-aging medicine.

Differences among the Countries

Naturally there are differences among the countries. Most notably, the Dominican Republic is the youngest, smallest and least industrialized. The Dominican Republic will transition to an "older" country in 2025 when the percentage of people over 60 is 12.9% of the total population (International Longevity Centers, 2000). Japan is the oldest, followed by the United Kingdom and France respectively. In Japan, the fear of aging is not as high as it is in the United States and Europe (International Longevity Centers, 2000). France reports that its immigrant population is aging more rapidly, while in Japan there are very few immigrants.

Rationale for including all five countries

Although these five countries were pre-selected by virtue of using an already existing database, there are some strategic reasons to focus an aging study on comparison of the United States, Japan, France, the United Kingdom and the Dominican Republic. As indicated in the chart above, by 2025 the United States will experience the realities of an increased percentage of older people, which Japan, France and the United Kingdom began to experience in 2000. It will also be interesting to compare a smaller, younger and less developed country with the other four countries to determine if in fact there are differences in attitudes toward aging despite the differences in population size and industrialization. The Dominican Republic Ambassador to the United Nations, Julia Alvarez, noted that the developing countries do not have the luxury of the developed world, in that a country such as the Dominican Republic will get older before it gets richer (Alvarez, 2007).

The Japanese case of an aging population is in many ways a test case for other societies. The dramatic demographic shift that is taking place in Japan in some way affects every sector of society (Goodman & Harper, 2006). Although the term “national crisis” has been applied to this demographic shift, a new, more positive view is beginning to emerge, with a projection that Japan could adapt and become a more open, international egalitarian society with a generally high quality of life for the population as a whole (Goodman & Harper, 2006).

Summary of the Literature Review

In summary, what is known about culture and perceptions of aging is that in addition to culture as a variable, the demographic variables of age, gender, and socioeconomic status also play a significant role in perceptions of aging and older people.

We know that culture is significant in determining when old age begins (McConatha et al., 2003). Culture also plays a role in determining attitudes towards older adults: Germans are more concerned about aging than Americans, and Germans view aging more negatively (McConatha et al., 2003), Chinese had more positive views of aging than did North Americans (Yoon, Hasher, Feinberg, Rahhal, 2000), Hispanics have a more negative bias than whites or blacks (Haughty, Walls, Laney, Leavell, Stuzen, 1999), and Anglo-Americans and Anglo-Canadians are more similar in their attitudes than are Anglo-Americans and African-Americans (Slaughter-Defoe, Kuehne, and Straker, 1992).

Age is also a significant variable. Younger people have a negative bias towards older people (Jackson & Sullivan, 2001; Celejewski & Dion, 1998; Slotterback, 1996; and Hummert, 1990, Yun & Lachman, 2006). The age of the respondent was also determined to be significant in measuring personal fears of aging (Monteparte & Lachman, 1989, Yun & Lachman, 2006). But older people held more complex stereotypes of aging than younger people (Hummert et al., 1994).

There were mixed results regarding the significance of gender on attitudes towards aging. No gender differences were found in the quantity of social relations of older people, but researchers found that there were gender differences in resource deficits (Antonucci et al., 2002) and in anxiety about aging (Yun & Lachman, 2006). Gender

played a role in the construction of age-related beliefs and practices (McConatha et al., 2003) and in whether or not there were positive or negative biases towards older people (Haughty, 1999).

Socioeconomic status (SES) was found to be a determining factor in measuring attitudes. A lower SES was indicative of having older identities and was the sole factor for the differences in the concepts of old age among three ethnic groups.

Several variables were significant in determining life satisfaction. There were mixed results when culture or ethnicity was taken into consideration: one study found ethnicity to have no significant effect, while another study found that black older adults had lower levels of life satisfaction than whites (Kamilar, et al. 2000); Canadian-Chinese had lower well-being than Anglo-Canadians (Wong & Reker, 1985). Several studies found that gender influences life satisfaction (Davis & Douglas, 2004; Smith et al., 2002; Staudinger, Fleeson & Baltes, 1999).

From the literature review it was discovered that all cross-national and/or cross-cultural studies are quantitative because a significant number of respondents are needed in order to assess and adequately measure differences or similarities of cultures. Only a couple of studies used more than two or three countries or ethnicities for comparison, and because of the few number of units that were being compared, one way analysis of variance was used. For comparisons of more than three countries or ethnicities more complex analyses are needed.

As a result of the findings of the literature review, this cross-national study of five countries includes the independent variables of age, gender, income level, and country in exploring the influences on perceptions of aging and older adults. Although marital

status was mentioned in only one of the studies, this study includes the demographic variable of marital status, because it is provided in the database and because a preliminary analysis of the data demonstrated that marital status is a significant predictor variable of perceptions of aging and older people.

The overall research question driving this study is:

Do people from differing countries, and therefore cultures, view aging and older people differently?

And based on the findings discussed in the literature review the additional questions are:

a. *Do older participants in different countries perceive having a higher life satisfaction than younger people?*
b. *Do males in different countries have a higher life satisfaction than females?*
c. *Do participants with lower income levels have less positive perceptions of quality of life for people over 65 than do participants with higher income levels?*
d. *Does marital status influence how participants in different countries perceive aging and older adults?*

This study is a descriptive comparative research project that provides a quantitative analysis of a database containing a total of over 7,000 interviews across five countries. The details of this study and database are discussed in the next chapter on Methodology.

Chapter 3: Research Design and Methods

Very little research attention has been paid to comparing and analyzing perceptions of aging and older people across countries. Therefore, in examining the cross-national literature appropriate standardized instruments were not found that met the purposes of this study. As a result, this is an exploratory study designed to generate hypotheses for creating such constructs in the future.

This chapter includes a description of the type of research design, the survey instrument, the procedures for carrying out the study, and method of analysis of study data.

A. Type of Research Design

This is a quantitative study that is descriptive and correlational. As a descriptive study, it describes the prevalence of certain age-related attitudes, such as satisfaction in life and how many people within a country report high or low levels of satisfaction in life. As a correlation study, it looks at relationships of such variables as females' perceptions of aging compared with males' perceptions in each of the five countries, as well as comparing the influence of varying levels of income on perceptions of quality of life and aging.

This is a quantitative study rather than a qualitative study for several reasons. A qualitative study would be difficult to coordinate simultaneously in each of the five countries. A qualitative study could not produce the volume of interviews needed in

order to have a representative sample in each country. A quantitative study would provide much more data that is easily quantifiable and measurable.

The basic analytic strategies employed in analyzing the data include: describing, counting, comparing, finding commonalities, and examining deviant cases (Weiss, 1998). In addition to computing frequency distribution two of the three different measures of central tendency will be used, the arithmetic mean or average, which can be skewed by extremes; and the median, which is less precise than the mean, but gives a truer picture of the central tendency in frequency distributions. The mode, which is the least precise and unaffected by extreme values, is not used in this study. Information about the values of dispersion measures is frequently supplemented with information about the dispersion of frequency distributions. Two common measures of dispersion are: the range, which is the difference between the highest and lowest scores in the distribution, and the standard deviation, which indicates the extent to which scores in the distributions cluster around the mean or are highly dispersed.

B. The Survey Instrument

The survey instrument from which the data was collected is a set of questions from a larger survey instrument originally designed by the National Council on Aging in conjunction with Harris Interactive, Inc. for "The Myths and Realities of Aging in America", which was conducted in December to March 2000. With permission from the National Council on Aging and in collaboration with Harris Interactive, the International Longevity Centers of the United States, the United Kingdom, Japan, France, and the Dominican Republic commissioned an international survey of perceptions of aging.

The presidents from each of the International Longevity Centers, along with representatives from Harris Interactive, selected certain questions from the larger survey instrument. The questions selected related to the respondent's perception of her/his own aging and perceptions of older people and the quality of their life. This set of questions was attached to omnibus surveys being conducted in the four countries during the summer of 2000. Harris Interactive coordinated the international survey project in the Dominican Republic, France, Japan, and the United Kingdom and collected the data. The data from the four countries were then included in the data that had been collected in the United States. This database was then provided to the International Longevity Centers.

During the preparation of the survey instrument for international use, it became apparent that the use of language in each country would be a hurdle. Directly translating the English questions into Spanish, French, and Japanese would not suffice, as it was necessary to ensure that the wording of the questions conveyed the intended meaning. Therefore the questionnaire was translated into the three other languages and each survey was then translated back into English by professional translators who understood the nuances of the languages. Even by taking such careful measures, it cannot be certain that the respondents completely understood the intent of the questions. Rokkan points out that "question meaning and problems of verbal communication" is a problem area in cross-cultural research. He also mentions that "the concepts behind words are often delineated differently in different languages; the more abstract the concept, the greater the likelihood of differences" (Rokkan, 1968). One method of minimizing this potential discrepancy is to provide the results of this study to the researchers in the four International Longevity Centers (ILCs) of the Dominican Republic, France, Japan, and

the United Kingdom in order to have the results evaluated in terms of each of their observable cultures.

The survey instrument contains twelve questions of which the data from nine of the questions are used for this study (see Attachment A). The responses for each of the questions is described using three sets of procedures which are presented for analyzing and interpreting data: first, the use of whole numbers, averages, and dispersions; second, the use of proportions; and third, the use of cross-tabulations or analysis of variance (Epstein & Tripodi, 1977).

The nine survey questions have been categorized into four types of perceptions:

1. Perception of Others Aging
    a. What Best Defines the Beginning of Old Age
    b. Respect for People over 65

2. Perception of Life Satisfaction for Self
    a. As I Grow Older Things are Better than I Thought They Would Be
    b. As I Look Back on my Life I am Fairly Satisfied
    c. These are the Best Years of My Life
    d. Life Satisfaction Scale

3. Perception of Quality of Life for Self
    a. Quality of Life for Self Scale
    b. Locus of Control

4. Perception of Quality of Life for People over 65
    a. Quality of Life for People over 65 Scale

The responses to each of the questions within these four categories are the criterion variables. A more detailed description of the questions is discussed below in the sections on the variables and the database.

C. Target Population and Sample

In order to investigate culture and aging and to determine the similarities and differences in perceptions of aging and older adults among countries, this study analyzes a database which contains survey data from five countries: the Dominican Republic, France, Japan, the United Kingdom and the United States. These five countries are included in the database because there is an International Longevity Center (ILC) in each of these countries. The consortium of the five ILCs conducts joint projects in order to understand population aging within and among their representative countries; in order to compare perceptions of aging among their countries they commissioned the survey that created the database. The consortium of ILCs and Harris Interactive decided to gather a representative sample of the populations in each of the countries. It was decided that one thousand interviews would be conducted in each of the four countries. The United States survey had already conducted over 3,000 interviews. The survey results from the remaining four countries, along with those from the United States, are contained in one database that is owned by the ILC consortium.

Although the data was collected in 2000, it has never been analyzed. Having been employed by the ILC-USA at the time the survey was conducted, I have been given exclusive permission to be the first to use the database for this study. This is a golden opportunity to analyze a very unique database which contains information on the perceptions of aging and older adults from five countries. This study is one of the first of its kind – a five-country comparison of perceptions of aging and older people. It is one of the few studies that compares comparable data collected within the same time frame. Standardized and comparable data is necessary to enable comparisons within and among

regions (Cattell, 1989). Surveys are the only feasible way of obtaining demographic data on large populations. Also surveys produce solid data on relatively objective matters such as social and economic conditions or health and functionality of individuals (Cattell, 1989). Therefore, using this unique database for a study comparing perceptions of aging across five countries is truly a unique opportunity.

D. Data Collection

Harris Interactive, an experienced survey company, oversaw the administration of the survey and worked directly with the survey companies in each of the four countries. As a professional survey company, Harris Interactive worked with qualified survey companies with trained interviewers who are experienced in following standardized procedures of reading questions as they are written, listening carefully, recording answers accurately, avoiding relaying any biases, and trying to convince respondents to complete the interview, but not to force them (Weiss, 1998). Harris Interactive staff conducted the survey themselves in the United States.

The data that was collected in each of the five countries is a representative sample of the population of each country. Harris Interactive used a weighted stratified random sampling method to ensure that the respondents were representative of the total population (18 and over) in each of their respective countries. In all, 1,118 adults were surveyed in Japan by telephone, 990 adults were interviewed in person in the United Kingdom, 1,004 adults were surveyed in France by telephone, and 1,001 adults were interviewed in person in the Dominican Republic. The data for the United States were

obtained from the earlier survey which collected data from 3,048 adults via telephone interviews.

Harris Interactive is a reputable survey company and therefore ensured that probability sampling was employed in general and stratified sampling in particular. Harris conducted probability sampling because it is a procedure that ensures that the units chosen are representative of the population from which they are drawn (Weiss, 1998). In stratified random sampling the target population is first described according to certain pertinent properties such as race, ethnicity, gender, age, etc. In order to obtain a representative sample of the total population in each country, Harris sought to obtain percentages of certain types of people. According to Epstein and Tripodi, to check for representativeness one begins with percentage comparisons between the sample and target populations on those dimensions that are relevant to the study and about which there is complete information for both populations (Epstein and Tripodi, 1977). For the 2000 survey, efforts were made to ensure that a representation of most ethnicities in the United States were included. It is therefore safer to generalize from the sample to the universe (e.g. the United States' total population) because of the percentages and the weighted samples. Harris selected the sample size according to their knowledge of obtaining representativeness, as well as the limits of time and money in conducting the survey.

Describing each country's population by its demographics of age, gender, and income level is an important part of this study, in order to determine the study's generalizability (Weiss, 1998). The total number of completed interviews in each country is substantial enough to weigh the respondents in order to assure

representativeness of the total population of each country. The following demographics were collected for each respondent: gender, age, marital status, household income in 1999, level of education, type of residence (metropolis, urban or rural), city/town of residence, size of the community of residence, housing type and whether it is owned or rented, size of household, number of adults in household, number of children in household, age of children, employment status, occupation, head of household, employment status of head of household, and occupation of head of household. By using these demographics, a profile of each respondent is created and according to how representative to the whole population, each respondent is weighted, thereby allowing the tallying of results to approximate a representative sample of the total population for each of the five countries.

The findings of this study can be generalized only to the target populations for each of the five countries. Therefore this study does not have empirical generalizability; the findings cannot be generalized to other situations and to other populations. The computation measure of statistical significance will determine whether the findings in the population studied reflect a true relationship in the population to which I would like to generalize (Epstein and Tripodi, 1977).

E. Reliability and Validity

One of the limits of this study is that only twelve questions related to perceptions of aging and older people; however these questions do provide indication of cultural perceptions.

Harris Interactive, an experienced survey company, ensured the reliability and validity of the data. The test-retest procedures they had conducted prior to the commencement of the survey in 2000 ensured some level of reliability of the instrument and the consistency of the responses (Weiss, 1998). Since the survey consists of twelve questions, checking for internal-consistency – looking at people's responses to different subsets of items in the instrument cannot be measured (Weiss, 1998). Cronbach's alpha analysis was used to test the reliability of the data. The results of Cronbach's alpha are discussed below in the section on the database and construct of the variables.

Validity refers to the extent to which a measure measures what it is supposed to be measuring (Epstein and Tripodi, 1977). For this study the reliability of the content validity is based on the larger survey conducted in 2000. There is reason to believe that the measurement device is directly relevant to the concept being measured since this questionnaire was used successfully in the earlier study (Epstein and Tripodi, 1977). However, there is a concern that since this instrument is shorter, there is no guarantee that the indicator is actually capturing the entire concept of interest (Weiss, 1998). The three types of validity: criterion, construct and content, may not be able to be determined with this short set of measures. For instance, concurrent evidence of criterion validity would demonstrate that a particular measure relates well (correlates) with another established measure of the same concept administered at the same time (Weiss, 1998). It is difficult to know if a similar concept was administered at the same time. For construct validity, the questionnaire did not probe for further details that could be theorized to be related to a general concept and this would be true for content validity (Weiss, 1998). However, it

can be said that the study has external validity because measures were taken to ensure that the study's findings can be generalized (Yin, 1994).

F. Data Analysis

This is a secondary data analysis study. Secondary data analysis makes use of existing survey data (Kiecolt & Nathan, 1985). Utilizing an existing database makes sense for a cross-national comparison study because survey research data easily lends itself to the exploration of a wide range of topics, such as population characteristics, attitudes, and behavior (Kiecolt & Nathan, 1985). Conducting secondary analysis on this existing survey allows access to data from large, national samples (Kiecolt & Nathan, 1985). Although secondary analysis has not received much attention in social work research, there are some very good reasons to consider secondary analysis of survey data as a method of conducting a dissertation study.

1. Advantages of Secondary Analysis

The primary advantage is its potential for resource savings (Kiecolt & Nathan, 1985). Secondary analysis can utilize data resulting from high-quality research with limited time, money, and resources (Sales, Lichtenwalter, Fevola, 2006). There have been many well-funded research studies already conducted on issues that are of concern for social work studies, such as economic inequalities, health problems, and criminal justice (Sales, Lichtenwalter, Fevola, 2006). There are archives of survey data that can be accessed for relatively little or no money. Public opinion poll data are a rich resource for secondary analysis (Kiecolt & Nathan, 1985). Two major public access archives, the Roper Center for Public Opinion Research and the Louis Harris Data Center, are valuable

storehouses of data collected by polling organizations (Kiecolt & Nathan, 1985). The Louis Harris Center is part of the Social Science Data Library at the University of North Carolina, Chapel Hill. Louis Harris and Associates is a private international firm has conducted a variety of polls since 1956 (Kiecolt & Nathan, 1985). Harris Interactive, which designed and conducted the survey from which this study is taken, is an affiliate of Harris Polls.

Sociological surveys are the only feasible way of getting demographic data on large populations and can produce solid data on relatively objective matters such as social conditions (Cattell, Maria G., 1989). Secondary analysis provides an opportunity to conduct research on large samples that are beyond the capacity and resources of doctoral students, and most social worker researchers (Sales, Lichtenwalter, Fevola, 2006).

Another advantage of secondary analysis is that it circumvents data collection problems (Kiecolt & Nathan, 1985). Data archives furnish a large quantity of survey data with nationally representative samples, standard items and standard indices (Kiecolt & Nathan, 1985). A variety of research projects can be accomplished with pre-collected data, such as comparative studies and exploratory research (Kiecolt & Nathan, 1985).

Conducting secondary analysis on survey data provides an opportunity to compare social issues in the United States with other countries by using a survey that has been replicated in other societies, (Sales, Lichtenwalter, Fevola, 2006). The wide availability of cross-national survey data provides enormous potential for cross-national studies (Kiecolt & Nathan, 1985). Cross-national or comparative studies are a paramount goal of the social sciences, because it enables us to know whether observed social

phenomena are universal or confined to a particular nation or type of society (Kiecolt & Nathan, 1985).

It has become easier to utilize pre-existing databases due to more advanced computer technology which provides better data storage and transmission, web-based access to data archives, and ability to analyze some data sets online (Sales, Lichtenwalter, Fevola, 2006).

Utilizing data that has already been collected lends itself to IRB approval inasmuch as the database has already been approved by an IRB for the original data collection by using previously collected data. By using an existing database it is possible to avoid the intrusiveness of data collection, as well as the possibility of inflicting harm to vulnerable groups (Sales, Lichtenwalter, Fevola, 2006).

Lastly, but importantly, learning how to conduct secondary data analysis will be very useful to many students in their post-educational work (Sales, Lichtenwalter, Fevola, 2006).

2. Limitations of Secondary Analysis

Although the advantages of secondary analysis outweigh the disadvantages, there are limitations (Kiecolt & Nathan, 1985). One potential issue is data availability. A different sort of data availability problem stems from a major mismatch of primary and secondary research objectives (Kiecolt & Nathan, 1985). For this study, this researcher participated in the development of the original survey and therefore the primary and secondary objectives are closely aligned.

Another limitation is that the surveys may not contain the precise indicators of the concepts the secondary analyst wants to study (Kiecolt & Nathan, 1985). This is true, if

it had been known at the time of the design of the survey that the data would be used as a dissertation study, this researcher would have included additional indicators and variables.

Errors made in the original survey may no longer be visible and it is impossible to differentiate interviewing and coding errors (Kiecolt & Nathan, 1985). Using data collected by others, it may be more difficult to assess any failings, biases, or errors in the procedures used for data collection (Sales, Lichtenwalter, Fevola, 2006) The result may be gross inconsistencies between what system members tell the investigators and what they actually do (Epstein, 1985). While there is no true guarantee that there are no errors in this database, Harris Interactive is an expert polling organization and stakes its reputation on accuracy.

Weak operationalization of variables could also be a problem. Studies that seek a high response rate may limit the questions asked and the variables may be relatively superficial (Sales, Lichtenwalter, Fevola, 2006). This could be an issue with this study. The survey instrument is short and the variables could possibly be stronger; however, as an exploratory study it is believed that the findings will provide useful insight and knowledge enough to initiate further studies.

The database may have gaps in the data (Sales, Lichtenwalter, Fevola, 2006) and therefore, this researcher did check on the amount of missing data on each of the indicators and found that there were very few missing responses.

Temporal invalidity may occur in cross-cultural surveys. Questions may have very different meanings depending on the cultural context (Kiecolt & Nathan, 1985). Culture and context can fundamentally influence the meaning of the actual phrase

(Antonucci, Toni C., Lansford, Jennifer E., Akiyama, Hiroko, Smith, Jacqui, Baltes, Margret M., Takahashi, Keiko, Fuhrer, Rebecca, and Dartigues, Jean-Francoise, (2002). This was taken into consideration in creating the original survey instrument, by translating the survey questions into the intended language and then having a native of that language translate it back into English. However, temporal invalidity could be an issue as translations do not always take into consideration cultural contexts.

Problems of sample comparability are of potential concern as changes over time in methods of locating and selecting respondents could result in changes in sample composition (Kiecolt & Nathan, 1985). It is hoped that this issue was minimized by having the survey conducted within a four month time frame in the other four countries, and all five surveys were within a year's time.

Another difference in the conduct of the survey among the five countries is the differing methods of data collection – telephone interviews for some countries versus face-to-face interviews in others. This raises the issue of sample noncomparability due to the differences in population coverage and nonresponse (Kiecolt & Nathan, 1985).

Lastly, secondary analysis can limit research creativity. The researcher is limited to the existing data and is constrained in the range of questions that can be investigated (Sales, Lichtenwalter, Fevola, 2006 and Kiecolt & Nathan, 1985). This is true of this study, which is why it is an exploratory study. It is hoped that the results of this study will create a foundation of knowledge on which additional research could be based.

While taking into consideration the potential limitations and pitfalls of conducting secondary analysis, this researcher feels strongly that the knowledge gained from this

research study outweighs the weaknesses and will make a beneficial contribution to the field of knowledge in social work and aging practice.

G. The Database

Data collected from the survey instruments from each of the five countries were coded, verified, and entered by Harris Interactive. The database contains information collected from a total of 7,161 participants: the United States *N* = 3,048, the United Kingdom *N* = 990, Japan *N* = 1,118, France *N* = 1,004, and the Dominican Republic *N* = 1,001. The first database, responses from the United States, was created prior to the administration of the international survey. The second database contains the responses from the other four countries. These two databases were merged by Harris Interactive; however, the data on age and income was input differently for the United States. This became an issue only when attempting to run a simple one way analysis of variance for age and income using all five countries as the independent variable.

Upon receiving and reviewing the database, this researcher prepared the data, a process that included cleaning, transforming, and combining the data in order to measure the variables.

1. Missing Data

The database did contain missing data. The missing data was both "Missing not at random (MNAR)" and "Missing completely at random (MCAR)" (Lyons, Peter and Doueck, Howard J., 2010). The MNAR relates to both the dependent and the independent variables which are missing. It was observed with this database that in each of the five countries there are significant data missing on income levels. The number

missing is reported in each chapter on the country analysis. This type of missing data represents a pattern. It can be deduced that respondents to the survey refused to provide information on the level of their income. While this can impact the results of the study, there are still significant numbers of responses in equal proportion in the income levels that allows valid results.

The MCAR refers to data that are missing where there is no discernible relationship to either the independent or dependent variables. Throughout the database it was noted that there are missing data across all fields and in all countries.

The database was cleaned of the "Don't Know" and the "Refused" missing data. Both of these types of data were recoded so that they would not be counted in the analysis.

2. Demographic Data

The database contains demographic information on all the participants. This study focuses on age, gender, marital status, and income level, which are the independent or predictor variables.

The age of the participants is recorded as age at the time of the study. Therefore, whole numbers are provided. The age range for four of the countries is 18 to 99. However, for the Dominican Republic the age range is 18 to 75. It is not known if the survey company could have obtained responses from people in their eighties or nineties in the Dominican Republic. For purposes of this study the ages of the participants were coded in two ways: age by category and age by decade. The coding of the age of the participants is discussed below in the Transforming Variables section below. The percentages of the "young" age category of the participants are 27% for the United

States, 46% for the United Kingdom, 35% for Japan, 44% for France, and 60% for the Dominican Republic. The percentages of the "middle-age" category of the participants are 35% for the United States, 38% for the United Kingdom, 42% for Japan, 38% for France, and 29% for the Dominican Republic. The percentages of the "old" category of the participants are 38% for the United States, 17% for the United Kingdom, 16% for Japan, 18% for France, and 11% for the Dominican Republic. These percentages are surprising as they are not representative of the populations in the countries studied. For example, the population of people sixty-five and older in Japan is 20% and in the United States it is 15%. Therefore, this sample is not representative of the populations in these countries as had been stated to the International Longevity Centers.

The gender of the participants is provided as either male or female. In all of the countries there is a slightly higher percentage of females ranging from 51.9% in the Dominican Republic to 58.3% in the United Kingdom.

The marital status of the participants is provided as either "married" or "not married". The "not married" category includes single, separated, divorced, or widowed. In four of the countries there is a higher percentage of married participants, the United States (53%), the United Kingdom (59%), France (61%), and the Dominican Republic (52%). In Japan there is a higher percentage of not married participants (67%).

The income of the participants is provided in the currency of their particular country. For example, in France the income is listed in *francs*. The data collected on income of the respondents was recorded in the currency of their country. In each country the income was collected within a range of income. For example, in the United Kingdom, one income range is 2,500 - 4, 499 *L*. The number of income ranges is not consistent

across the countries. For example, there are fifteen income ranges in the United Kingdom and five income ranges in the Dominican Republic. For purposes of this study, the income level in each of the countries is coded in two ways: income by thirds and income by quartiles. The coding of the income level is discussed in the Transforming Variables section below. The percentages of the "low" income category of the participants are 32% for the United States, 34% for the United Kingdom, 35% for Japan, 50% for France, 41% for the Dominican Republic. The percentages for the "medium" income category of the participants are 35% for the United States, 38% for the United Kingdom, 25% for Japan, 25% for France, and 38% for the Dominican Republic. The percentages for the "high" income category of the participants are 32% for the United States, 28% for the United Kingdom, 40% for Japan, 22% for France, and 21 percent for the Dominican Republic.

3. Transforming Variables

The database provides participant demographic information that is needed for the independent or predictor variables of this study, age, gender, marital status, and income. However, for two of these variables, the data is too specific and does not lend itself to comparative analysis. For example, the age of all 7,161 participants is provided in number of years and the income is provided in ranges that vary from country to country. Therefore, these two variables, age and income, had to be transformed in order to allow comparative analysis.

Age

Conducting comparative analysis using the age of the participant is essential to this study and therefore two age variables were created to allow for comparison on a more general level and comparison on a more specific level.

Age Variable #1: the ages of the participants were divided into three categories: young, middle-age, and old. The age ranges within each category was modeled on the studies of the literature review. The "young" age category includes the ages between 18 and 39; the "middle-age" category includes the ages between 40 and 64; and the "old" age category includes the ages of 65 and older. This age variable is labeled "Age by Category".

Age Variable #2: the ages of the participants were divided into nine categories that represent the decade of the age. For example, participants aged 20 to 29 are categorized into the "twenties" or "20s" decade, and participants aged 30 to 39 are categorized into the "30s" decade, and so on. This age variable is labeled "Age by Decades".

Income

The income level is also an important variable for this study of perceptions. As described in the literature review, socioeconomic status is a predictor of attitudes toward aging. The database does not provide socioeconomic status, nor did it provide similar demographic data in all countries which could have been used to develop a socioeconomic variable, such as educational level. Therefore, this study uses income level, which has also been found to be a significant predictor variable in previous studies. Two types of variables for income level were created for this study in an effort to capture any nuances income levels may provide.

Income Level Variable #1: the income ranges vary from country to country; therefore a comparative grouping was needed. For the first income level variable, the income ranges were grouped into three categories: “low”, “medium”, and “high”. Because the income ranges themselves could not be separated, these three categories are as equally divided as possible. This income level variable is labeled “Income by Thirds”.

Income Level Variable #2: in order to create a more specific income level variable, the income ranges were grouped into four categories: “low”, “low-medium”, “high-medium”, and “high”. Again, because the income ranges could not be separated, these four categories are as equally divided as possible. This income level variable is labeled “Income by Quartiles”.

4. Composite Variables

Three composite variables were created for the analysis by using the three Likert Scale questions included in the survey instrument. Cronbach’s alpha was conducted on each of the three sets of items to determine how well the set of items measures a concept on a single uni-dimensional scale.

The first composite variable was created with the following question:

> Q3. I’m going to read you some statements that people have made about life in general. For each statement, would you tell me if you agree strongly, agree somewhat, disagree somewhat or disagree strongly with it.
>
> A. As I grow older things seem better than I thought they would be
> B. As I look back on my life I am fairly well satisfied
> C. These are the best years of my life

The Cronbach’s alpha for this set of items is .63, which is not widely-accepted in social science as an appropriate level to be considered a scale. However, some sciences are more lenient and do allow a .60 alpha to be acceptable. Therefore, for purposes of

this study, each of the three items is considered a separate dependent or criterion variable and a composite variable was also created and used one of the dependent or criterion variables. The composite variable is labeled “Life Satisfaction Scale”, and together with the other three items it makes up the dependent variable category of “Life Satisfaction for Self”.

The second composite variable was created with the following question:

> Q4. Would you tell me whether the following issue is a very serious problem, a somewhat serious problem, or not a problem at all for you personally?
>
> A. Not having enough money to live on
> B. Poor health
> C. Loneliness
> D. Fear of crime
> E. Often feeling sad or blue

The Cronbach’s alpha for this set of items is .86, which widely-accepted in social science as an appropriate level to be considered a scale. Therefore, for purposes of this study, this set of items were transformed into a composite variable labeled “Quality of Life for Self” and is dependent/criterion variable.

The third composite variable was created with the following question:

> Q8. Would you tell me whether the following issue is a very serious problem, a somewhat serious problem, or not a problem at all for most people over 65 personally?
>
> A. Not having enough money to live on
> B. Poor health
> C. Loneliness
> D. Fear of crime
> E. Often feeling sad or blue

The Cronbach’s alpha for this set of items is .80, which widely-accepted in social science as an appropriate level to be considered a scale. Therefore, for purposes of this

study, this set of items were transformed into a composite variable labeled “Quality of Life for People Over 65” and is dependent/criterion variable.

H. The Construct of the Variables

1. Measurements

The subset of questions (the survey instrument, Attachment A) was chosen to capture information on the perceptions of aging. The independent/predictor variables are: age, gender, marital status, income level, and country. The dependent/criterion variables are the responses to the questions of the survey instrument.

Adequate measures of concepts in all social research entail multiple measurements (Weiss, 1998). Separate measures of three of the questions’ responses were combined to form composite measures for comparison as described above (Weiss, 1998). Measurement accuracy refers to the degree of freedom from error in the measuring process. Accuracy pertains to the achievement of measurement scales with mutually exclusive and exhaustive categories. The three kinds of scales used in this study are: nominal – gender, marital status, and country; ordinal – age and income level, and interval – the units of measurement of the scales which are calibrated in a way so that they are equidistant and contain units that are mutually exclusive, exhaustive, and ordered.

This study also lends itself to developing a “case study” for each country’s cultural attitudes towards aging and older people. Yin states that the unit of analysis for your case study might be a country’s economy, an industry in the world marketplace, an economic

policy, or the trade or capital flow between two countries, therefore a case study could be cultural attitudes among five countries (Yin, 1994).

2. Variables

A variable is an idea that has at least two categories: demonstrating that it varies and is potentially observable. Each variable in a study requires two definitions: a conceptual definition defines, theoretically, the idea of the variable; and the operational definition provides the following: how it obtains and measures the conceptual definition, the specific items that determine the conceptual definition of the variable, and the procedures used to determine how much of the conceptual definition an individual has or to which category an individual belongs (i.e. scoring).

a. Conceptual and Operational Definitions of the Predictor Variables

The Independent Variables are referred to as the Predictor Variables in this study. There predictor variables are: age, gender, marital status, income level, country, developed country, developing country, and culture. Below are the conceptual definitions of the predictor variables.

1. Age, a demographic ordinal variable. There are two types of the age variable; 1. Age by Category: young, middle-age and old; and 2. Age by Decade.
2. Gender, a demographic nominal variable, is dichotomous and is either identified as either male or female.

3. Marital Status, a demographic nominal variable. For this database marital status is dichotomous and is identified either as married or not married. Not married includes single, separated, divorced, or widowed.

    a. Marital Status of Females, a demographic nominal variable. In order to determine if the marital status of female participants has influence on their perceptions of aging and older adults, this dichotomous variable was used. The value for this variable is identified as either females who are married or females who are not married.

    b. Marital Status of Males, a demographic nominal variable. In order to determine if the marital status of male participants has influence on their perceptions of aging and older adults, this dichotomous variable was used. The value for this variable is identified as either males who are married or males who are not married.

4. Income Level, a demographic ordinal variable. In this study there are two income level variables: Income Level by Thirds (low, medium, and high) and Income Level by Quartiles (low, low-medium, high-medium and high).

5. Country, a nominal variable, and is defined by the country in which the data was obtained.

6. A developed country is one with a level of economic development that has a high income per capita and a high Human Development Index, which is the average achievements in a country in three basic dimensions of human development: a long and healthy life (life expectancy rate); knowledge and education (literacy rate); and a decent standard of living (gross domestic

product). Each year, United Nations member states are listed and ranked according to these measures. France, Japan, the United Kingdom, and the United States are listed by the United Nations as developed countries (Wikipedia, 2008). For this study a developed country is identified as France, Japan, the United Kingdom, and the United States.

7. A developing country is one which has a relatively low standard of living and a moderate to low Human Development Index. The Dominican Republic is listed by the United Nations as a developing country. For this study a developing country is identified as the Dominican Republic.
8. Culture is defined as the collective beliefs or attitudes of people from different countries. Culture will be determined by the country in which the respondent resides and from which the interview was conducted.

b. Conceptual and Operational Definitions of the Criterion Variables

The Dependent Variables are referred to as the Criterion Variables in this study. There are nine criterion variables included in this study. The criterion variables are the questions in the survey instrument. The operational definitions of the criterion variables are the responses to the questions. The conceptual definitions of the criterion variables are described below in the choice of responses to the questions.

1. What Best Defines the Beginning of Old Age: a decline in physical ability, a decline in mental functioning, reaching a certain age, retirement, becoming a grandparent.
2. Respect for People over 65: receiving either too little respect, too much respect, or just the right amount of respect.

3. As I Grow Older Things are Better than I Thought They Would Be: agree strongly, agree somewhat, disagree somewhat, disagree strongly.
4. As I Look Back on my Life I am Fairly Satisfied: agree strongly, agree somewhat, disagree somewhat, disagree strongly.
5. These are the Best Years of My Life: agree strongly, agree somewhat, disagree somewhat, disagree strongly.
6. Life Satisfaction Scale: contains the aggregate of the responses to the questions of: As I Grow Older Things are Better than I Thought They Would Be; As I Look Back on my Life I am Fairly Satisfied; and These are the Best Years of My Life.
7. Quality of Life for Self Scale: contains the responses to the perceptions of quality of life issues for the participants personally: crime, poverty, ill health, depression, loneliness, and feeling sad.
8. Locus of Control: refers to the participants' perception of what will influence the quality of their life at age 75: decisions or choices that participants make during their lifetime; decisions made by others that are beyond their control; genetic or inherited factors; or blind luck.
9. Quality of Life for People over 65 Scale: contains the responses to the participants' perceptions of quality of life issues for people over 65: crime, poverty, ill health, depression, loneliness, and feeling sad.

Each of the nine criterion variables were analyzed with the predictor variables of age, gender, marital status, and income level in order to determine if predictor variables influence the participants' responses to the questions.

I. Statistical Analysis

The Statistical Package for the Social Sciences (SPSS) version 11 was used in the computer analysis of the data. Each country was analyzed individually first. The statistical analysis and the findings are described within each country. Then the findings from each of the five countries are compared with each other. For each of the countries frequency distribution was used for all predictor and criterion variables. The mode, median, and mean were determined for all of the variables. The tables containing the frequency distribution as well as the tables containing the output of the statistical analysis are embedded in each country chapter.

In order to analyze the differences between and among the variables, three types of statistical analysis are employed in this study: a simple one-way analysis of variance; Chi-Square, and an Independent Samples T-Test. The number of subjects for four of the countries is approximately 1,000. It was thought that this number was appropriate for the statistical analysis employed. The number of subjects for the United States is over 3,000, which is significantly higher, and it was expected that there would be greater significance between the variables. The entire database of 7,161 subjects is a substantial number. All of the statistical analysis using the five countries was significant, which could be attributed to the large number of subjects. Therefore, a side by side discussion of the

findings from the individual country analyses is also used to describe the findings of the five country analysis. Future research using the entire database would focus on regression analysis.

Statistical significance is determined at the *p* level of .05. When the results of the analysis are greater than .05, the statistical finding is provided, however, the output of the analysis is not provided. When the results of the analyses are .05 or less, the statistical finding is provided as well as a table portraying the results of the analysis. A description of the findings is also provided. For purposes of this study, the exact *p* level is provided. Also, the exact mean and standard deviation are provided and not rounded to the one hundredth decimal. The rationale is because of the large samples and the nuanced results, as well as a method to save time when reporting the volumes of results.

J. Discussion of Findings

There is a chapter for each of the five countries which describe the country's demographic profile and the analysis of the data including the tables and the interpretation. It was decided to report and discuss the findings of each country's analysis starting with the United States first, followed by the United Kingdom and so on, in reverse alphabetical order to the Dominican Republic. The chapter describing the analyses comparing all five countries follows the chapter on the Dominican Republic.

The final chapter summarizes the study, the findings, and the implications for social service programs, public education especially in gerontological curriculum, and concludes with recommendations for further research.

Chapter 4: Discussion of Analysis and Findings in the United States

A. Population Demographics

In order to provide a basis on which to compare demographics across time and across countries, the current relevant demographics are provided (2009 is the most current data available), as well as the relevant demographic information for 2000, which is the year the data was collected for this study**.**

1. Current Demographics

Compared to the other four countries of this study, the United Kingdom, Japan, France and the Dominican Republic, the United States ranks fourth in regard to its population aging. The most current demographics available for the United States are from 2009. In that year, people 65 and over made up 12.9% of the population, 50.7% of the population was female and 11.1% were foreign born. The median household income (in 2008) was $52,029.

Life expectancy in the United States rose from age 70.0 in 1960-65 to 79.2 in 2005-10. The United States, like many other countries, is entering an era of hyperaging. The percent of people aged 60 and over in 2007 was 18.2%; this percent is expected to rise to 25.4% by 2040 (Jackson, R. 2010).

2. Demographics in 2000

The data used for this study were collected in 2000. The participants were sampled to be representative of the population in the United States at that time. The

entire population of the United States in 2000 was 287,842,000; 12.4 percent of the population was 65 and over.

Table USA-1 below displays the demographics of the 3048 participants in this study.

Table USA-1: United States Participant Demographics_ (N= 3048)

	N	%
Gender:		
Female	1708	56.0
Male	1340	44.0
Marital Status:		
Married	1603	52.7
Not Married	1441	47.3
Age:		
Teens	64	2.1
Twenties	348	11.4
Thirties	419	13.7
Forties	525	17.2
Fifties	402	13.2
Sixties	512	16.8
Seventies	584	19.2
Eighties	184	6.0
Nineties	10	.3
Salary Range: (N = 2643)		
$7,500 or less	179	6.8
$7,501 to $15,000	252	9.5
$15,001 to $25,000	416	15.7
$25,001 to $35,000	440	16.6
$35,001 to $50,000	486	18.4
$50,001 to $75,000	401	15.2
$75,001 to $100,000	239	9.0
$100,001 or over	230	8.7

As Table USA-1 above shows, the United States participants in this study consist of 56 percent females and 44 percent males; 52.7 percent of the total number of participants is married; and 47.3 percent are not married – either single, divorced, separated, or widowed. The ages range from 18 to 99 with just over one-fourth of the

participants (27.3%) falling into the young category (39 and younger), just over one-third of the participants (34.8%) in the middle-aged category (40 to 64), and 37.9 percent in the old category (65 and older). The mean age is 53.3 and the median age is 53. The salaries range from $7,500 or less (6.8%) to $100,000 or over (8.7%), with the mean range between $25,000 and $35,000 and the median range from $35,001 and $50,000.

These demographics are relevant to this study in which I analyze how age, gender, marital status, and income levels influence participants' perceptions of aging.

B. Analysis of Data

The survey instrument for this study was designed to collect data that would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions:

1. Perceptions of Aging and Older People;
2. Perceptions of Life Satisfaction for Self;
3. Perceptions of Quality of Life for Self; and
4. Perceptions of Quality of Life for People Sixty-five and Older.

The following is the data analysis of each of the four categories.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people:

a) “In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning, or reaching a specific age”; and

b) “Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people”.

Each question was analyzed using the four predictor variables: age, gender, marital status, and income level.

a. *“In general, which one of the following five things would you say best defines the beginning of old age”*

This question in the survey instrument is intended to provide understanding of the participants’ perceptions of when old age begins. There are five responses to choose from:

(1) “Retirement”;

(2) “Becoming a grandparent”;

(3) “Decline in physical ability”;

(4) “Decline in mental functioning”; and

(5) “Reaching a specific age”.

Table USA-2 below displays the frequencies of the responses.

Table USA-2: “Which one of the following five things best defines the beginning of old age”

	Total (N=2979)	
	Number	**%**
Decline in physical ability	1212	40.7
Decline in mental functioning	1020	34.2
Reaching a specific age	404	13.6
Retirement	267	9.0
Becoming a grandparent	76	2.6

As shown in the table above, the most frequently selected response (40.7%) is "Decline in physical ability", and the second most frequently selected response (34.2%) is "Decline in mental functioning".

Chi-Square analysis was used to determine which of the predictor variables: age, gender, marital status or income level, influence the participants' perception of when old age begins. All of the predictor variables were determined to have a statistically significant relationship with the criterion variable of "What best defines the beginning of old age".

In order to determine if the age of the participants has a relationship with the responses to the question "Which one of the following five things would you say best defines the beginning of old age?", Chi-Square analysis was employed using two versions of the age variable, age by category and age by decade. The age by category variable consists of three groupings of age:

(1) young (39 and younger);

(2) middle-age (40 to 64); and

(3) old (65 and over).

Table USA-3 shows the outcome of the Chi-Square analysis for the age by category independent variable and the criterions variable of what best defines old age.

Table USA-3: Chi-Square Results for Age: Young, Middle-Age, and Old with "Which one of the following five things would you say best defines the beginning of old age" (N=2979).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 93	
Decline in physical ability	**N**	337	413	462	**1212**
	%	40.8	39.3	41.9	**40.7**
Decline in mental functioning	**N**	230	408	382	**1020**
	%	27.8	38.9	34.6	**34.2**
Reaching a specific age	**N**	135	147	122	**404**
	%	16.3	14.0	11.1	**13.6**
Retirement	**N**	95	68	104	**267**
	%	11.5	6.5	9.4	**9.0**
Becoming a grandparent	**N**	29	14	33	**76**
	%	3.5	1.3	3.0	**2.6**
Total	**N**	826	1050	1103	**2979**
	%	100.0	100.0	100.0	**100.0**

***x²* = 50.643, *df* = 8, *p* = .000**

As seen in the Table USA-3, a statistically significant relationship was found between age category of young, middle-age, and old and what best defines the beginning of old age ($x^2 = 50.643$, $df = 8$, $p = .000$). Participants in the "old" category have a slightly higher percentage of those who selected "Decline in physical ability" (41.9%), followed by participants in the "young" category (40.8%). More than expected "old" and "young" participants selected "Decline in physical ability" and fewer than expected "middle-age" participants selected that response. Of those who selected "Decline in mental functioning", participants in the "middle-age" category had the highest percentage (38.9%). More than expected "old" and "middle-age" participants selected "Decline in mental functioning" and fewer than expected "young" participants selected that response. A higher percentage of "young" participants selected "Reaching a specific age" (16.3%) and "Retirement" (11.5%) than "middle-age" and "old" participants.

The Chi-Square analysis indicates that most of the participants in each of the age categories: young, middle-age and old, perceive the beginning of old age as a "Decline in physical ability". "Young" participants are more inclined to perceive the beginning of old age as "Reaching a specific age" and "Retirement" than do "middle-age" and "old" participants.

The second age variable is "age by decade", which categorizes the age of the participants by the decades; such as twenties, thirties, forties, etc. In order to determine if there is a relationship between the more nuanced age variable category of age by decades and the responses to the survey question "Which one of the following five things would you say best defines the beginning of old age", Chi-Square analysis was performed. The analysis determined that there is also a statistically significant relationship between age by decade and what best defines the beginning of old age ($x^2 = 87.293$, $df = 32$, $p = .011$). Table USA-4 below displays the results.

Table USA-4: Chi-Square Results for Age: Decades with "Which one of the following five things would you say best defines the beginning of old age" (N=2979).

		Age: Decades									
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	**Total**
Decline in physical ability	**N**	17	142	178	211	155	203	226	77	3	**1212**
	%	26.6	40.8	43.0	40.5	39.0	40.6	40.4	45.8	37.5	**40.7**
Decline in mental functioning	**N**	14	96	120	194	158	189	188	56	5	**1020**
	%	21.9	27.6	29.0	37.2	39.8	37.8	33.6	33.3	62.5	**34.2**
Reaching a specific age	**N**	14	50	71	74	53	59	68	15	0	**404**
	%	21.9	14.4	17.1	14.2	13.4	11.8	12.2	8.9	.0	**13.6**
Retirement	**N**	14	44	37	32	28	41	56	15	0	**267**
	%	21.9	12.6	8.9	6.1	7.1	8.2	10.0	8.9	.0	**9.0**
Becoming a grandparent	**N**	5	16	8	10	3	8	21	5	0	**76**
	%	7.8	4.6	1.9	1.9	.8	1.6	3.8	3.0	.0	**2.6**
Total	**N**	64	348	414	521	397	500	559	168	8	**2979**
	%	100	100	100	100	100	100	100	100	100	**100**

***x²* = 87.293, *df* = 32, *p* = .011**

In general the highest percentage of participants in each of the age decades selected “Decline in physical ability” as the beginning of old age. The highest percentage of participants in their fifties and in their nineties selected “Decline in mental functioning”. The second most selected response among all the participants is “Decline in mental functioning”. In general, the percentages of participants who selected the response “Reaching a specific age”, declines with each ascending decade; the percentage of participants in younger than twenty is 21.9 while for participants in their eighties it is 8.9. The percentage of participants selecting “Retirement” decreases from those younger than twenty until the fifties, when the percentages increase until the nineties.

This analysis shows that the majority of the age decades of participants in the United States perceive that a decline in physical ability best defines the beginning of old age. And that the second most common perception of the beginning of old age for each of the age decades is decline in mental functioning. The percentage of participants who perceive that reaching a specific age best defines the beginning of old age decreases as the age decades increase.

In order to determine if the gender of the participants has a relationship with the responses to the question “What best defines the beginning of old age”, Chi-Square analysis was conducted. It was determined that there is a statistically significant relationship between the independent variable gender and the criterion variable (x^2 = 32.824, df = 4, p = .000), as shown in Table USA-5 below.

Table USA-5: Chi-Square Results for Gender and "Which one of the following five things would you say best defines the beginning of old age" (N=2979).

		Gender		Total
		Male	Female	
Decline in physical ability	**N**	537	675	**1212**
	%	40.7	40.7	**40.7**
Decline in mental functioning	**N**	401	619	**1020**
	%	30.4	37.3	**34.2**
Reaching a specific age	**N**	187	217	**404**
	%	14.2	13.1	**13.6**
Retirement	**N**	152	115	**267**
	%	11.5	6.9	**9.0**
Becoming a grandparent	**N**	43	33	**76**
	%	3.3	2.0	**2.6**
Total	**N**	1320	1659	**2979**
	%	100.0	100.0	**100.0**

***x²* = 32.824, *df* = 4, *p* = .000**

As shown in Table USA-5, the most frequently selected response for males and females is "Decline in physical ability"; the percentages are equal for both genders (40.7%). However, for the second most frequently selected response "Decline in mental functioning" a higher percentage of female participants (37.3%) selected that response compared to male participants (30.4%); also more than expected female participants selected "Decline in mental functioning" and fewer than expected male participants selected that response. For the fourth selected response "Retirement", a higher percentage of male participants (11.5%) selected that response than female participants (6.9%); and more than expected male participants selected that response and fewer than expected female participants selected that response.

The results of the Chi-Square analysis indicate that firstly both male and female participants equally perceive that the definition of the beginning of old age is "Decline in physical ability". Secondly, female participants are more inclined to perceive that the

beginning of old age is a “Decline in mental functioning” compared to male participants, and male participants are more inclined to perceive that “Retirement” is the beginning of old age compared to female participants.

In order to determine if the marital status of the participants has a relationship with the responses to the question “What best defines the beginning of old age”, Chi-Square analysis was conducted. It was determined that there is a statistically significant relationship between the independent variable marital status and the criterion variable (x^2 = 32.824, df = 4, p = .000), as shown in Table USA-6 below.

Table USA-6: Chi-Square Results for Marital Status and “Which one of the following five things would you say best defines the beginning of old age” (N=2979).

		Marital Status		
		Married	**Not Married**	**Total**
Decline in physical ability	**N**	674	536	**1210**
	%	42.7	38.4	**40.7**
Decline in mental functioning	**N**	571	448	**1019**
	%	36.2	32.1	**34.3**
Reaching a specific age	**N**	185	219	**404**
	%	11.7	15.7	**13.6**
Retirement	**N**	118	148	**266**
	%	7.5	10.6	**8.9**
Becoming a grandparent	**N**	30	46	**76**
	%	1.9	3.3	**2.6**
Total	**N**	1578	1397	**2975**
	%	100.0	100.0	**100.0**

***x²* = 32.824, *df* = 4, *p* = .000**

The most frequently selected response for married and not married participants is “Decline in physical ability”; however, the percentage for married participants (42.7%) is higher than for not married participants (38.4%); and more than expected married participants selected this response while fewer than expected not married participants selected this response. A higher percentage of married participants (36.2%) selected

"Decline in mental functioning" than not married participants (32.1%); and more than expected married participants selected this response while fewer than expected not married participants selected this response. A higher percentage of not married participants (15.7%) than married participants (11.7%) selected "Reaching a specific age"; more than expected not married participants selected this response while fewer than expected married participants selected this response.

The results of the Chi-Square analysis indicate that firstly both married and not married participants equally perceive that the definition of the beginning of old age is "Decline in physical ability". Secondly, married participants are more inclined to perceive that the beginning of old age is a "Decline in mental functioning" compared to not married participants, and not married participants are more inclined to perceive that "Reaching a specific age" is the beginning of old age compared to married participants.

The Chi-Square analysis shows that gender and marital status have a statistically significant relationship with the criterion variable of "What best defines the beginning of old age", therefore the marital status of female participants and the marital status of male participants may also have a relationship with this criterion variable. Chi-Square analysis was performed in order to determine if these two independent variables also have a relationship with the criterion variable.

The Chi-Square analysis using marital status of female participants does show that there is a statistically significant relationship with "What best defines the beginning of old age" ($x^2 = 12.600$, $df = 4$, $p = .013$). Table USA-7 below displays the results.

The most frequently selected response for married and not married female participants is "Decline in physical ability"; however the percentage for married female

participants (41.4%) is higher than for not married female participants (40.0%); and more than expected married female participants selected this response while fewer than expected not married female participants selected this response. A higher percentage of married female participants (39.7%) selected "Decline in mental functioning" than not married female participants (35.1%); and more than expected married female participants selected this response while fewer than expected not married female participants selected this response. A higher percentage of not married female participants (14.6%) than married female participants (11.5%) selected "Reaching a specific age"; more than expected not married female participants selected this response while fewer than expected married female participants selected this response.

Table USA-7: Chi-Square Results for the Marital Status of Females and "Which one of the following five things would you say best defines the beginning of old age" (N=1656).

		Marital Status Of Females		
		Married	**Not Married**	**Total**
Decline in physical ability	**N**	335	339	**674**
	%	41.4	40.0	**40.7**
Decline in mental functioning	**N**	321	297	**618**
	%	39.7	35.1	**37.3**
Reaching a specific age	**N**	93	124	**217**
	%	11.5	14.6	**13.1**
Retirement	**N**	51	63	**114**
	%	6.3	7.4	**6.9**
Becoming a grandparent	**N**	9	24	**33**
	%	1.1	2.8	**2.0**
Total	**N**	809	847	**1656**
	%	100.0	100.0	**100.0**

x^2 = 12.600, *df* = 4, *p* = .013

The results of the Chi-Square analysis indicate that married female participants are more inclined to perceive the beginning of old age as a "Decline in physical ability" than not married female participants and married female participants are more inclined to

perceive “Decline in mental functioning” as the beginning of old age compared to not married female participants. Not married female participants are more inclined to perceive that “Reaching a specific age” is the beginning of old age compared to married female participants.

Chi-Square analysis was used to determine if there is a relationship between the marital status of male participants and the criterion variable of “What best defines the beginning of old age”. The analysis determined that there is a statistically significant relationship between the marital status of male participants and “What best defines the beginning of old age” (x^2 = 28.693, df = 4, p = .000). Table USA-8 below displays the results.

Table USA-8: Chi-Square Results for the Marital Status of Males and “Which one of the following five things would you say best defines the beginning of old age” (N=1319).

		Marital Status Of Males		
		Married	**Not Married**	**Total**
Decline in physical ability	**N**	339	197	**536**
	%	44.1	35.8	**40.6**
Decline in mental functioning	**N**	250	151	**401**
	%	32.5	27.5	**30.4**
Reaching a specific age	**N**	92	95	**187**
	%	12.0	17.3	**14.2**
Retirement	**N**	67	85	**152**
	%	8.7	15.5	**11.5**
Becoming a grandparent	**N**	21	22	**43**
	%	2.7	4.0	**3.3**
Total	**N**	769	550	**1319**
	%	100.0	100.0	**100.0**

***x²* = 28.693, *df* = 4, *p* = .000**

As shown in Table USA-8, the most frequently selected response for married and not married male participants is “Decline in physical ability”; however the percentage for married male participants (44.1%) is higher than for not married male participants

(35.8%); and more than expected married male participants selected this response while fewer than expected not married male participants selected this response. A higher percentage of married male participants (32.5%) selected "Decline in mental functioning" than not married male participants (27.5%); and more than expected married male participants selected this response while fewer than expected not married male participants selected this response. A higher percentage of not married male participants (17.3%) than married male participants (12.0%) selected "Reaching a specific age"; more than expected not married male participants selected this response while fewer than expected married male participants selected this response.

The results of the Chi-Square analysis indicate that married male participants are more inclined to perceive the beginning of old age as a "Decline in physical ability" than not married male participants and married male participants are more inclined to perceive "Decline in mental functioning" as the beginning of old age compared to not married male participants. Not married male participants are more inclined to perceive that "Reaching a specific age" is the beginning of old age compared to married male participants.

The income level of participants can have an effect on how they perceive aging and older people. Therefore, Chi-Square analysis was performed with the predictor variable of income level. The income levels of the participants were categorized in two separate ways in order to determine which would have the most sensitivity. The first grouping is in three categories: low, medium and high. The second grouping of income is in quartiles: low, low-medium, high-medium, and high. The results of the Chi-Square

analysis determined that both of the groupings of the income variable have a statistically significant relationship with “What best defines the beginning of old age”.

In order to determine if the independent variable of income categorized by thirds (low, medium, and high) has a significant relationship with the criterion variable of “What best defines the beginning of old age?”, Chi-Square analysis was conducted using both these variables. The results of the analysis determined that there is a statistically significant relationship ($x^2 = 39.240$, $df = 8$, $p = .000$). The results are shown in Table USA-9 below.

Table USA-9: Chi-Square Results for Income Levels: Thirds (Low, Medium, High) with “Which one of the following five things would you say best defines the beginning of old age” (N=2596).

		Income Level: Thirds			Total
		Low	Medium	High	
Decline in physical ability	**N**	310	361	399	**1070**
	%	37.8	39.4	46.4	**41.2**
Decline in mental functioning	**N**	255	334	291	**880**
	%	31.1	36.5	33.8	**33.9**
Reaching a specific age	**N**	139	112	104	**355**
	%	17.0	12.2	12.1	**13.7**
Retirement	**N**	93	83	55	**231**
	%	11.3	9.1	6.4	**8.9**
Becoming a grandparent	**N**	23	26	11	**60**
	%	2.8	2.8	1.3	**2.3**
Total	**N**	820	916	860	**2596**
	%	100.0	100.0	100.0	**100.0**

***x²* = 39.240, *df* = 8, *p* = .000**

Table USA-9 shows the differences among the three income levels for the responses to the survey question “What best defines the beginning of old age?”. For the most frequently selected response “Decline in physical ability”, the percentage of participants in each of the income categories increases as the income level increases. Also the results show that fewer than expected participants with low and medium income

levels selected this response, while more than expected participants in the high income level selected this response. This indicates that the higher the income level the more likely the participants are to perceive a decline in physical ability as the beginning of old age. For the second most frequently selected response "Decline in mental functioning", the percentage of participants is higher for the medium income level and less in the low and high income levels. Also, the results show that fewer than expected participants with a low income level selected this response, while more than expected participants in the medium income level selected this response. The expected and actual count for the high income level is the same. This indicates that participants in the medium income level are more likely to perceive decline in mental functioning as the beginning of old age than participants in the low or high income levels. The percentages of participants who selected "Reaching a specific age" declines as the income levels become higher. And more than expected participants in the low income level selected this response, while fewer than expected participants in the medium and high income levels selected that response. This indicates that as the income levels increase, participants are less likely to perceive that reaching a specific age is the beginning of old age. The percentages of participants who selected "Retirement" declines as the income levels become higher. And more than expected participants in the low and medium income levels selected this response, while fewer than expected participants in the high income levels selected that response. This indicates that as the income levels increase, participants are less likely to perceive that retirement is the beginning the old age. The percentages of participants in the low and medium income levels are the same for those who selected "Becoming a grandparent" and lower for participants in the high income category. More than expected

participants in the low and the medium income levels selected this response, while fewer than expected participants in the high income level selected this response. This indicates that participants in the low and medium income levels are more likely to perceive becoming a grandparent as the beginning of old age compare to participants in the high income level. In summary, the results indicate that participants with higher income levels are more likely to perceive a change in physical or mental functioning as the beginning of old age, while participants in lower income levels are more likely to perceive a change in status, such as retirement or becoming a grandparent, or reaching a specific age as the beginning of old age.

The results of the Chi-Square analysis using income by quartiles (low, low-medium, high-medium, and high) ($x^2 = 41.812$, $df = 12$, $p = .000$) are shown in Table USA-10 below.

Table USA-10: Chi-Square Results for Income Levels: Quartiles (Low, Low-Medium, High-Medium, High) with "Which one of the following five things would you say best defines the beginning of old age" (N=2596).

		Income Level: Quartiles				Total
		Low	**Low-Med**	**Hi-Med**	**High**	
Decline in physical ability	**N**	310	361	180	219	**1070**
	%	37.8	39.4	45.3	47.3	**41.2**
Decline in mental functioning	**N**	255	334	139	152	**880**
	%	31.1	36.5	35.0	32.8	**33.9**
Reaching a specific age	**N**	139	112	50	54	**355**
	%	17.0	12.2	12.6	11.7	**13.7**
Retirement	**N**	93	83	26	29	**231**
	%	11.3	9.1	6.5	6.3	**8.9**
Becoming a grandparent	**N**	23	26	2	9	**60**
	%	2.8	2.8	.5	1.9	**2.3**
Total	**N**	820	916	397	463	**2596**
	%	100	100	100	100	**100**

***x²* = 41.812, *df* = 12, *p* = .000**

Table USA-10 above shows the differences among the four income levels with the responses to the survey question “What best defines the beginning of old age?”. For the most frequently selected response “Decline in physical ability”, the percentage of participants in each of the income categories increases as the income level increases. Also the results show that fewer than expected participants with low and low-medium income levels selected this response, while more than expected participants in high-medium and high income levels selected this response. This indicates that the higher the income level the more likely the participants are to perceive a decline in physical ability as the beginning of old age. For the second most frequently selected response “Decline in mental functioning, the percentage of participants is higher for the two medium income levels (low-medium and high-medium) than for the low and high income levels. Also, the results show that fewer than expected participants with low and high income levels selected this response, while more than expected participants in low-medium and high-medium income levels selected this response. This indicates that participants in the medium income levels are more likely to perceive decline in mental functioning as the beginning of old age than participants in the low or high income levels. In general, the percentages of participants who selected “Reaching a specific age” declines as the income levels become higher. And more than expected participants in the low income level selected this response, while fewer than expected participants in the low-medium, high-medium, and high income levels selected that response. This indicates that as the income levels increase, participants are less likely to perceive that reaching a specific age is the beginning of old age. In general, the percentages of participants who selected “Retirement” declines as the income levels become higher. And more than expected

participants in the low income level selected this response, while fewer than expected participants in the low-medium, high-medium, and high income levels selected that response. This indicates that as the income levels increase, participants are less likely to perceive that retirement is the beginning the old age. This holds true for participants who selected “Becoming a grandparent”; it appears that the higher the income of the participant the less likely they are to perceive that becoming a grandparent is the definition of old age.

The results of this analysis indicate that participants with higher income levels are more likely to perceive a change in physical or mental functioning as the beginning of old age, while participants in lower income levels are more likely to perceive a change in status, such as retirement or becoming a grandparent, or reaching a specific age as the beginning of old age.

In summary, the majority of participants in the United States perceive the beginning of old age as first a decline in physical ability and second as a decline in mental functioning. All of the independent variables, age, gender, marital status, and income proved to have a statistically significant relationship with the criterion variable “What best defines the beginning of old age?”. Older participants are more inclined to perceive a decline in physical or mental functioning compared to younger participants. Both male and female participants equally perceive a decline in physical ability. However female participants are more inclined to perceive a decline in mental functioning compared to male participants and male participants are more inclined to perceive reaching a specific age compared to female participants. Married participants are more inclined to perceive a decline in physical and mental functioning as the

beginning of old age compared to not married participants. Married female participants are more inclined to perceive the beginning of old age as a decline in physical and mental functioning compared to not married female participants. The same is true for married male participants who also are more likely to perceive the beginning of old age as a decline in physical and mental functioning compared to not married male participants. Lastly, participants with higher incomes are more likely to perceive the beginning of old age as a decline in physical and mental functioning, participants with lower income levels are more likely to perceive the beginning of old age as a change in status, retirement or becoming a grandparent, or reaching a specific age.

b. *"Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to provide an understanding of the participants' perceptions of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three responses:

(1) too much respect;

(2) too little respect; or

(3) just about the right amount respect.

Table USA-11 below displays the frequencies of the responses selected by the participants.

Table USA-11: "Do you feel that people over 65 get too much, too little or just about the right amount of respect".

	Total (N=2980)	
	N	**%**
Too little respect	2248	75.4
Just right amount of respect	710	23.8
Too much respect	22	0.7

Three-fourths of the participants (75.4%) in the United States perceive that people over 65 get too little respect from younger people, and just below one-fourth (23.8%) of the participants perceive that people over 65 get just the right amount of respect.

In order to determine if age, gender, marital status or income influence the participants' perception of respect for older people, Chi-Square analysis was conducted with each of the predictor variables. It was determined that age, the marital status of female participants, and income have relationship with the criterion variable.

Chi-Square analysis shows that there is a statistically significant relationship between age by category: young, middle-age and old, and perception of respect for older people (x^2 = 296.981, *df* = 4, *p* = .000). Table USA-12 below displays the results of the analysis.

Table USA-12: Chi-Square results for Age by Category and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=2980).

		Age: Category			Total
		Young 18 - 39	**Middle-Age 40 - 64**	**Old 65 - 93**	
Too Little Respect	**N**	711	896	641	**2248**
	%	85.9	85.4	58.1	**75.4**
Just the Right Amount of Respect	**N**	106	151	453	**710**
	%	12.8	14.4	41.1	**23.8**
Too Much Respect	**N**	11	2	9	**22**
	%	1.3	.2	.8	**.7**
Total	**N**	828	1049	1103	**2980**
	%	100	100	100	**100**

***x*² = 296.981, *df* = 4, *p* = .000**

As shown in Table USA-12 above, there is a significant difference between the percentages of the young participants (85.9%) and the middle-age participants (85.4%) who selected “Too little respect” compared to the old participants (58.1%). The majority of young and middle-age participants (85%) perceive that people over 65 get too little respect, and over half of the old participants (58%) also perceive that people over 65 get too little respect. More young and middle-age participants than expected selected “Too little respect” and fewer than expected old participants selected that response. Therefore, the young and middle-age participants are more likely to perceive that people over 65 get too little respect than old participants. Almost half of the old participants (41.1%) perceive that people over 65 get “Just the right amount of respect”, while less than fifteen percent of the young (12.8%) and middle-age (14.4%) perceive that people over 65 get “Just the right amount of respect”. More than expected old participants selected “Just the right amount of respect”, while fewer than expected young and middle-age participants selected that response. Therefore, old participants are more likely to perceive that people over 65 get just the right amount of respect, while young and middle-age participants are less likely to perceive that people over 65 get the right amount of respect. In summary, young and middle-age participants are more likely to perceive that people over 65 received too little respect from young people, and old participants are more likely to perceive that people over 65 get just the right amount of respect from young people.

Chi-Square analysis shows that there is a statistically significant relationship between age by decades, twenties, thirties, forties, etc., and perception of respect for older people ($x^2 = 341.322$, $df = 16$, $p = .000$). Table USA-13 below displays the results of the analysis.

Table USA-13: Chi-Square results for Age by Decade and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=2980).

		Age: Decades									
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	**Total**
Too Little Respect	**N**	48	293	370	468	333	324	320	87	5	**2248**
	%	75.0	84.4	88.7	89.8	83.9	64.8	57.8	51.2	50.0	**75.4**
Just the Right Amount of Respect	**N**	13	47	46	51	64	174	229	81	5	**710**
	%	20.3	13.5	11.0	9.8	16.1	34.8	41.3	47.6	50.0	**23.8**
Too Much Respect	**N**	3	7	1	2	0	2	5	2	0	**22**
	%	4.7	2.0	.2	.4	.0	.4	.9	1.2	.0	**.7**
Total	**N**	64	347	417	521	397	500	554	170	10	**2980**
	%	100	100	100	100	100	100	100	100	100	**100**

$x^2 = 341.322$, $df = 16$, $p = .000$

Table USA-13 above shows that the percentages of the participants who selected "Too little respect" increase from participants younger than twenty to participants younger than fifty and the percentages decrease from participants from age fifty through the nineties. This indicates that participants under the age of fifty are more likely to perceive that older people get too little respect from younger people compared to participants fifty and older. Of the participants who selected "Just the right amount of respect", the percentages of the participants decrease from participants younger than twenty to participants younger than fifty and the percentages increase from participants from age fifty through the nineties. This indicates that participants fifty and older are more likely to perceive that older people get just the right amount of respect from younger people compared to participants under age fifty. In summary, participants fifty and older are more likely to perceive that older people get just the right amount of respect and participants younger than fifty are more likely to perceive that older people get too little respect from young people.

The Chi-Square analysis shows that there is no relationship between the predictor variable of gender and the criterion variable of respect for the elderly ($x^2 = 2.252$, $df = 2$, $p = .324$).

The Chi-Square analysis shows that there is no relationship between the predictor variable of marital status and the criterion variable of respect for the elderly ($x^2 = 4.876$, $df = 2$, $p = .087$).

The Chi-Square analysis shows that there is a statistically significant relationship between the predictor variable of marital status of female participants and the criterion variable of respect for the elderly ($x^2 = 7.975$, $df = 2$, $p = .019$). Table USA-14 displays the results.

Table USA-14: Chi-Square Results for the Marital Status of Females and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=1661).

		Marital Status Of Females		
		Married	**Not Married**	**Total**
Too Little Respect	**N**	628	622	**1250**
	%	78.0	72.7	**75.3**
Just the Right Amount of Respect	**N**	175	227	**402**
	%	21.7	26.5	**24.2**
Too Much Respect	**N**	2	7	**9**
	%	.2	.8	**.5**
Total	**N**	805	856	**1661**
	%	100.0	100.0	**100.0**

***x*² = 7.975, *df* = 2, *p* = .019**

Table USA-14 shows that the percentage of the married female participants (78%) is higher than for the not married female participants (72.7%) of those who selected "Too little respect". More than expected married female participants selected "Too little respect" and fewer than expected not married female participants selected that response. Therefore, married female participants are more likely to perceive that people over 65 get too little respect compared to not married female participants. Of the female participants

who selected “Just the right amount of respect”, the percentage of the not married female participants (26.5%) is higher than the married female participants (21.7%). More than expected not married female participants selected “Just the right amount of respect” and fewer than expected married female participants selected that response. Therefore, not married female participants are more likely to perceive that people over 65 get just the right amount of respect compared to married female participants.

The Chi-Square analysis shows that there is no relationship between the predictor variable of the marital status of male participants and the criterion variable of respect for the elderly ($x^2 = 3.717$, $df = 2$, $p = .156$).

The Chi-Square analysis shows that there is a statistically significant relationship between the predictor variable of income level and the criterion variable of respect for the elderly. The results of the Chi-Square analysis using income levels by thirds and “Do you feel that people over 65 get too much, too little or just about the right amount of respect” ($x^2 = 11.324$, $df = 4$, $p = .023$) is shown in Table USA-15 below.

Table USA-15: Chi-Square Results for Income Levels: Thirds (Low, Medium, High) with “Do you feel that people over 65 get too much, too little or just about the right amount of respect” (N=2596).

		Income Level: Thirds			Total
		Low	**Medium**	**High**	
Too Little Respect	**N**	607	688	689	**1984**
	%	73.5	75.7	80.0	**76.4**
Just the Right Amount of Respect	**N**	210	213	168	**591**
	%	25.4	23.4	19.5	**22.8**
Too Much Respect	**N**	9	8	4	**21**
	%	1.1	.9	.5	**.8**
Total	**N**	826	909	861	**2596**
	%	100.0	100.0	100.0	**100.0**

***x*² = 11.324, *df* = 4, *p* = .023**

Table USA-15 shows that for the response of “Too little respect”, participants with a high income level (80%) have a higher percentage compared to participants with medium (75.7%) and low (73.5%) income levels. More than expected participants with a high income level selected “Too little respect”, and fewer than expected participants with a medium and low income level selected that response. This indicates that participants with a high income level are more likely to perceive that people over 65 get too little respect compared to participants with low and medium income levels. The percentages of participants with a low income level (25.4%) and with a medium income level (23.4%) who selected “Just the right amount of respect” are higher than for participants with a high come level (19.5%). More than expected participants with a low income level and with a medium income level selected “Just the right amount of respect” and fewer than expected participants with a high income level selected that response. Therefore, participants with a low or a medium income level are more likely to perceive that people over 65 receive just the right amount of respect compared to participants with a high income level. In summary, participants with a high income level are more likely to perceive that people over 65 get too little respect and participants with low and medium income levels are more likely to perceive that people over 65 get just the right amount of respect.

The Chi-Square analysis shows that income levels by quartiles and “Do you feel that people over 65 get too much, too little or just about the right amount of respect” has a statistically significant relationship ($x^2 = 13.588$, $df = 6$, $p = .035$) as shown in Table USA-16 below.

Table USA- 16: Chi-Square Results for Income Levels: Quartiles (Low, Low-Medium, High-Medium, High) with "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=2596).

		Income Level: Quartiles				Total
		Low	Low-Med	Hi-Med	High	
Too Little Respect	**N**	607	688	315	374	**1984**
	%	73.5	75.7	79.5	80.4	**76.4**
Just the Right Amount of Respect	**N**	210	213	81	87	**591**
	%	25.4	23.4	20.5	18.7	**22.8**
Too Much Respect	**N**	9	8	0	4	**21**
	%	1.1	.9	.0	.9	**.8**
Total	**N**	826	909	396	465	**2596**
	%	100	100	100	100	**100**

x^2 = 13.588, df = 6, p = .035

Table USA-16 shows that for the response of "Too little respect", participants with high income (80.4%) and high-medium (79.5%) income levels have a higher percentage compared to low (73.5%) and low-medium (75.7%) income levels. More than expected participants with high-medium and high income levels selected "Too little respect", and fewer than expected participants with low and low-medium income levels selected that response. This indicates that participants with high-medium and high income levels are more likely to perceive that people over 65 get too little respect compared to participants with low and low-medium income levels. The percentages of participants with low (25.4%) and with medium (23.4%) income levels who selected "Just the right amount of respect" are higher than for participants with a high-medium (20.5%) and high (18.7%) income levels. More than expected participants with low and low-medium income levels selected "Just the right amount of respect" and fewer than expected participants with high-medium and high income levels selected that response. Therefore, participants with low or low-medium income levels are more likely to perceive that people over 65 receive just the right amount of respect compared to participants with high-medium and high

income levels. In summary, participants with high-medium and high income levels are more likely to perceive that people over 65 get too little respect and participants with low and low-medium income levels are more likely to perceive that people over 65 get just the right amount of respect.

In summary, the majority of United States participants perceive that people over 65 get too little respect from young people. The predictor variable of age proved to have a significant relationship with how participants responded. Participants fifty and older are more likely to perceive that older people get just the right amount of respect and participants younger than fifty are more likely to perceive that older people get too little respect from young people. The predictor variable of gender did not prove to have an influence on how participants perceive respect for people over 65. Marital status in general also did not prove to have a relationship with participants' responses; however the marital status of females did have a relationship. Married female participants perceive that people over 65 get too little respect from young people, while not married female participants are more likely to perceive that people over 65 get just the right amount of respect. The income level of the participants also has a relationship with how they perceive respect for people over 65. Participants with a high income level are more likely to perceive that people over 65 get too little respect and participants with a low and a medium income level are more likely to perceive that people over 65 get just the right amount of respect. The finding that is most unexpected is that participants over 50 perceive that people over 65 get just the right amount of respect from younger people, while participants under 50 perceive that people over 65 get too little respect. This finding is contrary to the belief in the United States that older people perceive that they

are not being respected by younger people. The finding also indicates that young people perceive that their peers are not giving enough respect to older people.

2. Perceptions of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are:

(a) "As I grow older things seem better than I thought they would be";

(b) "As I look back on my life I am fairly well satisfied"; and

(c) "These are the best years of my life".

The responses to the questions are Likert Scale scoring:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Each of these three questions is considered a criterion variable and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. *"As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants' perceive their own life as they age compared to what they had imagined it might be. The participants were asked to choose from four responses:

(1) "Agree strongly";

(2) "Agree somewhat";

(3) "Disagree somewhat"; or

(4) "Disagree strongly" with this statement.

Table USA-17 below shows the frequencies of the responses.

Table USA-17: "As I grow older things seem better than I thought they would be".

	Total (N=2977)	
	Number	**%**
Agree Strongly	1017	34.2
Agree Somewhat	1073	36.0
Disagree Somewhat	585	19.7
Disagree Strongly	302	10.1

As shown in Table USA-17 above, almost three-fourths (70.2%) of the participants stated that they agree with this statement: 34.2 percent agree strongly and 36.0 percent agree somewhat. Just over one-fourth (29.8%) of the participants indicate that they disagree with this statement, with 19.7 percent stating that they disagree somewhat and

10.1 percent disagreeing strongly. Therefore, the majority of the participants in the United States perceive that as they grow older things seem better than they thought they would.

Statistical analysis was performed with each of the predictor variables of age, gender, marital status and income, in order to determine if they have an influence on the participants' responses. As discussed below, marital status, the marital status of men, and income levels do have a significant relationship with this criterion variable; age and gender do not.

Analysis of Variance (ANOVA) was conducted to determine if age has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought would be". The results of the analysis show that age by category (young, middle-age, and old) does not have a statistically significant relationship with the criterion variable ($F = 2.599$, $df = 2, 2974$, $p = .075$). The ANOVA results also show that age by decades does not have a statistically significant relationship ($F = 1.470$, $df = 8, 2968$, $p = .163$). Therefore, the age of the participants does not influence whether or not they perceive that as they grow older things are better than they thought they would be.

In order to determine if the gender of the participants has an influence on their response to the survey question, Chi-Square analysis was performed. The results of the analysis determined that gender does not have a statistically significant relationship with this criterion variable ($x^2 = 6.950$, $df = 3$, $p = .074$).

In order to determine if the marital status of the participants has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought they would be", Chi-Square analysis was performed. The results show that

there is a statistically significant relationship between marital status and this criterion variable (x^2 = 29.977, *df* = 3, *p* = .000), as shown in Table USA-18 below.

Table USA-18: Chi-Square Results for Marital Status and "As I grow older things seem better than I thought they would be" (N=2973).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	587	429	**1016**
	%	37.5	30.5	**34.2**
Agree Somewhat	**N**	562	509	**1071**
	%	35.9	36.2	**36.0**
Disagree Somewhat	**N**	295	289	**584**
	%	18.8	20.5	**19.6**
Disagree Strongly	**N**	122	180	**302**
	%	7.8	12.8	**10.2**
Total	**N**	1566	1407	**2973**
	%	100.0	100.0	**100.0**

***x²* = 29.977, *df* = 3, *p* = .000**

As seen in Table USA-18 above, a higher percentage of married participants (73.4%) agreed with the statement: 37.5 percent agreed strongly and 35.9 percent agreed somewhat. And 26.6 percent of married participants disagreed with the statement. A higher percentage of not married participants (66.7%) disagreed with the statement: 30.5 percent agreed strongly and 36.2 percent agreed somewhat. And 33.3 percent of not married participants disagreed with the statement. More than expected married participants agreed with the statement. More than expected not married participants disagreed with the statement. Therefore, married participants are more inclined to perceive that as they grow older things seem better than they thought they would be", and not married participants are more inclined to disagree with the statement.

Chi-Square analysis was conducted to investigate whether the marital status of females and the marital status of males have a relationship with how the participants responded to the questions "As I grow older things seem better than I thought they

would". The results show that there is no statistically significant relationship between the marital status of females ($x^2 = 4.674$, $df = 3$, $p = .197$); but there is a statistically significant relationship between the marital status of males ($x^2 = 41.026$, $df = 3$, $p = .000$) with this criterion variable. The results are shown in Table USA-19 below.

Table USA-19: Chi-Square Results for Marital Status of Males and "As I grow older things seem better than I thought they would be" (N=1308).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	279	137	**416**
	%	36.4	25.3	**31.8**
Agree Somewhat	**N**	284	197	**481**
	%	37.1	36.3	**36.8**
Disagree Somewhat	**N**	155	123	**278**
	%	20.2	22.7	**21.3**
Disagree Strongly	**N**	48	85	**133**
	%	6.3	15.7	**10.2**
Total	**N**	766	542	**1308**
	%	100.0	100.0	**100.0**

***x²* = 41.026, *df* = 3, *p* = .000**

As shown in Table USA-19, almost three-fourths (73.5%) of married male participants agree with the statement "As I grow older things seem better than I thought they would be"; 26.5 percent of married males disagree with the statement. Almost two-thirds (61.6%) of the not married male participants agree with the statement; 38.4 percent of not married males disagree with the statement. More than expected married male participants agreed with the statement; and more than expected not married male participants disagreed with the statement. Therefore, married male participants are more inclined to perceive that as they grow older things seem better than they thought they would. Not married male participants are more inclined not to agree with the statement.

In order to determine if the income status of the participants influenced how they responded to the question "As I grow older things seem better than I thought they would

be", a one way analysis of variance was conducted using both sets of income variables, by thirds and by quartiles. The results of the analysis indicate that the income by thirds (low, medium, and high) does have a statistically significant relationship with this criterion variable (F = 20.903, df = 2, 2590, p = .000). Table USA-20 shows the results.

Table USA-20: ANOVA Mean Scores for Income by Thirds and "As I grow older things seem better than I thought they would be" (N = 674).

Variable	N	Mean	SD
Income by Thirds:			
Low	828	2.1860	1.02529
Medium	916	2.0906	.96126
High	849	1.8881	.91009
Total	2593	2.0548	.97346

***F* (2, 2590) = 20.903, *p* = .000**

As shown in Table USA-20, participants with a high level of income have the lowest mean score and participants with a low income level have the highest mean score. This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement. Therefore, as the income levels become higher, participants are more inclined to agree with the statement "As I grow older things seem better than I thought they would be". The Scheffe Post Hoc test determined that there is a significant difference between the

mean scores of the participants with a high level of income and the mean scores of the participants with a medium level of income (p=.000) and with the mean scores of participants with a low level of income (p=.000). There is also a significant difference between the mean scores of participants with a medium level of income and the mean score of the participants with a low level of income (p=.000). Therefore, the ANOVA analysis determined that as the level of income increases for the participants the more likely they are to perceive that as they grow older things seem better than they thought would be.

The ANOVA analysis also shows that there is a significant relationship between the income level by quartiles (low, low-medium, high medium, and high) and the criterion variable of "As I grow older things seem better than I thought they would be" (F = 14.527, df = 3, 2589, p = .000). Table USA-21 shows the results.

Table USA-21: ANOVA Mean Scores for Income by Quartiles and "As I grow older things seem better than I thought they would be" (N = 674).

Variable	N	Mean	SD
Income by Quartiles:			
Low	828	2.1860	1.02529
Low Med	916	2.0906	.96126
High Med	399	1.9348	.93280
High	450	1.8467	.88846
Total	2593	2.0548	.97346

***F* (3, 2589) = 14.527, *p* = .000**

As shown in Table USA-21 above, the higher the income level of the participants to lower the mean scores, which indicates that as the income levels of the participants increase, the more likely they are to agree with the statement "As I grow older things

seem better than I thought they would be". For this survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicates participants do not agree with the statement. The Scheffe Post Hoc Test indicates that there is a significant difference between the mean scores of the participants with a high level of income and the mean scores of participants with a low-medium level of income (p=.000) and with the mean score of participants with a low level of income (p=.000), but not with the mean scores of participants with a high-medium level of income. There is also a significant difference between the mean scores of participants with a high-medium level of income and the mean scores of participants with a low level of income (p=.000). Therefore, this ANOVA analysis determines that the higher the level of income of the participants the more likely they are to perceive that as they grow older things seem to better than they thought they would.

In summary, the majority of the participants from the United States agree with the statement that "As I grow older things seem better than I thought they would be". The statistical analysis reveals that the predictor variables that have been determined to have an influence on how the participants responded to this statement are marital status, the marital status of male participants, and income levels. Married participants are more

likely than not married participants to agree with the statement and perceive that as they grow older things are better than they had thought they would be. Married male participants are more inclined than not married male participants to agree with the statement. And the higher the income level of the participants the more likely they are to perceive that as they grow older things seem better than they thought they would be.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. The participants were asked to choose from four responses:

(1) "Agree strongly";

(2) "Agree somewhat";

(3) "Disagree somewhat"; or

(4) "Disagree strongly" with this statement.

Table USA-22 below shows the frequencies of the responses.

Table USA-22: "As I Look Back On My Life I Am Fairly Well Satisfied"

	Total (N=3037)	
	Number	**%**
Agree Strongly	1680	55.3
Agree Somewhat	896	29.5
Disagree Somewhat	284	9.4
Disagree Strongly	177	5.8

Table USA-22 above shows that the majority of the participants (84.8%) agreed with this statement (agree strongly = 55.3%, agree somewhat = 29.5%). Less than one-fourth (15.2%) of the participants did not agree (disagree somewhat = 9.4%, disagree strongly = 5.8%). In order to determine if any of the predictor variables of age, gender, marital

status, or income has an influence on how the participants perceive whether or not they are well satisfied with their life statistical analysis was performed.

In order to ascertain if the age of the participant has a relationship with this criterion variable analysis of variance (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant. The results of the ANOVA analysis of age by category (young, middle-age, and old) is statistically significant (F =10.623, df = 2, 3034, p = .000), as shown in Table USA-23 below.

Table USA-23: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 3037).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	831	1.7136	.89432
Middle-Age (40-64)	1061	1.7135	.91058
Old (65 +)	1145	1.5633	.81274
Total	3037	1.6569	.87313

***F* (2, 3034) = 10.623, *p* = .000**

This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more participants agree with the statement and the higher the mean score indicates participants do not agree with the statement.

As shown in the Table USA-23 above, the mean score for the "old" age category of 65 and older is lower (.81274) than the mean score for the young (.89432) and middle-age (.89432) categories, which means that the old participants are more likely to choose strongly agree or somewhat agree with the statement "As I look back on my life I am fairly well satisfied". The Scheffe Post Hoc Test results indicate that there is a significant difference between the mean scores of the "old" and "middle-age" (p = .000) and with "young" (p = .001). This indicates that participants within the old age category are more likely to perceive being fairly satisfied with their life lived compared to the middle-age and young participants. Therefore, participants 65 and older perceive feeling satisfied with their life compared to participants 64 and younger.

ANOVA was conducted using age categorized by decades. According to the results of the ANOVA, age categorized by decade is also statistically significant (F = 3.175, df = 8, 3028, p = .001) with this criterion variable of perception of being well satisfied with life lived, as shown in Table USA-24 below.

Table USA-24: ANOVA Mean Scores for Age by Decades and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 3037).

Variable	N	Mean	SD
Age by Decades:			
Teens	64	1.8281	.91815
Twenties	348	1.7356	.90417
Thirties	419	1.6778	.88245
Forties	524	1.7233	.93873
Fifties	402	1.7289	.92276
Sixties	510	1.6039	.81729
Seventies	579	1.5423	.79978
Eighties	181	1.5635	.79763
Nineties	10	1.6000	.84327
Total	3037	1.6569	.87313

***F* (8, 3028) = 3.175, *p* = .001**

The lowest mean score is found in participants in their seventies (1.5423) which means that they are more likely to agree with the statement "As I look back on my life I am fairly well satisfied". The participants in their twenties have the highest mean score (1.8281) indicating that they are more likely to disagree with the statement. In general, the mean scores decrease from the twenties to the nineties indicating that as people in the United States grow older they are more likely to be well satisfied as they look back on their life. The mean score for participants in their eighties (1.5635) and in their nineties 1.6000) are only slightly higher than the mean score for participants in their seventies. The Scheffe Post Hoc Test shows that there is no statistically significant difference between any of the mean scores of the age decades of the participants.

In order to determine if gender also has predictor qualities on the participants' response to the criterion variable of being fairly well satisfied when looking back on one's life, Chi-Square analysis was conducted. The results of the analysis indicate that there is no statistically significant relationship between gender and this criterion variable ($x^2 = 4.042$, $df = 3$, $p = .257$).

Chi-Square analysis was also conducted to determine if marital status influenced how the participants responded to the statement. The results of the analysis indicate that there is a statistically significant relationship between marital status and the participants' responses to "As I look back on my life I am fairly well satisfied" ($x^2 = 37.597$, $df = 3$, $p = .000$). Table USA-25 below shows the results of the Chi-Square analysis.

Table USA- 25: Chi-Square Results for Marital Status and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 3033).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	991	687	**1678**
	%	61.9	48.0	**55.3**
Agree Somewhat	**N**	434	460	**894**
	%	27.1	32.1	**29.5**
Disagree Somewhat	**N**	118	166	**284**
	%	7.4	11.6	**9.4**
Disagree Strongly	**N**	59	118	**177**
	%	3.7	8.2	**5.8**
Total	**N**	1602	1431	**3033**
	%	100.0	100.0	**100.0**

***x²* = 37.597, *df* = 3, *p* = .000**

As shown in Table USA-25 above, a higher percentage of married participants (89%) agreed ("Agree somewhat" and "Agree strongly") with the statement compared to not married participants (80.1%). More than expected married participants selected "Agree strongly" and fewer than expected not married participants selected that response. A higher percentage of not married participants (19.8%) disagreed with the statement compared to married participants (11.1%). More than expected not married participants selected "Disagree strongly" and "Disagree somewhat" compared to married participants. Therefore, the results indicate that married participants are more inclined to perceive being well satisfied with their life lived compared to not married participants.

In order to determine if there is a statistically significant relationship between the marital status of females and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was conducted. The results show that there is a statistically significant relationship between the marital status of female participant and this criterion variable ($x^2 = 26.814$, $df = 3$, $p = .000$). Table USA-26 below shows the results of the analysis.

Table USA- 26: Chi-Square Results for the Marital Status of Female Participants and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1698).

		Marital Status of Female Participants		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	509	455	**964**
	%	62.2	51.7	**56.8**
Agree Somewhat	**N**	219	269	**488**
	%	26.8	30.6	**28.7**
Disagree Somewhat	**N**	61	87	**148**
	%	7.5	9.9	**8.7**
Disagree Strongly	**N**	29	69	**98**
	%	3.5	7.8	**5.8**
Total	**N**	818	880	**1698**
	%	100.0	100.0	**100.0**

***x²* = 26.814, *df* = 3, *p* = .000**

As shown in Table USA-26, a higher percentage of married female participants (89%) agree ("Agree somewhat" and "Agree strongly") with the statement compared to not married female participants (82.3%). More than expected married female participants selected "Agree strongly" and fewer than expected not married females selected that response. A higher percentage of not married female participants (17.9%) disagreed with the statement compared to married participants (11%). More than expected not married female participants selected "Disagree strongly" and "Disagree somewhat", and fewer than expected married female participants selected those responses. Therefore, the

results indicate that married female participants are more inclined to perceive being well satisfied with their life lived compared to not married female participants.

In order to determine if there is a statistically significant relationship between the marital status of males and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was employed. The Chi-Square analysis did determine that there is a statistically significant relationship between the marital status of males and their response to this criterion variable ($x^2 = 58.189$, $df = 3$, $p = .000$). Table USA-27 below shows the results of the analysis.

Table USA- 27: Chi-Square Results for Marital Status of Males and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1335).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	482	232	**714**
	%	61.5	42.1	**53.5**
Agree Somewhat	**N**	215	191	**406**
	%	27.4	34.7	**30.4**
Disagree Somewhat	**N**	57	79	**136**
	%	7.3	14.3	**10.2**
Disagree Strongly	**N**	30	49	**79**
	%	3.8	8.9	**5.9**
Total	**N**	784	551	**1335**
	%	100.0	100.0	**100.0**

***x²* = 58.189, *df* = 3, *p* = .000**

As shown in Table USA-27, a higher percentage of married male participants (88.9%) agree (agree strongly = 61.5% and Agree somewhat = 27.4%) with the statement compared to not married male participants (76.8%). More than expected married male participants selected "Agree strongly" and fewer than expected not married males selected that response. A higher percentage of not married male participants (23.2%) disagreed with the statement compared to married participants (11.1%). More than expected not married male participants selected "Disagree strongly" and "Disagree

somewhat", and fewer than expected married male participants selected those responses. Therefore, the results indicate that married male participants are more inclined to perceive being well satisfied with their life lived compared to not married male participants.

In order to find a relationship between income levels of the participants (predictor variable) and their response to "As I look back on my life I am fairly well satisfied" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds show that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 43.731, df = 2, 2635, p = .000). Table USA-27 shows the results of the income by thirds analysis.

Table USA- 28: ANOVA Mean Scores for Income by Thirds and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 2638).

Variable	N	Mean	SD
Income by Thirds:			
Low	843	1.8754	.98319
Medium	925	1.6822	.87939
High	870	1.4828	.72854
Total	2638	1.6782	.88294

***F* (2, 2635) = 43.731, *p* = .000**

As shown in Table USA-27, as the income levels rise, the mean scores decrease. The participants with a high income level have the lowest mean score. The lower the mean score indicates that participants with a high income level are more likely to select the response categories of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. Participants with low or medium income levels have higher mean scores than participants with a high

income level. The higher mean scores indicate that participants were more likely to select the categories of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for medium income level (p = .000), and there is a significant difference between the high income level and the low income level (p = .000). There is also a significant difference between the mean score of the medium income level and the mean score of the low income level (p = .000. This ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

The results of the ANOVA analysis using income by quartiles also show that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 34.113, df = 3, 2634, p = .000). Table USA-29 shows the results of the income by quartiles analysis.

Table USA- 29: ANOVA Mean Scores for Income Quartiles and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 2638).

Variable	N	Mean	SD
Income by Quartiles:			
Low	843	1.8754	.98319
Low Med	925	1.6822	.87939
High Med	401	1.6035	.78733
High	469	1.3795	.65770
Total	2638	1.6782	.88294

***F* (3, 2634) = 34.113, *p* = .000**

As shown in Table USA-29, as the income levels increase, the mean scores decrease. The high income level of the participants has the lowest mean score. The low mean score indicates that these participants were more likely to select the response

categories of “Agree strongly” which scores a “1” or “Agree somewhat” which scores a “2”. Participants with lower income levels have higher mean scores which indicate that participants were more likely to select the response categories of “Disagree somewhat” which scores a “3” or “Disagree strongly” which scores a “4”. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of the high income level and with the high-medium income level (p = .002), the low-medium income level (p = .000), and the low income level (p = .000). There is no significant difference between the high-medium income level and the low-medium income level (p = .512). Therefore, this ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

In summary, the statistical analysis of the criterion variable of “As I Look Back On My Life I am Fairly Well Satisfied” with each of the predictor variables determined that there is a significant relationship with age, marital status and income variables, but not with the gender variable in general. The results show that the older the participant in the United States the more likely they are to agree with the criterion statement. Married participants are more likely than not married participants to agree with the statement; and married female and married male participants are more likely to agree with the statement than their not married counterparts. The higher the income level of the participants the more likely they are to perceive that as they look back on their life they are fairly well satisfied.

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The responses to the question are Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4" with this statement.

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement.

Table USA-30 below shows the frequencies of the responses.

Table USA- 30: "These are the best years of my life"

	Total (N=3037)	
	N	**%**
Agree Strongly	1680	55.3
Agree Somewhat	896	29.5
Disagree Somewhat	84	9.4
Disagree Strongly	177	5.8

As shown in the table above, the majority of participants (84.8%) agree with the statement "These are the best years of my life" (Agree strongly = 55.3% and Agree somewhat = 29.5%); 15.2% of the participants disagree with the statement.

In order to determine which of the predictor variables, age, gender, marital status or income levels, has an influence on the participants' responses to this statement statistical analysis was performed.

The age of the participants may be a factor in whether or not the participants perceive that these are the best years of their life. Therefore, a simple one-way analysis of variance (ANOVA) was conducted using both versions of the age variable, by category and by decade. The results show that both types of age groupings have a statistically significant relationship with the criterion variable of "These are the best years of my life". The results of both tests are shown and discussed below.

The ANOVA analysis shows that there is a statistically significant relationship between the predictor variable of age by category (young, middle-age, old) and this criterion variable (F = 76.019, df = 2, 2993, p = .000). Table USA-31 shows the results of the analysis.

Table USA- 31: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "These Are the Best Years of My Life" (N = 2996).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	824	1.8981	.97192
Middle-Age (40-64)	1050	1.9438	1.01170
Old (65 +)	1122	2.4029	1.09329
Total	2996	2.1031	1.05810

***F* (2, 2993) = 76.019, *p* = .000**

Table USA-31 above shows that the mean score of the young category is the lowest (1.8981) and the mean score for the old category is the highest (2.4029). This survey question "These are the best years of my life" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and

- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates the more likely the participants do not agree with the statement. The young age category has the lowest mean score which indicates that the young participants (thirty-nine and younger) are more likely to select responses of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". Old participants (sixty-five and older) have the highest mean score which indicates that they are more likely to select responses of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". These results shown above indicate that the younger the participant the more likely they are to agree with the statement "These are the best years of my life", while the older the participant the more inclined they are to disagree with the statement. The Scheffe Post Hoc Test results show a significant difference between the young participants and the old participants (p = .000), but not between the young and the middle-age participants (p = .636). There is also a significant difference between the middle-age participants and the old participants (p = .000). This analysis shows that the younger the participant in the United States the more likely s/he is to perceive that these are the best years of their life.

The ANOVA findings also show that there is a statistically significant relationship between the predictor variable of age by decades and the criterion variable of "These are the best years of my life" (F = 22.636, df = 8, 2987, p = .000). Table USA-32 below displays the results.

Table USA- 32: ANOVA Mean Scores for Age by Decades and "These are the Best Years of My Life" (N = 2996).

Variable	N	Mean	SD
Age by Decades:			
Teens	64	1.8750	1.01575
Twenties	346	1.9769	.98071
Thirties	414	1.8357	.95521
Forties	523	1.9159	.99260
Fifties	398	1.9698	1.02566
Sixties	503	2.1650	1.08897
Seventies	565	2.4106	1.08890
Eighties	174	2.7356	1.03085
Nineties	9	2.6667	1.00000
Total	2996	2.1031	1.05810

***F* (8, 2987) = 22.636, *p* = .000**

Table USA-32 above shows that in general the mean scores increase as the decades increase. The mean score of the participants in their teens is the lowest (1.8750) and the mean score of the participants in their eighties is the highest (2.7356), which indicates that participants in their teens are more inclined to agree with the statement "These are the best years of my life", while participants in their eighties are more inclined to disagree with the statement. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of the participants in their teens and participants in their eighties (p = .000). There is also a significant difference between the mean scores of the decades of the twenties, thirties, forties and fifties with the mean scores of the seventies and eighties (p = .000). There is also a significant difference between the mean score of participants in their sixties and the mean score of the participants in their seventies (p = .000). These results indicate that the younger the participant is from the age of sixty the more likely they are to perceive that these are the

best years of their life. The older the participant from the age of seventy the more likely the participants are to disagree with the statement “These are the best years of my life”.

In order to determine if gender has a significant relationship with the statement “These are the best years of my life”, Chi-Square analysis was employed. The results show that there is not a statistically significant relationship between the predictor variable of gender and this criterion variable ($x^2 = 3.263$, $df = 3$, $p = .353$).

In order to find the relationship between the marital status of the participants and their responses to the statement “These are the best years of my life”, Chi-Square analysis was conducted. The results determined that there is a statistically significant relationship ($x^2 = 40.812$, $df = 3$, $p = .000$). Table USA-33 below shows the results of the analysis.

Table USA- 33: Chi-Square Results for Marital Status and “These Are the Best Years of My Life” (N = 2992).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	676	479	**1155**
	%	42.8	33.9	**38.6**
Agree Somewhat	**N**	404	348	**752**
	%	25.6	24.6	**25.1**
Disagree Somewhat	**N**	340	364	**704**
	%	21.5	25.7	**23.5**
Disagree Strongly	**N**	158	223	**381**
	%	10.0	15.8	**12.7**
Total	**N**	1578	1414	**2992**
	%	100.0	100.0	**100.0**

***x²* = 40.812, *df* = 3, *p* = .000**

As shown in Table USA-33 above, a higher percentage of married participants agreed with the statement (68.4%: Agree strongly = 42.8% and Agree somewhat = 25.6%) than not married participants (58.5%: Agree strongly = 33.9% and Agree somewhat = 24.6%). More than expected married participants agreed with the statement

and fewer than expected not married participants agreed with the statement. Therefore, married participants are more likely to agree with the statement “These are the best years of my life” than not married participants. A higher percentage of not married participants disagreed with the statement (41.5%: Disagree somewhat = 25.7% and Disagree strongly = 15.8%) than married participants (31.5%: Disagree somewhat = 21.5% and Disagree strongly = 10.0%). More than expected not married participants disagreed with the statement and fewer than expected married participants disagreed with the statement. Therefore, not married participants are more likely to disagree with the statement than married participants.

In order to determine if the marital status of female participants and the marital status of male participants has an influence on their responses for the statement “These are the best years of my life”, Chi-Square analysis was performed for the marital status of each gender. The analyses found that both the marital status of females ($x^2 = 25.407$, $df = 3$, $p = .000$) and the marital status of males ($x^2 = 15.623$, $df = 3$, $p = .001$) have a statistically significant relationship with the criterion variable.

Table USA-34 below displays the results of the Chi-Square analysis of the independent variable of marital status of female participants and the criterion variable of “These are the best years of my life”.

Table USA-34: Chi-Square Results for Marital Status of Females and "These Are the Best Years of My Life" (N = 1673).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	367	300	**667**
	%	45.4	34.7	**39.9**
Agree Somewhat	**N**	194	210	**404**
	%	24.0	24.3	**24.1**
Disagree Somewhat	**N**	169	226	**395**
	%	20.9	26.2	**23.6**
Disagree Strongly	**N**	79	128	**207**
	%	9.8	14.8	**12.4**
Total	**N**	809	864	**1673**
	%	100.0	100.0	**100.0**

x^2 = 25.407, *df* = 3, *p* = .000

As shown in Table USA-34 above, a higher percentage of the married female participants (69.4%) agree with the statement (Agree strongly = 45.4% and Agree somewhat = 24%), compared to the percentage of the not married participants who agreed with the statement (59%: Agree strongly = 34.7% and Agree somewhat = 24.3%). The Chi-Square results show that more than expected married females selected "Agree strongly" and fewer than expected not married females selected that response. Therefore, married female participants are more inclined to agree that these are the best years of their life than not married female participants. A higher percentage of not married female participants disagreed with the statement (41%: Disagree somewhat = 26.2% and Disagree strongly = 14.8%) compared to the percentage of married female participants disagreed with the statement (30.7%: Disagree somewhat = 20.9% and Disagree strongly = 9.8%). More than expected not married females selected "Disagree somewhat" and "Disagree strongly" and fewer than expected married females selected those responses. Therefore, not married female participants are more likely to feel that these are not the best years of their life compared to married female participants.

The Chi-Square analysis also shows that there is a statistically significant relationship between the marital status of males and the statement "These are the best years of my life" (x^2 = 18.676, df = 3, p = .000). Table USA-35 shows the details of the analysis.

Table USA- 34: Chi-Square Results for Marital Status of Males and "These Are the Best Years of My Life" (N = 1319).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	309	179	**488**
	%	40.2	32.5	**37.0**
Agree Somewhat	**N**	210	138	**348**
	%	27.3	25.1	**26.4**
Disagree Somewhat	**N**	171	138	**309**
	%	22.2	25.1	**23.4**
Disagree Strongly	**N**	79	95	**174**
	%	10.3	17.3	**13.2**
Total	**N**	769	550	**1319**
	%	100.0	100.0	**100.0**

***x²* = 18.676, *df* = 3, *p* = .000**

As shown in Table USA-35 above, a higher percentage of the married male participants agreed with the statement (67.5%: Agree strongly = 40.2% and Agree somewhat = 27.3%) than the not married male participants (57.6%: Agree strongly = 32.5% and Agree somewhat = 25.1%). The results of the Chi-Square analysis reveal that more than expected married male participants selected "Agree strongly" and "Agree somewhat", while fewer than expected not married male participants selected those responses. A higher percentage of the not married male participants disagreed with the statement (42.4%: Disagree somewhat = 25.1% and Disagree strongly = 17.3%) than the married male participants (32.5%: Disagree somewhat = 22.2% and Disagree strongly = 10.3%). More than expected not married male participants selected "Disagree strongly"

and “Disagree somewhat”, while fewer than expected married male participants selected those responses. Therefore, the not married male participants are more inclined to disagree with the statement “These are the best years of their life” than the married male participants.

In order to find the relationship between income levels of the participants (predictor variable) and their response to “These are the best years of my life” (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds show that there is a statistically significant relationship with the statement (F = 38.487, df = 2, 2603, p = .000). The results of the ANOVA using income categorized by thirds are shown in Table USA-36 below.

Table USA- 35: ANOVA Mean Scores for Income by Thirds and “These are the best years of my life” (N = 2606).

Variable	N	Mean	SD
Income by Quartiles:			
Low	828	2.3019	1.10868
Medium	916	2.1408	1.05106
High	862	1.8631	.96504
Total	2606	2.1002	1.05744

***F* (2, 2603) = 38.487, *p* = .000**

As shown in Table USA-36, as the high income level is the highest (1.8631) and the medium income level is the lowest (2.1408). This survey question “These are the best years of my life” offers four Likert Scale responses:

- “Agree Strongly = 1”,
- “Agree Somewhat = 2”,
- “Disagree Somewhat = 3”, and
- “Disagree Strongly = 4”.

Therefore, the lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates that the participants are more likely to disagree with the statement. Therefore, the participants with the high income level are more likely to agree with that these are the best years of their life and participants with the medium and low income levels are more likely to disagree that these are the best years of their life. The Scheffe Post Hoc test shows that there is a significant difference between the mean scores of the high income level and the medium income level (p= .000) and also with the low income level (p= .000). There is also a significant difference between the medium income level and the low income level (p= .000). Therefore, the Chi-Square analysis shows that the higher the income level of the participant the more likely s/he is to agree with the statement "These are the best years of my life".

The results of the ANOVA using income categorized by quartiles also show that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 26.208, df = 3, 2602, p = .000). The results of the ANOVA analysis are displayed in Table USA-37 below.

Table USA- 36: ANOVA Mean Scores for Income Quartiles and "These are the best years of my life" (N = 2606).

Variable	N	Mean	SD
Income by Quartiles:			
Low	828	2.3019	1.10868
Low Med	916	2.1408	1.05106
High Med	398	1.9121	.97825
High	464	1.8211	.95261
Total	2606	2.1002	1.05744

***F* (3, 2602) = 26.208, *p* = .000**

As shown in Table USA-37, the mean scores decrease as the income levels increase. The highest mean score is the low income level (2.3019) and the lowest mean score is the high income level (1.8211). The lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates that the participants are more likely to disagree with the statement. Therefore, the participants with the high income level are more likely to agree with that these are the best years of their life and participants with a low income level are more likely to disagree that these are the best years of their life. The Scheffe Post Hoc test shows that there is a significant difference between the mean scores of the high income level and the low-medium (p = .000) and the low income levels (p = .000), but not between the high-medium income level (p = .653). There is a significant difference between the high-medium income level and the low-medium (p = .004) and the low income levels (p = .000). There is also a significant difference between the low-medium and the low income levels (p = .016). These results indicate that the participants with the high and high-medium income levels are more likely to agree with the statement "These are the best years of my life" and the participants with the low-medium and low income levels are more likely to disagree with the statement.

In summary, the statistical analysis of the criterion variable "These are the best years of my life" and the predictor variables determined that age, marital status and income levels have an influence on the participants' responses to the statement, and gender does not. Participants younger than age sixty are more likely to agree with the statement, and participants older than seventy are more likely to disagree with the statement. Married participants are more inclined to agree with the statement than not

married participants. And married female and married male participants are more inclined to agree with the statement than their not married counterparts. Participants with higher income levels are more likely to perceive that these are the best years of their life compared to participants with medium and low income levels who are more likely to disagree with the statement.

d. *"Life Satisfaction Variable"*

In analyzing each of the three criterion variables that relate to the life satisfaction of the participants:

(1) "As I grow older things seem better than I thought they would be";

(2) "As I look back on my life I am fairly well satisfied"; and

(3) "These are the best years of my life",

it was discovered that the most consistent predictor variables that influenced the participants' responses for all three criterion variables are marital status, the marital status of male participants, and income level. For two of the three questions: "As I look back on my life I am fairly well satisfied" and "These are the best years of my life", the predictor variable of age of the participant was found to have an influence on the responses as well as the marital status of female participants. The predictor variable of gender did not prove to have a statistically significant relationship with any of the three criterion variables.

As described in the Methodology section above, in order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions were combined to create the "Life Satisfaction" criterion variable. This

variable was analyzed with each of the predictor variables to determine which has a significant relationship with the "Life Satisfaction" scale.

For the "Life Satisfaction" scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the "Life Satisfaction" composite variable the response "Agree strongly" is scored a "1", and "Agree somewhat" is scored a "2", while "Disagree somewhat" is scored a "3" and "Disagree strongly" is scored a "4". Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction.

In order to determine if the predictor variable of age has a relationship with the composite criterion variable "Life Satisfaction", an analysis of variance (ANOVA) was conducted with both age variables. The results of the analysis determined that there is a statistically significant relationship with age by category (young, middle-age, and old) with "Life Satisfaction" (F = 11.481, df = 2, 2927, p = .000). Table USA-38 below shows the results of the analysis.

Table USA- 38: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Life Satisfaction" (N = 2930).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	816	5.6152	1.96321
Middle-Age (40-64)	1025	5.7132	2.29888
Old (65 +)	1089	6.0514	2.08044
Total	2930	5.8116	2.13620

***F* (2, 2927) = 11.481, *p* = .000**

As shown in Table USA-38 above, participants in the young category have the lowest mean score (5.6152), which indicates that participants age eighteen to thirty-nine have higher life satisfaction than participants sixty-four and younger. Participants in the

middle-age category have a lower mean score than the participants in the old category. Therefore the analysis indicates that the participants in the old category have the lowest life satisfaction compared to the participants sixty-four years and younger. The Scheffe Post Hoc results show that there is a significant difference between the mean scores of the young category and the old category (p = .000), and there is also a significant difference between the mean scores of the middle age category and the old category (p = .001). However, there is no significant difference between the mean scores of the young category and the middle-age category (p = .618). Therefore, the ANOVA results indicate that the young and middle-age participants perceiving having a higher life satisfaction than the old participants.

ANOVA was also conducted using age categorized by decade (teens, twenties, thirties, etc.). It was determined that there is a significant relationship between age by decade and "Life Satisfaction" (F = 4.096, df = 8, 2921, p = .000) as seen in Table USA-39 below.

Table USA- 37: ANOVA Mean Scores for Age by Decades and "Life Satisfaction" Scale (N = 2930).

Variable	N	Mean	SD
Age by Decades:			
Teens	63	5.7460	1.96722
Twenties	345	5.7652	1.92896
Thirties	408	5.4681	1.98495
Forties	512	5.7480	2.32509
Fifties	388	5.7036	2.24064
Sixties	489	5.8160	2.22386
Seventies	549	6.0492	2.06450
Eighties	168	6.4167	1.92810
Nineties	8	5.8750	1.64208
Total	2930	5.8116	2.13620

***F* (8, 2921) = 4.096, *p* = .000**

As shown in Table USA-39 above, in general the mean scores increase as the age becomes older indicating that the younger the participant the more likely they are to perceive having a higher satisfaction with life. Participants in their thirties have the lowest mean score (5.4681) and the participants in their eighties have the highest mean score (6.4167). The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of participants in their thirties and participants in their seventies (p = .026) and between the mean scores of participants in their eighties (p = .003). Therefore, these results indicate that participants younger than age seventy are more inclined to perceive having a higher life satisfaction than participants seventy and older.

In order to determine if there is a relationship between the predictor variable of gender and "Life Satisfaction", an Independent Samples T-Test was conducted. The results show that there is a statistically significant relationship between gender and "Life Satisfaction" (t = 2.078, df = 2928, p = .038) as shown in Table USA-40 below.

Table USA-40: Mean Scores for Gender and "Life Satisfaction" Scale (N=2930).

	Males (n=1291)	**Females (n=1639)**
"Life Satisfaction"	*Mean* = 5.9040 *SD* = 2.13318	*Mean* = 5.7389 *SD* = 2.13641

***t* = 2.078, *df* = 2928, *p* = .038**

As shown in Table USA-40 above, the mean score for female participants (5.7389) is lower than the mean score for male participants (5.9040) indicating that female participants perceive having a higher life satisfaction than male participants.

An Independent Samples T-Test was also conducted in order to determine if the predictor variable of marital status has a relationship with the criterion variable "Life

Satisfaction". The results of the analysis show that there is a statistically significant relationship (t = -9.119, df = 2809.429, p = .000). Table USA-41 below shows the results of the T-Test.

Table USA- 41: Mean Scores for Marital Status and "Life Satisfaction" Scale (N=2926).

	Married (n=1545)	**Not Married (n=1381)**
"Life Satisfaction"	*Mean* = 5.4751 *SD* = 2.01537	*Mean* = 6.1904 *SD* = 2.20620

***t* = -9.119, *df* = 2809.429, *p* = .000**

Table USA-41 above shows that the mean score for the married participants (5.4751) is lower than the mean score for the not married participants (6.1904). According to the "Life Satisfaction" scale scoring, the lower the mean score, the more positive the life satisfaction is of the participants. Therefore, married participants are more likely to perceive having a higher life satisfaction than not married participants.

In order to determine if there is a relationship between the marital status of the female participants and the marital status of the male participants with the "Life Satisfaction" scale, an Independent T-Test was conducted using both predictor variables. The results for both indicate that there is a statistically significant relationship between the marital status of female participants and "Life Satisfaction" (t = -5.599, df = 1634, p = .000), as well as a statistically significant relationship with the marital status of male participants and "Life Satisfaction" (t = -7.751, df = 1034.174, p = .000).

Table USA-42 below shows the results of the T-Test of the marital status of females and "Life Satisfaction".

Table USA- 38: Mean Scores for Marital Status of Females and "Life Satisfaction" Scale (N=1636).

	Married Females (n=792)	**Not Married Females (n=844)**
"Life Satisfaction"	*Mean* = 5.4369 *SD* = 2.09051	*Mean* = 6.0237 *SD* = 2.14469

***t* = -5.599, *df* = 1634, *p* = .000**

Table USA-42 above shows that the mean score for the married female participants (5.4369) is lower than the mean score for the not married females participants (6.0237). According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive the life satisfaction is of the participants. Therefore, married female participants are more likely to perceive having a higher life satisfaction than not married female participants.

Table USA-43 below shows the results of the T-Test with the marital status of males and "Life Satisfaction".

Table USA- 39: Mean Scores for Marital Status of Males and "Life Satisfaction" Scale (N=1290).

	Married Males (n=753)	**Not Married Males (n=537)**
"Life Satisfaction"	*Mean* = 5.5153, *SD* = 1.93377	*Mean* = 6.4525, *SD* = 2.27701

***t* = -7.751, *df* = 1034.174, *p* = .000**

As Table USA-43 shows, the mean score for the married male participants is lower (5.5153) than the means score of the not married male participants (6.4525). According to the "Life Satisfaction" scale scoring, the lower the mean score, the higher the life satisfaction of the participants. Since the mean score is lower for the married male participants, they perceive themselves as having more life satisfaction than the not married male participants.

In order to determine if level of income of the participants has a relationship with the "Life Satisfaction" scale a simple ANOVA was conducted using both groupings of

the income variable, by quartiles and by thirds. The analysis shows that income by thirds has a statistically significant relationship with the "Life Satisfaction" scale (F = 65.227, df = 2, 2557, p = .000); and also income by quartiles also has a statistically significant relationship with the "Life Satisfaction" scale (F = 46.295, df = 3, 2556, p = .000).

The results of the ANOVA using income by thirds show that there is a statistically significant relationship between this predictor variable and the "Life Satisfaction" scale as shown in Table USA-44 below.

Table USA- 40: ANOVA Mean Scores for Income by Thirds and "Life Satisfaction" (N = 2560).

Variable	N	Mean	SD
Income by Quartiles:			
Low	810	6.3926	2.26576
Medium	906	5.9051	2.10441
High	844	5.2216	1.91379
Total	2560	5.8340	2.14941

***F* (2, 2557) = 65.227, *p* = .000**

As shown in Table USA-44, the high income level has the lowest mean score (5.2216) and the low income level has the highest mean score (6.3926). According to the "Life Satisfaction" scale scoring, the lower the mean score, the more positive the participants' perception of their life satisfaction. Therefore, participants with a high income level perceive having more life satisfaction than participants with lower income levels. The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for the medium income level (p = .000) and with the mean score of the low income level (p = .000). This ANOVA analysis using income by thirds indicates that the higher the income level of the participants the more they perceive having greater life satisfaction.

Table USA-45 below shows the ANOVA results of the income by quartiles and the "Life Satisfaction" scale.

Table USA- 45: ANOVA Mean Scores for Income Quartiles and "Life Satisfaction" (N = 2560).

Variable	N	Mean	SD
Income by Quartiles:			
Low	810	6.3926	2.26576
Low Med	906	5.9051	2.10441
High Med	396	5.4394	1.94581
High	448	5.0290	1.86611
Total	2560	5.8340	2.14941

***F* (3, 2556) = 46.295, *p* = .000**

As shown in Table USA-45 above, the higher the income level of the participants, the lower the mean score. According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive the participants perceive their life satisfaction. Therefore, participants with higher income levels perceive having more life satisfaction than participants with lower income levels. The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for the high-medium income level (p = .045), as well as with the mean score for the low-medium income level (p = .000), and the mean score for the low income level(p = .000). There is also a significant difference between the mean score of the high-medium income level and the low-medium income level (p = .004), and the low income level (p = .000). Therefore, the ANOVA analysis results using income by quartiles indicates that the higher the income level of the participants the more they perceive having better life satisfaction.

In summary, the each of the predictor variables of age, gender, marital status, and income levels has a significant relationship with the "Life Satisfaction" scale. The younger the participants the more they perceive having greater life satisfaction. Females have higher life satisfaction than male participants. Married participants are more likely to perceive having better life satisfaction than do not married participants; similarly married female participants and married male participants express having more life satisfaction than do their not married counterparts. Participants with higher income levels report having more life satisfaction than participants with medium and lower income levels.

3. Perceptions of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite variable that contains five items that refer to quality of life for oneself. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- "a very serious problem = 1",

- "a somewhat serious problem = 2", or
- "not a problem at all for you personally = 3".

According to this "Quality of Life for Self" scale, the higher the score (such as "not a problem at all for you personally" which equals a 3), the more positive the perception of quality of life for self.

The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

(1) "decisions or choices that you make during your lifetime"

(2) "decisions made by others that are beyond your control"

(3) "genetic or inherited factors" or

(4) "blind luck"?

Each of these two variables, "Quality of Life for Self" and "Locus of Control" was analyzed using each of the predictor variables of age, gender, marital status, and income. Below is the discussion of the results.

a. *"Quality of Life for Self" Variable*

In order to determine the relationship between the participants' perception of quality of life for themselves and the predictor variables of age, gender, marital status and income level, statistical analysis was performed using each of these variables with the criterion composite variable of "Quality of Life for Self". The statistical analysis

determined that all of the predictor variables have a significant relationship with "Quality of Life for Self" in the United States study. The results are discussed below.

ANOVA analysis was used to determine if age has a significant relationship with the "Quality of Life for Self" composite variable. The results show that there is a statistically significant relationship between "Quality of Life for Self" and age by category (F = 10.796, df = 2, 3005, p = .000).

Table USA- 46: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for Self" (N = 3008).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	824	12.3083	2.44693
Middle-Age (40-64)	1050	12.7371	2.24127
Old (65 +)	1134	12.7443	2.18068
Total	3008	12.6223	2.28476

***F* (2, 3005) = 10.796, *p* = .000**

As Table USA-46 shows, the mean score of the old participants (12.7443) is higher than the mean score of the middle-age participants (12.7371) and the mean score of the young participants (12.3083). According to the "Quality of Life for Self" scale, the higher the mean score the more positive the perception of quality of life for self. Therefore, the older the participant the more likely s/he perceives having a better quality of life than younger participants. The Scheffe Post Hoc test results show that there is a significant difference between the mean scores of the old participants and the mean scores of the young participants (p = .000). There is also a significant difference between the mean scores of the middle-age participants and the young participants (p = .000). But there is no significant difference between the mean scores of the old participants and the mean score of the middle-age participants (p = .997).

The results of this analysis show that the older participants perceive having a better quality of life than do younger participants. These results indicate that older participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas younger participants are more likely to answer that these issues are a serious problem for themselves.

The ANOVA analysis using age by decade and the "Quality of Life for Self" criterion variable determined that there is a statistically significant relationship (F = 5.422, df = 8, 2999, p = .000) as shown in Table USA-47 below.

Table USA- 41: ANOVA Mean Scores for Age by Decades and "Quality of Life for Self" Scale (N = 3008).

Variable	N	Mean	SD
Age by Decades:			
Teens	64	11.6250	2.43975
Twenties	348	12.1034	2.51238
Thirties	412	12.5874	2.35832
Forties	521	12.8234	2.25139
Fifties	398	12.6030	2.27641
Sixties	503	12.9145	2.08549
Seventies	577	12.6360	2.21797
Eighties	177	12.6780	2.15407
Nineties	8	12.2500	3.69362
Total	3008	12.6223	2.28476

***F* (8, 2999) = 5.422, *p* = .000**

As Table USA-47 above shows, in general the mean scores increase from the teens to the sixties. The mean score of the participants in their sixties is higher (12.9145) than the mean score of the participants in their teens (11.6250). The mean scores of participants in their seventies, eighties and nineties are also higher than the mean scores of the participants in their teens, twenties, and thirties. According to the "Quality of Life

for Self" scale, the higher the mean score, the more positive is the perception of quality of life for ones' self. Therefore, the older the participant, the more likely s/he is to perceive having a better quality of life than younger participants. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of participants in their sixties and the mean score of participants in their twenties (p = .001). There is also a significant difference between the mean score of the participants in their forties and the mean score of participants in their twenties (p = .007) and with participants in their teens (p = .045). Therefore, this analysis shows that the older the participant the more likely s/he is to perceive having a better quality of life than a younger participant.

In order to determine if there is a relationship between the predictor variable gender and the composite criterion variable of "Quality of Life for Self", an Independent Samples T-Test was performed. It was determined that there is a statistically significant relationship between these two variables of gender and "Quality of Life for Self" (t = 5.336, df = 2899.948, p = .000). Table USA-48 displays the results.

Table USA- 42: Mean Scores for "Quality of Life for Self" Scale and Gender (N=3008).

	Males (n=1322)	**Females (n=1686)**
"**Quality of Life for Self**"	*Mean* = 12.8707, *SD* = 2.20674	*Mean* = 12.4276, *SD* = 2.32630

***t* = 5.336, *df* = 2899.948, *p* = .000**

As shown in the table above, the mean score of the male participants is higher (12.8707) than the mean score of the female participants (12.4276). According to the "Quality of Life for Self" scale, the higher the mean score the more positive the perception of quality of life for self. Therefore, male participants in the United States are more likely to perceive having a better quality of life than do female participants.

A T-Test was also conducted to determine if the marital status of participants has a relationship with "Quality of Life for Self" variable. The results show that there is a statistically significant relationship between these two variables (t = 10.684, df = 2844.508, p = .000) as shown in Table USA-49 below.

Table USA- 49: Mean Scores for "Quality of Life for Self" Scale and Marital Status (N=3004).

	Married (n=1582)	**Not Married (n=1422)**
"**Quality of Life for Self**"	*Mean* = 13.0392, *SD* = 2.09960	*Mean* = 12.1575, *SD* = 2.39203

***t* = 10.684, *df* = 2844.508, *p* = .000**

As see in the table above, the mean scores are higher for married participants (13.0392) and lower for not married participants (12.1575). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. Participants with lower mean scores indicate that they have a less positive perception of their quality of life.

Therefore, as shown in the table above, married participants have a higher mean score which indicates that married participants in this study perceive themselves as having a more positive perception of their quality of life compared to the not married participants whose "Quality of Life" mean scores are lower and indicates they perceive having a less positive quality of life. These results indicate that married participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not being a serious problem for themselves; whereas not married participants are more likely to answer that these issues are a serious problem for themselves.

In order to determine if the marital status of female participants and the marital status of male participants have a relationship with the criterion variable of "Quality of Life for

Self" Independent Sample T-Tests were performed. The results show that there is a statistically significant relationship between both the marital status of female participants and the marital status of male participants with the "Quality of Life for Self" variable.

Table USA-50 below displays the results of the T-Test using the predictor variable of the marital status of female participants and the criterion variable of "Quality of Life for Self" (t = 7.233, df = 1678.556, p = .000).

Table USA- 50: Mean Scores for "Quality of Life for Self" Scale and the Marital Status of Females (N=1683).

	Married Females (n=808)	**Not Married Females (n=875)**
"**Quality of Life for Self**"	*Mean* = 12.8465, *SD* = 2.14902	*Mean* = 12.0411, *SD* = 2.41811

***t* = -2.905, *df* = 405.767, *p* = .004**

As shown in the table above, the mean score for the married female participants is higher (12.8465) than the mean score of the not married female participants (12.0411). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. Therefore, the married female participants are more likely to perceive having a better quality of life than the not married female participants.

Table USA-51 below displays the results of the T-Test using the predictor variable of the marital status of male participants and the criterion variable of "Quality of Life for Self" (t = 7.242, df = 1067.416, p = .000).

Table USA- 51: Mean Scores for "Quality of Life for Self" Scale and the Marital Status of Males (N=1321).

	Married Males (n=774)	**Not Married Males (n=547)**
"**Quality of Life for Self**"	*Mean* = 13.2403, *SD* = 2.02868	*Mean* = 12.3437, *SD* = 2.33989

***t* = 7.242, *df* = 1067.416, *p* = .000**

As see in the table above, the mean score is higher for the married male participants (13.2403) and lower for the not married male participants (12.3437). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, as shown in the table above, married male participants have a higher mean score which indicates that married male participants in this study perceive themselves as having a more positive perception of their quality of life compared to the not married male participants whose "Quality of Life" mean score is lower, which indicates they perceive having a less positive quality of life. These results indicate that married male participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas not married male participants are more likely to answer that these issues are a serious problem for themselves.

In order to determine if the income level of the participants influence their perception of the quality of life for themselves, a simple Variance of Analysis (ANOVA) was performed. The results indicate that income levels do have a statistically significant relationship with the "Quality of Life for Self" variable.

Table USA-52 below shows the results for the analysis using income categorized by thirds ($F = 112.799$, $df = 2, 2614$, $p = .000$).

Table USA- 43: ANOVA Mean Scores for Income by Thirds and "Quality of Life" Scale (N = 2617).

Variable	N	Mean	SD
Income by Quartiles:			
Low	837	11.7395	2.40743
Medium	915	12.7093	2.22052
High	865	13.3318	1.96078
Total	2617	12.6049	2.29408

***F* (2, 2614) = 112.799, *p* = .000**

As shown in Table USA-52 above, the higher the income level of the participants, the higher the mean score. Participants with a low income level have the lowest mean score (11.7395) and participants with a high income level have the highest mean score (13.3318). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, as this analysis shows, participants with a high income level have the most positive perception of "Quality of Life for Self", and participants with a low income level have the least positive perception of "Quality of Life for Self". The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for the medium income (p = .000) and low income levels (p = .000). The results also show that there is a significant difference between the mean score of the medium income level and the low income level (p = .000). The ANOVA results indicate that the higher the income level of participants the more they consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem

for themselves; whereas lower income participants are more likely to perceive that these issues are a serious problem for themselves.

The results of the ANOVA using income by quartiles also show that there is a statistically significant relationship between this predictor variable and the "Quality of Life for Self" scale ($F = 77.420$, $df = 3, 2613$, $p = .000$). Table USA-53 below shows the results of the income by quartiles analysis.

Table USA- 44: ANOVA Mean Scores for Income by Quartiles and "Quality of Life for Self" Scale (N = 2617).

Variable	N	Mean	SD
Income by Quartiles:			
Low	837	11.7395	2.40743
Low-Medium	915	12.7093	2.22052
High-Medium	399	13.1303	1.93955
High	466	13.5043	1.96446
Total	2617	12.6049	2.29408

***F* (3, 2613) = 77.420, *p* = .000**

As can be seen in Table USA-53, the mean scores become increasingly higher the higher the income level of the participants. According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, as shown in the table above, participants with higher levels of income which indicates that they perceive themselves as having a more positive perception of their quality of life compared to the participants with lower levels of income. Participants with lower levels of income have lower "Quality of Life" mean scores which indicate they perceive having a less positive quality of life. The Scheffe Post Hoc Test shows that there is a significant difference between the mean scores of the high level of income and the low-medium and low levels of

income (p = .000). But there is not a significant difference between the mean scores of the high level of income and the high-medium level of income (p = .102). These results indicate that participants with higher levels of income consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas participants with lower levels of income are more likely to answer that these issues are a serious problem for themselves.

In summary, the predictor variables that influence how the participants in the United States perceive their quality of life for themselves are age, gender, marital status, and income levels. Older participants perceive having a more positive quality of life than younger participants. Married participants perceive having a more positive quality of life than not married participants; married female and married male participants perceive having a more positive quality of life than their not married counterparts. Participants with higher levels of income perceive having a more positive quality of life than participants with lower levels of income.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

- "Decisions or choices that you make during your lifetime";
- "Decisions made by others that are beyond your control";

- "Genetic or inherited factors"; or
- "Blind luck"?

Table USA-54 below displays the frequencies of responses.

Table USA- 54: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2910)

	Number	%
Decisions or choices made by you	1856	63.8
Genetic or inherited factors	472	16.2
Blind luck	312	10.7
Decisions made by others	270	9.3

Almost two-thirds of the participants (63.8%) perceive that the control over the quality of their life at age 75 will be decided by decisions or choices made by themselves. The second most frequently selected response is "Genetic or inherited factors" (16.2%). The responses selected by fewer participants are "Blind luck" (10.7%) followed by "Decisions made by others" (9.3%). Therefore, the majority of the participants in the United States perceive that the quality of their life at age 75 will be determined by decisions or choices made by themselves, and just over one-third (36.2%) of the participants believe that the quality of their life at age 75 will be determined by factors beyond their control: genetic or inherited factors; blind luck; and decisions made by others.

In order to determine if the predictor variables of age, gender, marital status, and income level have a significant relationship with the "Locus of Control" criterion variable, Chi-Square analysis was conducted. The analysis shows that each of the predictor variables has a statistically significant relationship with the criterion variable, except for the marital status of male participants.

The results of the Chi-Square analysis proves that the predictor variable of age has a statistically significant relationship with the criterion variable of "Locus of Control" for both age variables, age by category (young, middle-age, and old) and age by decades (teens, twenties, thirties, etc.).

In order to determine if the age of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. Table USA-55 below shows the statistically significant results of the Chi-Square analysis using age by category and the criterion variable of "Locus of Control" ($x^2 = 21.053$, $df = 6$, $p = .002$).

Table USA- 55: Chi-Square Results for Age: Young, Middle-Age, and Old with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2910).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 91	
Decisions or choices made by you	**N**	538	661	657	**1856**
	%	65.9	63.3	62.7	**63.8**
Genetic or inherited factors	**N**	119	199	154	**472**
	%	14.6	19.0	14.7	**16.2**
Blind Luck	**N**	80	91	141	**312**
	%	9.8	8.7	13.5	**10.7**
Decisions made by others	**N**	80	94	96	**270**
	%	9.8	9.0	9.2	**9.3**
Total	**N**	817	1045	1048	**2910**
	%	100.0	100.0	100.0	**100.0**

***x²* = 21.053, *df* = 6, *p* = .002**

As shown in Table USA-55 above, the majority of all three of the age categories selected "Decisions or choices made by you", 65.9 percent of the young, 63.3 percent of the middle-age, and 62.7 percent of the old. The percentage of young participants is slightly higher than the percentages of the middle-age and old participants. More than expected young participants selected "Decisions made by you", and fewer than expected

middle-age and old participants selected that response. Therefore, the young participants are more inclined to perceive that the quality of their life at age 75 will be impacted by decisions made by themselves. A higher percentage of middle-age participants (19%) selected "Genetic or inherited factors". More than expected middle-age participants selected that response and fewer than expected young and old participants selected that response. Therefore, middle-age participants are more likely to perceive that genetic or inherited factors will influence the quality of their life at age 75. A higher percentage of old participants (13.5%) selected "Blind luck" compared to the young and middle-age participants. More than expected old participants selected "Blind luck" and fewer than expected young and middle-age participants selected that response. Therefore, old participants are more inclined to perceive that blind luck determines the quality of their life at age 75 than the young and middle-age participants.

The Chi-Square analysis determined that there is also a statistically significant relationship between age categorized by decade and the "Locus of Control" variable (x^2 = 62.841, df = 24, p = .000) as shown in Table USA-56 below.

Table USA- 45: Chi-Square Results for Age: Decades with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2910).

		Age: Decades									Total
		<20s	20s	30s	40s	50s	60s	70s	80s	90s	
Decisions/choices made by you	**N**	35	224	279	342	233	323	326	89	5	**1856**
	%	55.6	65.3	67.9	66.0	58.7	67.0	61.7	55.3	71.4	**63.8**
Genetic or inherited factors	**N**	13	46	60	91	86	76	77	22	1	**472**
	%	20.6	13.4	14.6	17.6	21.7	15.8	14.6	13.7	14.3	**16.2**
Blind Luck	**N**	11	36	33	37	45	37	80	33	0	**312**
	%	17.5	10.5	8.0	7.1	11.3	7.7	15.2	20.5	.0	**10.7**
Decisions made by others	**N**	4	37	39	48	33	46	45	17	1	**270**
	%	6.3	10.8	9.5	9.3	8.3	9.5	8.5	10.6	14.3	**9.3**
Total	**N**	63	343	411	518	397	482	528	161	7	**2910**
	%	100	100	100	100	100	100	100	100	100	**100**

$x^2 = 62.841$, $df = 24$, $p = .000$

As shown in Table USA-56 above the majority of participants in all the age decades perceive that decisions made by them will determine the quality of their life at age 75. Participants in their thirties have the highest percentage (67.9%). More than expected participants in their twenties, thirties, forties, and sixties selected "Decisions made by me" and fewer than expected participants in their teens, fifties, seventies, and eighties selected that response. Therefore, participants in their twenties, thirties, forties and sixties are more likely to perceive that decisions made by themselves will determine the quality of their lives at age 75 compared to the participants in their teens, fifties, seventies, and eighties. Of those who selected the response "Genetic or inherited factors" the percentages of participants in their teens, forties, and fifties are higher than for the other age decades. More than expected participants in their teens, forties and fifties selected "Genetic or inherited factors" and fewer than expected participants in their twenties, thirties, sixties, seventies, eighties and nineties selected that response. Therefore, participants in their teens, forties and fifties are more inclined to perceive that

genetic or inherited factors will determine the quality of their lives at age 75 compared to the other age decades. Of those who selected the response "Blind luck" the percentages of participants in their teens, fifties, seventies, and eighties are higher than for the other age decades. More than expected participants in their teens, fifties, seventies, and eighties selected "Blind luck" and fewer than expected participants in the other age decades selected that response. Therefore, participants in their teens, fifties, seventies, and eighties are more likely to perceive that blind luck will determine the quality of their lives at age 75 than participants in the other age decades. The results of this Chi-Square analysis with the predictor variable of age by decades are similar to the results of the analysis with age by category, but show more variability within the age groupings of young, middle-age, and old.

In order to determine if the gender of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. The results show that there is a statistically significant relationship between the predictor variable of gender and the criterion variable of "Locus of Control" (x^2 = 12.001, df = 3, p = .007). Table USA-57 shows the results below.

Table USA- 467: Chi-Square Results for Gender and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2910).

		Gender		
		Male	**Female**	**Total**
Decisions/choices made by you	**N**	798	1058	**1856**
	%	61.7	65.4	**63.8**
Genetic or inherited factors	**N**	200	272	**472**
	%	15.5	16.8	**16.2**
Blind Luck	**N**	162	150	**312**
	%	12.5	9.3	**10.7**
Decisions made by others	**N**	133	137	**270**
	%	10.3	8.5	**9.3**
Total	**N**	1293	1617	**2910**
	%	100.0	100.0	**100.0**

***x²* = 12.001, *df* = 3, *p* = .007**

As shown in Table USA-57 above, a higher percentage of female participants (5.4%) than male participants (561.7%) selected "Decisions made by you". The results of the Chi-Square analysis also show that more than expected female participants selected "Decisions made by you" and fewer than expected male participants chose that response. Therefore, female participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions made by themselves than male participants. A higher percentage of female participants (16.8%) selected "Genetic or inherited factors" compared to male participants (15.5%). More than expected female participants selected "Genetic or inherited factors" and fewer than expected male participants selected that response. Therefore, female participants are more inclined to believe that the quality of their life at age 75 will be determined by genetic or inherited factors compared to male participants. A higher percentage of male participants (12.5%) than female participants (9.3%) selected "Blind luck". More than expected male participants chose "Blind luck", and fewer than expected female participants chose that response. The results of the

analysis also show that a higher percentage of male participants (10.3%) than female participants (8.5%) selected “Decisions or choices made by others”. More than expected male participants selected “Decisions or choices made my others” and fewer than expected female participants selected that response. The results of this Chi-Square analysis show that female participants are more inclined to perceive that they have some control over the quality of their lives at age 75, either by decisions or choices made by themselves or by genetic or inherited factors, while male participants are more inclined to perceive that the quality of their lives at age 75 will be determined by factors out of their control, either by blind luck or decision made by others. Although female participants are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and genetic or inherited factors, a much higher percentage of female participants believe that decisions made by themselves will impact the quality of their life at age 75.

In order to determine if the marital status of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. The results of the analysis with the predictor variable of marital status and the criterion variable of “Locus of Control” show that there is a statistically significant relationship between these two variables ($x^2 = 16.500$, $df = 3$, $p = .001$). The results are shown in Table USA-58 below.

Table USA- 47: Chi-Square Results for Marital Status and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2906).

		Marital Status		
		Married	**Not Married**	**Total**
Decisions/choices made by you	**N**	997	857	**1854**
	%	64.5	63.0	**63.8**
Genetic or inherited factors	**N**	268	204	**472**
	%	17.3	15.0	**16.2**
Blind Luck	**N**	133	178	**311**
	%	8.6	13.1	**10.7**
Decisions made by others	**N**	147	122	**269**
	%	9.5	9.0	**9.3**
Total	**N**	1545	1361	**2906**
	%	100.0	100.0	**100.0**

x^2 = 16.500, *df* = 3, *p* = .001

As Table USA-58 shows, the majority of both married participants (64.5%) and not married participants (63.0%) selected "Decisions or choices made by you", however a slightly higher percentage of married participants than not married participants selected that response. More than expected married participants compared to fewer than expected not married participants selected "Decisions or choices made by me". Therefore, married participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions or choices made by themselves. A higher percentage of married participants (17.3%) compared to not married participants (15.0%) selected "Genetic or inherited factors". More than expected married participants selected "Genetic or inherited factors" and fewer than expected not married participants selected that response. Therefore, married participants are more likely than not married participants to perceive that the quality of their life at age 75 will be impacted by genetic or inherited factors. A higher percentage of not married participants (13.1%) selected "Blind luck" than married participants (8.6%). More than expected not married participants selected "Blind luck"

and fewer than expected married participants selected that response. Therefore, not married participants are more likely to perceive that blind luck will influence the quality of their life at age 75 than married participants. Although married participants are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and genetic or inherited factors, a much higher percentage of married participants believe that decisions made by themselves will impact the quality of their life at age 75.

The Chi-Square analysis also shows that there is a statistically significant relationship between the marital status of female participants and the criterion variable of "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" ($x^2 = 17.328$, $df = 3$, $p = .001$). Table USA-59 below shows the results of the analysis.

Table USA- 48: Chi-Square Results for Marital Status of Females and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=1614).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Decisions/choices made by you	**N**	518	539	**1057**
	%	66.2	64.8	**65.5**
Genetic or inherited factors	**N**	150	122	**272**
	%	19.2	14.7	**16.9**
Blind Luck	**N**	51	98	**149**
	%	6.5	11.8	**9.2**
Decisions made by others	**N**	63	73	**136**
	%	8.1	8.8	**8.4**
Total	**N**	782	832	**1614**
	%	100.0	100.0	**100.0**

$x^2 = 17.328$, $df = 3$, $p = .001$

Table USA-59 above shows that the percentage of married female participants (66.2%) is slightly higher than the percentage of not married female participants (64.8%)

who selected “Decisions or choices made by me”. More than expected married female participants selected “Decisions or choices made by me” and fewer than expected not married female participants selected that response. Therefore, married female participants are more inclined to perceive that decisions or choices they have made over their lifetime will impact the quality of their lives at age 75 than not married female participants. A higher percentage of married female participants (19.2%) compared to not married female participants (14.7%) selected “Genetic or inherited factors”. More than expected married female participants selected “Genetic or inherited factors” and fewer than expected not married female participants selected that response. Therefore, married female participants are more likely than not married female participants to perceive that the quality of their life at age 75 will be impacted by genetic or inherited factors. A higher percentage of not married female participants (11.8%) selected “Blind luck” than married female participants (6.5%). More than expected not married female participants selected “Blind luck” and fewer than expected married female participants selected that response. Therefore, not married female participants are more likely to perceive that blind luck will influence the quality of their life at age 75 than married female participants. Although married female participants are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and genetic or inherited factors, a much higher percentage of married female participants believe that decisions made by themselves will impact the quality of their life at age 75.

The results of the Chi-Square analysis show that there is not a statistically significant relationship with the marital status of male participants and the “Locus of Control” variable ($x^2 = 6.056$, $df = 3$, $p = .109$).

In order to determine if the income levels of the participants is a factor in their perception of what impacts the quality of their life at age 75, Chi-Square analysis was performed. The results show that there is a statistically significant relationship between income by thirds and income by quartiles and the criterion variable of "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75".

Table USA-60 shows the results of the Chi-Square analysis using income by thirds and the "Locus of Control" criterion variable ($x^2 = 42.616$, $df = 6$, $p = .000$).

Table USA- 60: Chi-Square Results for Income Levels: Thirds and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2554).

		Income Level: Thirds			
		Low	**Medium**	**High**	**Total**
Decisions/choices made by you	**N**	491	570	568	**1629**
	%	62.4	63.1	65.8	**63.8**
Genetic or inherited factors	**N**	99	144	173	**416**
	%	12.6	15.9	20.0	**16.3**
Blind Luck	**N**	114	100	61	**275**
	%	14.5	11.1	7.1	**10.8**
Decisions made by others	**N**	83	90	61	**234**
	%	10.5	10.0	7.1	**9.2**
Total	**N**	787	904	863	**2554**
	%	100.0	100.0	100.0	**100.0**

***x²* = 42.616, *df* = 6, *p* = .000**

As shown in Table USA-60 above, of the participants who chose the response "Decisions or choices made by you" the ones with a high income level have the highest percentage (65.8%). The Chi-Square analysis results show that more than expected participants with a high income level selected "Decisions or choices made by you" and fewer than expected participants with medium and low income levels selected that response. Therefore, participants with a high income level are more inclined to perceive

that the quality of their life at age 75 will be impacted by decisions or choices made by themselves. A higher percentage of participants with a high income level (20.0%) selected "Genetic or inherited factors" than participants with medium and low income levels. More than expected participants with a high income level selected "Genetic or inherited factors" and fewer than expected participants with medium and low income levels selected that response. Therefore, participants with a high income level are more likely to believe that genetic or inherited factors will determine the quality of their life at age 75 than participants with medium and low income levels. A higher percentage of low income participants selected "Blind luck" (14.5%) than participants with medium and high income levels. More than expected participants with low and medium income levels selected "Blind luck" and fewer than expected participants with a high income level selected that response. Therefore, participants with low and medium income levels are more likely to perceive that blind luck will determine the quality of their life at age 75 than participants with a high income level. Although participants with high income levels are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and genetic or inherited factors, a much higher percentage of participants with a high income level believe that decisions made by themselves will impact the quality of their life at age 75.

The Chi-Square results show that there is also a statistically significant relationship between income by quartiles and the criterion variable of "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75". Table USA-61 shows the results of the Chi-Square analysis using income by quartiles and the "Locus of Control" criterion variable ($x^2 = 52.245$, $df = 9$, $p = .000$).

Table USA- 61: Chi-Square Results for Income Levels: Quartiles and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=2554).

		Income Level: Quartiles				Total
		Low	Low-Med	Hi-Med	High	
Decisions/choices made by you	**N**	491	570	268	300	**1629**
	%	62.4	63.1	67.5	64.4	**63.8**
Genetic or inherited factors	**N**	99	144	65	108	**416**
	%	12.6	15.9	16.4	23.2	**16.3**
Blind Luck	**N**	114	100	28	33	**275**
	%	14.5	11.1	7.1	7.1	**10.8**
Decisions made by others	**N**	83	90	36	25	**234**
	%	10.5	10.0	9.1	5.4	**9.2**
Total	**N**	787	904	397	466	**2554**
	%	100	100	100	100	**100**

***x²* = 52.245, *df* = 9, *p* = .000**

As shown in Table USA-61 above, of the participants who chose the response "Decisions or choices made by you" the ones with a high-medium income level have the highest percentage (67.5%) and participants with a high income level have the second highest percentage (64.4%). The Chi-Square analysis results show that more than expected participants with a high-medium and high income levels selected "Decisions or choices made by you" and fewer than expected participants with low-medium and low income levels selected that response. Therefore, participants with high-medium and high income levels are more inclined to perceive that the quality of their life at age 75 will be impacted by decisions or choices made by themselves. A higher percentage of participants with high-medium (16.4%) and high income levels (23.2%) selected "Genetic or inherited factors" than participants with low-medium (15.9%) and low (12.6%) income levels. More than expected participants with medium-high and high income levels selected "Genetic or inherited factors" and fewer than expected participants with low-medium and low income levels selected that response. Therefore,

participants with medium-high and high income levels are more likely to believe that genetic or inherited factors will determine the quality of their life at age 75 than participants with low-medium and low income levels. A higher percentage of participants with low (14.5 %) and low-medium (11.1%) income levels selected "Blind luck" than participants with medium-high (7.1%) and high (7.1%) income levels. More than expected participants with low and low-medium income levels selected "Blind luck" and fewer than expected participants with high-medium and high income levels selected that response. Therefore, participants with low and low-medium income levels are more likely to perceive that blind luck will determine the quality of their life at age 75 than participants with high-medium and high income levels. Although participants with high-medium and high income levels are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and genetic or inherited factors, a much higher percentage of participants with high-medium and high income levels believe that decisions made by themselves will impact the quality of their life at age 75.

In summary, almost two-thirds (63.8%) of the participants in the United States perceive that decisions made by themselves will impact the quality of their life at age 75. Younger participants are more likely than older participants to perceive that decisions made by themselves will determine the quality of their life at age 75. Female participants are more likely to perceive that their quality of life at age 75 will be determined by themselves than male participants. Married participants are more likely to perceive that their quality of life will be influenced by decisions made by themselves compared to not married participants; and married female participants are more likely to perceive this than

not married female participants. Participants with higher income levels are more inclined to perceive that decisions made by themselves will impact the quality of their lives at age 75.

4. Perception of Quality of Life for People Over 65

In order to ascertain how the participants in the United States perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for older people. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- 'a very serious problem = 1,
- 'a somewhat serious problem = 2', or
- 'not a problem at all = 3' for most people over 65 personally?".

According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine if the participants' perception of the quality of life for people over 65 is influenced by their age, gender, marital status, or income level, statistical analysis was performed using each of these predictor variables with the criterion composite variable of "Quality of Life for People Over 65". The statistical analysis determined that all the predictor variables have a significant relationship with "Quality of Life for People Over 65", except the marital status of female participants. The results of each analysis are discussed below.

In order to ascertain if the age of the participants has a relationship with the criterion variable of "Quality of Life for People Over 65" a simple one-way variance of analysis (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant.

The results of the ANOVA analysis of age by category (young, middle-age, old) is statistically significant (F = 55.600, df = 2, 2763, p = .000), as shown in Table USA-62 below.

Table USA- 62: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for People Over 65" Scale (N = 2766).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	799	7.9750	1.92968
Middle-Age (40-64)	981	8.4546	2.05218
Old (65 +)	986	8.9990	2.14144
Total	2766	8.5101	2.09047

***F* (2, 2763) = 55.600, *p* = .000**

As seen in the table above, the mean scores are higher for old participants (8.9990) and lower for young (7.9750) and middle-age (8.4546) participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the

more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the Table USA-61 above, the older the participant the more inclined they are to have a more positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of the old and the middle-age participants (p = .000) and between the old and the young participants (p = .000). There is also a significant difference between the mean scores of the middle-age and young participants (p = .000). Therefore, the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

The results of the ANOVA analysis using age categorized by decades show that there is a statistically significant relationship between age by decade and the "Quality of Life for People Over 65" criterion variable (F = 16.805, df = 8, 2757, p = .000), as shown in Table USA-63 below.

Table USA- 49: ANOVA Mean Scores for Age by Decades and "Quality of Life for People Over 65" Scale (N =2766).

Variable	N	Mean	SD
Age by Decades:			
Teens	63	8.3016	1.76558
Twenties	335	7.9015	1.97116
Thirties	401	7.9850	1.91827
Forties	495	8.2242	1.96740
Fifties	372	8.6156	2.06370
Sixties	449	8.9376	2.12145
Seventies	500	8.9500	2.13086
Eighties	146	9.2466	2.32397
Nineties	5	10.6000	.54772
Total	2766	8.5101	2.09047

***F* (8, 2757) = 16.805, *p* = .000**

As shown in Table USA-63 above, with the exception of the participants in their teens, the older the participant the higher the mean score, which indicates that the older the participant the more likely they are to perceive a more positive quality of life for people over 65 than younger participants. The Scheffe Post Hoc Test results show that there is a statistically significant difference between the mean scores of participants in their eighties and the mean scores of participants in their forties, thirties, and twenties (*p* = .000). There is also a significant difference between the mean scores of participants in their seventies and their sixties and the mean scores of participants in their forties, thirties, and twenties (*p* = .000). There is a significant difference between the mean scores of participants in their fifties and the mean scores of participants in their thirties (*p* = .019) and in their twenties (*p* = .006). This indicates that the older the participant the more likely they are to perceive that not having enough money to live on, having poor

health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

In order to determine if gender has a significant relationship with the criterion variable of the "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that the predictor variable of gender has a statistically significant relationship with this criterion variable (t = 4.332, df = 2764, p = .000). Table USA-64 shows the results of the analysis.

Table USA- 50: Mean Scores for Gender and "Quality of Life for People Over 65" Scale (N=2766).

	Males (n=1218)	**Females (n=1548)**
"**Quality of Life for People over 65**"	*Mean* = 8.7036 *SD* = 2.09197	*Mean* = 8.3579 *SD* = 2.07732

***t* = 4.332, *df* = 2764, *p* = .000**

As seen in the table above, the mean scores are higher for the male participants and lower for the female participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, male participants have a higher mean score, which indicates that male participants in this study have a more positive perception of the quality of life for people over 65 compared to female participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65.

In order to determine if marital status has a significant relationship with the criterion variable of "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that marital status does have a statistically

significant relationship with this criterion variable (t = 4.245, df = 2760, p = .000). The results of the analysis are shown in Table USA-65 below.

Table USA- 51: Mean Scores for Marital Status and "Quality of Life for People Over 65" Scale (N=2762).

	Married (n=1472)	**Not Married (n=1290)**
"**Quality of Life for People over 65**"	*Mean* = 8.6685 *SD* = 2.08458	*Mean* = 8.3310 *SD* = 2.08464

***t* = 4.245, *df* = 2760, *p* = .000**

As seen in the table above, the mean scores are higher for the married participants and lower for the not married participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, married participants have a higher mean score, which indicates that married participants in this study have a more positive perception of the quality of life for people over 65 compared to not married participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Married participants in the United States are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a very serious problem for people over 65; whereas married participants are more likely to answer that these issues are a serious problem.

In order to determine if the marital status of the female participants has a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is no statistically significant relationship with the marital

status of female participants and the criterion variable of "Quality of Life for People Over 65" (t = 1.414, df = 1543, p = .157).

In order to determine if the marital status of the male participants has a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is a statistically significant relationship with the marital status of male participants and the criterion variable of "Quality of Life for People Over 65" (t = 4.280, df = 1215, p = .000). Table USA-66 displays the results.

Table USA- 52: Mean Scores for Marital Status of Male Participants and "Quality of Life for People Over 65" Scale (N=1217).

	Married (n=710)	**Not Married (n=507)**
"**Quality of Life for People over 65**"	*Mean* = 8.9211 *SD* = 2.06167	*Mean* = 8.4043 *SD* = 2.09748

***t* = 4.280, *df* = 1215, *p* = .000**

As shown in the table above, the mean score for married male participants is higher than the mean score for the not married male participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, married male participants have a higher mean score, which indicates that married male participants in this study have a more positive perception of the quality of life for people over 65 compared to not married male participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Therefore, married male participants in the United States are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious

problem for people over 65; whereas not married male participants are more likely to answer that these issues are a serious problem.

In order to determine if the income levels of participants' influence their perception of the quality of life for people over 65, a simple Variance of Analysis (ANOVA) was performed using both income levels by thirds and income levels by quartiles.

The results of the analysis using income levels categorized by thirds show that there is a statistically significant relationship with the criterion variable of "Quality of Life for People Over 65" ($F = 5.854$, $df = 2, 2429$, $p = .008$). Table USA-67 displays the results below.

Table USA- 53: ANOVA Mean Scores for Income by Thirds: Low, Medium, and High, and "Quality of Life for People Over 65" Scale (N=2432).

Variable	N	Mean	SD
Income by Thirds:			
Low	755	8.2808	2.04540
Medium	856	8.4638	2.05903
High	821	8.6370	2.08825
Total	2432	8.4655	2.06886

***F* (2, 2429) = 5.854, *p* = .008**

As shown in Table USA-67 above, as the income level increases the mean scores increase. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the participants with a high income level have the highest mean score, which indicates that these participants have a more positive perception of the quality of life for people over

65. The Scheffe Post Hoc Test results indicate that there is a significant difference between the mean score of participants with a high income level and the mean score of the participants with a low income level (p = .003), but not with the participants with a medium income level (p = .229). Therefore, this ANOVA analysis indicates that participants with a high income level in the United States are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for people over 65; whereas participants with a low income level are more likely to answer that these issues are a serious problem.

The results of the ANOVA analysis using income levels by quartiles indicate that there is a statistically significant relationship with the criterion variable of "Quality of Life for People Over 65" (F = 3.984, df = 3, 2428, p = .003). Table USA-68 shows the results below.

Table USA- 54: ANOVA Mean Scores for Income by Quartiles: Low, Low-Medium, High-Medium, and High, and "Quality of Life for People Over 65" Scale (N=2432).

Variable	N	Mean	SD
Income by Quartile:			
Low	755	8.2808	2.04540
Low-Medium	856	8.4638	2.05903
High-Medium	373	8.5979	1.96315
High	448	8.6696	2.18860
Total	2432	8.4655	2.06886

***F* (3, 2428) = 3.984, *p* = .003**

As shown in the table above, as the income levels increase the mean scores increase. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65.

Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the participants in the high income category have a higher mean score, which indicates that these participants have a more positive perception of the quality of life for people over 65 compared to participants in the lower income levels whose mean score indicates that they have a less positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results indicate that there is a significant difference between the mean score of the participants with a high income level and the mean score of the participants with a low income level ($p = .019$), but not with any other income levels. This ANOVA analysis indicates that participants with a high income level in the United States are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for people over 65; whereas participants with a low income level are more likely to answer that these issues are a serious problem for people over 65.

In summary, the predictor variables that influence how the participants in the United States perceive the quality of life for people over 65 are age, gender, marital status, the marital status of males, and income levels. The older the participant the more likely they are to have a more positive perception of the quality of life for people over 65. Married participants have a more positive perception of the quality of life for people over 65 than do not married participants. Married male participants have a more positive perception on the quality of life for people over 65 than do not married male participants. Participants with a high income level have a more positive perception of the quality of life for people over 65 than participants with a low income level.

C. Summary of the Findings on the Predictor Variables

This study analyzed the influence of four demographic predictor variables on perceptions of aging and older adults. Below is the summary of the findings of the significance of the predictor variables of age, gender, marital status, and income level.

1. Age

The analysis of the data collected in the United States shows that the age of the participant is a consistent predictor variable influencing the perceptions of aging and older people. In general, it was found that the older the participant the more positive perceptions they have regarding aging and older people. The age of the participants is a significant factor in how they perceived each of the criterion variables. The only criterion variable that the age of the participants in the United States was not found to have a significant relationship is "As I grow older things are better than I thought they would be".

Age was found to influence how participants perceive the beginning of old age. Although, all age groups of the participants in the United States perceive that a decline in physical ability best defines the beginning of old age, participants age 18 to 39 are more inclined to perceive the beginning of old age as "Reaching a specific age" and "Retirement" than the participants aged 40 – 64 and the participants aged 65 and older. The percentage of participants who perceive that reaching a specific age best defines the beginning of old age decreases as the age of the participants increases.

Age was found to influence whether or not participants perceive that people over 65 get too little, too much or just the right amount of respect from young people.

Participants fifty and older are more likely to perceive that older people get just the right amount of respect and participants younger than fifty are more likely to perceive that older people get too little respect from young people.

Age was found to influence how participants responded to the statement “As I Look Back On My Life I am Fairly Well Satisfied”. The results show that the older the participant the more likely s/he is to agree with the statement.

Age was found to influence how participants responded to the statement “These are the best years of my life”. Participants younger than age sixty are more likely to agree with the statement, and participants older than seventy are more likely to disagree with the statement.

Age was found to influence how the participants responded to the “Life Satisfaction” scale. The younger the participant the more s/he perceives having greater life satisfaction.

Age was found to influence how participants perceive quality of life for themselves. Older participants perceive having a more positive quality of life than younger participants.

Age was found to influence how the participants perceive the impact on the quality of their life at age 75. Younger participants are more likely than older participants to perceive that decisions made by themselves will determine the quality of their life at age 75.

Age was found to influence how the participants perceive the quality of life for people over 65. The older the participant the more likely they are to have a more positive perception of the quality of life for people over 65.

2. Gender

The analysis of the data collected in the United States shows that gender is a mixed predictor variable influencing only some of the perceptions of aging and older people. The criterion variables that gender has a significant relationship with are: "What Best Defines the Beginning of Old Age" variable; the composite "Life Satisfaction" variable; the "Quality of Life for Self" variable; the "Locus of Control" variable; and the "Quality of Life for People Over 65" variable. The criterion variables that gender does not have a significant relationship with are: "Respect for People Over 65"; "As I grow older things are better than I thought they would be"; "As I look back on my life I am fairly satisfied"; "These are the best years of my life".

The results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review.

In this study of the United States, the gender of the participant did have some influence, but it was not consistent with all the criterion variables.

3. Marital Status

In this study, marital status was a fairly consistent predictor variable influencing the perceptions of aging and older people. Marital status in the United States was found to have a significant relationship with the following criterion variables: "What best defines the beginning of old age"; "Things are better than they expected them to be"; "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; the composite "Life Satisfaction" variable; the composite variable "Quality of Life for Self"; the "Locus of Control" variable; and the composite variable "Quality of

Life for People Over 65". Marital status in the United States was not found to have a significant relationship with the criterion variable of "Respect for people 65 and over".

The marital status of female participants was found to be a significant predictor variable with the following criterion variables: "What best defines the beginning of old age"; "Respect for People Over 65"; "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; the composite "Life Satisfaction" variable; the composite variable "Quality of Life for Self"; and the "Locus of Control" variable. The marital status of female participants was not found to have a significant relationship with the following criterion variables: "Respect for People 65 and Over"; and the composite variable "Quality of Life for People Over 65".

The marital status for male participants in the United States was found to have a statistically significant relationship with the following criterion variables: "What best defines the beginning of old age"; "As I grow older things are better than I thought they would be"; "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; the composite "Life Satisfaction" variable; the composite variable "Quality of Life for Self"; and the composite variable "Quality of Life for People Over 65". The marital status of male participants was not found to have a significant relationship with the following criterion variables: "Respect for people 65 and over"; and the "Locus of Control" variable.

The literature review did not uncover, and therefore did not discuss, studies focused on the relationship between marital status and the perception of aging and older adults.

4. Income Level

The analysis of the data collected in the United States shows that income level is a predictor variable influencing the perceptions of aging and older people. Income levels have a significant relationship with all of the criterion variables.

It was expected that income levels would play a significant role in the participants' perception of aging and older people, because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003).

D. Summary

These findings from the United States data analysis examining the influence of the predictor variables of age, gender, marital status, and income levels on the perceptions of aging and older adults provide a snapshot of how people of the United States perceive their own aging and that of others. These results will be compared with the results of the other four countries in Chapter 9.

The next chapter discusses the analysis and findings in the United Kingdom.

Chapter 5: Discussion of Analysis and Findings in The United Kingdom

A. Population Demographics

In order to provide a basis on which to compare demographics across time and across countries, the current relevant demographics are provided (2009 is the most current data available), as well as the relevant demographic information 2000, which is the year the data was collected for this study**.**

1. Current Demographics

Compared to the other four countries of this study, the United States, Japan, France and the Dominican Republic, the United Kingdom ranks second in regard to population aging. The most current demographics available for the United Kingdom are from 2009. In that year, people 65 and over made up 16.9% of the population, the ratio of females to males was 1:1 up until the age of 70 when the ratio of females to males increases to 2:1.

Life expectancy in the United Kingdom rose from age 70.8 in 1960-65 to 79.4 in 2005-10. The United Kingdom, like many other countries, is entering an era of hyperaging. The percent of people aged 60 and over in 2007 was 22.7%; this is expected to rise to 27.9% by 2040 (Jackson, R. 2010).

2. Demographics in 2000

The data used for this study was collected in 2000. The participants were sampled to be representative of the population in the United Kingdom at that time. The

entire population of the United Kingdom in 2000 was 58,907,000, and 15.9 percent of the population was 65 and over.

Table UK-1 displays the demographics of the 990 participants in this study.

Table UK-1: United Kingdom Participant Demographics (N= 990)

	N	%
Gender:		
Female	577	58.3
Male	413	41.7
Marital Status:		
Married	580	58.6
Not Married	408	41.2
Age:		
Teens	39	3.9
Twenties	178	18.0
Thirties	235	23.7
Forties	158	16.0
Fifties	138	13.9
Sixties	122	12.3
Seventies	85	8.6
Eighties	32	3.2
Nineties	3	.3
Salary Range: (N = 559)		
Less than 2,500 L	10	1.0
2,500 – 4,499 L	50	5.1
4,500 – 6,499 L	58	5.9
6,500 – 7,499 L	33	3.3
7,500 – 9,499 L	39	3.9
9,500 – 11,499 L	51	5.2
11,500 – 13,499 L	40	4.0
13,500 – 15,499 L	29	2.9
15,500 – 17,499 L	39	3.9
17,500 – 24,999 L	55	5.6
25,000 – 34,999 L	71	7.2
35,000 – 39,999 L	36	3.6
40,000 – 59,999 L	28	2.8
60,000 –100,000 L	16	1.6
100,000 L	4	.4

Table UK-1 shows that the United Kingdom participants in this study consist of 58% females and 42% males; 58.6 % of the total number of participants are married. The ages range from 18 to 91 with almost half of the participants (46 percent) falling into the young category (39 and younger), 38 % in the middle-aged category (40 to 64), and 17% in the old category (65 and older). The mean age is 45 and the median age is 43. The salaries range from below 2,500 Pounds to over 100,000 Pounds, with the mean range between 11,500 and 15,500 Pounds.

These demographics are relevant to the study which analyzes how age, gender, marital status, and income level influence participants' perceptions of aging.

B. Analysis of Data

The survey instrument for this study was designed to collect data that would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions: (1) Perceptions of Aging and Older People; (2) Perceptions of Life Satisfaction for Self; (3) Perceptions of Quality of Life for Self; and (4) Perceptions of Quality of Life for People Sixty-five and Older. The following is the data analysis of each of the four categories.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people: a) "In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in

physical ability, a decline in mental functioning, or reaching a specific age"; and b) "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people". Each question was analyzed using the four predictor variables: age, gender, marital status, and income level.

a. *"In general, which one of the following five things would you say best defines the beginning of old age"*

This question in the survey instrument is intended to understand the participants' perception of when old age begins. There are five responses to choose from: "Retirement"; "Becoming a grandparent"; "Decline in physical ability"; "Decline in mental functioning"; and "Reaching a specific age". As seen in Table UK-2 below, the two responses selected by the majority of the participants are: "Decline in physical ability", which 35.8 percent of the participants selected; and "Decline in mental functioning", which 23.4 percent of the participants selected.

Table UK-2: "Which one of the following five things best defines the beginning of old age".

	Total (N=954)	
	Number	**%**
Decline in physical ability	354	35.8
Decline in mental functioning	232	23.4
Retirement	221	22.3
Reaching a specific age	105	10.6
Becoming a grandparent	42	4.2

Chi-Square analysis was used to determine which of the predictor variables: age, gender, marital status or income level, influence the participants' perception of when old age begins. Of the four predictor variables, two, age and gender, proved to have a statistically significant relationship with this criterion variable. Both types of age

categories, age category of young, middle-age, and old, and age by decades, have significant relationships with this criterion variable

In order to determine if the age of the participants has a relationship with the responses to the question "Which one of the following five things would you say best defines the beginning of old age?", Chi-Square analysis was used using two versions of the age variable, age by category and age by decade. The age by category variable consists of three groupings of age: young (39 and younger); middle-age (40 to 64); and old (65 and over). Table UK-3 below shows the outcome of the Chi-Square analysis for the age by category independent variable and the criterions variable of what best defines old age.

Table UK-3: Chi-Square Results for Age: Young, Middle-Age, and Old with "Which one of the following five things would you say best defines the beginning of old age" (N=954).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 91	
Decline in physical ability	**N**	156	135	63	**354**
	%	35.5	37.9	39.6	**37.1**
Decline in mental functioning	**N**	80	98	54	**23**
	%	18.2	27.5	34.0	**24.3**
Retirement	**N**	120	72	29	**221**
	%	27.3	20.2	18.2	**23.2**
Reaching a specific age	**N**	59	39	7	**105**
	%	13.4	11.0	4.4	**11.0**
Becoming a grandparent	**N**	24	12	6	**42**
	%	5.5	3.4	3.8	**4.4**
Total	**N**	439	356	159	**954**
	%	100.0	100.0	100.0	**100.0**

***x²* = 32.008, *df* = 8, *p* = .000**

As shown in the table above, there is a statistically significant relationship found between age category of young, middle-age, and old and what best defines the beginning

of old age (x^2 = 32,008, *df* = 8, *p* = .000). The highest percentage of the age category that selected "Decline in physical ability" is the old group (39.6%), followed by the middle-age group (37.9%). More middle-age and old participants than expected selected "Physical decline" and "Mental decline" as the beginning of old age, whereas more young participants than expected selected "Retirement", "Reaching a specific age", and "Becoming a grandparent" as what best defines the beginning of old age. The young group represents the highest percentage of those who selected "Retirement" (27.3%), "Reaching a specific age" (13.4%), and "Becoming a grandparent" (5.5%). These findings indicate that young participants, between the ages of 18 and 39, define the beginning of old age as a specific age or a significant event (retiring or becoming a grandparent), while middle-age and old participants define the beginning of old age as a decline in physical or mental functioning.

The second age variable is "age by decade", which categorizes the age of the participants by the decades; such as twenties, thirties, forties, etc. In order to determine if there is a relationship between the more nuanced age variable category of age by decades and the responses to the survey question "Which one of the following five things would you say best defines the beginning of old age", Chi-Square analysis was performed. The analysis determined that there is also a statistically significant relationship between age by decade and what best defines the beginning of old age (x^2 = 50.069, *df* = 32, *p* = .022). Table UK-4 below displays the results.

Table UK-4: Chi-Square Results for Age: Decades with "Which one of the following five things would you say best defines the beginning of old age" (N=954).

		Age: Decades									Total
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	
Decline in physical ability	**N**	12	59	85	49	50	53	32	13	1	**354**
	%	32.4	33.7	37.4	32.0	37.9	44.9	40.5	43.3	33.3	**37.1**
Decline in mental functioning	**N**	8	31	41	40	41	33	28	10	0	**232**
	%	21.6	17.7	18.1	26.1	31.1	28.0	35.4	33.3	0	**24.3**
Retirement	**N**	9	49	62	38	24	20	13	4	2	**221**
	%	24.3	28.0	27.3	24.8	18.2	16.9	16.5	13.3	66.7	**23.2**
Reaching a specific age	**N**	5	23	31	18	15	8	3	2	0	**105**
	%	13.5	13.1	13.7	11.8	11.4	6.8	3.8	6.7	0	**11.0**
Becoming a grandparent	**N**	3	13	8	8	2	4	3	1	0	**42**
	%	8.1	7.4	3.5	5.2	1.5	3.4	3.8	3.3	0	**4.4**
Total	**N**	37	175	227	153	132	118	79	30	3	**954**
	%	100	100	100	100	100	100	100	100	100	**100**

***x²* = 50.069, *df* = 32, *p* = .022**

By grouping the participants' ages into decades, more details regarding the shift of perceptions between the ages are apparent. As in the analysis using the age categories of young, middle-age, and old, Table UK-4 shows that the highest percentage of participants who selected "Decline in physical ability" as the beginning of old age are the older participants, fewer of the young participants (in their teens, and twenties) selected that category. The shift in perceptions seems to occur in the "older" young and "younger" middle-age ranges. For the analysis illustrated in Table UK-3, the young age range is from 18 to 39 years old and the middle-age range from 40 to 64 years old. As seen in the results of the Chi-Square analysis illustrated in Table UK-4 above, the shift in perceptions occurs in the decades of the thirties and the forties. The percentages of the responses of the participants in their teens and twenties are similar, and the percentages of the responses of the participants in their fifties and older are more similar. Some of the participants in their thirties responded similarly to those in the younger age decades,

where more than expected selected “Retirement” and “Reaching a specific age” as the beginning of old age, but fewer than expected selected “Decline in mental functioning”, which is similar to the responses of those under thirty . But just slightly more than expected in their thirties selected “Decline in physical ability”, where as fewer than expected in their forties selected that response as the beginning of old age. The participants in their forties, where more likely to respond similarly to those in their fifties and over as more than expected selected “Decline in mental functioning”, “Retirement” and “Reaching a specific age” as the beginning of old age.

In order to determine if the gender of the participants has a relationship to the responses to the question “What best defines the beginning of old age”, Chi-Square analysis was conducted. It was determined that the independent variable of gender has a statistically significant relationship with the criterion variable ($x^2 = 10.598$, $df = 4$, $p = .031$), as shown in Table UK-5 below. Again, the most common response for most males and females is “Decline in physical ability”, however more male participants than expected selected “Retirement” and “Reaching a specific age” as the beginning of old age compared to female participants. A slightly higher percentage of female participants (37.4%) selected “Decline in physical ability” than male participants (36.8%). A much higher percentage of female participants (27.6%) selected “Decline in mental functioning” than male participants (19.8%). More females than expected selected “Decline in mental functioning” compared to males whose responses are fewer than expected. This indicates that males perceive the beginning of old age in more objective terms such as retirement or a specific age, while female participants perceive the beginning of old age in more subjective terms such as a decline in mental functioning.

Table UK-5: Chi-Square Results for Gender and "Which one of the following five things would you say best defines the beginning of old age" (N=954).

		Gender		Total
		Male	Female	
Decline in physical ability	**N**	147	207	**354**
	%	36.8	37.4	**37.1**
Decline in mental functioning	**N**	79	153	**232**
	%	19.8	27.6	**24.3**
Retirement	**N**	103	118	**221**
	%	25.8	21.3	**23.2**
Reaching a specific age	**N**	52	53	**105**
	%	13.0	9.6	**11.0**
Becoming a grandparent	**N**	19	23	**42**
	%	4.8	4.2	**4.4**
Total	**N**	400	554	**954**
	%	100.0	100.0	**100.0**

***x²* = 10.598, *df* = 4, *p* = .031**

According to the Chi-Square analysis there is no significant relationship between the marital status of the participants and the responses to what best defines old age (x^2 = 4.327, *df* = 4, *p* = 0.364). And there is no significant relationship either regarding whether or not the male and female participants were married. The results of the analysis for the marital status of female participants and male participants respectively are: (x^2 = 7.489, *df* = 4, *p* = 0.112) and (x^2 = 2.242, *df* = 4, *p* = 0.691).

The income level of participants can have an effect on how they perceive aging and older people. Therefore, Chi-Square analysis was performed with the predictor variable of income level. The income levels of the participants were categorized in two separate ways in order to determine which would have the most sensitivity. The first grouping is in quartiles and the income levels are: low, low-medium, high-medium, and high. The second grouping of income is in three categories: low, medium and high. The results of the Chi-Square analysis determined that neither of the groupings of the income

variable have a statistically significant relationship with "What best defines the beginning of old age". The results of the Chi-Square analysis using income by quartiles (low, low-medium, high-medium, and high) is: $x^2 = 11.522$, $df = 12$, $p = 0.485$,) and the results for income categorized into low, medium, and high is: ($x^2 = 9.165$, $df = 8$, $p = 0.329$).

In summary, the age and the gender of the participants proved to be the predictor variables that influence how the participants define the beginning of old age. The older participants see the beginning of old age as a decline in physical or mental functioning, whereas the younger participants see the beginning of old age as reaching a specific age or retiring. And while the majority of both the male and female participants see decline in physical ability as the beginning of old age, more female participants compared to males selected decline in mental functioning as the beginning of old age. More male participants than female participants stated that retirement is the beginning of old age.

b. *"Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to understand the participants' perception of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three choices: (1) too much; (2) too little; or (3) just about the right amount. Table UK-6 below displays the frequencies of the responses selected by the participants.

Table UK-6: "Do you feel that people over 65 get too much, too little or just about the right amount of respect".

	Total (N=953)	
	Number	**%**
Too little respect	779	78.7
Just right amount of respect	162	16.4
Too much respect	12	1.2

As shown in Table UK-6 above, more than three-fourths of the participants (78.7%) feel that people over 65 get too little respect from younger people; less than one-fifth of the participants (16.4%) feel that people over 65 get just the right amount respect. A small percentage of participants (1.2%) feel that people over 65 get too much respect.

In order to determine if any of the predictor variables influence the participants' response Chi-Square analysis was conducted with each of the predictor variables. As shown in Table UK-7 below, the results show that there is no significant relationship with any of the predictor variables (age, gender, marital status, and income level) with this criterion variable of respect for people over 65.

Table UK-7: Chi-Square results of "Do you feel that people over 65 get too much, too little or just about the right amount of respect" with predictor variables.

Predictor Variable	Chi-Square Results
Age Category: Young, Middle-Age, Old	$x^2 = 6.788$, $df = 4$, $p = 0.148$
Age: Decades	$x^2 = 19.279$, $df = 16$, $p = 0.254$
Gender	$x^2 = 1.666$, $df = 2$, $p = 0.435$
Marital Status	$x^2 = 9.165$, $df = 8$, $p = 0.329$
Marital Status of Females	$x^2 = 2.573$, $df = 2$, $p = 0.276$
Marital Status of Males	$x^2 = 0.207$, $df = 2$, $p = 0.902$
Income by Quartiles	$x^2 = 9.165$, $df = 6$, $p = 0.955$
Income Group: Low, Medium, High	$x^2 = 0.794$, $df = 4$, $p = 0.939$

In summary, none of the predictor variables of age, gender, marital status, or income level influence how participants perceive younger peoples' respect for older people.

2. Perceptions of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are: (a) "As I grow older things seem better than I thought they would be"; (b) "As I look back on my life I am

fairly well satisfied"; and (c) "These are the best years of my life". The responses to the questions are Likert Scale scoring: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4". Each of these three questions are considered criterion variables and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income level.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. "*As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants' perceive their own life as they age compared to what they had imagined it might be. The participants were asked to choose from four responses: "Agree strongly"; "Agree somewhat"; "Disagree somewhat"; or "Disagree strongly". Table UK-8 below shows the frequencies of the responses.

Table UK-8: "As I grow older things seem better than I thought they would be".

	Total (N=948)	
	Number	**%**
Agree Somewhat	417	44.0
Agree Strongly	152	15.4
Disagree Somewhat	274	28.9
Disagree Strongly	105	11.1

As shown in Table UK-8 above, over half (59.4%) of the participants stated that they agree with this statement: 15.4 percent agree strongly and 44 percent agree somewhat. Forty percent of the participants indicate that they disagree with this statement: with 28.9 percent stating that they agree somewhat and 11.1 percent disagreeing strongly.

Statistical analysis was performed with each of the predictor variables of age, gender, marital status and income level, in order to determine if they have any influence on the participants' responses. As discussed below, marital status and income level do have a significant relationship with this criterion variable; age and gender do not.

Chi-Square analysis was performed to analyze the relationship between the predictor variables of marital status in general and the marital status of females. The results of the analysis for marital status indicate that there is a statistically significant relationship with this criterion variable ($x^2 = 12.547$, $df = 3$, $p = .006$).

As shown in Table UK-9 below, a higher percentage of married participants (63.6%) selected "Agree strongly" and "Agree somewhat" than not married participants (55%). More than expected married participants agreed strongly or agreed somewhat with the statement "As I grow older things seem better than I thought they would be". While fewer than expected not married participants (single, divorced or widowed) agreed strongly or agreed somewhat with the statement. This analysis indicates that married participants are more inclined to perceive that as they grow older things seem better than

they thought they would. A higher percentage of not married participants (45%) selected "Disagree somewhat" and "Disagree strongly" compared to married participants (36.4%). More than expected not married participants disagreed strongly or disagreed somewhat with the statement. Fewer than expected married participants disagreed strongly or disagreed somewhat. The results indicate that not married participants are more inclined to perceive that as they grow older things do not seem better than they thought they would.

Table UK-9: Chi-Square Results for Marital Status and "As I grow older things seem better than I thought they would be" (N=948).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	103	49	**152**
	%	18.6	12.5	**16.1**
Agree Somewhat	**N**	250	166	**416**
	%	45.0	42.5	**44.0**
Disagree Somewhat	**N**	153	120	**273**
	%	27.6	30.7	**28.9**
Disagree Strongly	**N**	49	56	**105**
	%	8.8	14.3	**11.1**
Total	**N**	555	391	**948**
	%	100.0	100.0	**100.0**

$x^2 = 12.547$, $df = 3$, $p = .006$

In order to determine if the gender of married participants and the not married participants influences the responses, Chi-Square analysis was conducted using the marital status of females and the marital status of males. The results of the analysis indicate that there is a significant relationship between the marital status of females and whether or not she perceives that as she grows older things seem better than she thought they would ($x^2 = 8.258$, $df = 3$, $p = .041$). However, there is no significant relationship between the marital status of males and whether or not he perceives that as he grows

older things seem better than he thought they would. The results of the analysis for the marital status of females, is shown in Table UK-10 below.

Table UK-10: Chi-Square Results for Marital Status of Females and "As I grow older things seem better than I thought they would be" (N=948).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	62	29	**91**
	%	19.3	13.1	**16.8**
Agree Somewhat	**N**	147	93	**240**
	%	45.8	41.9	**44.2**
Disagree Somewhat	**N**	87	71	**158**
	%	27.1	32.0	**29.1**
Disagree Strongly	**N**	25	29	**54**
	%	7.8	13.1	**9.9**
Total	**N**	321	222	**543**
	%	100.0	100.0	**100.0**

***x²* = 8.258, *df* = 3, *p* = .041**

A higher percentage of married females (65.1%) selected "Agree strongly" and "Agree somewhat" compared to not married females (55%). More than expected married females agreed strongly or agreed somewhat with the statement "As I grow older things seem better than I thought they would be", while fewer than expected not married females agreed with the statement. A higher percentage of not married females (45.1%) selected "Disagree somewhat" and "Disagree strongly" compared to married females (34.9%). More than expected not married females disagreed strongly or disagreed somewhat with the statement, compared to fewer than expected married females. The analysis therefore indicates that married females are more likely to perceive that as they grow older things seem better than they thought they would be, and that not married females are more inclined to perceive that as they grow older things do not seem better than they thought they would.

There is no significant relationship between the marital status of males with this same statement ($x^2 = 4.670$, $df = 3$, $p = .198$), indicating that there is no significant difference in how married males and not married males perceive growing older and things seeming better than they thought they would be.

In order to determine if the gender of the participants in general has an influence on the participants' response, Chi-Square analysis was conducted. The results indicate that there is no statistically significant relationship between the gender of the participants and their responses to "As I grow older things seem better than I thought they would be" ($x^2 = 1.979$, $df = 3$, $p = 0.577$). Therefore, there is no significant difference between how females and how males perceive that as they grow older things seem to be better than they thought they would. However, according to the Chi-Square analysis of the marital status of females discussed above, there is a significant difference in whether or not females are married and their perception regarding growing older and thinking things seem to be better than they thought they would be.

In order to determine if the income status of the participants influenced how they responded to the question "As I grow older things seem better than I thought they would be", a one way analysis of variance was conducted using both sets of income variables, by thirds and by quartiles. The results of the analysis indicate that the income level of the participants does have a significant relationship and that both types of the income variable show significance. This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4" for this statement. Therefore, the lower the mean scores, the more participants agree with the

statement and the higher the mean scores indicates participants do not agree with the statement.

A one way analysis of variance was performed using income grouped into thirds (low, medium and high), with the criterion variable statement "As I grow older things seem to be better than I thought they would be". Table UK-11 below illustrates that there is a statistically significant relationship between these two variables (F = 4.149, df = 2, 536, p = .016).

Table UK 11: ANOVA Mean Scores for Income: Low, Medium, High and "As I grow older things seem better than I thought they would be" (N = 539).

Variable	N	Mean	SD
Income by Thirds:			
Low	186	2.4946	.89592
Medium	208	2.3654	.82892
High	145	2.2207	.85366
Total	539	2.3711	.86419

***F* (2, 536) = 4.149, *p* = .016**

As shown in Table UK-11 above, the high income participants have the lowest mean scores indicating that they are more likely to select "Agree strongly" (1) or "Agree somewhat" (2) with the statement "As I grow older things seem better than I thought they would be". The low income participants have the highest mean scores, which indicates that they were more likely to select "Disagree somewhat" (3) or "Disagree strongly" (4) in response to the statement. The Scheffe Post Hoc Test indicates that there is a significant difference between the high income participants and the low income participants (p = .016). This analysis of using three groupings of income by low, medium and high reveals that the high income participants are more likely to agree that as they

grow older things seem better than they thought compared to the low income participants who were more likely to disagree.

As shown in Table UK-12 below, there is also a statistically significant relationship between income by quartiles (low, low-medium, high medium, high) and the participants' response to "As I grow older things seem better than I thought they would be" (F = 4.546, df = 3, 535, p = .004).

The high income participants have the lowest mean scores, which indicates that they are more likely to select "Agree strongly" or "Agree somewhat" with the statement "As I grow older things seem better than I thought they would be" because the value for "Agree strongly" is 1 and the value for "Agree somewhat" is 2. The low income participants have the highest mean score, which indicates that they were more likely to select "Disagree somewhat" (3) or "Disagree strongly" (4) in response to the statement. The Scheffe Post Hoc Test indicates that there is a significant difference between the high income participants and the low income participants (p = .006). This analysis of using income categorized into quartiles reveals that the high income participants are more likely to agree that as they grow older things seem better than they thought compared to the low income participants who are more likely to disagree.

Table UK-12: ANOVA Mean Scores for Income Quartiles and "As I grow older things seem better than I thought they would be" (N = 539).

Variable	N	Mean	SD
Income by Quartiles:			
Low	149	2.5772	.88670
Low Med	125	2.3200	.89443
High Med	120	2.3500	.77405
High	145	2.2207	.85366
Total	539	2.3711	.86419

***F* (3, 535) = 4.546, *p* = .004**

In order to determine if the predictor variable of age influenced the response of the participants, a simple one-way analysis of variance (ANOVA) was performed. Both versions of the age variable, age category of young (18 – 39), middle-age (40 – 64), and old (65 – 91), and aged grouped by decades (teens, twenties, thirties, etc.) were used in the ANOVA analysis with the criterion variable "As I grow older things seem better than I thought they would be". The results of the analysis indicate that there is not a statistically significant relationship between the age by young, middle-age, and old ($F = .094$, $df = 2, 945$, $p = .911$), nor is there a statistically significant relationship with age grouped by decades ($F = .583$, $df = 8, 939$, $p = .792$).

In summary, the predictor variables that have been determined to have an influence on how the participants perceive "As I grow older things seem better than I thought they would be", are marital status, the marital status of females, and income, both by quartiles and by thirds. Married participants are more likely to agree with the statement, as were married females. High income participants are more likely to agree with the statement. The data analysis showed that the age and the gender of the participants did not play a significant role in how the participants perceived that as they grew older things seemed better than they thought they would be.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. The participants were asked to choose from four responses: "Agree

strongly"; "Agree somewhat"; "Disagree somewhat"; or "Disagree strongly" with this statement. Table UK-14 below shows the frequencies of the responses.

Table UK-13: "As I Look Back On My Life I Am Fairly Well Satisfied"

	Total (N=976)	
	Number	**%**
Agree Strongly	295	30.2
Agree Somewhat	495	50.7
Disagree Somewhat	141	14.4
Disagree Strongly	45	4.6

Table UK-13 above shows that most of the participants agreed either strongly or somewhat with this statement; just over 80 percent of the participants agree with this statement (agree strongly = 30.2%, agree somewhat = 50.7%). However almost one-fifth (19%) of the participants did not agree. In order to determine if any of the predictor variables of age, gender, marital status, or income level has an influence on how the participants perceive whether or not they are well satisfied with their life as they look back statistical analysis was performed.

In order to ascertain if the age of the participant has a relationship with this criterion variable analysis of variance (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant. The results of the ANOVA analysis of age by category is statistically significant (F =11.676, df = 2, 973, p = .000), as shown in Table UK-14 below.

This survey question "As I Look Back On My Life I am Fairly Well Satisfied" offers four Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4". Therefore, the lower the mean

scores, the more participants agree with the statement, and the higher the mean scores indicates participants do not agree with the statement.

Table UK-14: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 976).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	442	2.0498	.83964
Middle-Age (40-64)	368	1.8940	.72868
Old (65 +)	166	1.7169	.74546
Total	976	1.9344	.79214

***F* (2, 973) = 11.676, *p* = .000**

As shown in the Table UK-14 above, the mean score for the "old" age category of 65 and older is lower (1.7169) than the mean for the young (2.0498) and middle-age (1.8940) categories, which means that the old participants are more likely to choose strongly agree or somewhat agree with the statement "As I look back on my life I am fairly well satisfied". "Agree strongly" is scored with a "1" and "agree somewhat" is scored with a "2" while "Disagree somewhat " is scored with a "3" and "Disagree strongly" is scored with a "4". The Scheffe Post Hoc Test indicates that there is a significant difference between "old" and "young" (p = .000), but not between "old" and "middle-age" (p = .054). There is a significant difference between "middle-age" and "young" (p = .019). This would indicate that participants within the old category are more likely to perceive their life lived as fairly well satisfied.

According to the results of the ANOVA, age categorized by decade is also statistically significant (F = 3.830, df = 8, 967, p = .000) with this criterion variable of perception of being well satisfied with life lived, as shown in Table UK-16 below.

Table UK-15: ANOVA Mean Scores for Age by Decades and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 976).

Variable	N	Mean	SD
Age by Decades:			
Teens	36	1.8889	.88730
Twenties	174	2.0345	.81812
Thirties	232	2.0862	.84842
Forties	157	1.9490	.73202
Fifties	137	1.8759	.73209
Sixties	121	1.8182	.73030
Seventies	84	1.7381	.74638
Eighties	32	1.5000	.71842
Nineties	3	1.6667	.57735
Total	976	1.9344	.79214

***F* (8, 967) = 3.830, *p* = .000**

The lowest mean score is found in participants in their eighties (1.5000) which means that they are more likely to agree with the statement of "As I look back on my life I am fairly well satisfied". The participants in their thirties had the highest mean score (2.0862) indicating that they were more likely to strongly disagree with the statement. The mean scores decrease from the twenties to the eighties indicating that as people in the United Kingdom grow older they are more likely to be well satisfied as they look back on their life. The Scheffe Post Hoc Test shows that there is a statistically significant difference between the mean scores of the participants in their eighties and the mean scores of participants in their thirties ($p = .047$). Therefore, as participants become older the more likely they are to agree that as they look on their life they are fairly well satisfied. Age, then, is a strong predictor variable in determining the participants' perception of being fairly well satisfied with life in retrospect.

In order to determine if gender also has predictor qualities on the participants' response to the criterion variable of being fairly well satisfied when looking back on

one's life, Chi-Square analysis was conducted. The results of the analysis indicate that there is no statistically significant relationship between gender and this criterion variable (x^2 = 3.700, *df* = 3, *p* = .296).

Chi-Square analysis was also conducted to determine if marital status influenced how the participants responded to the statement. The results of the analysis indicate that there is a statistically significant relationship between marital status and the participants' responses to "As I look back on my life I am fairly well satisfied" (x^2 = 13.806, *df* = 3, *p* = .003). Table UK-17 below shows the results of the Chi-Square analysis.

Table UK-16: Chi-Square Results for Marital Status and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 974).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	181	113	**294**
	%	31.7	28.0	**30.2**
Agree Somewhat	**N**	302	192	**494**
	%	52.9	47.6	**50.7**
Disagree Somewhat	**N**	63	78	**141**
	%	11.0	19.4	**14.5**
Disagree Strongly	**N**	25	20	**45**
	%	4.4	5.0	**4.6**
Total	**N**	571	403	**974**
	%	100.0	100.0	**100.0**

***x²* = 13.806, *df* = 3, *p* = .003**

As shown in Table UK-16 above, most married participants (84.6%) and most not married participants (75.6%) agree somewhat or agree strongly with the statement. However, the analysis showed that more than expected married participants agreed with the statement, while fewer than expected not married participants agreed with the statement. And more than expected not married participants disagreed with the statement, while fewer than expected married participants disagreed with the statement.

Therefore, married participants are more likely to agree that as they look back on their life they are fairly well satisfied.

In order to determine if there is a difference between the marital status of females and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was employed. The results show that there is no significant relationship between whether the female participant was married or not married when responding to the statement ($x^2 = 5.553$, $df = 3$, $p = .136$).

However, the Chi-Square analysis did determine that there is a statistically significant relationship between the marital status of males and their response to "As I look back on my life I am fairly well satisfied" ($x^2 = 9.565$, $df = 3$, $p = .023$). Table UK-18 below shows the results of the analysis.

Table UK-17. Chi-Square Results for Marital Status of Males and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 408).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	74	48	**122**
	%	31.4	27.9	**29.9**
Agree Somewhat	**N**	131	83	**214**
	%	55.5	48.3	**52.5**
Disagree Somewhat	**N**	19	31	**50**
	%	8.1	18.0	**12.3**
Disagree Strongly	**N**	12	10	**22**
	%	5.1	5.8	**5.4**
Total	**N**	236	172	**408**
	%	100.0	100.0	**100.0**

***x²* = 9.565, *df* = 3, *p* = .023**

Most married males (86.9%) and most not married males (76.2%) agree strongly or somewhat with the statement. However, more than expected married males agreed strongly or agreed somewhat with the statement, while fewer than expected not married

males disagreed strongly or somewhat with the statement. And more than expected not married males disagreed strongly or somewhat with the statement, while fewer than expected married males disagreed strongly or somewhat with the statement. Therefore, the Chi-Square analysis indicates that married males are more likely to perceive that as they look back on their life they are fairly well satisfied.

In order to find the relationship between income levels of the participants (predictor variable) and their response to "As I look back on my life I am fairly well satisfied" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by quartiles showed that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 3.500, df = 3, 552, p = .015). Table UK-18 shows the results of the income by quartiles analysis.

Table UK-18: ANOVA Mean Scores for Income Quartiles and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 556).

Variable	N	Mean	SD
Income by Quartiles:			
Low	150	2.1400	.86723
Low Med	129	1.9690	.81909
High Med	123	1.9106	.67761
High	154	1.8636	.75898
Total	556	1.9730	.79253

***F* (3, 552) = 3.500, *p* = .015**

As can be seen in Table UK-18 above, the higher the income level of the participants, the lower the mean score, which indicates that participants with higher income levels are more likely to select "agree strongly" or "agree somewhat" with the statement. The lower the mean score indicates that participants selected the categories of "agree strongly" which scores a "1" or "agrees somewhat" which scores a "2".

Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of "disagree somewhat" which scores a "3" or "disagrees strongly" which scores a "4". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level (p = .026). The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

The results of the ANOVA using income by thirds also showed that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 4.718, df = 2,553, p = .009). Table UK-19 shows the results of the income by thirds analysis.

Table UK- 19: ANOVA Mean Scores for Income by Thirds and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 556).

Variable	N	Mean	SD
Income by Quartiles:			
Low	189	2.1111	.85883
Medium	213	1.9296	.73953
High	154	1.8636	.75898
Total	556	1.9730	.79253

***F* (2, 553) = 4.718, *p* = .009**

As can be seen in Table UK-19, the higher the income level of the participants, the lower the mean score, which indicates that participants with higher income levels are more likely to select "agree strongly" or "agree somewhat" with the statement. The lower the mean score indicates that participants selected the categories of "agree strongly" which scores a "1" or "agrees somewhat" which scores a "2". Participants with

lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of "disagree somewhat" which scores a "3" or "disagrees strongly" which scores a "4". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for low income level (p = .016). The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

In summary, the statistical analysis determined that the predictor variables that were determined to have an influence on the participants responses to the statement "As I look back on my life I am fairly well satisfied" are age (by category and by decade), which showed that the older the participant the more likely they were to agree with the statement; marital status, which showed that married participants were more likely to agree with the statement; the marital status of males, which showed that married men were more likely to agree with the statement; and income (by quartiles and by thirds), which showed that the participants with a higher income level were more likely to agree with the statement. The gender of the participants did not prove to have a significant relationship with "As I look back on my life I am fairly well satisfied".

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The responses to the question are Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree

Somewhat = 3", and "Disagree Strongly = 4" with this statement. Table UK-20 below shows the frequencies of the responses. More than half (57.4%) of the participants agreed with the statement "These are the best years of my life" (Agree strongly = 20.3% and Agree somewhat = 37.1%), while less than half (42.6%) disagree with the statement (Disagree somewhat = 28.1% and Disagree strongly = 14.5%).

Table UK-20: "These are the best years of my life"

	Total (N=953)	
	Number	**%**
Agree Strongly	193	20.3
Agree Somewhat	354	37.1
Disagree Somewhat	268	28.1
Disagree Strongly	138	14.5

In order to determine which predictor variable has an influence on the participants' responses to this statement statistical analysis with each of the variables, age, gender, marital status, and income, was performed.

The age of the participants may be a factor in whether or not the participants perceive that these are the best years of their life. Analysis of variance (ANOVA) was conducted using both version of the age variable (by category and by decade) and both were proved to have a statistically significant relationship with the criterion variable of "These are the best years of my life". The results for age by category are $F = 29.956$, $df = 2,950$ $p = .000$, and the results for age by decade are $F = 9.445$, $df = 8, 944$, $p = .000$. The tables below show the details of the analysis.

Table UK-21 below shows the results using age categories: young, middle-age, and old.

Table UK-21: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "These Are the Best Years of My Life" (N = 953).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	433	2.1640	.94692
Middle-Age (40-64)	359	2.4095	.93774
Old (65 +)	61	2.8261	.89837
Total	953	2.3683	.96347

***F* (2, 950) = 29.956, *p* = .000**

As shown in Table UK-21, the age category of young (18 – 39) has the lowest mean score (2.1640) and the mean score for the age category of old is the highest (2.8261), this indicates that the young participants are more likely to select agree strongly or agree somewhat for the statement "These are the best years of my life". The lower the mean scores indicates that participants selected the responses of "agree strongly" which scores a "1" or "agrees somewhat" which scores a "2". Old participants (65 and older) have the highest mean score which indicates that they are more likely to disagree with the statement. The higher mean scores indicate that participants selected the responses of "disagree somewhat" which scores a "3" or "disagrees strongly" which scores a "4". The Scheffe Post Hoc Test results show a significant different among all three age categories: young and old ($p = .000$); young and middle-age ($p = .001$); and middle-age and old ($p = .000$).

Table UK-22 below shows the statistically significant results ($F = 9.445$, $df = 8, 944$, $p = .000$) using age categorized by decades.

Table UK-22: ANOVA Mean Scores for Age by Decades and "These are the Best Years of My Life" (N = 953).

Variable	N	Mean	SD
Age by Decades:			
Teens	37	2.0270	.98563
Twenties	172	2.0756	.97338
Thirties	224	2.2545	.91450
Forties	152	2.2434	.86886
Fifties	133	2.5639	.97198
Sixties	121	2.5455	.96609
Seventies	81	2.9012	.84565
Eighties	30	2.8333	.94989
Nineties	3	3.3333	.57735
Total	953	2.3683	.96347

***F* (8, 944) = 9.445, *p* = .000**

Table UK-22 displays the results of the influence of the age of participants and the mean scores of their responses selected for the statement "These are the best years of my life". The mean scores are lowest for the youngest participants and show a fairly steady increase as the age of the participants' increases. The largest difference is between the participants in their teens with a mean score of 2.027 and the participants in their nineties with a mean score of 3.333. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of the participants in their teens and the mean score of the participants in their seventies ($p = .005$). There are also significant differences between the mean scores of the participants in their twenties and participants in their fifties ($p = .009$), in their sixties ($p = .021$), in their seventies ($p = .000$), and in their eighties ($p = .031$). There is also a significant difference in the mean scores between participants in their seventies and participants in their thirties ($p = .000$), and participants in their forties ($p = .001$). These results clearly indicate that the older the participant the more likely they are to disagree with the statement "These are the best years of my life".

In order to determine if gender has a significant relationship with the statement "These are the best years of my life", Chi-Square analysis was employed. The results showed that there is no significant relationship between the predictor variable of gender and this criterion variable ($x^2 = 2.617$, $df = 3$, $p = .455$).

In order to find the relationship between the marital status of the participants and the responses to the statement "These are the best years of my life", Chi-Square analyses was conducted. The results determined that there is a statistically significant relationship ($x^2 = 26.088$, $df = 3$, $p = .000$). Table UK-23 below shows the results of the analysis.

Table UK-23: Chi-Square Results for Marital Status and "These Are the Best Years of My Life" (N = 951).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	111	81	**192**
	%	20.0	20.4	**20.2**
Agree Somewhat	**N**	225	128	**353**
	%	40.6	32.2	**37.1**
Disagree Somewhat	**N**	164	104	**268**
	%	29.6	26.2	**28.2**
Disagree Strongly	**N**	54	84	**138**
	%	9.7	21.2	**14.5**
Total	**N**	554	397	**951**
	%	100.0	100.0	**100.0**

***x²* = 26.088, *df* = 3, *p* = .000**

Almost two-thirds (60.6%) of the married participants agree with the statement "These are the best years of my life", and that just over half of the not married participants (52.6%) also agree with the statement. However, more than expected married participants selected "Agree somewhat" and fewer than expected not married participants selected "Agree somewhat". While more than expected not married participants selected "Disagree strongly", and fewer than expected married participants

selected “Disagree strongly”. The results indicate that married participants are more likely to agree that “These are the best years of my life”.

In order to determine if the marital status of females and the marital status of males has an influence on the response selection for the statement “These are the best years of my life”, Chi-Square analysis was performed for the marital status of each gender. It was found that the marital status of females has a significant relationship to the statement (x^2 = 14.035, df = 3, p = .003). Also, the marital status of males has a significant relationship with this statement (x^2 = 26.088, df = 3, p = .000). Tables UK-24 and UK-25 show the results of the analyses.

Table UK-24: Chi-Square Results for Marital Status of Females and “These Are the Best Years of My Life” (N = 553).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	68	38	**106**
	%	20.8	16.8	**19.2**
Agree Somewhat	**N**	139	76	**215**
	%	42.5	33.6	**38.9**
Disagree Somewhat	**N**	89	68	**159**
	%	27.2	30.1	**28.4**
Disagree Strongly	**N**	31	44	**75**
	%	9.5	19.5	**13.6**
Total	**N**	327	226	**553**
	%	100.0	100.0	**100.0**

***x²* = 14.035, *df* = 3, *p* = .003**

As shown in Table UK-24 above, almost two-thirds (63.3%) of the married female participants agree with the statement “These are the best years of my life” (Agree strongly = 20.8% and Agree somewhat = 42.5%), and just over half (50.4%) of the not married females agree with the statement (Agree strongly = 16.8% and Agree somewhat = 33.6%). The results of the Chi-Square analysis reveal that more than expected married

female participants selected “Agree strongly” and “Agree somewhat”, while fewer than expected not married female participants selected those categories. While more than expected not married female participants selected “Disagree somewhat” and “Disagree strongly”, and fewer than expected married female participants selected those two responses. Therefore, married female participants are more likely to perceive that “These are the best years of their life” compared to not married female participants.

The Chi-Square analysis also showed that there is a significant relationship between the marital status of males and the statement “These are the best years of my life” ($x^2 = 19.167$, $df = 3$, $p = .000$). Table UK-25 shows the details of the analysis.

Table UK-25: Chi-Square Results for Marital Status of Males and “These Are the Best Years of My Life” (N = 398).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	43	43	**86**
	%	18.9	25.1	**21.6**
Agree Somewhat	**N**	86	52	**138**
	%	37.9	30.4	**34.7**
Disagree Somewhat	**N**	75	36	**111**
	%	33.0	21.1	**27.9**
Disagree Strongly	**N**	23	40	**63**
	%	10.1	23.4	**15.8**
Total	**N**	227	171	**398**
	%	100.0	100.0	**100.0**

***x²* =19.167, *df* = 3, *p* = .000**

As shown in Table UK-25 above, more than half (56.8%) of the married male participants agree with the statement “These are the best years of my life” (Agree strongly = 18.9% and Agree somewhat = 37.9%), and also just over half (55.5%) of the not married males agree with the statement (Agree strongly = 25.1% and Agree somewhat = 30.4%). The results of the Chi-Square analysis reveal that more than

expected married male participants selected “Agree somewhat”, while fewer than expected not married male participants selected that response. While more than expected not married male participants selected “Disagree strongly”, and fewer than expected married male participants selected that response. Therefore, married male participants are more likely to perceive that “These are the best years of their life” compared to not married male participants.

In order to find the relationship between income levels of the participants (predictor variable) and their response to “These are the best years of my life” (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds showed that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 9.845, df = 2,536, p = .000). Table UK-26 shows the results of the income by thirds analysis.

Table UK-26: ANOVA Mean Scores for Income by Thirds and “These Are the Best Years of My Life” (N = 539).

Variable	N	Mean	SD
Income by Quartiles:			
Low	183	2.5792	1.03404
Medium	208	2.3029	.88987
High	148	2.1216	.92512
Total	539	2.3469	.96608

***F* (2, 536) = 9.845, *p* = .000**

As shown in Table UK-26 above, the higher the income level of the participants, the lower the mean score, which indicates that participants with higher income levels are more likely to select “Agree strongly” or “Agree somewhat” with the statement “These are the best years of my life”. The lower the mean scores indicates that participants selected the categories of “Agree strongly” which scores a “1” or “Agrees somewhat”

which scores a “2”. Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of “Disagree somewhat” which scores a “3” or “Disagrees strongly” which scores a “4”. The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for low income level (p = .000). Also, there is a significant difference between the medium income level and the low income level (p = .017). The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that “These are the best years of their life”.

The results of the ANOVA using income by quartiles also showed that there is a statistically significant relationship between this predictor variable and the criterion statement (F = 8.906, df = 3, 535, p = .000). Table UK-27 shows the results of the income by quartiles analysis.

Table UK-27: ANOVA Mean Scores for Income Quartiles and “These Are the Best Years of My Life” (N = 539).

Variable	N	Mean	SD
Income by Quartiles:			
Low	145	2.6690	1.02778
Low Med	126	2.3413	.94795
High Med	120	2.2417	.85990
High	148	2.1216	.92512
Total	539	2.3469	.96608

***F* (3, 535) = 8.906, *p* = .000**

As shown in Table UK-27 above, the higher the income level of the participants, the lower the mean score, which indicates that participants with higher income levels are more likely to select “Agree strongly” or “Agree somewhat” with the statement. The lower the mean scores indicates that participants selected the categories of “Agree

strongly" which scores a "1" or "Agrees somewhat" which scores a "2". Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of "Disagree somewhat" which scores a "3" or "Disagrees strongly" which scores a "4". The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for the low income level (p = .000). It also shows that there is a significant difference between the high-medium income level and the low income level (p = .004), as well as between the low-medium income level and the low income level (p = .045). The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that "These are the best years of their life" compared to the participants with lower income levels.

In summary, the statistical analysis determined that the predictor variables which have an influence on the participants' responses to the statement "These are the best years of my life" are age (by category and by decade), which showed that the younger the participant the more likely they were to agree with the statement; marital status, which showed that married participants were more likely to agree with the statement; the marital status of females, which showed that married females were more likely to agree with the statement; and the marital status of males, which showed that married men were more likely to agree with the statement; and income (by quartiles and by thirds), which showed that the participants with higher income levels were more likely to agree with the statement. The gender of the participants did not prove to have a significant relationship with the criterion variable "These are the best years of my life".

d. *"Life Satisfaction Variable"*

In analyzing each of the three survey questions that relate to the life satisfaction of the participants, it was discovered that the most consistent predictor variable that influenced the participants' responses are marital status and income level. For two of the three questions, "As I look back on my life I am fairly well satisfied" and "These are the best years of my life", the predictor variable of age of the participant was also found to have an influence on the responses. The only predictor variable that was found to have no influence on the responses is gender. In order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions were combined to create the "Life Satisfaction" criterion variable. This variable was analyzed with each of the predictor variables to determine which one has a significant relationship with "Life Satisfaction" scale.

In order to determine if the predictor variable of age has a relationship with the criterion variable "Life Satisfaction", an analysis of variance (ANOVA) was conducted with both age variables. It was determined that there is no statistically significant relationship with age by category (young, middle-age, and old) with "Life Satisfaction" ($F = 1.208$, $df = 2, 916$, $p = .299$). ANOVA was also conducted using age categorized by decade (teens, twenties, thirties, etc.). It was determined that there is no significant relationship between age by decade and "Life Satisfaction" ($F = .961$, $df = 8, 910$, $p = .465$).

In order to find a relationship between gender and "Life Satisfaction", an Independent Samples T-Test was conducted. The results showed that there is no statistically

significant relationship between gender and "Life Satisfaction" (t = .129, df =917, p = .897).

An Independent Samples T-Test was also conducted in order to determine if the predictor variable of marital status has a relationship with the criterion variable "Life Satisfaction". The results of the analysis show that there is a statistically significant relationship (t = -4.071, df =915, p = .000). Table UK-28 below shows the results of the T-Test.

Table UK-28: Mean Scores for Martial Status and "Life Satisfaction" Scale (N=916).

	Married (n=533)	**Not Married (n=384)**
"Life Satisfaction"	*Mean* = 6.4503, *SD* = 1.94276	*Mean* = 6.9922, *SD* = 2.05090

***t* = -4.071, *df* =915, *p* = .000**

The results indicate that the difference between the means is statistically significant (t = -4.071, df =915, p = .000). Married participants had a lower mean score on the "Life Satisfaction" scale (6.45) than not married participants (6.99). According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive is the life satisfaction of the participants. Since the mean scores are more positive for the married participants, they perceive themselves as having more life satisfaction.

In order to determine if there is a relationship between married females and married males with the "Life Satisfaction" scale, an Independent T-Test was conducted for the marital status of females and the marital status of males. The results for both indicate that there is a statistically significant relationship between the marital status of female participants and "Life Satisfaction" (t = -3.487, df = 525, p = .001), as well as a

statistically significant relationship with the marital status of male participants and "Life Satisfaction" (t = -2.187, df = 388, p = .029).

Table UK-29 below shows the results of the T-Test with the marital status of females and "Life Satisfaction".

Table UK-29: Mean Scores for Martial Status of Females and "Life Satisfaction" Scale (N=527).

	Married Females (n=310)	**Not Married Females (n=217)**
"Life Satisfaction"	*Mean* = 6.4194, *SD* = 1.96200	*Mean* = 7.0323, *SD* = 2.01932

***t* = -3.487, *df* = 525, *p* = .001**

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As Table UK-29 shows, married female participants had a significantly lower mean score on the "Life Satisfaction" scale (6.42) than not married female participants (7.03). According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive is the life satisfaction of the participants. Since the mean score is more positive for the married female participants, they perceive themselves as having more life satisfaction than not married female participants.

Table UK-30 below shows the results of the T-Test with the marital status of males and "Life Satisfaction".

Table UK-30: Mean Scores for Martial Status of Males and "Life Satisfaction" Scale (N=390).

	Married Males (n=223)	**Not Married Males (n=167)**
"Life Satisfaction"	*Mean* = 6.4933, *SD* = 1.91925	*Mean* = 6.9401, *SD* = 2.09618

***t* = -2.187, *df* = 388, *p* = .029**

As Table UK-30 shows, married male participants had a significantly lower mean score on the "Life Satisfaction" scale (6.49) than not married male participants (6.04). According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive

is the life satisfaction of the participants. Since the mean scores are more positive for the married male participants, they perceive themselves as having more life satisfaction.

In order to determine if level of income of the participants has a relationship with the "Life Satisfaction" scale a simple ANOVA was conducted using both groupings of the income variable, by thirds and by quartiles. The analysis shows that income by thirds has a statistically significant relationship with the "Life Satisfaction" scale ($F = 10.25$, $df = 2, 521$, $p = .000$). Table UK-31 below shows the results of the income by thirds analysis.

Table UK-31: ANOVA Mean Scores for Income by Thirds and "Life Satisfaction" (N = 524).

Variable	N	Mean	SD
Income by Quartiles:			
Low	181	7.1878	2.16745
Medium	204	6.6029	1.86336
High	139	6.2014	1.84619
Total	524	6.6985	2.00399

***F* (2, 521) = 10.25, *p* = .000**

As shown in Table UK-31, the higher the income level of the participants, the lower the mean score. According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive is the life satisfaction of the participants. Participants with lower income levels have higher mean scores which indicate that they perceive having more life satisfaction. The higher mean scores indicate that participants have lower life satisfaction. The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level ($p = .000$). It also shows that there is a significant difference between the medium income level and the low income level ($p = .015$). The ANOVA analysis

using income by thirds indicates that the higher the income level of the participants the more they perceive having life satisfaction.

The ANOVA analysis also showed that income by quartiles has a statistically significant relationship with the "Life Satisfaction" scale (F = 9.843, df = 3, 520, p = .000) as shown in Table UK-32 below.

Table UK-32: ANOVA Mean Scores for Income Quartiles and "Life Satisfaction" (N = 524).

Variable	N	Mean	SD
Income by Quartiles:			
Low	145	7.4069	2.13924
Low Med	122	6.6230	2.09812
High Med	118	6.4915	1.66793
High	139	6.2014	1.84619
Total	524	6.6985	2.00399

***F* (3, 520) = 9.843, *p* = .000**

As shown in Table UK-32, the higher the income level of the participants, the lower the mean score. According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive is perception of the participants' life satisfaction. Participants with higher income levels have lower mean scores which indicate that they perceive having more life satisfaction. The higher mean scores indicate that participants have lower life satisfaction. The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level (p = .000). It also shows that there is a significant difference between the high-medium income level and the low income level (p = .003), as well as between the low-medium income level and the low income level (p = .014). The ANOVA analysis results using income by quartiles indicates that the higher the income level of the participants the more they perceive having life satisfaction.

In summary, the predictor variables that have a significant relationship with the "Life Satisfaction" scale are marital status, including the marital status of females and the marital status of males. Married participants in general and married females and married males have higher life satisfaction. The predictor variable of income also has a significant relationship with the "Life Satisfaction" scale, including income by thirds and income by quartiles. The higher the income level of the participants the higher they rate their life satisfaction. The predictor variables of age and gender do not have a significant relationship with the life satisfaction of participants.

3. Perceptions of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite variable that contains five items that refer to quality of life for oneself. The five items are: (1) not having enough money to live on; (2) having poor health; (3) level of loneliness; (4) fear of crime; and (5) often feeling sad or blue. Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is: 'a very serious problem = 1, 'a somewhat serious problem = 2', or 'not a problem at all for you personally = 3'". According to this "Quality of Life for Self" scale, the higher the score (not a problem at all for you personally) the more positive the perception of quality of life for self. The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is - "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75: (1) decisions

or choices that you make during your lifetime; (2) decisions made by others that are beyond your control; (3) genetic or inherited factors; or (4) blind luck?". Each of these two variables, "Quality of Life for Self" and "Locus of Control" was analyzed using each of the predictor variables of age, gender, marital status, and income.

a. "Quality of Life for Self" Variable

In order to determine the relationship between the participants' perception of quality of life for themselves and the predictor variables of age, gender, marital status or income, statistical analysis was performed using each of these variables with the criterion composite variable of "Quality of Life for Self". The statistical analysis determined that the predictor variables which have a significant relationship with "Quality of Life for Self" are gender, marital status, and income. The results are discussed below.

In order to determine if age had a significant relationship with the "Quality of Life for Self" variable an Analysis of Variance was conducted. The results showed that there is no statistically significant relationship between "Quality of Life for Self" and age by category (F = .064, df = 2, 977, p = .938) and age by decade (F = 1.063, df = 8, 971, p = .387).

The statistical analysis used to determine if gender has a significant relationship with "Quality of Life for Self" was an Independent Samples T-Test. As shown in Table UK-33 below the results determined that gender and "Quality of Life for Self" have a statistically significant relationship (t = 2.377, df = 978, p = .018).

Table UK-33: Mean Scores for "Quality of Life for Self" Scale and Gender (N=980).

	Males (n=409)	**Females (n=571)**
"**Quality of Life for Self**"	*Mean* = 11.851, *SD* = 2.853	*Mean* = 11.406, *SD* = 2.912

***t* = 2.377, *df* = 978, *p* = .018**

As shown in the table above, the mean scores are higher for male participants and lower for female participants. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self. Participants with lower mean scores indicate that they have a less positive perception of their quality of life. Therefore, as shown in the table above, male participants have a higher mean score which indicates that males in this study perceive themselves as having a more positive perception of quality of life for themselves compared to females whose "Quality of Life" mean score is lower and therefore indicates that female participants have a less positive perception of their quality of life. Males then are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas female participants were more likely to answer that these issues were a serious problem for themselves.

In order to find if marital status has an influence on how participants perceive their quality of life an Independent Samples T-Test was performed. As shown in Table UK- 35 below, there is a statistically significant relationship between the marital status of participants and their perception quality of life for themselves (t = 2.088, df = 9786, p = .037).

Table UK-34: Mean Scores for "Quality of Life for Self" Scale and Marital Status (N=978).

	Married (n=404)	**Not Married (n=574)**
"**Quality of Life for Self**"	*Mean* = 11.751, *SD* = 2.957	*Mean* = 11.359, *SD* = 2.794

***t* = 2.088, *df* = 976, *p* = .037**

As see in the table above, the mean scores are higher for married participants and lower for not married participants. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Participants with lower mean scores indicate that they have a less positive perception of their quality of life. Therefore, as shown in the table above, married participants have a higher mean score which indicates that married participants in this study perceive themselves as having a more positive perception of their quality of life compared to not married participants whose "Quality of Life" mean scores are lower and indicates they perceive having a less positive quality of life. These results indicate that married participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas not married participants were more likely to answer that these issues were a serious problem for themselves.

Since the gender and marital status had a significant relationship with the "Quality of Life for Self" variable, Independent Sample T-Tests were performed to determine if the marital status of female participants and the marital status of male participants had a significant relationship with "Quality of Life for Self". As shown in Table UK-35 below, there is a statistically significant relationship between the marital status of females and "Quality of Life for Self" (t = 2.528, df = 567, p = .012). However, there is no

statistically significant relationship between the marital status of males and "Quality of Life for Self" (t = .293, df = 407, p = .770).

Table UK-35: Mean Scores for "Quality of Life for Self" Scale and the Marital Status of Females (N=569).

	Married Females (n=337)	**Not Married Females (n=232)**
"**Quality of Life for Self**"	*Mean* = 11.656, *SD* = 2.945	*Mean* = 11.030, *SD* = 2.835

***t* = 2.528, *df* = 567, *p* = .012**

As shown in the table above, the mean scores are higher for married female participants and lower for not married female participants. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Lower mean scores indicate that participants have a less positive perception of their quality of life. Therefore, as shown in the table above, married female participants have a higher mean score which indicates that married female participants in this study perceive themselves as having a more positive perception of their quality of life compared to not married female participants whose "Quality of Life" mean scores are lower and indicates they perceive having a less positive quality of life. These results indicate that married female participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas not married female participants were more likely to answer that these issues were a serious problem for themselves.

In order to determine if the income levels of participants' influence their perception of the quality of life for themselves, a simple Variance of Analysis (ANOVA) was performed. The results indicate that income levels do have a statistically significant

relationship with the "Quality of Life for Self" variable, for both income by quartiles (F = 22.976, df = 3, 554, p = .000), and income by thirds (F = 29.705, df = 2, 555, p = .000). Tables UK-36 and UK-37 below show the results of both analyses.

Table UK-36: ANOVA Mean Scores for Income by Quartiles and "Quality of Life for Self" Scale (N = 558).

Variable	N	Mean	SD
Income by Quartiles:			
Low	151	10.0265	2.88663
Low-Medium	130	11.4615	2.67099
High-Medium	123	12.0732	2.59940
High	154	12.4805	2.74926
Total	558	11.4892	2.89475

***F* (3, 554) = 22.976, *p* = .000**

As shown in Table UK-36 above, the higher the income level of the participants, the higher the mean score. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Lower mean scores indicate that participants have a less positive perception of their quality of life. Therefore, participants with a high income level have the most positive perception of "Quality of Life for Self", and participants with a low income level have the least positive perception of "Quality of Life for Self". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level (p = .000) and the mean score for the low-medium income level (p = .021). It also shows that there is a significant difference between the high-medium income level and the low income level (p = .000). The ANOVA results indicate that the higher the income level of participants the more they consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious

problem for themselves; whereas lower income participants are more likely to perceive that these issues were a serious problem for themselves.

The results of the ANOVA using income by thirds also showed that there is a statistically significant relationship between this predictor variable and the "Quality of Life for Self" scale ($F = 29.705$, $df = 2, 555$, $p = .000$). Table UK-37 below shows the results of the income by thirds analysis.

Table UK-37: ANOVA Mean Scores for Income by Thirds and "Quality of Life" Scale (N = 558).

Variable	N	Mean	SD
Income by Quartiles:			
Low	190	10.2895	2.86290
Medium	214	11.8411	2.66308
High	154	12.4805	2.74926
Total	558	11.4892	2.89475

***F* (2, 555) = 29.705, *p* = .000**

As shown in Table UK-37 above, the higher the income level of the participants, the higher the mean score. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Lower mean scores indicate that participants have a less positive perception of their quality of life. Therefore, participants with a high income level have the most positive perception of "Quality of Life for Self", and participants with a low income level have the least positive perception of "Quality of Life for Self". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level ($p = .000$). It also shows that there is a significant difference between the medium income level and the low income level ($p = .000$). The ANOVA results indicate that the higher the income level of

participants the more they consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas lower income participants are more likely to perceive that these issues were a serious problem for themselves.

In summary, the predictor variables that influence how the participants in the United Kingdom perceive their quality of life for themselves are gender, marital status, including the marital status of females, and income. Females perceive a more positive quality of life than males. Married participants perceive a more positive quality of life than not married participants, and married female participants perceive a more positive quality of life than not married female participants. Participants with higher levels of income perceive having a more positive quality of life than participants with lower levels of income.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75: 'Decisions or choices that you make during your lifetime'; 'Decisions made by others that are beyond your control'; 'Genetic or inherited factors'; or 'Blind luck'? Table UK-38 below displays the frequencies of responses.

Table UK- 38: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?"
Total (N=913)

	Number	%
Decisions or choices made by you	378	41.4
Decisions made by others	284	31.1
Blind luck	144	15.8
Genetic or inherited factors	107	11.7

More than half of the participants (58.6%) feel that they will not have control over the quality of their life at age 75, instead they perceive that the quality of their life at age 75 will be determined by "Decisions made by others "(31.1%), "Blind luck" (15.8%), or "Genetic or inherited factors" (11.7%). Less than half of the participants (41.4%) feel that their own decisions or choices will influence the quality of their life at age 75.

In order to determine if any of the predictor variables of age, gender, marital status, and income have a significant relationship with the "Locus of Control" variable, Chi-Square analysis was conducted. Only two of the predictor variables were found to have a significant relationship with the "Locus of Control" criterion variable, age and gender.

The results of the Chi-Square analysis proves that the predictor variable of age has a significant relationship with the criterion variable of "Locus of Control" for both age variables, age by category (young, middle-age, and old) ($x^2 = 26.105$, $df = 6$, $p = .000$) and age by decades ($x^2 = 44.370$, $df = 24$, $p = .007$). Table UK-39 below shows the results of the analysis using age by category.

Table UK- 39: Chi-Square Results for Age: Young, Middle-Age, and Old with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=913).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 91	
Decisions or choices made by you	**N**	206	129	43	**378**
	%	49.0	37.6	28.7	**41.4**
Decisions made by others	**N**	109	111	64	**284**
	%	26.0	32.4	42.7	**31.1**
Blind luck	**N**	60	62	22	**144**
	%	14.3	18.1	14.7	**15.8**
Genetic or inherited factors	**N**	45	41	21	**107**
	%	10.7	12.0	14.0	**11.7**
Total	**N**	420	343	150	**913**
	%	100.0	100.0	100.0	**100.0**

***x²* = 26.105, *df* = 6, *p* = .000**

As shown above, there is a statistically significant relationship found between age by category of young, middle-age, and old and the "Locus of Control" variable (x^2 = 26.105, df = 6, p = .000). Almost half (49%) of the young participants selected "Decisions or choices made by you". More young participants than expected selected "Decisions or choices made by you"; and fewer than expected middle-age and old participants selected that response. Even though more than two-thirds (37.6%) of the middle-age participants selected "Decisions or choices made by you", more middle-age participants than expected selected "Decisions made by others"; and fewer than expected young participants selected "Decisions made by others". The highest percentage of old participants (42.7%) selected "Decisions made by others", and more than expected old participants selected "Decisions made by others". Fewer than expected young participants and old participants selected "Blind luck"; and more than expected middle-age participants selected "Blind luck". More than expected middle-age and old

participants selected “Genetic or inherited factors”; and fewer than expected young participants selected “Genetic or inherited factors”. The results of this analysis indicate that the young participants (18 – 39) are more inclined to perceive that their quality of life at age 75 will be determined by decisions or choices made by themselves. Whereas, middle-age (40 – 64) and old participants (65 and older) are more inclined to perceive that their quality of life at age 75 will be determined by factors beyond their control, either by decisions made by others, blind luck, or genetic or inherited factors.

There is also a statistically significant relationship between age categorized by decade and the “Locus of Control” variable ($x^2 = 44.370$, $df = 24$, $p = .007$) as shown in Table UK-40 below.

Table UK- 40: Chi-Square Results for Age: Decades with “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” Total (N=913).

		Age: Decades									
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	**Total**
Decisions or choices made by you	**N**	17	78	111	62	49	30	18	12	1	**378**
	%	45.9	47.9	50.5	43.1	37.7	26.1	24.0	46.2	33.3	**41.4**
Decisions made by others	**N**	13	40	56	40	42	47	35	10	1	**284**
	%	35.1	24.5	25.5	27.8	32.3	40.9	46.7	38.5	33.3	**31.1**
Blind luck	**N**	5	23	32	25	22	22	11	4	0	**144**
	%	13.5	14.1	14.5	17.4	16.9	19.1	14.7	15.4	.0	**15.8**
Genetic or inherited factors	**N**	2	22	21	17	17	16	11	0	1	**107**
	%	5.4	13.5	9.5	11.8	13.1	13.9	14.7	.0	33.3	**11.7**
Total	**N**	37	163	220	144	130	115	75	26	3	**913**
	%	100	100	100	100	100	100	100	100	100	**100**

***x²* = 44.370, *df* = 24, *p* = .007**

By categorizing the participants’ ages into decades, more details regarding the shift of perceptions between the ages can be seen. As in the analysis using the age categories of young, middle-age, and old, Table UK-40 shows that the highest percentage

of participants (41.4%) selected “Decisions or choices made by you”. The percentages within each decade increases from the teens through the thirties, then decreases until the eighties. This illustrates a directional flow that was shown in Table UK-38, the young participants (18 – 39) feel that their quality of life at age 75 will be determined by decisions or choices made by themselves. Whereas fewer middle-age and old participants selected that response. More than expected participants in their teens, twenties, thirties and forties selected “Decisions made by you”, and fewer than expected participants in their fifties, sixties and seventies selected that response. With the exception of the teenagers, the percentages of participants’ responses for “Decisions made by others’ increases from the twenties through the seventies, indicating that as the participants grew older they feel that the quality of their life at age 75 will be determined by the decisions made by others”. More than expected participants in their fifties, sixties, seventies, eighties and nineties selected “Decisions made by others”, and fewer than expected in their twenties, thirties, and forties selected that response. In analyzing the responses to “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” by looking at age categorized by decades it is clear to see that the participants from the teenage years through the forties perceive that they will have control over the quality of their lives at age 75. As participants become older, starting in their fifties up through the nineties, they perceive that the quality of their life at age 75 is determined more by the decisions of others.

In addition to the age of the participants, gender also has a significant relationship with the criterion variable of “Locus of Control” ($x^2 = 9.847$, $df = 3$, $p = .020$), as shown in Table UK- 41 below.

Table UK- 41: Chi-Square Results for Gender and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Total (N=913).

		Gender		
		Male	**Female**	**Total**
Decisions or choices made by you	**N**	184	194	**378**
	%	46.9	37.2	**41.4**
Decisions made by others	**N**	116	168	**284**
	%	29.6	32.2	**31.1**
Blind luck	**N**	51	93	**144**
	%	13.0	17.9	**15.8**
Genetic or inherited factors	**N**	41	66	**107**
	%	10.5	12.7	**11.7**
Total	**N**	392	521	**913**
	%	100.0	100.0	**100.0**

***x²* = 9.847, *df* = 3, *p* = .020**

As shown in Table UK-41 above, a higher percentage of male participants (46.9%) than female participants (37.2%) selected "Decisions made by you". The results of the Chi-Square analysis also showed that more than expected male participants selected "Decisions made by you" and fewer than expected female participants chose that response. A higher percentage of female participants (32.2%) than male participants (29.6%) selected "Decisions made by others". More than expected female participants chose "Decisions made by others", and fewer than expected male participants chose that response. The results of the analysis also show that a higher percentage of female participants than male participants selected "Blind luck" and "Genetic or inherited factors". Therefore, female participants are more likely to perceive that their quality of life at age 75 will be determined by others, blind luck, or genetic or inherited factors. Male participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions made by themselves.

According to the Chi-Square analysis there is no significant relationship between the marital status of the participants and the responses to “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” (x^2 = 3.907, df = 3, p = .272). And there is no significant relationship the marital status of males (x^2 = 2.931, df = 3, p = .402), nor with the marital status of females (x^2 = 2.416, df = 3, p = .491), and the “Locus of Control” variable. Additionally, there is no significant relationship with income, either by quartiles (x^2 = 7.053, df = 9, p = .632), or by thirds (x^2 = 6.217, df = 6, p = .399), with the “Locus of Control” variable

In summary, more than half of the participants feel that they will not have control over the quality of their life at age 75, instead they perceive their quality of life will be determined by “Decisions made by others “, “Blind luck”, or “Genetic or inherited factors”. Less than half of the participants feel that their own decisions or choices will influence the quality of their life at age 75. Age was a significant factor in the participants’ responses to this question. Middle-age and old participants are more likely to perceive that the quality of their life at age 75 will be determined by others, while young participants perceive that the quality of their lives will be determined by decisions made by themselves. Gender also was influential. Female participants are more inclined to perceive that the quality of their life at age 75 will be determined by factors beyond their control. Male participants perceive that the quality of their lives will be determined by their own decisions.

4. Perception of Quality of Life for People Over 65

In order to ascertain how the participants in the United Kingdom perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for others. The five items are: (1) not having enough money to live on; (2) having poor health; (3) level of loneliness; (4) fear of crime; and (5) often feeling sad or blue. Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is: 'a very serious problem = 1, 'a somewhat serious problem = 2', or 'not a problem at all = 3' for most people over 65 personally". According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine if the participants' perception of the quality of life for people over 65 is influenced by their age, gender, marital status or income, statistical analysis was performed using each of these predictor variables with the criterion composite variable of "Quality of Life for People Over 65". The statistical analysis determined that the predictor variables which have a significant relationship with "Quality of Life for People Over 65" are age, gender, marital status, marital status of males, and income. The results are discussed below.

In order to ascertain if the age of the participant has a relationship with the criterion variable of "Quality of Life for People Over 65" Analysis of Variance (ANOVA) was conducted with both versions of age, by category and by decades. Both

versions of the age variable proved to be statistically significant. The results of the ANOVA analysis of age by category is statistically significant (F =10.508, df = 2, 917, p = .000), as shown in Table UK-42 below.

Table UK- 42: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for People Over 65" Scale (N = 920).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	426	7.5469	2.49685
Middle-Age (40-64)	340	8.0324	2.62091
Old (65 +)	154	8.6104	2.54197
Total	920	7.9043	2.57712

***F* (2, 917) = 10.508, *p* = .000**

As shown in the table above, the mean scores are higher for old participants and lower for young and middle-age participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the older the participant the more inclined they are to have a more positive perception of the quality of life for people over 65.

The Scheffe Post Hoc test shows that there is a significant difference between the old and the young participants (p = .000). There is also a significant difference between the middle-age and young participants (p = .033). Therefore, the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not very serious problems for people over 65.

There is also a statistically significant relationship between age by decade and the "Quality of Life for People Over 65" criterion variable (F = 3.860, df = 8, 911, p = .000), as shown in Table UK-43 below.

Table UK- 43: ANOVA Mean Scores for Age by Decades and "Quality of Life for People Over 65" Scale (N = 920).

Variable	N	Mean	SD
Age by Decades:			
Teens	37	7.7027	2.27138
Twenties	168	7.6905	2.41986
Thirties	221	7.4118	2.59153
Forties	148	7.8514	2.56179
Fifties	129	7.8450	2.63228
Sixties	108	8.7778	2.68026
Seventies	80	8.5250	2.19882
Eighties	26	8.8462	3.17102
Nineties	3	7.6667	2.08167
Total	920	7.9043	2.57712

***F* (8, 911) = 3.860, *p* = .000**

As shown in the table above, the trend is that the older the participant the higher the mean score, which indicates that the older the participant the more likely they are to perceive a more positive quality of life for people over 65 than younger participants. Although, participants in their nineties have a lower mean score than the participants in their teens. The largest difference between mean scores are between the ages of eighties and thirties. However, the Scheffe Post Hoc Test shows that there is a statistically significant difference between the sixties and the thirties (p = .008). The age by decade analysis also shows that the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not very serious problems for people over 65.

In order to determine if gender has a significant relationship with how participants responded to the "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that gender does have a statistically significant relationship with this criterion variable (t = 2.566, df = 918, p = .010) as shown in Table UK-44 below.

Table UK- 44: Mean Scores for Gender and "Quality of Life for People Over 65" Scale (N=980).

	Males (n=382)	**Females (n=538)**
"**Quality of Life for People over 65**"	*Mean* = 8.1623 *SD* = 2.62930	*Mean* = 7.7212 *SD* = 2.52591

***t* = 2.566, *df* = 918, *p* = .010**

As shown in the table above, the mean scores are higher for male participants and lower for female participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life. Therefore, as shown in the table above, male participants have a higher mean score, which indicates that males in this study have a more positive perception of the quality of life for people over 65 compared to female participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Male participants in the United Kingdom are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a very serious problem for people over 65; whereas female participants are more likely to answer that these issues were a very serious problem.

In order to determine if the marital status of the participants has a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is no statistically significant relationship with marital status and the criterion variable of "Quality of Life for People Over 65" (t = 1.258, df = 850.153, p = .209).

However, an Independent Samples T-Test did indicate that the marital status of male participants does have a statistically significant relationship with this criterion variable (t = 2.183, df = 380, p = .030) as shown in Table UK-45 below.

Table UK- 45: Mean Scores for the Marital Status of Males and "Quality of Life for People Over 65" Scale (N=980).

	Married Males (n=221)	**Not Married Males (n=161)**
"**Quality of Life for People over 65**"	*Mean* = 8.4118 *SD* = 2.68627	*Mean* = 7.8199 *SD* = 2.51716

***t* = 2.183, *df* = 380, *p* = .030**

As shown in the table above, the mean scores are higher for married male participants and lower for not married male participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of quality of life for people over 65. Lower mean scores indicate that participants have a less positive perception of the quality of life. Therefore, as shown in the table above, married male participants have a higher mean score, which indicates that married male participants in this study have a more positive perception of the quality of life for people over 65 compared to the not married male participants whose "Quality of Life for People Over 65" mean score is lower and indicates they have a less positive perception of the quality of life. These results indicate that married male participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of

crime, and often feeling sad or blue as not a very serious problem for people over 65; whereas not married male participants were more likely to answer that these issues were a serious problem.

There is no statistically significant relationship between the marital status of females and the criterion variable of "Quality of Life for People Over 65" (t = -.212, df = 534, p = .830).

In order to determine if the income levels of participants' influence their perception of the quality of life for people over 65, a simple Variance of Analysis (ANOVA) was performed. The results indicate that neither of the income variables has a statistically significant relationship with the "Quality of Life for People Over 65" variable. The ANOVA results for income by quartiles is(F = 1.968, df = 3, 519, p = .118), and the results for income by thirds is (F = 2.736, df = 2, 520, p = .066).

In summary, the predictor variables that influence how the participants in the United Kingdom perceive the quality of life for people over 65 are age, gender, and the marital status of males. The older the participant the more likely they are to have a more positive perception of the quality of life for people over 65. Males have a more positive perception of the quality of life for people over 65 than females. And married male participants have a more positive perception on the quality of life for people over 65 than not married male participants. The income levels of the participants do not have a statistically significant relationship with how the participants perceive the quality of life for people over 65.

C. Summary of the Findings on the Predictor Variables

1. Age

The analysis of the data collected in the United Kingdom shows that age is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: "What best defines the meaning of old age" variable; "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; the "Locus of Control" variable; and the "Quality of Life for People Over 65" composite variable.

However, in the analysis of the United Kingdom data, age was not found to have a significant relationship with the following criterion variables: "Respect for people 65 and over" variable; the "Life Satisfaction" composite variable; the "Things are better than they expected them to be" variable; and the "Quality of Life for Self" composite variable.

The studies discussed in the literature review found that age is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults.

The study by Hummert and colleagues found age does affect how different age groups perceive older adults. They found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In the second part of the study, the researchers found that young, middle-aged and elderly adults have many of the same stereotypes of the elderly.

Davis and Douglas examined the relationship between age and life satisfaction and found that there were significant age group and life satisfaction differences (Davis and Douglas, 2004).

A study conducted by Smith and colleagues, which used data on people whose ages ranged from 70 to 103 years old, found that even between groups in their later years, age does play a role in life satisfaction (Smith, Borchelt, Maier, and Jopp, 2002). They found that there are significant differences between the young old and the oldest old regarding their level of life satisfaction.

However, Kite and Blair in their meta-analysis of literature to examine the question of perceptions of older adults stated that age seemed to be less important in determining attitudes toward the elderly than other types of information (Kite and Blare, 1988). Kite and Blair did suggest that the perception of the elderly can be influenced by factors such as type of design used or by the experimental setting (in the lab versus in the field) and that more research was needed to determine which factors influence beliefs and attitudes toward older people. Perhaps this study adds to the body of knowledge and can contribute one more study, conducted in the field, that does show that age is a strong predictor variable.

2. Gender

The analysis of the data collected in the United Kingdom shows that gender is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: "What best defines the meaning of old age" variable; the "Quality of Life for Self" composite variable; the "Locus of Control" variable; and the "Quality of Life for People Over 65" composite variable. However, in the analysis of

the United Kingdom data, gender was not found to have a significant relationship with the following criterion variables: "Respect for people 65 and over" variable; the "Life Satisfaction" composite variable; the "Things are better than they expected them to be" variable; the "As I look back I am fairly satisfied" variable; and "These are the best years of my life" variable.

The results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review.

As discussed in the literature review, Kamilar and colleagues stated studies showed mixed results of gender differences in regards to life satisfaction in old age, with some studies suggesting that males have a higher life satisfaction than females and others having the opposite outcome (Kamilar, Segal, and Qualls, 2000).

Smith and colleagues found that men reported higher life satisfaction and satisfaction with their own aging compared to women (Smith, Borchelt, Maier, and Jopp, 2002).

In a study by Kite, Deaux and Miele (Kite, Deaux and Miele, 1991), it was found that age does outweigh gender in the stereotypes, or perceptions, of the young and old regarding older adults. The study by Celejewski and Dion also showed that age as a variable was more powerful than gender in predicting stereotypical perceptions of older adults (Celejewski and Dion, 1998).

The study conducted by Canetto, et al, supported their hypothesis that perceptions of aging varied depending on the gender of the target and the age of the respondent (and the age of the target), but not on the gender of the respondent (Canetto, Kaminski and

Felicio, 1995). Their findings indicated that there was no significant effect for respondent gender and perceptions of aging.

McConatha and colleagues found in their study gender plays a major role in the construction of age-related beliefs and practices (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). The authors state that the results of their study support previous findings that cultural factors influence perceptions of age and suggest that further cross-cultural studies include a larger and more varied sample which would provide a more comprehensive understanding of how people of different countries feel about aging.

Antonucci and colleagues examined the influence of gender on social relations in late life in four different countries. However, the one-way analysis of variance was conducted separately by country and revealed no gender differences (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most research on gender differences in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are related to norms in one particular country versus the extent the differences would be found from a comparison among cultures and countries. The authors stated that having data that is similar and comparable would be advantageous in comparing gender difference across cultures. In Chapter 9 (?), the influence of gender on the perceptions of aging and older adults will be compared among all five countries.

In this study of the United Kingdom, the gender of the participant did have some influence, but it was not consistent with all the criterion variables. The marital status of females proved to be a better predictor variable than gender or marital status alone.

3. Marital Status

In this study, marital status was a fairly consistent predictor variable influencing the perceptions of aging and older people. Marital status in the United Kingdome was found to have a significant relationship with the following criterion variables: the "Life Satisfaction" composite variable; the "Things are better than I expected" variable; "As I look back I am fairly satisfied" variable; "These are the best years of my life"; and the "Quality of Life for Self" composite variable.

Marital status in the United Kingdom was not found to have a significant relationship with the following criterion variables: "What Best Defines Old Age"; "Respect for people 65 and over"; "the "Locus of Control" variable; and the "Quality of Life for People Over 65" composite variable.

However, the marital status of females was found to be a significant predictor variable with the following criterion variables: the "Life Satisfaction" composite variable; the "Things are better than I expected" variable; "These are the best years of my life"; and the "Quality of Life for Self" composite variable.

The marital status for males in the United Kingdom was found to have a statistically significant relationship with the following criterion variables: the "Life Satisfaction" composite variable; the "These are the best years of my life"; "As I look back I am fairly satisfied"; "these are the best years of my life"; and the "Quality of Life for People Over 65" composite variable.

The literature review did not uncover, and therefore did not discuss, studies focused on the relationship between marital status and the perception of aging and older adults.

4. Income

The analysis of the data collected in The United Kingdom shows that income level is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: the "Life Satisfaction" composite variable; the "Things are better than they expected them to be" variable; "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; and the "Quality of Life for Self" composite variable.

However, in the analysis of the United Kingdom data, income level was not found to have a significant relationship with the following criterion variables: "What best defines the meaning of old age" variable; "Respect for people 65 and over" variable; the "Locus of Control" variable; and the "Quality of Life for People Over 65" composite variable.

It was expected that income level would have significant role in the participants' perception of aging and older people, because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003). The findings from an American study of socioeconomic status and attitudes towards aging showed that participants with lower socioeconomic status hold less optimistic views (Barrett, 2003). And in a cross-cultural study of attitudes towards aging, the researchers concluded that the most significant findings were due to socioeconomic status differences (Slaughter-Defoe, Kuehne, and Straker, 1992). This researcher understands the difference between socioeconomic status and income level and perhaps it is this difference that creates the different findings from this study, which had only income as a variable and which found that it was not a good predictor of

perceptions of aging; compared to the studies that used socioeconomic status as a predictor variable and which found that it is a good predictor variable.

D. Summary

These findings from the United Kingdom data analysis examining the influence of the predictor variables of age, gender, marital status, and income levels on the perceptions of aging and older adults provide a snapshot of how people of the United Kingdom perceive their own aging and that of others. These results will be compared with the results of the other four countries in Chapter 9.

The next chapter discusses the analysis and findings in Japan.

A Cross-National Comparison of Perceptions of Aging and Older Adults

by

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Chapter 6: Discussion of the Analysis and Findings in Japan

A. Population Demographics

In order to provide a basis on which to compare demographics across time and across countries, the current relevant demographics are provided (2009 is the most current data available), as well as the relevant demographic information 2000, which is the year the data was collected for this study**.**

1. Current Demographics

Compared to the other four countries of this study, the United States, the United Kingdom, France and the Dominican Republic, Japan ranks first in regard to population aging. The most current demographics available for Japan are from 2009. In that year, people 65 and over made up 22.0% of the population, the ratio of males to females was 0:95.

Life expectancy in Japan rose from age 68.9 in 1960-65 to 82.7 in 2005-10. Japan, as in many other countries, is entering an era of hyperaging. The percent of people aged 60 and over in 2007 was 30.5%, this is expected to rise to 43.3% by 2040 (Jackson, R. 2010).

2. Demographics in 2000

The data used for this study was collected in 2000. The participants were sampled to be representative of the population in Japan at that time. The entire population of Japan in 2000 was 126,706,000, 17.2 percent of the population was 65 and over.

Table J-1 below displays the demographics of the 1118 participants in this study.

Table J-1: Japan Participant Demographics (N = 1118)

	N	%
Gender:		
Female	596	53.3
Male	522	46.7
Marital Status:		
Married	369	33.0
Not Married	749	67.0
Age:		
Teens	41	3.7
Twenties	256	22.9
Thirties	216	19.3
Forties	205	18.3
Fifties	132	11.8
Sixties	155	13.9
Seventies	88	7.9
Eighties	22	2.0
Nineties	3	.3
Salary Range: (N = 680)		
< 5 million yen	236	34.7
5 million to < 7.5 million yen	173	25.4
7.5 million to < 10 million yen	124	18.2
10 million to < 15 million yen	88	12.9
15 million to < 20 million yen	35	5.1
20 million yen to > 20 million yen	24	3.5

The Japanese participants in this study consist of 53.3 percent females and 46.7 percent males; 33.0 percent of the total number of participants are married; and 67.0 percent are not married – either singer, divorced, separated, or widowed. The ages range from 18 to 93 with less than half of the participants (35%) falling into the young category (39 and younger), nearly half of the participants (49.2%) are in the middle-aged category (40 to 64), and 15.8 percent in the old category (65 and older). The mean age is 44 and the median age is 41. The salaries range from below 5 million yen (34.7%) to over 20 million yen (3.5%), with the mean range between 5 million and 7.5 million yen.

These demographics are relevant to the study which analyzes the how age, gender, marital status, and income influence participants' perceptions of aging.

B. Analysis of Data

The survey instrument for this study was designed to collect data that would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions: (1) Perceptions of Aging and Older People; (2) Perceptions of Life Satisfaction for Self; (3) Perceptions of Quality of Life for Self; and (4) Perceptions of Quality of Life for People Sixty-five and Older. The following is the data analysis of each of the four categories.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people: a) "In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning, or reaching a specific age"; and b) "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people". Each question was analyzed using the four predictor variables: age, gender, marital status, and income.

a. *"In general, which one of the following five things would you say best defines the beginning of old age"*

This question in the survey instrument is intended to understand the participants' perception of when old age begins. There are five responses to choose from: "Retirement"; "Becoming a grandparent"; "Decline in physical ability"; "Decline in mental functioning"; and "Reaching a specific age". Table J-2 below displays the frequencies of the responses.

Table J-2: "Which one of the following five things best defines the beginning of old age".

	Total (N=1104)	
	Number	**%**
Decline in physical ability	455	41.2
Decline in mental functioning	237	21.5
Reaching a specific age	172	15.6
Retirement	163	14.8
Becoming a grandparent	77	6.9

As shown in the table above, the response selected by most of the participants (41.2%) is "Decline in physical ability", which is almost twice as much as the second most selected response (21.5%): "Decline in mental functioning".

Chi-Square analysis was used to determine which of the predictor variables: age, gender, marital status or income level, influence the participants' perception of when old age begins. Of the four predictor variables, two, age and gender, proved to have a statistically significant relationship with this criterion variable. Both types of age categories, age category of young, middle-age, and old, and age by decades, have significant relationships with this criterion variable.

In order to determine if the age of the participants has a relationship with the responses to the question "Which one of the following five things would you say best defines the beginning of old age?", Chi-Square analysis was used using two versions of the age variable, age by category and age by decade. The age by category variable

consists of three groupings of age: young (39 and younger); middle-age (40 to 64); and old (65 and over). Table J-3 below shows the outcome of the Chi-Square analysis for the age by category independent variable and the criterions variable of what best defines old age.

Table J-3: Chi-Square Results for Age: Young, Middle-Age, and Old with "Which one of the following five things would you say best defines the beginning of old age" (N=1104).

		Age Category			Total
		Young 18 – 39	**Middle-Age 40 - 64**	**Old 65 - 93**	
Decline in physical ability	**N**	195	170	90	**455**
	%	38.4	42.4	46.2	**41.2**
Decline in mental functioning	**N**	122	88	27	**237**
	%	24.0	21.9	13.8	**21.5**
Reaching a specific age	**N**	63	67	42	**172**
	%	12.4	16.7	21.5	**15.6**
Retirement	**N**	87	58	18	**163**
	%	17.1	14.5	9.2	**14.8**
Becoming a grandparent	**N**	41	18	18	**77**
	%	8.1	4.5	9.2	**7.0**
Total	**N**	508	401	195	**1104**
	%	100.0	100.0	100.0	**100.0**

***x²* = 29.038, *df* = 8, *p* = .000**

There is a statistically significant relationship found between age category of young, middle-age, and old and what best defines the beginning of old age ($x^2 = 29.038$, $df = 8$, $p = .000$). Participants in the "old" category had the highest percentage of those who selected "Decline in physical ability" (46.2%), followed by the middle-age group (42.4%). More old and middle-age participants than expected selected "Physical decline" as the beginning of old age, whereas fewer than expected young participants selected that response. Of those who selected "Decline in mental functioning", participants in the "young" category had the highest percentage (24.0%). More than expected young

participants selected “Decline in mental functioning” and fewer than expected old participants selected that response. Of the participants who selected “Reaching a specific age”, the participants in the “old” category had the highest percentage (21.5%). More than expected old and middle-age participants selected “Reaching a specific age”, and fewer than expected young participants selected that response. The Chi-Square analysis indicates that most of the participants in each of the age categories, young, middle-age and old, perceive the beginning of old age as a “Decline in physical ability”. The second most selected response for the old participants is “Reaching a specific age”, whereas for young and middle-age participants it is “Decline in mental functioning”.

The second age variable is “age by decade”, which categorizes the age of the participants by the decades; such as twenties, thirties, forties, etc. In order to determine if there is a relationship between the more nuanced age variable category of age by decades and the responses to the survey question “Which one of the following five things would you say best defines the beginning of old age”, Chi-Square analysis was performed. The analysis determined that there is also a statistically significant relationship between age by decade and what best defines the beginning of old age ($x^2 = 53.257$, $df = 32$, $p = .011$). Table J-4 below displays the results.

Table J-4: Chi-Square Results for Age: Decades with "Which one of the following five things would you say best defines the beginning of old age" (N=1104).

		Age: Decades									Total
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	
Decline in physical ability	**N**	13	96	86	87	54	63	45	10	1	**455**
	%	31.7	37.9	40.2	43.3	40.9	41.4	51.7	47.6	33.3	**41.2**
Decline in mental functioning	**N**	7	62	53	45	27	30	11	1	1	**237**
	%	17.1	24.5	24.8	22.4	20.5	19.7	12.6	4.8	33.3	**21.5**
Reaching a specific age	**N**	8	27	28	32	23	26	20	8	0	**172**
	%	19.5	10.7	13.1	15.9	17.4	17.1	23.0	38.1	.0	**15.6**
Retirement	**N**	6	48	33	31	17	22	5	0	1	**163**
	%	14.6	19.0	15.4	15.4	12.9	14.5	5.7	.0	33.3	**14.8**
Becoming a grandparent	**N**	7	20	14	6	11	11	6	2	0	**77**
	%	17.1	7.9	6.5	3.0	8.3	7.2	6.9	9.5	.0	**7.0**
Total	**N**	41	253	214	201	132	152	87	21	3	**1104**
	%	100	100	100	100	100	100	100	100	100	**100**

***x²* = 53.257, *df* = 32, *p* = .011**

As shown in Table J-4, the highest percentage of participants in each of the age decades selected "Decline in physical ability" as the beginning of old age. The second most selected response for the participants in their twenties, thirties, forties, fifties, and sixties is "Decline in mental functioning", but not for the teens or the participants in their seventies and eighties. The second most selected response for the participants in their teens, seventies and eighties is "Reaching a specific age".

In order to determine if the gender of the participants has a relationship with the responses to the question "What best defines the beginning of old age", Chi-Square analysis was conducted. It was determined that there is a statistically significant relationship between the independent variable gender and the criterion variable (x^2 = 16.417, df = 4, p = .003), as shown in Table J-5 below.

Table J-5: Chi-Square Results for Gender and "Which one of the following five things would you say best defines the beginning of old age" (N=1104).

		Gender		Total
		Male	Female	
Decline in physical ability	**N**	186	269	**455**
	%	36.3	45.5	**41.2**
Decline in mental functioning	**N**	114	123	**237**
	%	22.2	20.8	**21.5**
Reaching a specific age	**N**	81	91	**172**
	%	15.8	15.4	**15.6**
Retirement	**N**	83	80	**163**
	%	16.2	13.5	**14.8**
Becoming a grandparent	**N**	49	28	**77**
	%	9.6	4.7	**7.0**
Total	**N**	513	591	**1104**
	%	100.0	100.0	**100.0**

$x^2 = 16.417$, $df = 4$, $p = .003$

The most common response for most males and females is "Decline in physical ability", however a much higher percentage of female participants (45.5%) selected that response compared to male participants (36.3%). More than expected female participants selected "Decline in physical ability" and fewer than expected male participants selected that response. A slightly higher percentage of male participants (22.2%) selected "Decline in mental functioning" compared to female participants (20.8%). The third most selected response for males is "Retirement" (16.2%), while the third most selected response for females is "Reaching a specific age" (15.4%). And almost double the percentage of males (9.6%) compared to females (4.7%) selected "Becoming a grandparent" as the beginning of old age. The main difference between the genders in their perception of the beginning of old age is that a higher percentage of males compared to females selected retirement and females selected reaching a specific age. In Japan there is mandatory retirement when the employee reaches a specific age. Male may put

more emphasis on the retirement while females may place more emphasis on the specific age.

According to the Chi-Square analysis there is no significant relationship between the marital status of the participants and the responses to what best defines old age (x^2 = 7.585, df = 4, p = .108). And there is no significant relationship either regarding whether or not the male and female participants were married. The results of the analysis for the marital status of female participants and male participants respectively are: (x^2 = 9.385, df = 4, p = .052) and (x^2 = 4.812, df = 4, p = .307).

The income level of participants can have an effect on how they perceive aging and older people. Therefore, Chi-Square analysis was performed with the predictor variable of income level. The income levels of the participants were categorized in two separate ways in order to determine which would have the most sensitivity. The first grouping is in quartiles and the income levels are: low, low-medium, high-medium, and high. The second grouping of income is in three categories: low, medium and high. The results of the Chi-Square analysis determined that neither of the groupings of the income variable have a statistically significant relationship with “What best defines the beginning of old age”. The results of the Chi-Square analysis using income by quartiles (low, low-medium, high-medium, and high) is: x^2 = 11.295, df = 12, p = .504,) and the results for income categorized into low, medium, and high is: (x^2 = 8.496, df = 8, p = .387).

In summary, the age and the gender of the participants proved to be the predictor variables that influence how the participants in Japan define the beginning of old age. The majority of the old participants see the beginning of old age as a decline in physical ability or reaching a specific age, whereas the majority of the young participants see the

beginning of old age as a decline in physical ability and a decline in mental functioning. And while the majority of both the male and female participants see decline in physical ability and decline in mental functioning as the two most selected responses for the beginning of old age, more female participants compared to males selected reaching a specific age as their third most selected response, and more males than females selected retirement as their third most common response.

b. *"Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to understand the participants' perception of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three choices: (1) too much; (2) too little; or (3) just about the right amount. Table J-6 below displays the frequencies of the responses selected by the participants.

Table J-6: "Do you feel that people over 65 get too much, too little or just about the right amount of respect".

	Total (N=1097)	
	Number	**%**
Just right amount of respect	586	53.4
Too little respect	491	44.8
Too much respect	20	1.8

As shown in Table J-6 above, just over half (53.%) of the participants perceive that people over 65 get just the right amount of respect from younger people; under half (44.8%) perceive that people over 65 get too little respect; and a very small percent (1.8%) perceive that people over 65 get too much respect.

In order to determine if any of the predictor variables influence the participants' response Chi-Square analysis was conducted with each of the predictor variables. Only age by decades has a statistically significant relationship with how participants perceive respect for people over 65. The other predictor variables of age by category (x^2 = 6.664, df = 4, p = .155), gender (x^2 = 3.098, df = 2, p = .213), marital status (x^2 = .836, df = 2, p = .658), and income (by quartiles: (x^2 = 4.818, df = 6, p = .567, by thirds: x^2 = 3.760, df = 4, p = .439), do not have a statistically significant relationship with this criterion variable. Table J-7 displays the results of the Chi-Square analysis using age by decades.

Table J-7: Chi-Square results for Age by Decades and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=1097).

		Age: Decades									Total
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	
Just the Right Amount of Respect	**N**	20	150	107	116	76	68	44	4	1	**586**
	%	50.0	59.5	50.2	57.7	58.5	45.3	50.0	20.0	33.3	**53.4**
Too Little Respect	**N**	17	100	103	80	52	79	44	14	2	**491**
	%	42.5	39.7	48.4	39.8	40.0	52.7	50.0	70.0	66.7	**44.8**
Too Much Respect	**N**	3	2	3	5	2	3	0	2	0	**20**
	%	7.5	.8	1.4	2.5	1.5	2.0	.0	10.0	.0	**1.8**
Total	**N**	40	252	213	201	130	150	88	20	3	**1097**
	%	100	100	100	100	100	100	100	100	100	**100**

***x*² 37.977, *df* = 16, *p* = .002**

As shown in Table J-7 above, the majority of the participants in each of the age decades, with the exception of the participants in their sixties, seventies, eighties, and nineties, feel that people over 65 get just the right amount of respect from young people. The majority of the participants in their sixties or more feel that people over 65 get too little respect from young people. Therefore the participants who are actually sixty-five and over perceive that young people do not respect them enough, while the younger

participants from their teens through their fifties, perceive that they are providing just the right amount of respect for older people. The two groups with the highest percentage of those who feel that people over 65 get too much respect are the teenagers and those in their eighties, although these represent low numbers.

In summary, the only predictor variable that has a statistically significant relationship with the criterion variable of "Respect for people over 65" is age by decades. Participants under age sixty perceive that people over 65 get just the right amount of respect, while participants over age sixty feel that younger people have too little respect for people over 65.

2. Perceptions of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are: (a) "As I grow older things seem better than I thought they would be"; (b) "As I look back on my life I am fairly well satisfied"; and (c) "These are the best years of my life". The responses to the questions are Likert Scale scoring: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4". Each of these three questions are considered criterion variables and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income level.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical

analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. *"As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants' perceive their own life as they age compared to what they had imagined it might be. The participants were asked to choose from four responses: "Agree strongly"; "Agree somewhat"; "Disagree somewhat"; or "Disagree strongly" with this statement. Table J-8 below shows the frequencies of the responses.

Table J-8: "As I grow older things seem better than I thought they would be".

	Total (N=1105)	
	Number	**%**
Agree Strongly	74	6.7
Agree Somewhat	331	30.0
Disagree Strongly	152	13.8
Disagree Somewhat	548	49.6

As shown in Table J-8 above, almost two-thirds (63.4%) of the participants stated that they disagree with this statement: 49.6 percent disagree somewhat and 13.8 percent disagree strongly. Just over one-third (36.7%) of the participants indicate that they agree with this statement: with 28.9 percent stating that they agree somewhat and 11.1 percent disagreeing strongly. Therefore, a higher percentage of the Japanese participants do not perceive that as they grow older things seem better than they thought they would.

Statistical analysis was performed with each of the predictor variables of age, gender, marital status and income level, in order to determine if they have an influence on the participants' responses. As discussed below, gender, marital status, and income by quartiles do have a significant relationship with this criterion variable; age does not.

Analysis of Variance (ANOVA) was conducted to determine if age has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought would be". The results of the analysis showed that age by category (young, middle-age, and old) does not have a statistically significant relationship with the criterion variable ($F = 2.116$, $df = 2, 1102$, $p = .121$); nor does age by decades ($F = 1.644$, $df = 8, 1096$, $p = .108$). Therefore, the age of the participants does not influence whether or not they perceive that as they grow older things are better than they thought they would be.

In order to determine if the gender of the participants has an influence on their response to the survey question, Chi-Square analysis was performed. The results of the analysis, which are shown in Table J-9 below, indicate that there is a statistically significant relationship between gender and how the participants perceive their life as they grow older ($x^2 = 10.391$, $df = 3$, $p = .016$).

Table J-9: Chi-Square Results for Gender and "As I grow older things seem better than I thought they would be" (N=1105).

		Gender		
		Males	**Females**	**Total**
Agree Strongly	**N**	27	47	**74**
	%	5.2	8.0	**6.7**
Agree Somewhat	**N**	140	191	**331**
	%	27.1	32.5	**30.0**
Disagree Somewhat	**N**	267	281	**548**
	%	51.6	47.8	**49.6**
Disagree Strongly	**N**	83	69	**152**
	%	16.1	11.7	**13.8**
Total	**N**	517	588	**1105**
	%	100.0	100.0	**100.0**

***x²* = 10.391, *df* = 3, *p* = .016**

As shown in Table J-9 above, a higher percentage of male participants (51.6%) selected "Disagree somewhat" compared to female participants (47.8%). More males than expected and fewer females than expected selected that response. The same is true for the response "Disagree strongly"; a higher percentage of male participants (16.1%) compared to female participants (11.7%) selected that response. More males than expected and fewer females than expected selected "Disagree strongly". Whereas, a higher percentage of females (32.5%) compared to males (27.1%) selected "Agree somewhat". More females than expected selected that response and fewer males than expected selected that response. The same is true for the response "Agree strongly"; a higher percentage of females (8.0%) compared to males (5.2%) selected that response. More females than expected and fewer males than expected selected "Agree strongly". Therefore, male participants are more inclined to disagree with the statement that "As I grow older things seem better than I thought would be", compared to female participants

who are more inclined to perceive that as they grow older things are better than they had thought.

In order to determine if the marital status of the participants has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought they would be", Chi-Square analysis was performed. The results show that there is a statistically significant relationship between marital status and this criterion variable ($x^2 = 7.869$, $df = 3$, $p = .049$), as shown in Table J-10 below.

Table J-10: Chi-Square Results for Marital Status and "As I grow older things seem better than I thought they would be" (N=1105).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	24	50	**74**
	%	6.6	6.7	**6.7**
Agree Somewhat	**N**	106	225	**331**
	%	29.1	30.4	**30.0**
Disagree Somewhat	**N**	169	379	**548**
	%	46.4	51.1	**49.6**
Disagree Strongly	**N**	65	87	**152**
	%	17.9	11.7	**13.8**
Total	**N**	364	741	**1105**
	%	100.0	100.0	**100.0**

***x²* = 7.869, *df* = 3, *p* = .049**

As shown in Table J-10 above, a higher percentage of not married participants (51.1%) selected "Disagree somewhat" compared to married participants (46.4%). More not married participants than expected and fewer married participants than expected selected that response. However, a higher percentage of married participants (17.9%) compared to not married participants (11.7%) selected "Disagree strongly". More than expected married participants and far fewer than expected not married participants selected "Disagree strongly". In combining the two sets of percentages for each of the

married and not married participants, it can be seen that the total percentage of married participants who selected either “Disagree somewhat” or “Disagree strongly” is 64.3 percent, and the total percentage of the not married participants is 62.8 percent. This indicates that the married participants are more inclined to perceive that as they grow older things are not better than they thought they would be. The percentage differences between the married and the not married participants who selected “Agree somewhat” or “Agree strongly” are negligible; as is the difference between the actual count and the expected count.

Chi-Square analysis was conducted to investigate whether the marital status of females and the marital status of males have a relationship with how the participants responded to the questions “As I grow older things seem better than I thought they would”. The results showed that there is no statistically significant relationship between the marital status of females ($x^2 = 4.599$, $df = 3$, $p = .204$); and no statistically significant relationship between the marital status of males ($x^2 = 4.765$, $df = 3$, $p = .190$) with this criterion variable.

In order to determine if the income status of the participants influenced how they responded to the question “As I grow older things seem better than I thought they would be”, a one way analysis of variance was conducted using both sets of income variables, by thirds and by quartiles. The results of the analysis indicate that the income by thirds (low, medium, and high) does not have a statistically significant relationship with this criterion variable ($F = 1.659$, $df = 2, 672$, $p = .191$). However, the predictor variable of income by quartiles (low, low-medium, high medium, and high) does have a significant relationship ($F = 3.159$, $df = 3, 671$, $p = .024$) as shown in Table J-11 below.

Table J-11: ANOVA Mean Scores for Income by Quartiles and "As I grow older things seem better than I thought they would be" (N = 675).

Variable	N	Mean	SD
Income by Quartiles:			
Low	233	2.7597	.75584
Low Med	171	2.7895	.81320
High Med	124	2.7903	.75734
High	147	2.5578	.75061
Total	675	2.7289	.77363

***F* (3, 671) = 3.159, *p* = .024**

This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4". Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicates participants do not agree with the statement.

As seen in Table J-11 above, the high income participants have the lowest mean score (2.5578), which indicates that they are more likely to select "Agree strongly" or "Agree somewhat" with the statement "As I grow older things seem better than I thought they would be" because the value for "Agree strongly" is 1 and the value for "Agree somewhat" is 2. The other three levels of income: low, low-medium, and high-medium have higher mean scores indicating that they are more likely to select "Disagree somewhat" (3) or "Disagree strongly" (4) in response to the statement. The Scheffe Post Hoc Test indicates that there is no significant difference between any of the levels of income by quartile. This analysis of using income categorized into quartiles reveals that the high income participants are more likely to agree that as they grow older things seem

better than they thought compared to the low, low-medium, and high-medium income participants who are more likely to disagree.

In summary, while the majority of the Japanese participants disagree with the statement "That as I grow older things seem better than I thought they would be", the statistical analysis revealed that the predictor variables that have been determined to have an influence on how the participants responded to this statement are gender, marital status, and income by quartiles. Male participants are more inclined to disagree with the statement compared to female participants. Married participants are also more likely to disagree with the statement and perceive that as they grow older things are not as good as they had thought they would be. However, higher income participants are more likely to agree that as they grow older things seem to be better than they thought they would. The predictor variable of age did not have a significant relationship with this criterion variable, which indicates that the age of the participants did not influence whether or not they perceived that as they grow older things seem better than they thought it would be.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. The participants were asked to choose from four responses: "Agree strongly"; "Agree somewhat"; "Disagree somewhat"; or "Disagree strongly" with this statement. Table J-12 below shows the frequencies of the responses.

Table J-12: "As I Look Back On My Life I Am Fairly Well Satisfied"

	Total (N=1108)	
	Number	**%**
Agree Strongly	229	20.7
Agree Somewhat	565	51.0
Disagree Somewhat	253	22.8
Disagree Strongly	61	5.5

Table J-12 above shows that the majority of the participants (71.7%) agreed with this statement (agree strongly = 20.7%, agree somewhat = 51.0%). However more than one-fourth (28.3%) of the participants did not agree (disagree somewhat = 22.8%, disagree strongly = 5.5%). In order to determine if any of the predictor variables of age, gender, marital status, or income has an influence on how the participants perceive whether or not they are well satisfied with their life statistical analysis was performed.

In order to ascertain if the age of the participant has a relationship with this criterion variable analysis of variance (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant. The results of the ANOVA analysis of age by category (young, middle-age, and old) is statistically significant (F =13.378, df = 2, 1105, p = .000), as shown in Table J-13 below.

Table J-13: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1108).

Variable	**N**	**Mean**	**SD**
Age Category:			
Young (18-39)	508	2.2559	.80522
Middle-Age (40-64)	401	2.0698	.76493
Old (65 +)	199	1.9397	.80175
Total	1108	2.1318	.79903

***F* (2, 1105) = 13.378, *p* = .000**

This survey question “As I grow older things seem better than I thought they would be” offers four Likert Scale responses: “Agree Strongly = 1”, “Agree Somewhat = 2”, “Disagree Somewhat = 3”, and “Disagree Strongly = 4”. Therefore, the lower the mean score, the more participants agree with the statement and the higher the mean score indicates participants do not agree with the statement.

As can be seen in the Table J-13 above, the mean for the “old” age category of 65 and older is lower (1.9397) than the mean for the young (2.2559) and middle-age (2.0698) categories, which means that the old participants are more likely to choose strongly agree or somewhat agree with the statement “As I look back on my life I am fairly well satisfied”. “Agree strongly” is scored with a “1” and “Agree somewhat” is scored with a “2” while “Disagree somewhat” is scored with a “3” and “Disagree strongly” is scored with a “4”. The Scheffe Post Hoc Test indicates that there is a significant difference between “old” and “young” (p = .000), but not between “old” and “middle-age” (p = .165). There is a significant difference between “middle-age” and “young” (p = .002). This would indicate that participants within the old age category are more likely to perceive being fairly satisfied with their life lived compared to the young age participants. And the middle-age participants also perceive being fairly satisfied with their life lived compared to young participants. Therefore, participants forty and older perceive feeling satisfied with their life compared to participants thirty-nine and younger.

ANOVA was also conducted using age categorized by decades. According to the results of the ANOVA, age categorized by decade is also statistically significant (F = 4.214, df = 8, 1099, p = .000) with this criterion variable of perception of being well satisfied with life lived, as shown in Table J-14 below.

Table J-14: ANOVA Mean Scores for Age by Decades and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1108).

Variable	N	Mean	SD
Age by Decades:			
Teens	40	2.2250	.94699
Twenties	253	2.2885	.79166
Thirties	215	2.2233	.79509
Forties	202	2.0941	.73034
Fifties	131	2.0611	.72064
Sixties	154	2.0195	.85917
Seventies	88	1.9091	.82541
Eighties	22	1.8636	.71016
Nineties	3	1.0000	.00000
Total	1108	2.1318	.79903

***F* (8, 1099) = 4.214, *p* = .000**

The lowest mean score is found in participants in their nineties (1.0000) which means that they are more likely to agree with the statement of "As I look back on my life I am fairly well satisfied". The participants in their twenties have the highest mean score (2.2885) indicating that they are more likely to strongly disagree with the statement. The mean scores decrease from the twenties to the nineties indicating that as people in Japan grow older they are more likely to be well satisfied as they look back on their life. The Scheffe Post Hoc Test shows that there is no statistically significant difference between any of the mean scores of the age decades of the participants.

In order to determine if gender also has predictor qualities on the participants' response to the criterion variable of being fairly well satisfied when looking back on one's life, Chi-Square analysis was conducted. The results of the analysis indicate that there is a statistically significant relationship between gender and this criterion variable

(x^2 = 26.594, *df* = 3, *p* = .000). Table J-15 below shows the results of the Chi-Square analysis.

Table J-15: Chi-Square Results for Gender and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1108).

		Gender		
		Male	**Female**	**Total**
Agree Strongly	**N**	97	132	**229**
	%	18.8	22.3	**20.7**
Agree Somewhat	**N**	236	329	**565**
	%	45.6	55.7	**51.0**
Disagree Somewhat	**N**	144	109	**253**
	%	27.9	18.4	**22.8**
Disagree Strongly	**N**	40	21	**61**
	%	7.7	3.6	**5.5**
Total	**N**	517	591	**1108**
	%	100.0	100.0	**100.0**

***x²* = 26.594, *df* = 3, *p* = .000**

The results of the Chi-Square analysis shows that the female participants (78.0%) have a higher percentage of agreeing (agree strongly = 22.3% and agree somewhat = 55.7%) with the statement "As I look back on my life I am fairly well satisfied" than male participants (64.4%). More female participants than expected selected "Agree strongly" and "Agree somewhat" than male participants who fewer than expected selected those responses. Therefore, female participants are more inclined to perceive being well satisfied with their life lived compared to males.

Chi-Square analysis was also conducted to determine if marital status influenced how the participants responded to the statement. The results of the analysis indicate that there is a statistically significant relationship between marital status and the participants' responses to "As I look back on my life I am fairly well satisfied" (x^2 = 37.597, *df* = 3, *p* = .000). Table J-16 below shows the results of the Chi-Square analysis.

Table J-16: Chi-Square Results for Marital Status and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1108).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	55	174	**229**
	%	15.2	23.4	**20.7**
Agree Somewhat	**N**	163	402	**565**
	%	44.9	54.0	**51.0**
Disagree Somewhat	**N**	116	137	**253**
	%	32.0	18.4	**22.8**
Disagree Strongly	**N**	29	32	**61**
	%	8.0	4.3	**5.5**
Total	**N**	363	745	**1108**
	%	100.0	100.0	**100.0**

x^2 = 37.597, *df* = 3, *p* = .000

As shown in Table J-16 above, a higher percentage of not married participants (77.4%) agree ("agree somewhat" and "agree strongly") with the statement compared to married participants (60.1%). More than expected not married participants agreed with the statement compared to fewer than expected married participants who selected However, the analysis showed that more than expected married participants agreed with the statement, while fewer than expected not married participants agreed with the statement. More not married participants than expected selected "Agree strongly" and "Agree somewhat" than married participants who fewer than expected selected those responses. Therefore, not married participants are more inclined to perceive being well satisfied with their life lived compared to married participants.

In order to determine if there is a statistically significant relationship between the marital status of females and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was employed. The results show that there is a statistically significant relationship between the marital status of female

participant and this criterion variable (x^2 = 13.876, *df* = 3, *p* = .003). Table J-17 shows the results of the analysis.

Table J-17: Chi-Square Results for the Marital Status of Female Participants and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 591).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	25	107	**132**
	%	16.4	24.4	**22.3**
Agree Somewhat	**N**	78	251	**329**
	%	51.3	57.2	**55.7**
Disagree Somewhat	**N**	42	67	**109**
	%	27.6	15.3	**18.4**
Disagree Strongly	**N**	7	14	**21**
	%	4.6	3.2	**3.6**
Total	**N**	152	439	**591**
	%	100.0	100.0	**100.0**

***x²* = 13.876, *df* = 3, *p* = .003**

As shown in Table J-17 above, a higher percentage of not married female participants (81.6%) agree ("agree somewhat" and "agree strongly") with the statement compared to married female participants (67.7%). More than expected not married female participants agreed with the statement compared to fewer than expected married female participants who selected those responses. Therefore, not married female participants are more inclined to perceive being well satisfied with their life lived compared to married female participants.

In order to determine if there is a statistically significant relationship between the marital status of males and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was employed. The Chi-Square analysis did determine that there is a statistically significant relationship between the marital

status of males and their response to this criterion variable (x^2 = 16.172, df = 3, p = .001). Table J-18 below shows the results of the analysis.

Table J-18: Chi-Square Results for Marital Status of Males and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 517).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	30	67	**97**
	%	14.2	21.9	**18.8**
Agree Somewhat	**N**	85	151	**236**
	%	40.3	49.3	**45.6**
Disagree Somewhat	**N**	74	70	**144**
	%	35.1	22.9	**27.9**
Disagree Strongly	**N**	22	18	**40**
	%	10.4	5.9	**7.7**
Total	**N**	211	306	**517**
	%	100.0	100.0	**100.0**

***x²* = 16.172, *df* = 3, *p* = .001**

As shown in Table J-18 above, a higher percentage of not married male participants (71.2%) agree ("agree somewhat" and "agree strongly") with the statement compared to married male participants (54.5%). More than expected not married male participants agreed with the statement compared to fewer than expected married male participants who selected those responses. Therefore, not married male participants are more inclined to perceive being well satisfied with their life lived compared to married male participants.

In order to find a relationship between income levels of the participants (predictor variable) and their response to "As I look back on my life I am fairly well satisfied" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds showed that there is a statistically significant

relationship between this predictor variable and the criterion statement ($F = 4.514$, $df = 2, 673$, $p = .011$). Table J-19 below shows the results of the income by thirds analysis.

Table J-19: ANOVA Mean Scores for Income by Thirds and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 676).

Variable	N	Mean	SD
Income by Quartiles:			
Low	235	2.2085	.87409
Medium	171	2.2339	.81401
High	270	2.0296	.74115
Total	676	2.1435	.81202

***F* (2, 673) = 4.514, *p* = .011**

As shown in Table J-19, the participants with a high income level have the lowest score. The lower the mean score indicates that participants with a high income level are more likely to select the response categories of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for medium income level ($p = .036$), and there is a significant difference between the high income level and the low income level ($p = .047$). The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

The results of the ANOVA using income by quartiles also showed that there is a statistically significant relationship between this predictor variable and the criterion

statement (F = 3.227, df = 3, 672, p = .022). Table J-20 below shows the results of the income by quartiles analysis.

Table J-20: ANOVA Mean Scores for Income Quartiles and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 676).

Variable	N	Mean	SD
Income by Quartiles:			
Low	235	2.2085	.87409
Low Med	171	2.2339	.81401
High Med	123	2.0732	.71484
High	147	1.9932	.76298
Total	676	2.1435	.81202

***F* (3, 672) = 3.227, *p* = .022**

As shown in Table J-20, the high income level of the participants has the lowest mean score (1.9932). The low mean score indicates that participants are more likely to select "Agree strongly" or "Agree somewhat" with the statement. The low mean score indicates that participants selected the categories of "Agree strongly" which scores a "1" or "Agrees somewhat" which scores a "2". Participants with lower income levels have higher mean scores which indicate that they were more likely to disagree with the statement. The higher mean scores indicate that participants selected the categories of "Disagree somewhat" which scores a "3" or "Disagrees strongly" which scores a "4". The Scheffe Post Hoc Test results show that there is no significant difference between the mean scores of any of the income levels. The ANOVA analysis indicates that the higher the income level of the participants the more likely they perceive that as they look back on their life they are fairly well satisfied.

In summary, the statistical analysis determined that the predictor variables that were determined to have an influence on the participants responses to the statement "As I look back on my life I am fairly well satisfied" are age (by category and by decade),

which showed that the older the participant the more likely they are to agree with the statement; gender, which showed that female participants are more likely to agree with the statement; marital status, which showed that not married participants are more likely to agree with the statement; the marital status of females, which showed that not married female participants are more likely to agree with the statement; the marital status of males, which showed that not married male participants are more likely to agree with the statement; and income (by quartiles and by thirds), which showed that the participants with a higher income level are more likely to agree with the statement.

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The responses to the question are Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4" with this statement. As Table J-21 below shows the frequencies of the responses.

Table J-21: "These are the best years of my life"

	Total (N=1104)	
	Number	**%**
Agree Strongly	201	18.2
Agree Somewhat	384	34.8
Disagree Somewhat	408	37.0
Disagree Strongly	111	10.1

As the table above shows, just over half (53.0%) of the participants agreed with the statement "These are the best years of my life" (Agree strongly = 18.2% and Agree somewhat = 34.8%), and just less than half (47.1%) disagree with the statement (Disagree

somewhat = 37.0% and Disagree strongly = 10.1%). However, the largest percentage of participants (37.0%) disagree somewhat with the statement "These are the best years of my life".

In order to determine which predictor variable has an influence on the participants' responses to this statement statistical analysis with each of the variables, age, gender, marital status, and income, was performed.

The age of the participants may be a factor in whether or not the participants perceive that these are the best years of their life. Analysis of variance (ANOVA) was conducted using both version of the age variable (by category and by decade) and both were proved to have a statistically significant relationship with the criterion variable of "These are the best years of my life". The results of both tests are shown and discussed below.

The ANOVA analysis shows that there is a statistically significant relationship between the predictor variable of age by category (young, middle-age, old) and this criterion variable (F = 21.801, df = 2, 1101, p = .000). Table J-22 shows the results using age categories: young, middle-age, and old.

Table J 22: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "These Are the Best Years of My Life" (N = 1104).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	504	2.5734	.88872
Middle-Age (40-64)	400	2.2750	.85803
Old (65 +)	200	2.1500	.90087
Total	1104	2.3886	.89640

***F* (2, 1101) = 21.801, *p* = .000**

Table J-22 above shows that the mean score for the old category is the lowest (2.1500) and that the mean score for the young category is the highest (2.5734). This survey question "These are the best years of my life" offers four Likert Scale responses: "Agree Strongly = 1", "Agree Somewhat = 2", "Disagree Somewhat = 3", and "Disagree Strongly = 4". Therefore, the lower the mean score, the more participants agree with the statement and the higher the mean score indicates participants do not agree with the statement. The old age category has the lowest mean score (2.1500) which indicates that the old participants (sixty-five and over) are more likely to select agree strongly or agree somewhat for the statement "These are the best years of my life". The lower the mean scores indicates that participants selected the responses of "Agree strongly" which scores a "1" or "Agrees somewhat" which scores a "2". Young participants (thirty-nine and younger) have the highest mean score (2.5734) which indicates that they are more likely to disagree with the statement. The higher mean scores indicate that participants selected the responses of "Disagree somewhat" which scores a "3" or "Disagrees strongly" which scores a "4". These results indicate that the older the participants the more likely they are to agree with the statement "These are the best years of my life", while the younger the participant the more inclined they are to disagree with the statement. The Scheffe Post Hoc Test results show a significant difference between the old participants and the young participants (.000), but not between the old and the middle-age participants (.261). However, there is a significant difference between the middle-age participants and the young participants (.000).

Table J-23 below shows the statistically significant results using age categorized by decades ($F = 7.494$, $df = 8, 1095$, $p = .000$).

The results of the ANOVA analysis using age categorized by decades. As shown in the table above, participants in their nineties have the lowest mean score (1.0000) and participants in their twenties have the highest mean score (2.6375), which indicates that participants in their nineties are more inclined to agree with the statement "These are the best years of my life", while participants in their twenties are more likely to disagree with the statement. In general the findings indicate that the older the participant the more they are inclined to agree that these are the best years of their life, while the younger the participant the more likely they are to disagree with the statement. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of the participants in their sixties and participants in their thirties (.004) and participants in their twenties (.000). This indicates that participants in their sixties perceive that these are the best years of their life while participants in their thirties and twenties are more likely not to perceive that these are the best years of their life.

Table J-23: ANOVA Mean Scores for Age by Decades and "These are the Best Years of My Life" (N = 1104).

Variable	N	Mean	SD
Age by Decades:			
Teens	40	2.5250	.98677
Twenties	251	2.6375	.92522
Thirties	213	2.5070	.82198
Forties	202	2.3366	.81987
Fifties	130	2.2846	.85576
Sixties	155	2.0645	.90938
Seventies	88	2.2955	.87309
Eighties	22	2.0909	1.01929
Nineties	3	1.0000	.00000
Total	1104	2.3886	.89640

***F* (8, 1095) = 7.494, *p* = .000**

In order to determine if gender has a significant relationship with the statement "These are the best years of my life", Chi-Square analysis was employed. The results showed that there is statistically significant relationship between the predictor variable of gender and this criterion variable ($x^2 = 48.534$, $df = 3$, $p = .000$).

As shown in Table J-24 below, a higher percentage of female participants (62.3%) agree with the statement "These are the best years of my life", than male participants (42.5%). More than expected female participants agreed with the statement, while fewer than expected male participants agreed with the statement. A higher percentage of male participants (57.5%) disagree with the statement than female participants (37.6%). More than expected male participants disagreed with the statement, while fewer than expected female participants disagreed with the statement. The analysis indicates that female participants are more inclined to perceive that these are the best years of their life, while male participants are less inclined to perceive that these are the best years of their life.

Table J-24: Chi-Square Results for Gender and "These are the Best Years of My Life" (N = 1104).

		Gender		
		Male	**Female**	**Total**
Agree Strongly	**N**	72	129	**201**
	%	13.8	22.1	**18.2**
Agree Somewhat	**N**	149	235	**384**
	%	28.7	40.2	**34.8**
Disagree Somewhat	**N**	225	183	**408**
	%	43.3	31.3	**37.0**
Disagree Strongly	**N**	74	37	**111**
	%	14.2	6.3	**10.1**
Total	**N**	520	584	**1104**
	%	100.0	100.0	**100.0**

***x²* = 48.534, *df* = 3, *p* = .000**

In order to find the relationship between the marital status of the participants and their responses to the statement “These are the best years of my life”, Chi-Square analysis was conducted. The results determined that there is a statistically significant relationship (x^2 = 58.199, df = 3, p = .000). Table J-25 below shows the results of the analysis.

Table J-25: Chi-Square Results for Marital Status and “These Are the Best Years of My Life” (N = 1104).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	43	158	**201**
	%	11.9	21.3	**18.2**
Agree Somewhat	**N**	94	290	**384**
	%	26.0	39.0	**34.8**
Disagree Somewhat	**N**	163	245	**408**
	%	45.2	33.0	**37.0**
Disagree Strongly	**N**	61	50	**111**
	%	16.9	6.7	**10.1**
Total	**N**	361	743	**1104**
	%	100.0	100.0	**100.0**

***x²* = 58.199, *df* = 3, *p* = .000**

Just under two-thirds (60.3%) of the not married participants agree with the statement “These are the best years of my life” (agree strongly = 21.3% and agree somewhat = 39.0%), and that just over one-third of the married participants (37.9%) agree with the statement (agree strongly = 11.9% and agree somewhat = 26.0%). More than expected not married participants agreed with the statement and fewer than expected married participants agreed with the statement. Almost two-thirds of married participants (62.1%) disagreed with the statement (disagree strongly = 16.9% and disagree somewhat = 45.2%), and just over one-third of the not married participants (39.7%) disagreed with the statement (disagree strongly = 6.7% and disagree somewhat = 33.0%). More than expected married participants disagreed with the statement, and fewer than expected not

married participants disagreed with the statement. The results indicate that not married participants are more likely to agree with the statement "These are the best years of my life", and married participants are more inclined to disagree with the statement.

In order to determine if the marital status of females and the marital status of males has an influence on their responses for the statement "These are the best years of my life", Chi-Square analysis was performed for the marital status of each gender. The analyses found that both have a statistically significant relationship with the criterion variable. Tables J-26 and J-27 below show the results.

Table J-26: Chi-Square Results for Marital Status of Females and "These Are the Best Years of My Life" (N = 584).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	26	103	**129**
	%	17.4	23.7	**22.1**
Agree Somewhat	**N**	48	187	**235**
	%	32.2	43.0	**40.2**
Disagree Somewhat	**N**	59	124	**183**
	%	39.6	28.5	**31.3**
Disagree Strongly	**N**	16	21	**37**
	%	10.7	4.8	**6.3**
Total	**N**	149	435	**584**
	%	100.0	100.0	**100.0**

***x²* = 15.623, *df* = 3, *p* = .001**

As shown in Table J-26 above, the marital status of the female participants has a statistically significant relationship with the criterion variable "These are the best years of my life" ($x^2 = 15.623$, $df = 3$, $p = .001$). Two-thirds (66.7%) of the not married female participants agree with this statement compared to about half of the married female participants (49.6%). More than expected not married female participants selected "Agree strongly" or "Agree somewhat" for this statement, while fewer than expected

married female participants chose those responses. Fifty percent of the married female participants disagreed with this statement compared to one-third (33.3%) of the not married female participants. More than expected married female participants selected "Disagree somewhat" or "Disagree strongly" with this statement, and fewer than expected not married female participants selected those responses. The results indicate that the not married female participants are more inclined to perceive that these are the best years of their life; married female participants are more inclined to disagree that these are the best years of their life.

The Chi-Square analysis also showed that there is a statistically significant relationship between the marital status of males and the statement "These are the best years of my life" ($x^2 = 29.901$, $df = 3$, $p = .000$). Table J-27 shows the details of the analysis.

Table J-27: Chi-Square Results for Marital Status of Males and "These Are the Best Years of My Life" (N = 520).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	17	55	**72**
	%	8.0	17.9	**13.8**
Agree Somewhat	**N**	46	103	**149**
	%	21.7	33.4	**28.7**
Disagree Somewhat	**N**	104	121	**225**
	%	49.1	39.3	**43.3**
Disagree Strongly	**N**	45	29	**74**
	%	21.2	9.4	**14.2**
Total	**N**	212	308	**520**
	%	100.0	100.0	**100.0**

***x²* = 29.901, *df* = 3, *p* = .000**

As shown in Table J-27 above, slightly more than half (51.3%) of the not married male participants agree with the statement "These are the best years of my life" (agree

strongly = 17.9% and agree somewhat = 33.4%), while less than a third (29.7%) of the married males agree with the statement (agree strongly = 8.0% and agree somewhat = 21.7%). The results of the Chi-Square analysis reveal that more than expected not married male participants selected "Agree strongly" and "Agree somewhat", while fewer than expected married male participants selected those responses. A majority (70.3%) of the married male participants disagreed with the statement; while less than half (48.7%) of the not married male participants disagreed with the statement. More than expected married male participants selected "Disagree strongly" and "Disagree somewhat", while fewer than expected not married male participants selected those responses. Therefore, the not married male participants are more likely to perceive that "These are the best years of their life" compared to the married male participants.

In order to find the relationship between income levels of the participants (predictor variable) and their response to "These are the best years of my life" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by quartiles showed that there is no statistically significant relationship between this predictor variable and the criterion statement (F = .808, df = 3, 670, p = .489). The results of the ANOVA using income categorized by thirds also showed that there is no statistically significant relationship between this predictor variable and the criterion statement (F = 1.161, df = 2, 671, p = .314). The ANOVA analysis indicates that the income level of the participants does not have an impact on whether or not the participants perceive "These are the best years of my life".

In summary, the statistical analysis determined that the predictor variables which have an influence on the participants' responses to the statement "These are the best years

of my life" are age (by category and by decade), which showed that the older the participant the more likely they are to agree with the statement; gender, which showed that female participants are more likely to agree with the statement; marital status, which showed that not married participants are more likely to agree with the statement; the marital status of females, which showed that not married females are more likely to agree with the statement; and the marital status of males, which showed that not married men are more likely to agree with the statement. The income levels of the participants did not prove to have an influence on how the participants responded to the statement "These are the best years of my life".

d. *"Life Satisfaction Variable"*

In analyzing each of the three criterion variables that relate to the life satisfaction of the participants: "As I grow older things seem better than I thought they would be"; "As I look back on my life I am fairly well satisfied"; and "These are the best years of my life", it was discovered that the most consistent predictor variables that influenced the participants' responses for all three criterion variables are gender, marital status and income level. For two of the three questions, "As I look back on my life I am fairly well satisfied" and "These are the best years of my life", the predictor variable of age of the participant was found to have an influence on the responses. The predictor variable of income was found to be statistically significant with two of the criterion variables: "As I grow older things seem better than I thought they would be"; and "As I look back on my life I am fairly well satisfied".

As described in the Methodology section above, in order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions were combined to create the "Life Satisfaction" criterion variable. This variable was analyzed with each of the predictor variables to determine which one has a significant relationship with "Life Satisfaction" scale.

For the "Life Satisfaction" scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the "Life Satisfaction" composite variable the response "Strongly agree" is scored a "1", and "Somewhat agree" is scored a "2", while "Strongly disagree" is scored a "3" and "Somewhat disagree" is scored a "4". Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction.

In order to determine if the predictor variable of age has a relationship with the composite criterion variable "Life Satisfaction", an analysis of variance (ANOVA) was conducted with both age variables. The results of the analysis determined that there is a statistically significant relationship with age by category (young, middle-age, and old) with "Life Satisfaction" (F = 17.896, df = 2, 1089, p = .000). Table J-28 shows the results of the analysis.

Table J-28: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Life Satisfaction" (N = 1092).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	497	7.5433	1.73514
Middle-Age (40-64)	399	7.0802	1.78029
Old (65 +)	196	6.6990	1.86910
Total	1092	7.2225	1.80358

***F* (2, 1089) = 17.896, *p* = .000**

As shown in Table J-28 above, participants in the old category have the lowest mean score, which indicates that participants sixty-five and older have higher life satisfaction than participants sixty-four and younger. Participants in the middle-age category have a lower mean score than the participants in the young category. Therefore the analysis indicates that the participants under age forty have the lowest life satisfaction compared to participants age forty and older. The Scheffe Post Hoc results show that there is a significant difference between the old category and the middle-age category (p = .049) and there is also a significant difference between the old category and the young category (p = .000). There is also a significant difference between the middle-age category and the young category (p = .001). Therefore, the ANOVA results indicate that the older the participant the more likely they are to perceive having a higher life satisfaction.

ANOVA was also conducted using age categorized by decade (teens, twenties, thirties, etc.). It was determined that there is a significant relationship between age by decade and "Life Satisfaction" (F = 6.368, df = 8, 1083, p = .000) as seen in Table J-29 below.

Table J-29: ANOVA Mean Scores for Age by Decades and "Life Satisfaction" Scale (N = 1092).

Variable	N	Mean	SD
Age by Decades:			
Teens	40	7.4250	1.67772
Twenties	246	7.6138	1.82311
Thirties	211	7.4834	1.64272
Forties	201	7.2040	1.69209
Fifties	130	7.0385	1.76268
Sixties	152	6.7368	1.84045
Seventies	88	6.8295	1.93706
Eighties	21	6.6667	2.08167
Nineties	3	3.3333	.57735
Total	1092	7.2225	1.80358

***F* (8, 1083) = 6.368, *p* = .000**

As shown in Table J-29 above, in general the mean scores decrease as the age becomes older indicating that the older the participant the more likely they are to perceive having a higher satisfaction with life. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of participants in their nineties and the thirties (p = .040) and between the nineties and the twenties (.027). There is also a significant difference between the mean scores of participants in their sixties and the thirties (p = .047) and the sixties and the twenties (p = .003). Therefore, the older the participant the more likely she or he perceives having a higher life satisfaction.

In order to find a relationship between gender and "Life Satisfaction", an Independent Samples T-Test was conducted. The results showed that there is a statistically significant relationship between gender and "Life Satisfaction" (t = 6.930, df = 1090, p = .000) as shown in Table J-30 below.

Table J-30: Mean Scores for Gender and "Life Satisfaction" Scale (N=1092).

	Males (n=513)	**Females (n=579)**
"Life Satisfaction"	*Mean* = 7.6160, *SD* = 1.79155	*Mean* = 6.8739, *SD* = 1.74290

***t* = 6.930, *df* = 1090, *p* = .000**

As shown in Table J-30 above, the mean score for female participants (6.8739) is lower than the mean score for male participants (7.6160) indicating that female participants perceive having a higher life satisfaction than male participants.

An Independent Samples T-Test was also conducted in order to determine if the predictor variable of marital status has a relationship with the criterion variable "Life Satisfaction". The results of the analysis show that there is a statistically significant

relationship (t = 6.810, df = 1090, p = .000). Table J-31 below shows the results of the T-Test.

Table J-31: Mean Scores for Marital Status and "Life Satisfaction" Scale (N=1092).

	Married (n=357)	**Not Married (n=735)**
"Life Satisfaction"	*Mean* = 7.7451, *SD* = 1.80028	*Mean* = 6.9687, *SD* = 1.75094

***t* = 6.810, *df* = 1090, *p* = .000**

The results indicate that the difference between the means is statistically significant. Not married participants have a lower mean score on the "Life Satisfaction" scale (6.9687) than married participants (7.7451). According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive is the life satisfaction of the participants. Since the mean scores are more positive for the not married participants, they perceive themselves as having more life satisfaction.

In order to determine if there is a relationship between the marital status of the female participants and the marital status of the male participants with the "Life Satisfaction" scale, an Independent T-Test was conducted using both predictor variables. The results for both indicate that there is a statistically significant relationship between the marital status of female participants and "Life Satisfaction" (t = 3.79, df = 577, p = .001), as well as a statistically significant relationship with the marital status of male participants and "Life Satisfaction" (t = 4.420, df = 511, p = .000).

Table J-32 below shows the results of the T-Test with the marital status of females and "Life Satisfaction".

Table J-32: Mean Scores for Marital Status of Females and "Life Satisfaction" Scale (N=579).

	Married Females (n=147)	**Not Married Females (n=432)**
"Life Satisfaction"	*Mean* = 7.3401, *SD* = 1.81129	*Mean* = 6.7153, *SD* = 1.69206

***t* = 3.79, *df* = 577, *p* = .001**

As Table J-32 shows, not married female participants have a significantly lower mean score on the "Life Satisfaction" scale (6.7153) than married female participants (7.3401). According to the "Life Satisfaction" scale scoring, the lower the scores, the more positive is the life satisfaction of the participants. Since the mean score is lower for the not married female participants, they perceive themselves as having more life satisfaction than married female participants.

Table J-33 below shows the results of the T-Test with the marital status of males and "Life Satisfaction".

Table J-33: Mean Scores for Marital Status of Males and "Life Satisfaction" Scale (N=513).

	Married Males (n=210)	**Not Married Males (n=303)**
"Life Satisfaction"	*Mean* = 8.0286, *SD* = 1.74146	*Mean* = 7.3300, *SD* = 1.77267

***t* = 4.420, *df* = 511, *p* = .000**

As Table J-33 shows, not married male participants have a significantly lower mean score on the "Life Satisfaction" scale (7.33) than married male participants (8.0286). According to the "Life Satisfaction" scale scoring, the lower the mean scores, the higher the life satisfaction of the participants. Since the mean score is lower for the not married male participants, they perceive themselves as having more life satisfaction.

In order to determine if level of income of the participants has a relationship with the "Life Satisfaction" scale a simple ANOVA was conducted using both groupings of the

income variable, by thirds and by quartiles. The analysis shows that income by thirds has a statistically significant relationship with the "Life Satisfaction" scale (F = 4.026, df = 2, 667, p = .018); and also that income by quartiles has a statistically significant relationship with the "Life Satisfaction" scale (F = 3.540, df = 3, 666, p = .014).

The results of the ANOVA using income by thirds are displayed in Table J-34 below.

Table J-34: ANOVA Mean Scores for Income by Thirds and "Life Satisfaction" (N = 670).

Variable	N	Mean	SD
Income by Quartiles:			
Low	232	7.3362	1.86767
Medium	170	7.4588	1.84329
High	268	6.9963	1.71684
Total	670	7.2313	1.81059

***F* (2, 667) = 4.026, *p* = .018**

As can be seen in Table J-34, the high income level has the lowest mean score. According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive the participants' perception of their life satisfaction. Participants with a high income level have low mean scores which indicate that they perceive having more life satisfaction. The higher mean scores indicate that participants have lower life satisfaction. The Scheffe Post Hoc Test results show that there is a significant difference between the mean score of the high income level and the mean score for the medium income level (p = .033). The ANOVA analysis using income by thirds indicates that the higher the income level of the participants the more they perceive having greater life satisfaction.

Table J-35 below shows the ANOVA results of the income by quartiles and the "Life Satisfaction" scale.

Table J-35: ANOVA Mean Scores for Income Quartiles and "Life Satisfaction" (N = 670).

Variable	N	Mean	SD
Income by Quartiles:			
Low	232	7.3362	1.86767
Low Med	170	7.4588	1.84329
High Med	123	7.1870	1.57516
High	145	6.8345	1.81817
Total	670	7.2313	1.81059

***F* (3, 666) = 3.540, *p* = .014**

As can be seen in Table J-35, the higher the income level of the participants, the lower the mean score. According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive participants perceive their life satisfaction. Participants with higher income levels have lower mean scores which indicate that they perceive having more life satisfaction. The higher mean scores indicate that participants have lower life satisfaction. The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low-medium income level ($p = .025$). The ANOVA analysis results using income by quartiles indicates that the higher the income level of the participants the more they perceive having better life satisfaction.

In summary, the each of the predictor variables of age, gender, marital status, and income levels have a significant relationship with the "Life Satisfaction" scale. The older the participant the more they perceive having greater life satisfaction. Females have higher life satisfaction than male participants. Not married participants are more likely to perceive having better life satisfaction than married participants; similarly for not married female participants and not married male participants who express having more life

satisfaction than their married counterparts. Participants with higher income levels report having more life satisfaction than participants with medium and lower income levels.

3. Perceptions of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite variable that contains five items that refer to quality of life for oneself. The five items are: (1) not having enough money to live on; (2) having poor health; (3) level of loneliness; (4) fear of crime; and (5) often feeling sad or blue. Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is: 'a very serious problem = 1, 'a somewhat serious problem = 2', or 'not a problem at all for you personally = 3'". According to this "Quality of Life for Self" scale, the higher the score (not a problem at all for you personally) the more positive the perception of quality of life for self. The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is - "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75: (1) decisions or choices that you make during your lifetime; (2) decisions made by others that are beyond your control; (3) genetic or inherited factors; or (4) blind luck?". Each of these two variables, "Quality of Life for Self" and "Locus of Control" was analyzed using each of the predictor variables of age, gender, marital status, and income.

a. "Quality of Life for Self" Variable

In order to determine the relationship between the participants' perception of quality of life for themselves and the predictor variables of age, gender, marital status and income, statistical analysis was performed using each of these variables with the criterion composite variable of "Quality of Life for Self". The statistical analysis determined that the predictor variables which have a significant relationship with "Quality of Life for Self" are age by decade, marital status, marital status of males, and income levels. The results are discussed below.

In order to determine if age has a significant relationship with the "Quality of Life for Self" composite variable an Analysis of Variance was conducted. The results showed that there is no statistically significant relationship between "Quality of Life for Self" and age by category (F = 512, df = 2, 1098, p = .600), however there is a statistically significant relationship with age by decade (F = 2.041, df = 8, 1092, p = .039) as seen in Table J-36 below.

Table J-36: ANOVA Mean Scores for Age by Decades and "Quality of Life for Self" Scale (N = 1101).

Variable	N	Mean	SD
Age by Decades:			
Teens	41	12.4390	2.04999
Twenties	252	12.9524	1.75766
Thirties	214	13.0841	1.63943
Forties	205	13.1561	1.40204
Fifties	128	12.7891	1.89758
Sixties	150	13.2333	1.64017
Seventies	87	12.8276	1.65098
Eighties	21	12.7619	1.72930
Nineties	3	14.6667	.57735
Total	1101	13.0073	1.68306

***F* (8, 1092) = 2.041, *p* = .039**

According to the "Quality of Life for Self" scale, the higher the score the more positive the perception of quality of life for self. Table J-36 shows that in general the older the participant the higher the mean score, which indicates that older participants perceive having a better quality of life than younger participants. These results indicate that older participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas younger participants are more likely to answer that these issues are a serious problem for themselves.

The Scheffe Post Hoc Test shows that there are no significant differences between any of the age decades. However, the ANOVA results show that there is a statistically significant relationship between age by decade and the "Quality of Life for Self" criterion variable; older participants are more likely to perceive having a better quality of life compared to younger participants.

In order to determine if there is a relationship between the predictor variable gender and the composite criterion variable of "Quality of Life for Self" an Independent Samples T-Test was performed. It was determined that there is no statistically significant relationship between these two variables (t = -1.175, df = 1099, p = .240).

A T-Test was also conducted to determine if the marital status of participants has a relationship with "Quality of Life for Self" variable. The results show that there is a statistically significant relationship between these two variables (t = -3.552, df = 664.884, p = .000) as shown in Table J-37 below.

Table J-37: Mean Scores for "Quality of Life for Self" Scale and Marital Status (N=1101).

	Married (n=363)	**Not Married (n=738)**
"**Quality of Life for Self**"	*Mean* = 12.7438, *SD* = 1.77550	*Mean* = 13.1369, *SD* = 1.62125

***t* = -3.552, *df* = 664.884, *p* = .000**

As shown in the table above, the mean scores are higher for not married participants (13.1369) and lower for married participants (12.7438). According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Participants with lower mean scores indicate that they have a less positive perception of their quality of life. Therefore, as shown in the table above, not married participants have a higher mean score which indicates that not married participants in this study perceive themselves as having a more positive perception of their quality of life compared to the married participants whose "Quality of Life" mean scores are lower and indicates they perceive having a less positive quality of life. These results indicate that not married participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas married participants are more likely to answer that these issues are a serious problem for themselves.

In order to determine if the marital status of female participants and the marital status of male participants have a relationship with the criterion variable of "Quality of Life for Self" Independent Sample T-Tests were performed. The results show that there is no statistically significant relationship between the marital status of female participants and the "Quality of Life for Self" variable (t = -1.919, df = 587, p = .055), however there is a

statistically significant relationship between the marital status of male participants and the "Quality of Life for Self" variable (t = -2.905, df = 405.767, p = .004) as shown in Table J-38 below.

Table J-38: Mean Scores for "Quality of Life for Self" Scale and the Marital Status of Males (N=512).

	Married Males (n=208)	**Not Married Males (n=304)**
"**Quality of Life for Self**"	*Mean* = 12.6635, *SD* = 1.89385	*Mean* = 13.1349, *SD* = 1.66251

***t* = -2.905, *df* = 405.767, *p* = .004**

As shown in the table above, the mean score is higher for the not married male participants and lower for the married male participants. According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, as shown in the table above, not married male participants have a higher mean score which indicates that not married male participants in this study perceive themselves as having a more positive perception of their quality of life compared to the married male participants whose "Quality of Life" mean score is lower, which indicates they perceive having a less positive quality of life. These results indicate that not married male participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas married male participants are more likely to answer that these issues are a serious problem for themselves.

In order to determine if the income level of the participants influence their perception of the quality of life for themselves, a simple Variance of Analysis (ANOVA)

was performed. The results indicate that income levels do have a statistically significant relationship with the "Quality of Life for Self" variable. Table J-39 below shows the results for income categorized by quartile.

Table J-39: ANOVA Mean Scores for Income by Quartiles and "Quality of Life for Self" Scale (N = 672).

Variable	N	Mean	SD
Income by Quartiles:			
Low	231	12.7100	1.71891
Low-Medium	172	12.9070	1.84884
High-Medium	124	13.0403	1.63000
High	145	13.4138	1.44138
Total	672	12.9732	1.69839

***F* (3, 668) = 5.357, *p* = .001**

As shown in Table J-39, there is a statistically significant relationship between income by quartiles and the "Quality of Life for Self" composite variable income by quartiles ($F = 5.357$, $df = 3, 668$, $p = .001$). The mean scores become increasing higher the higher the income level of the participants. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Lower mean scores indicate that participants have a less positive perception of their quality of life. Therefore, as shown in the table above, participants with higher levels of income which indicates that they perceive themselves as having a more positive perception of their quality of life compared to the participants with lower levels of income. Participants with lower levels of income have lower "Quality of Life" mean scores which indicate they perceive having a less positive quality of life. The Scheffe Post Hoc Test shows that there is a significant difference between the mean scores of the high level of income and the low level of income ($p =$ 001). These results indicate that participants with higher levels of income consider the

quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas participants with lower levels of income are more likely to answer that these issues are a serious problem for themselves.

The results of the ANOVA using income by thirds also showed that there is a statistically significant relationship between this predictor variable and the "Quality of Life for Self" scale (F = 6.366, df = 2, 669, p = .002). Table J-40 below shows the results of the income by thirds analysis.

Table J-40: ANOVA Mean Scores for Income by Thirds and "Quality of Life" Scale (N = 672).

Variable	N	Mean	SD
Income by Quartiles:			
Low	231	12.7100	1.71891
Medium	172	12.9070	1.84884
High	269	13.2416	1.53964
Total	672	12.9732	1.69839

***F* (2, 669) = 6.366, *p* = .002**

As shown in Table J-40 above, the higher the income level of the participants, the higher the mean score. According to the "Quality of Life for Self" scale scoring, the higher the mean scores, the more positive the perception of quality of life for self of the participants. Lower mean scores indicate that participants have a less positive perception of their quality of life. Therefore, participants with a high income level have the most positive perception of "Quality of Life for Self", and participants with a low income level have the least positive perception of "Quality of Life for Self". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income level (p = .002). The ANOVA

results indicate that the higher the income level of participants the more they consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas lower income participants are more likely to perceive that these issues were a serious problem for themselves.

In summary, the predictor variables that influence how the participants in Japan perceive their quality of life for themselves are age by decade, marital status, including the marital status of males, and income. Older participants perceive having a more positive quality of life than younger participants. Not married participants perceive having a more positive quality of life than married participants, and not married male participants perceive having a more positive quality of life than married male participants. Participants with higher levels of income perceive having a more positive quality of life than participants with lower levels of income.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75: 'Decisions or choices that you make during your lifetime'; 'Decisions made by others that are beyond your control'; 'Genetic or inherited factors'; or 'Blind luck'? Table J-41 below displays the frequencies of responses.

Table J-41: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=1037).

	Number	%
Decisions made by others	649	62.6
Blind luck	143	13.8
Decisions or choices made by you	140	13.5
Genetic or inherited factors	105	10.1

The majority of the participants in Japan (86.5%) perceive that the quality of their life at age 75 will be determined by factors beyond their control: almost two-thirds (62.6%) perceive that the control over the quality of their life at age 75 will be decided by others, 13. 8% believe that blind luck will determine the quality of their life at age 75; and 10.1% of the participants believe that genetic or inherited factors will determine the quality of their life at age 75. Only 13.5% of the Japanese participants perceive that the quality of their life at age 75 will be determined by decisions or choices made by themselves.

In order to determine if the predictor variables of age, gender, marital status, and income levels have a significant relationship with the "Locus of Control" criterion variable, Chi-Square analysis was conducted. The analysis shows that age, gender, marital status and the marital status of males have a statistically significant relationship with the "Locus of Control" criterion variable. The Chi-Square analysis showed that income levels do not have a significant relationship with this criterion variable.

The results of the Chi-Square analysis proves that the predictor variable of age has a significant relationship with the criterion variable of "Locus of Control" for both age variables, age by category (young, middle-age, and old) and age by decades (teens, twenties, thirties, etc.). Table J-42 below shows the results of the analysis using age by category.

Table J-42: Chi-Square Results for Age: Young, Middle-Age, and Old with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=1037).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 91	
Decisions made by others	**N**	296	251	102	**649**
	%	60.4	66.4	60.4	**62.6**
Blind Luck	**N**	60	49	34	**143**
	%	12.2	13.0	20.1	**13.8**
Decisions or choices made by you	**N**	84	39	17	**140**
	%	17.1	10.3	10.1	**13.5**
Genetic or inherited factors	**N**	50	39	16	**105**
	%	10.2	10.3	9.5	**10.1**
Total	**N**	490	378	169	**1037**
	%	100.0	100.0	100.0	**100.0**

***x²* = 16.553, *df* = 6, *p* = .011**

As shown above, there is a statistically significant relationship found between age by category of young, middle-age, and old and the "Locus of Control" variable (x^2 = 16.553, df = 6, p = .011). The majority of all three of the age categories selected "Decisions or choices made by others", 60.4 percent of the young, 66.4 percent of the middle-age, and 60.4 percent of the old. More than expected middle-age participants selected "Decisions made by others", and fewer than expected young and old participants selected that response. One-fifth of the old participants (20.1%) selected blind luck; more than expected old participants selected this response, while fewer than expected young and middle-age participants selected this response. Less than one-fifth of the young participants (17.1%) selected "Decisions or choices made by themselves"; more than expected young participants selected that response and fewer than expected middle-age and old participants selected that response. The results of this analysis indicate that the majority of all age categories perceive that the quality of their lives at age 75 will be

determined by decisions beyond their control. The second most selected response for the young participants (18 – 39) is "Decisions made by you" (17.1%). The second most selected response for middle-age and older participants is "Blind luck". Therefore, most of the participants in Japan perceive that they do not have direct control over the quality of their lives at age 75. A small percentage of young participants perceive that decisions made by them will determine the quality of their lives at age 75.

Chi-Square analysis determined that there is also a statistically significant relationship between age categorized by decade and the "Locus of Control" variable (x^2 = 45.617, df = 24, p = .005) as shown in Table J-43 below.

Table J-43: Chi-Square Results for Age: Decades with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=1037).

		Age: Decades									Total
		<20s	20s	30s	40s	50s	60s	70s	80s	90s	
Decisions made by others	**N**	23	137	136	140	78	82	43	9	1	**649**
	%	60.5	55.2	66.7	70.4	62.9	63.6	55.8	56.3	50.0	**62.6**
Blind Luck	**N**	5	31	24	20	17	26	17	2	1	**143**
	%	13.2	12.5	11.8	10.1	13.7	20.2	22.1	12.5	50.0	**13.8**
Decisions/choices made by you	**N**	6	53	25	17	18	8	8	5	0	**140**
	%	15.8	21.4	12.3	8.5	14.5	6.2	10.4	31.3	.0	**13.5**
Genetic or inherited factors	**N**	4	27	19	22	11	13	9	0	0	**105**
	%	10.5	10.9	9.3	11.1	8.9	10.1	11.7	.0	.0	**10.1**
Total	**N**	38	248	204	199	124	129	77	16	2	**1037**
	%	100	100	100	100	100	100	100	100	100	**100**

***x²* = 45.617, *df* = 24, *p* = .005**

By categorizing the participants' ages into decades, more details regarding the shift of perceptions between the ages can be seen. As in the analysis using the age categories of young, middle-age, and old, Table J-43 shows that the highest percentage of participants (62.6%) selected "Decisions or choices made by others". In general, the

percentages within each decade increases from the teens through the forties, then decreases through the nineties. This illustrates a directional flow that was shown in Table J-42; the young participants (18 – 39) begin to perceive that their quality of life at age 75 will be determined by decisions made by others that are beyond their control. After age 49, participants begin to perceive that this is less likely. However, the percentages within each age decade remains above fifty percent indicating that participants in Japan strongly perceive that the quality of their life at age 75 will be determined by others that are beyond their control. The second most selected response is "Blind luck", although considerably less than the first, with a 48.8 percent difference. The directional flow indicates that participants age fifty and older are more likely than younger participants to perceive that blind luck will determine the quality of their life at age 75. The directional flow of the participants in their teens through their forties indicates that they are less likely to perceive blind luck will determine the quality of their life at age 75 compared to older participants. In general, participants in their teens through their thirties are more likely than participants in their sixties and older to perceive that decisions made by themselves will determine the quality of life at age 75. The results of the analysis shows that while most of the participants over all perceive that decisions made by others that are beyond their control will determine the quality of their life at age 75, there are differences among the age decades. Older participants are more likely to perceive that blind luck will determine the quality of their life at age 75, whereas younger participants are more likely to perceive that decisions made by themselves will determine the quality of their life at age 75.

In addition to the age of the participants, gender also has a significant relationship with the criterion variable of "Locus of Control" ($x^2 = 14.573$, $df = 3$, $p = .002$), as shown in Table J-44 below.

Table J-44: Chi-Square Results for Gender and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=1037).

		Gender		
		Male	**Female**	**Total**
Decisions made by others	**N**	279	370	**649**
	%	57.6	66.9	**62.6**
Blind Luck	**N**	83	60	**143**
	%	17.1	10.8	**13.8**
Decisions/choices made by you	**N**	76	64	**140**
	%	15.7	11.6	**13.5**
Genetic or inherited factors	**N**	46	59	**105**
	%	9.5	10.7	**10.1**
Total	**N**	484	553	**1037**
	%	100.0	100.0	**100.0**

***x²* = 14.573, *df* = 3, *p* = .002**

As shown in Table J-44 above, a higher percentage of female participants (66.9%) than male participants (57.6%) selected "Decisions made by others". The results of the Chi-Square analysis also showed that more than expected female participants selected "Decisions made by others" and fewer than expected male participants chose that response. A higher percentage of male participants (17.1%) than female participants (10.8%) selected "Blind luck". More than expected male participants chose "Blind luck", and fewer than expected female participants chose that response. The results of the analysis also show that a higher percentage of male participants (15.7%) than female participants (11.6%) selected "Decisions or choices made by me", and a higher percentage of female participants (10.7%) than male participants (9.5%) selected "Genetic or inherited factors". Therefore, female participants are more likely to perceive

that their quality of life at age 75 will be determined by decision made by others that are beyond their control or genetic or inherited factors compared to male participants. Although the majority of male participants also perceive that the quality of their life at age 75 will be determined by decisions made by others that are beyond their control they are more likely than female participants to perceive that blind luck and decision made by themselves will determine the quality of their life at age 75.

The Chi-Square analysis also shows that there is a significant relationship between the marital status of the participants and the responses to "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (x^2 = 13.348, df = 3, p = .004). The results of the analysis are shown in Table J-45 below.

Table J-45: Chi-Square Results for Marital Status and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=1037).

		Marital Status		
		Married	**Not Married**	**Total**
Decisions made by others	**N**	203	446	**649**
	%	57.5	65.2	**62.6**
Blind Luck	**N**	46	97	**143**
	%	13.0	14.2	**13.8**
Decisions/choices made by you	**N**	66	74	**140**
	%	18.7	10.8	**13.5**
Genetic or inherited factors	**N**	38	67	**105**
	%	10.8	9.8	**10.1**
Total	**N**	353	684	**1037**
	%	100.0	100.0	**100.0**

***x²* = 13.348, *df* = 3, *p* = .004**

As shown in Table J-45, the majority of both married participants (57.5%) and not married participants (65.2%) selected "Decisions made by others", however a higher percentage of not married participants than married participants selected that response.

More than expected not married participants compared to fewer than expected married participants selected “Decisions made by others”. Higher percentages of married participants (18.7%) compared to not married participants (19.8%) selected “Decisions or choices made by me”. The results of this analysis indicate that while the majority of married and not married participants perceive that the quality of their lives at age 75 will be determined by decisions or choices made by others that are beyond their control, married participants are more likely than not married participants to perceive that decisions or choices made by themselves will determine the quality of their life at age 75.

The Chi-Square analysis also shows that there is a statistically significant relationship between the marital status of male participants and the criterion variable of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” ($x^2 = 9.128$, $df = 3$, $p = .028$). Table J-46 below shows the results of the analysis.

Table J-46: Chi-Square Results for Marital Status of Males and “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” (N=484).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Decisions made by others	**N**	109	170	**279**
	%	52.7	61.4	**57.6**
Blind Luck	**N**	33	50	**83**
	%	15.9	18.1	**17.1**
Decisions/choices made by you	**N**	44	32	**76**
	%	21.3	11.6	**15.7**
Genetic or inherited factors	**N**	21	25	**46**
	%	10.1	9.0	**9.5**
Total	**N**	207	277	**484**
	%	100.0	100.0	**100.0**

$x^2 = 9.128$, $df = 3$, $p = .028$

Table J-46 above shows that more than half of the male participants (57.6%) selected “Decisions made by others” in response to “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?”. However, a higher percentage of not married male participants (61.4%) than married male participants (52.7%) selected that response. More than expected not married male participants selected that response and fewer than expected married male participants selected that response. This indicates that not married male participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions beyond their control than married male participants. A higher percentage of married male participants (21.3%) compared to not married male participants (11.6%) selected “Decisions or choices made by myself”. This indicates that married male participants are more likely than not married male participants perceive that the quality of their life at age 75 will be impacted by decisions or choice made by themselves. The results of this analysis indicates that while the majority of male participants perceive that the quality of their life at age 75 will be determined by factors beyond their control, not married male participants are more likely to agree with that statement. Married male participants are more likely to perceive that they will have more control over the quality of their lives at age 75 than not married male participants.

The Chi-Square analysis using the marital status of female participants with the criterion variable of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” indicates that there is no significant relationship between these two variables ($x^2 = 3.152$, $df = 3$, $p = .369$).

In order to determine if there is a significant relationship between the predictor variable of income levels and the criterion variable of "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" Chi-Square analysis was performed. It was determined that there is no statistically significant relationship between income by quartiles and this "Locus of Control" variable (x^2 = 2.352, df = 9, p = .398). There results also showed that there is no statistically significant relationship between income by thirds and this criterion variable (x^2 = 1.914, df = 6, p = .927).

In summary, almost two-thirds of the participants in Japan perceive that decisions made by others that are beyond their control will determine the quality of their life at age 75. Older participants compared to younger participants are more likely to perceive that decisions made by others will determine the quality of their life at age 75. Female participants are more likely to perceive that their quality of life at age 75 will be determined by others than male participants. Not married participants are more likely to perceive that their quality of life will be determined by decisions made by others compared to married participants; and not married male participants are more likely to perceive this than married male participants. The income levels of the participants has no influence on how the participants perceive the locus of control over the quality of the lives at age 75.

4. Perception of Quality of Life for People Over 65

In order to ascertain how the participants in Japan perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology

section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for others. The five items are: (1) not having enough money to live on; (2) having poor health; (3) level of loneliness; (4) fear of crime; and (5) often feeling sad or blue. Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is: 'a very serious problem = 1, 'a somewhat serious problem = 2', or 'not a problem at all = 3' for most people over 65 personally?". According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine if the participants' perception of the quality of life for people over 65 is influenced by their age, gender, marital status or income level, statistical analysis was performed using each of these predictor variables with the criterion composite variable of "Quality of Life for People Over 65". The statistical analysis determined that the predictor variables which have a significant relationship with "Quality of Life for People Over 65" are age, marital status, marital status of females and of males, and income levels by quartiles. The results are discussed below.

In order to ascertain if the age of the participant has a relationship with the criterion variable of "Quality of Life for People Over 65" Analysis of Variance (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant. The results of the ANOVA analysis of age by category (young, middle-age, old) is statistically significant ($F = 34.516$, $df = 2, 1056$, $p = .000$), as shown in Table J-47 below.

Table J-47: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for People Over 65" Scale (N = 1059).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	499	7.8277	2.05701
Middle-Age (40-64)	383	8.0966	2.31511
Old (65 +)	177	9.4689	2.74491
Total	1059	8.1992	2.34923

***F* (2, 1056) = 34.516, *p* = .000**

As shown in the table above, the mean scores are higher for old participants and lower for young and middle-age participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the Table J-47 above, the older the participant the more inclined they are to have a more positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of the old and the middle-age participants (p = .000) and between the mean scores of the old and the young participants (p = .000). Therefore, the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not very serious problems for people over 65.

There is also a statistically significant relationship between age categorized by decade and the "Quality of Life for People Over 65" criterion variable (F = 11.922, df = 8, 1050, p = .000), as shown in Table J-48 below.

Table J-48: ANOVA Mean Scores for Age by Decades and "Quality of Life for People Over 65" Scale (N = 1059).

Variable	N	Mean	SD
Age by Decades:			
Teens	41	7.6341	1.78544
Twenties	249	7.9157	2.06275
Thirties	209	7.7608	2.10315
Forties	198	7.7980	2.17732
Fifties	123	8.1220	2.21243
Sixties	139	9.2950	2.76744
Seventies	80	9.2625	2.59378
Eighties	18	9.5000	2.77064
Nineties	2	15.0000	.00000
Total	1059	8.1992	2.34923

***F* (8, 1050) = 11.922, *p* = .000**

As shown in Table J-48 above, the trend is that the older the participant the higher the mean score, which indicates that the older the participant the more likely they are to perceive a more positive quality of life for people over 65 than younger participants. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of the participants in their nineties and all of the age decades starting with the fifties ($p<.050$). There is also a significant difference between the mean scores of the participants in their seventies and for the forties, thirties and twenties ($p<.050$); as well as for the mean scores of the participants in their sixties and all the lower decades ($p<.050$). The age by decade analysis shows that the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

In order to determine if gender has a significant relationship with the criterion variable of the "Quality of Life for People Over 65" an Independent Samples T-Test was

conducted. The results indicate that gender does not have a statistically significant relationship with this criterion variable (t = -.263, df = 1057, p = .793).

In order to determine if marital status of the participants has a significant relationship with the criterion variable of "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that marital status does have a statistically significant relationship with this criterion variable (t = -3.268, df = 830.735, p = .001). The results of the analysis are shown in Table J-49 below.

Table J-49: Mean Scores for Marital Status and "Quality of Life for People Over 65" Scale (N=1059).

	Married (n=354)	**Not Married (n=705)**
"**Quality of Life for People over 65**"	*Mean* = 7.8870 *SD* = 2.05690	*Mean* = 8.3560 *SD* = 2.46960

***t* = -3.268, *df* = 830.735, *p* = .001**

As shown in the table above, the mean scores are higher for not married participants and lower for married participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, not married participants have a higher mean score, which indicates that not married participants in this study have a more positive perception of the quality of life for people over 65 compared to married participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Therefore, not married participants in Japan are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a very serious problem for people over 65;

whereas married participants are more likely to answer that these issues are a serious problem.

In order to determine if the marital status of the female participants has a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is a statistically significant relationship with the marital status of female participants and the criterion variable of "Quality of Life for People Over 65" (t = -2.454, df = 360.014, p = .015). Table J- 50 displays the results.

Table J-50: Mean Scores for Marital Status of Females and "Quality of Life for People Over 65" Scale (N=567).

	Married (n=151)	**Not Married (n=416)**
"**Quality of Life for People over 65**"	*Mean* = 7.8609 *SD* = 1.87986	*Mean* = 8.3462 *SD* = 2.55454

***t* = -2.454, *df* = 360.014, *p* = .015**

As shown in Table J-50 above, the mean score for the not married female participants is higher than the mean score for the married female participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, not married female participants have a higher mean score, which indicates that not married female participants in this study have a more positive perception of the quality of life for people over 65 compared to married female participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Therefore, not married female participants in Japan are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling

sad or blue as not a very serious problem for people over 65; whereas married female participants are more likely to answer that these issues are a serious problem.

In order to determine if the marital status of the male participants has a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is a statistically significant relationship with the marital status of male participants and the criterion variable of "Quality of Life for People Over 65" (t = -2.221, df = 490, p = .027). Table J- 51 displays the results.

Table J-51: Mean Scores for Marital Status of Males and "Quality of Life for People Over 65" Scale (N=492).

	Married (n=203)	**Not Married (n=289)**
"**Quality of Life for People over 65**"	*Mean* = 7.9064 *SD* = 2.18367	*Mean* = 8.3702 *SD* = 2.34623

***t* = -2.221, *df* = 490, *p* = .027**

As shown in Table J-51 above, the mean score for the not married male participants is higher than the mean score for the married male participants. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, not married male participants have a higher mean score, which indicates that not married male participants in this study have a more positive perception of the quality of life for people over 65 compared to married male participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65. Therefore, not married male participants in Japan are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not

a very serious problem for people over 65; whereas married male participants are more likely to answer that these issues are a serious problem.

In order to determine if the income levels of participants' influence their perception of the quality of life for people over 65, a simple Variance of Analysis (ANOVA) was performed. The ANOVA results for income by thirds shows that there is no statistically significant relationship between income categorized by thirds and the criterion variable of "Quality of Life for People Over 65" (F = 1.697, df = 2, 647, p = .184). However, the ANOVA results indicate that income categorized by quartiles does have a statistically significant relationship with the criterion variable of "Quality of Life for People Over 65" (F = 2.656, df = 3, 646, p = .048). Table J-52 shows the results below.

Table J-52: ANOVA Mean Scores for Income by Quartiles: Low, Low-Medium, High-Medium, and High, and "Quality of Life for People Over 65" Scale (N = 650).

Variable	N	Mean	SD
Income by Quartile:			
Low	225	8.2622	2.53857
Low-Medium	166	8.5241	2.47827
High-Medium	119	7.7479	2.07984
High	140	8.3786	2.18058
Total	650	8.2600	2.37898

***F* (3, 646) = 2.656, *p* = .048**

As shown in Table J-52 above, the income level with the highest mean score is "Low-Medium" (8.5241) and the income level with the lowest mean score is "High-Medium" (7.7479). According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less

positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the participants in the "Low-Medium" income category have a higher mean score, which indicates that these participants have a more positive perception of the quality of life for people over 65 compared to participants in the "High-Medium" income category whose mean score indicates that they have a less positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results indicate that there is no significant difference between any of the income levels. The ANOVA analysis indicates that participants with a low-medium income level in Japan are more inclined to perceive issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for people over 65; whereas participants with a high-medium income level are more likely to answer that these issues are a serious problem.

In summary, the predictor variables that influence how the participants in Japan perceive the quality of life for people over 65 are age, marital status, the marital status of females and the marital status of males and income levels by quartiles. The older the participant the more likely they are to have a more positive perception of the quality of life for people over 65. Not married participants have a more positive perception of the quality of life for people over 65 than married participants. Not married female participants have a more positive perception on the quality of life for people over 65 than married female participants. Not married male participants have a more positive perception of the quality of life for people over 65 than married male participants. Participants falling within the low-medium income level have a more positive perception of the quality of life for people over 65 than the other income levels.

C. Summary of the Findings on the Predictor Variables

1. Age

The analysis of the data collected in Japan shows that age is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: "What best defines the meaning of old age" variable (age categorized by young, middle-age, and old only); "Respect for People 65 and Over" (age categorized by decades only); "As I look back I am fairly satisfied" variable; "These are the best years of my life" variable; the composite "Life Satisfaction" variable; the composite variable of "Quality of Life for Self" (age categorized by decade only); the "Locus of Control" variable; and the "Quality of Life for People Over 65" composite variable.

However, in the analysis of the Japan data, age was not found to have a significant relationship with one of the criterion variables: "Things are better than they expected them to be".

The studies discussed in the literature review found that age is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults.

The study by Hummert and colleagues found age does affect how different age groups perceive older adults. They found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In the second part of the study, the researchers found that young, middle-aged and elderly adults have many of the same stereotypes of the elderly.

Davis and Douglas examined the relationship between age and life satisfaction and found that there were significant age group and life satisfaction differences (Davis and Douglas, 2004).

A study conducted by Smith and colleagues, which used data on people whose ages ranged from 70 to 103 years old, found that even between groups in their later years, age does play a role in life satisfaction (Smith, Borchelt, Maier, and Jopp, 2002). They found that there are significant differences between the young old and the oldest old regarding their level of life satisfaction.

However, Kite and Blair in their meta-analysis of literature to examine the question of perceptions of older adults stated that age seemed to be less important in determining attitudes toward the elderly than other types of information (Kite and Blare, 1988). Kite and Blair did suggest that the perception of the elderly can be influenced by factors such as type of design used or by the experimental setting (in the lab versus in the field) and that more research was needed to determine which factors influence beliefs and attitudes toward older people. Perhaps this study adds to the body of knowledge and can contribute one more study, conducted in the field, that does show that age is a strong predictor variable.

2. Gender

The analysis of the data collected in Japan shows that gender is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: “What Best Defines the Beginning of Old Age” variable; “Things are better than they expected them to be”; “As I look back I am fairly satisfied”

variable; “These are the best years of my life” variable; the composite “Life Satisfaction” variable; and the “Locus of Control” variable.

However, in the analysis of the Japan data, gender was not found to have a significant relationship with the following criterion variables: “Respect for People 65 and Over”; the “Quality of Life for Self” composite variable; and the “Quality of Life for People Over 65” composite variable.

The results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review.

As discussed in the literature review, Kamilar and colleagues stated studies showed mixed results of gender differences in regards to life satisfaction in old age, with some studies suggesting that males have a higher life satisfaction than females and others having the opposite results (Kamilar, Segal, and Qualls, 2000).

Smith and colleagues found that men reported higher life satisfaction and satisfaction with their own aging compared to women (Smith, Borchelt, Maier, and Jopp, 2002).

In a study by Kite, Deaux and Miele (Kite, Deaux and Miele, 1991), it was found that age does outweigh gender in the stereotypes, or perceptions, of the young and old regarding older adults. The study by Celejewski and Dion also showed that age as a variable was more powerful than gender in predicting stereotypical perceptions of older adults (Celejewski and Dion, 1998).

The study conducted by Canetto, et al, supported their hypothesis that perceptions of aging varied depending on the gender of the target and the age of the respondent (and the age of the target), but not on the gender of the respondent (Canetto, Kaminski and

Felicio, 1995). Their findings indicated that there was no significant effect for respondent gender and perceptions of aging.

McConatha and colleagues found in their study gender plays a major role in the construction of age-related beliefs and practices (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). The authors state that the results of their study support previous findings that cultural factors influence perceptions of age and suggest that further cross-cultural studies include a larger and more varied sample which would provide a more comprehensive understanding of how people of different countries feel about aging.

Antonucci and colleagues examined the influence of gender on social relations in late life in four different countries. However, the one-way analysis of variance was conducted separately by country and revealed no gender differences (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most research on gender differences in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are related to norms in one particular country versus the extent the differences would be found from a comparison among cultures and countries. The authors stated that having data that is similar and comparable would be advantageous in comparing gender difference across cultures. In Chapter 9, the influence of gender on the perceptions of aging and older adults will be compared among all five countries.

In this study of Japan, the gender of the participant did have some influence, but it was not consistent with all the criterion variables.

3. Marital Status

In this study, marital status was a fairly consistent predictor variable influencing the perceptions of aging and older people. Marital status in Japan was found to have a significant relationship with the following criterion variables: “Things are better than they expected them to be”; “As I look back I am fairly satisfied” variable; “These are the best years of my life” variable; the composite “Life Satisfaction” variable; the composite variable “Quality of Life for Self”; the “Locus of Control” variable; and the composite variable “Quality of Life for People Over 65”.

Marital status in Japan was not found to have a significant relationship with the following criterion variables: “What Best Defines Old Age”; and “Respect for people 65 and over”.

The marital status of female participants was found to be a significant predictor variable with the following criterion variables: “As I look back I am fairly satisfied”; “These are the best years of my life” ; the composite “Life Satisfaction” variable; and the composite variable “Quality of Life for People Over 65”. The marital status of female participants was not found to have a significant relationship with the following criterion variables: “What Best Defines Old Age”; and “Respect for People 65 and Over”; “Things are better than they expected them to be”; the composite variable “Quality of Life for Self”; and the “Locus of Control” variable.

The marital status for male participants in Japan was found to have a statistically significant relationship with the following criterion variables: “As I look back I am fairly satisfied” variable; “These are the best years of my life” variable; the composite “Life Satisfaction” variable; the composite variable “Quality of Life for Self”; the “Locus of

Control" variable; and the composite variable "Quality of Life for People Over 65". The marital status of male participants was not found to have a significant relationship with the following criterion variables: "What Best Defines Old Age"; "Respect for people 65 and over"; and "Things are better than they expected them to be".

The literature review did not uncover, and therefore did not discuss, studies focused on the relationship between marital status and the perception of aging and older adults.

4. Income

The analysis of the data collected in Japan shows that income level is a predictor variable influencing the perceptions of aging and older people, particularly in the following criterion variables: the "Life Satisfaction" composite variable; the "Things are better than they expected them to be" (income categorized by quartiles only); "As I look back I am fairly satisfied" variable; the "Quality of Life for Self" composite variable; and the "Quality of Life for People Over 65" composite variable (income categorized by quartiles only).

However, in the analysis of the Japan data, income level was not found to have a significant relationship with the following criterion variables: "What best defines the meaning of old age" variable; "Respect for people 65 and over"; "These are the best years of my life", and the "Locus of Control" variable.

It was expected that income level would have a significant role in the participants' perception of aging and older people, because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003). The findings from an American study of socioeconomic status and

attitudes towards aging showed that participants with lower socioeconomic status hold less optimistic views (Barrett, 2003). And in a cross-cultural study of attitudes towards aging, the researchers concluded that the most significant findings were due to socioeconomic status differences (Slaughter-Defoe, Kuehne, and Straker, 1992). This researcher understands the difference between socioeconomic status and income level and perhaps it is this difference that creates the different findings from this study, which had only income level as a variable, and found that it was not a good predictor of perceptions of aging; compared to the studies that used socioeconomic status as found that it is a good predictor variable.

D. Summary

These findings from the Japan data analysis examining the influence of the predictor variables of age, gender, marital status, and income levels on the perceptions of aging and older adults provide a snapshot of how people of Japan perceive their own aging and that of others. These results will be compared with the results of the other four countries in Chapter 9.

The next chapter discusses the analysis and findings in France.

Chapter 7: Discussion of the Analysis and Findings in France

A. Population Demographics

In order to provide a basis on which to compare demographics across time and across countries, the current relevant demographics are provided (2009 is the most current data available), as well as the relevant demographic information 2000, which is the year the data was collected for this study**.**

1. Current Demographics

Compared to the other four countries of this study, the United States, the United Kingdom, Japan, and the Dominican Republic, France ranks third in regard to population aging. The current demographics for France, for 2009, indicate that people 65 and over in France make up 16.7% of the population; there were 51.6 % of women and 48.4% of men.

Life expectancy in France rose from age 70.7 in 1960-65 to 81.2 in 2005-10. France, like many other countries, is entering an era of hyperaging. The percent of people aged 60 and over in 2007 was 23.2%; this is expected to rise to 31.6% by 2040 (Jackson, R. 2010).

2. Demographics in 2000

The data used for this study was collected in 2000. The participants were sampled to be representative of the population in France at that time. The entire

population of France in 2000 was 59,128, 000; 16.1 percent of the population was 65 and over.

Table F-1 below displays the demographics of the 1004 participants in this study.

Table F- 1: France Participant Demographics (N=1004)

	N	%
Gender:		
Female	525	52.3
Male	479	47.7
Marital Status:		
Married	616	61.4
Not Married	388	38.6
Age:		
Teens	38	3.8
Twenties	214	21.3
Thirties	189	18.8
Forties	174	17.3
Fifties	142	14.1
Sixties	127	12.6
Seventies	93	9.3
Eighties	25	2.5
Nineties	2	.2
Salary Range: (N = 739)		
Less than 4,000 F	22	3.0
4,001 – 6,000 F	53	5.3
6,001 – 8,000 F	75	7.5
8,001 – 10,000 F	116	11.6
10,001 – 12,500 F	90	9.0
12,501 – 15,000 F	125	12.5
15,001 – 20,000 F	122	12.2
20,001 – 25,000 F	75	7.5
25,001 – 40,000 F	46	4.6
40,001 + F	15	1.5

The French participants in this study are 52.3 percent females and 47.7 percent males; 61.4 percent of the total number of participants are married. The ages range from 18 to 93 with almost 44 percent young (39 and younger), 38 percent middle-aged (40 to

64), and almost 18 percent old (65 and older). The mean age is 45 and the median age is 42. The salaries range from below 4,000 Francs to over 40,000 Francs, with the mean range between 12,501 and 15,000 Francs.

These demographics are relevant to the study which analyzes the how age, gender, marital status, and income influence participants' perceptions of aging.

B. Analysis of Data

The survey instrument for this study was designed to collect data that would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions:

1. Perceptions of Aging and Older People;
2. Perceptions of Life Satisfaction for Self;
3. Perceptions of Quality of Life for Self; and
4. Perceptions of Quality of Life for People Sixty-five and Older.

The following is the data analysis of each of the four categories.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people:

a) "In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning, or reaching a specific age"; and

b) “Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people”.

Each question was analyzed using the four predictor variables: age, gender, marital status, and income level.

a. *“In general, which one of the following five things would you say best defines the beginning of old age”*

This question in the survey instrument is intended to provide understanding of the participants’ perceptions of when old age begins. There are five responses to choose from:

(1) “Retirement”;

(2) “Becoming a grandparent”;

(3) “Decline in physical ability”;

(4) “Decline in mental functioning”; and

(5) “Reaching a specific age”.

Table F-2 below displays the frequencies of the responses.

Table F- 2: “Which one of the following five things best defines the beginning of old age”.

	Total (N=970)	
	N	**%**
Decline in physical ability	404	41.6
Decline in mental functioning	239	24.6
Reaching a specific age	154	15.9
Retirement	128	13.2
Becoming a grandparent	45	4.6

According to Table F-2 above, less than half of the participants (41.6 percent) stated that a “decline in physical ability” best defines the beginning of old age; and almost one-fourth (24.6 percent) selected “decline in mental functioning”.

Chi-Square analysis was used to determine which of the predictor variables: age, gender, marital status or income level, influence the participants' perception of when old age begins. Only the predictor variables of age and income by thirds proved to have a significant relationship with the criterion variable of "What best defines the beginning of old age".

In order to determine if the age of the participants has a relationship with the responses to the question "Which one of the following five things would you say best defines the beginning of old age?", Chi-Square analysis was employed using two versions of the age variable, age by category and age by decade. The age by category variable consists of three groupings of age:

(1) young (39 and younger);

(2) middle-age (40 to 64); and

(3) old (65 and over).

Table F-3 below shows the outcome of the Chi-Square analysis for the age by category predictor variable and the criterion variable of what best defines old age.

Table F- 3: Chi-Square Results for Age: Young, Middle-Age, and Old with "Which one of the following five things would you say best defines the beginning of old age" (N=970).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 93	
Decline in physical ability	**N**	172	165	67	**404**
	%	39.3	45.7	39.2	**41.6**
Decline in mental functioning	**N**	88	98	53	**239**
	%	20.1	27.1	31.0	**24.6**
Reaching a specific age	**N**	77	53	24	**154**
	%	17.6	14.7	14.0	**15.9**
Retirement	**N**	74	36	18	**128**
	%	16.9	10.0	10.5	**13.2**
Becoming a grandparent	**N**	27	9	9	**45**
	%	6.2	2.5	5.3	**4.6**
Total	**N**	438	361	171	**970**
	%	100.0	100.0	100.0	**100.0**

***x²* = 25.396, *df* = 8, *p* = .001**

As shown in Table F-3, a statistically significant relationship was found between age category of young, middle-age, and old and what best defines the beginning of old age ($x^2 = 25.396$, $df = 8$, $p = .001$). Participants in the "middle-age" category have the highest percentage (45.7%) of those who selected "Decline in physical ability", while participants in the "young" and "old" category have virtually the same percentage (39%). More than expected "middle-age" participants selected "Decline in physical disability"; while fewer than expected "old" and "young" participants selected that response. Of those who selected "Decline in mental functioning", participants in the "old" category had the highest percentage (31.0%). More than expected "old" and "middle-age" participants selected "Decline in mental functioning" and fewer than expected "young" participants selected that response. A higher percentage of "young" participants selected

"Reaching a specific age" (17.6%), "Retirement" (16.9%), and "Becoming a grandparent" (6.2%) than "middle-age" and "old" participants.

The Chi-Square analysis indicates that while almost half of the participants selected "Decline in physical ability" as the beginning of old age; middle-age participants are more likely to perceive the beginning of old age as a decline in physical ability; old participants are more likely to perceive the beginning of old age as a decline in mental functioning; and young participants are more likely to perceive the beginning of old age as retirement and reaching a specific age.

The second age variable is "age by decade", which categorizes the age of the participants by the decades; such as twenties, thirties, forties, etc. In order to determine if there is a relationship between the more nuanced age variable category of age by decades and the responses to the survey question "Which one of the following five things would you say best defines the beginning of old age", Chi-Square analysis was performed. The analysis determined that there is also a statistically significant relationship between age by decade and what best defines the beginning of old age ($x^2 = 68.214$, $df = 32$, $p = .000$). Table F-4 below displays the results.

Table F- 4: Chi-Square Results for Age: Decades with "Which one of the following five things would you say best defines the beginning of old age" (N=970).

		Age: Decades									Total
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	
Decline in physical ability	**N**	12	82	78	73	69	46	35	9	0	**404**
	%	31.6	38.5	41.7	43.7	52.3	39.0	38.9	39.1	.0	**41.6**
Decline in mental functioning	**N**	1	50	37	47	32	33	31	7	1	**239**
	%	2.6	23.5	19.8	28.1	24.2	28.0	34.4	30.4	50.0	**24.6**
Reaching a specific age	**N**	12	28	37	28	18	16	9	6	0	**154**
	%	31.6	13.1	19.8	16.8	13.6	13.6	10.0	26.1	.0	**15.9**
Retirement	**N**	10	38	26	15	11	16	11	1	0	**128**
	%	26.3	17.8	13.9	9.0	8.3	13.6	12.2	4.3	.0	**13.2**
Becoming a grandparent	**N**	3	15	9	4	2	7	4	0	1	**45**
	%	7.9	7.0	4.8	2.4	1.5	5.9	4.4	.0	50.0	**4.6**
Total	**N**	38	213	187	167	132	118	90	23	2	**970**
	%	100	100	100	100	100	100	100	100	100	**100**

$x^2 = 68.214$, $df = 32$, $p = .000$

As seen in Table F-4, the highest percentage of participants in each of the age decades selected "Decline in physical ability" as the beginning of old age. More than expected participants in their thirties, forties, and fifties selected this response, while fewer than expected participants in the other age decades selected this response. Therefore, participants in their thirties, forties and fifties and more likely to perceive that a decline in physical ability best defines the beginning of old age than participants in the age categories. For the second most selected response "Decline in mental functioning", a higher percent of participants in all the age decades, except participants below the age of twenty, selected that response. Participants below the age of twenty selected "Reaching a specific age" as their second selection. More than expected participants in their forties, fifties, sixties, seventies, eighties and nineties selected "Decline in mental functioning", and fewer than expected participants under the age of fifty selected this response.

Therefore, participants age fifty and older are more likely to perceive that a decline in mental functioning is the beginning of old age.

The Chi-Square analysis determined that there is no statistically significant relationship between the predictor variables of gender(x^2 = 5.992, *df* = 4, *p* = .200), marital status (x^2 = 5.031, *df* = 4, *p* = .284), and income categorized by quartiles (x^2 = 18.686, *df* = 12, *p* = .096).

The analysis did show that there is a statistically significant relationship between income categorized by thirds and the criterion variable of "What best defines the beginning of old age?" (x^2 = 20.497, *df* = 8, *p* = .009). Table F-3 shows the results of the analysis.

Table F- 5: Chi-Square Results for Income Levels: Thirds (Low, Medium, High) with "Which one of the following five things would you say best defines the beginning of old age" (N=717).

		Income Level: Thirds			Total
		Low	**Medium**	**High**	**Total**
Decline in physical ability	**N**	104	82	113	**299**
	%	40.5	38.5	45.7	**41.7**
Decline in mental functioning	**N**	52	59	76	**187**
	%	20.2	27.7	30.8	**26.1**
Reaching a specific age	**N**	50	28	30	**108**
	%	19.5	13.1	12.1	**15.1**
Retirement	**N**	39	31	20	**90**
	%	15.2	14.6	8.1	**12.6**
Becoming a grandparent	**N**	12	13	8	**33**
	%	4.7	6.1	3.2	**4.6**
Total	**N**	257	213	247	**717**
	%	100.0	100.0	100.0	**100.0**

***x*² = 20.497, *df* = 8, *p* = .009**

Table F-5 shows the differences among the three income levels for the responses to the survey question "What best defines the beginning of old age?". For the most frequently selected response "Decline in physical ability", the highest percentage of

participants who selected this response are in the high income level. More than expected participants with a high income level selected this response, while fewer than expected participants with a low and middle income level selected this response, therefore participants with a high income level are more likely to perceive that decline in physical ability best defines the beginning of old age. For the second most frequently selected response each of the income category percentages increases as the income level increases. More than expected participants in the middle and high income level selected this response and fewer than expected participants in the low income category selected this response. Therefore, participants with middle and low income are more likely than participants with low income to perceive that a decline in mental functioning best defines the beginning of old age. More than expected participants with low income selected the other three responses: "Reaching a specific age", "Retirement", and "Becoming a grandparent", while fewer than expected participants with middle and high income selected those responses. Therefore, participants with low income are more likely to perceive that reaching a specific age, retirement, and becoming a grandparent defines the beginning of old age than participants with high income.

The findings for the predictor variable of income by thirds indicate that participants with a higher income are more likely to perceive the definition of the beginning of old age as a physical or mental decline as opposed to participants with lower incomes who are more likely to define the beginning of old age as a specific age.

In summary, the predictor variables that influence how participants define the beginning of old age are age and income by thirds. Participants age fifty and older are more likely to perceive that a decline in mental functioning is the beginning of old age,

and participants with middle and high income are more likely than participants with low income to perceive that a decline in mental functioning best defines the beginning of old age.

b. *"Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to provide an understanding of the participants' perceptions of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three responses:

(1) too much respect;

(2) too little respect; or

(3) just about the right amount respect.

Table F-6 below displays the frequencies of the responses selected by the participants.

Table F- 6: "Do you feel that people over 65 get too much, too little or just about the right amount of respect".

	Total (N=968)	
	N	**%**
Just right amount of respect	470	48.6
Too little respect	413	42.7
Too much respect	85	8.8

Almost half of the participants (48.6%) feel that people over 65 get just about the right amount of respect from younger people and almost forty-three percent (42.7%) feel that people over 65 get too little respect. Not quite ten percent (8.8%) of the participants feel that people over 65 get too much respect.

In order to determine if age, gender, marital status or income influence the participants' perception of respect for older people, Chi-Square analysis was conducted with each of these predictor variables. It was determined that age is the only predictor variable that has a significant relationship to "Do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people". Both age variables, age grouped by category and age grouped by decade, have a statistically significant relationship. Table F-5.

There is a statistically significant relationship between age by category (young, middle-age, old) and "Do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people" ($x^2 = 13.981$, $df = 4$, $p = .007$). Table F-7 displays the results of the Chi-Square analysis using age grouped by category.

Table F- 7: Chi-Square results for Age by Category and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=968).

		Age: Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 93	
Just the Right Amount of Respect	**N**	214	188	68	**470**
	%	49.4	51.1	40.7	**48.6**
Too Little Respect	**N**	194	141	78	**413**
	%	44.8	38.3	46.7	**42.7**
Too Much Respect	**N**	25	39	21	**85**
	%	5.8	10.6	12.6	**8.8**
Total	**N**	433	368	167	**968**
	%	100	100	100	**100**

$x^2 = 13.981$, $df = 4$, $p = .007$

As Table F-7 shows, a higher percentage of middle-age participants (51.1%) selected "Just about the right amount of respect", compared to young (49.4%) and old (40.7%) participants. More than expected middle-age and young participants selected that response, while fewer than expected old participants selected that response.

Therefore, middle-age and young participants are more likely to perceive that people over 65 get just about the right amount of respect from younger people than old participants. Of those participants who selected “Too little respect” the participants in the “old” category have a higher percentage (46.7%) than those in the “young” (44.8%) and those in the “middle-age” (38.3%). More than expected old participants and more than expected young participants selected this response, while fewer than expected middle-age participants selected this response. Therefore, the old and the young participants are more likely to perceive that people over 65 get to little respect from young people than middle-age participants. Young participants have the lowest percentage (5.8%) of those who selected “Too much respect”. More than expected old and middle-age participants selected that response and fewer than expected young participants selected that response. Therefore, young participants are less likely to perceive people over 65 get too much respect from younger people.

This analysis shows that old participants are more likely to perceive that people over 65 get too little respect from young people; middle-age participants are more likely perceive that people over 65 get just about the right amount of respect; and young participants are less likely to perceive that people over 65 get too much respect from young people.

The results of the Chi-square analysis indicate that there is a statistically significant relationship between age by decade and “Do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people” ($x^2 = 31.339$, $df = 16$, $p = .012$). Table F-8 below displays the results of the analysis.

Table F- 8: Chi-Square results for Age by Decade and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=968).

		Age: Decades									Total
		<20s	20s	30s	40s	50s	60s	70s	80s	90s	
Just the Right Amount of Respect	**N**	17	95	102	83	77	49	34	12	1	**470**
	%	45.9	44.8	55.4	50.0	56.2	40.5	38.6	57.1	50.0	**48.6**
Too Little Respect	**N**	19	101	74	65	45	60	43	6	0	**413**
	%	51.4	47.6	40.2	39.2	32.8	49.6	48.9	28.6	.0	**42.7**
Too Much Respect	**N**	1	16	8	18	15	12	11	3	1	**85**
	%	2.7	7.5	4.3	10.8	10.9	9.9	12.5	14.3	50.0	**8.8**
Total	**N**	37	212	184	166	137	121	88	21	2	**968**
	%	100	100	100	100	100	100	100	100	100	**100**

$x^2 = 31.339$, $df = 16$, $p = .012$

As shown in Table F-8, within the "old" category of the age group triad, which includes participant ages 65 and older, the most distinct age decade is the sixties which shows the largest difference between expected and observed counts for "too little respect" and "just about the right amount of respect". More than expected reported that people over 65 get "Too little respect" and fewer than expected stated that people over 65 get "Just about the right amount of respect". It appears that participants in their sixties are the ones that have the mixed response regarding respect for people over 65 for the "old" category according to the Chi-Square analysis using age by category. The results of the analysis using age by decade provide a breakdown of responses within each age group.

The results of the Chi-square analysis for the other predictor variables of gender, marital status and income demonstrated that there is no statistically significant relationship between these predictor variable and the criterion variable "Do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people": Gender: ($x^2 = 3.838$, $df = 2$, $p = 1.47$); Marital Status: ($x^2 = 2.643$, $df =$

2, $p = 0.267$); Income by Quartiles: ($x^2 = 9.983$, $df = 6$, $p = 0.125$); and Income by Thirds: ($x^2 = 8.556$, $df = 4$, $p = 0.073$).

In summary, the only predictor variable that influence how participants perceive respect for people over 65 is age. Participants aged sixty-five and older are more likely to perceive that people over 65 get too little respect from young people; participants aged forty to sixty-four are more likely perceive that people over 65 get just about the right amount of respect; and participants aged eighteen to thirty-nice are less likely to perceive that people over 65 get too much respect from young people.

2. Perception of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are:

(a) "As I grow older things seem better than I thought they would be";

(b) "As I look back on my life I am fairly well satisfied"; and

(c) "These are the best years of my life".

The responses to the questions are Likert Scale scoring:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement.

Each of the three questions is considered a criterion variable and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. *"As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants' perceive their own life as they age compared to what they had imagined it might be. This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement.

Table F-9 below shows the frequencies of the responses.

Table F- 9: "As I grow older things seem better than I thought they would be".

	Total (N=941)	
	N	%
Agree Strongly	169	18.0
Agree Somewhat	361	38.4
Disagree Somewhat	236	25.1
Disagree Strongly	175	18.6

As shown in Table F-9, over half (56.4%) of the participants stated that they agree with this statement, 18 percent agree strongly and 38.4 percent agree somewhat. However, 42 percent of the participants indicate that they disagree with this statement, with 25.1 percent stating that they agree somewhat, and almost 19 percent disagreeing strongly.

Of the predictor variables, age by category (young, middle-age, old) and marital status have a statistically significant relationship with this criterion variable.

A simple one way analysis of variance (ANOVA) was performed to analyze the relationship between the predictor variable of age by category and the criterion variable "As I grow older things seem better than I thought they would be". As Table F-10 below shows, there is a statistically significant relationship between participants' age by category and their responses to "As I grow older things seem better than I thought they would be" ($F = 3.916$, $df = 2, 938$, $p = .020$).

Table F- 10: ANOVA Mean Scores for Age by Category and "As I grow older things seem better than I thought they would be" (N = 941).

Variable	N	Mean	SD
Age Category			
Young (18 – 39)	416	2.42	.96
Middle-age (40 – 64)	356	2.38	.98
Old (65 +)	169	2.63	1.04
Total	941	2.44	.99

***F* (2, 938) = 3.916, *p* = .020**

As shown in Table F-10, the mean score for the middle –age participants is the lowest (2.38) and the mean score for the older group of participants is the highest (2.44). Therefore, the middle-age participants are more likely to agree with the statement and the older participants are more likely to disagree. The lower the mean score indicates that participants are more likely to select the response categories of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". The higher mean scores indicate that participants were more likely to select the categories of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement. Therefore, the middle-age participants are more likely to agree to agree that "As I grow older things seem better than I thought they would be". The Scheffe Post Hoc test indicates that there is a significant difference between the mean scores of middle-age and older (p = .27). These results indicate that middle-age participants are more likely to perceive that as they grow older things seem better than they thought they would be and the young and old participants are more likely to perceive that as they grow older things do not seem better than they thought they would be

The ANOVA analysis using age by decade indicates that there is no significant relationship with this criterion variable (F = .981, df = 8, 932, p= .449).

Chi-Square analysis was performed to analyze the relationship between the predictor variables of gender and marital status. The results of the test proved that there is no significant relationship between gender and this criterion variable (x^2 = 4.014, df = 3, p = .260). The results indicate that the difference between the means is not statistically significant, therefore, in France, being either male or female did not have any influence on the respondents' answers to the statement "As I grow older things seem better than I thought they would be" scale.

The Chi-Square analysis results did show that there is a statistically significant relationship with marital status (x^2 = 7.827, df = 3, p = .050) and this criterion variable. Table F-11 displays the results.

Table F- 11: Chi-Square Results for Marital Status and "As I grow older things seem better than I thought they would be" (N=941).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	113	56	**169**
	%	19.4	15.6	**18.0**
Agree Somewhat	**N**	229	132	**361**
	%	39.3	36.8	**38.4**
Disagree Somewhat	**N**	147	89	**236**
	%	25.3	24.8	**25.1**
Disagree Strongly	**N**	93	82	**175**
	%	16.0	22.8	**18.6**
Total	**N**	582	359	**941**
	%	100.0	100.0	**100.0**

x^2 = 7.827, df = 3, p = .050

As shown in the table above, a higher percentage of married participants (58.7%) agreed with the statement (19.4 percent agreed strongly and 39.3 percent agreed somewhat) compared to not married participants (52.4%). More than expected married

participants agreed with the statement, while fewer than expected not married participants agreed with the statement. A higher percent of not married participants (47.6%) disagreed with the statement compared to 41.3 percent of married participants who disagreed. More than expected not married participants disagreed strongly with the statement, and fewer than expected married participants disagreed strongly. Therefore, this Chi-Square analysis demonstrates that married participants are more inclined to perceive that as they grow older things seem better than they thought they would be", and not married participants are more inclined to disagree with the statement.

The Chi-Square analysis demonstrated that there is no statistically significant relationship between the marital status of female participants ($x^2 = 5.639$, $df = 3$, $p = .131$) and the marital status of male participants ($x^2 = 2.669$, $df = 3$, $p = .445$) with the criterion variable "As I grow older things seem better than I thought they would be".

A simple ANOVA was conducted to determine if there is a relationship between income levels and the criterion variable of "As I grow older things seem better than I thought they would be". The results indicate that there is no statistically significant relationship between income by thirds ($F = .156$, $df = 2,695$, $p = .855$), and no statistically significant relationship with income by quartiles ($F = .519$, $df = 3, 694$, $p = .669$).

In summary, the predictor variables that have been determined to have an influence on the participants' responses to the statement "As I grow older things seem better than I thought they would be", are age and marital status. The results of the analysis show that middle-age participants and married participants are more likely to agree with the statement, while young and old participants and not married participants are more likely

to disagree with the statement. The predictor variables of gender and income do not have a relationship with this criterion variable.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement.

Table F-12 below shows the frequencies of the responses.

Table F- 12: "As I Look Back On My Life I Am Fairly Well Satisfied".

	Total (N=995)	
	N	**%**
Agree Strongly	391	39.3
Agree Somewhat	442	44.4
Disagree Somewhat	106	10.7
Disagree Strongly	56	5.6

Table F-12 above shows that almost 84 percent of the participants agree with this statement (agree strongly = 39.3%, agree somewhat = 44.4%) and just over 16 percent of the participants disagree with "As I look back on my life I am fairly well satisfied". Statistical analysis was conducted to determine if the predictor variables of age, gender,

marital status, and income have an influence on how the participants responded to this statement.

A simple one-way analysis of variance (ANOVA) was employed to determine if age has a significant relationship with this criterion variable. The results determined that there is no statistically significant relationship between the criterion variable and age by category ($F = 2.859$, $df = 2, 992$, $p = .058$) and no statistically significant relationship with age by decade ($F = 1.766$, $df = 8, 986$, $p = .080$).

Chi-Square analysis was conducted to determine if gender has a significant relationship with this criterion variable. It was determined that there is no statistically significant relationship between gender and the statement "As I look back on my life I am fairly well satisfied" ($x^2 = 5.802$, $df = 3$, $p = .122$).

The Chi-Square analysis did show that marital status has a statistically significant relationship with this criterion variable ($x^2 = 10.392$, $df = 3$, $p = .016$). Table F-13 below shows the results of the Chi-Square analysis.

As shown in Table F-13 below, a higher percentage of married participants (86.3%) agreed (41.9 percent agreed strongly and 44.4 percent agreed somewhat) with the statement compared to not married participants (79.6%). More than expected married participants selected "Agree strongly" and fewer than expected not married participants selected that response. A higher percentage of not married participants (20.5%) disagreed with the statement compared to married participants (13.7%). More than expected not married participants selected "Disagree strongly" and "Disagree somewhat" compared to married participants. Therefore, the results indicate that married participants

are more inclined to perceive being well satisfied with their life lived compared to not married participants.

Table F- 13: Chi-Square Results for Marital Status and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 995).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	257	134	**391**
	%	41.9	35.1	**39.3**
Agree Somewhat	**N**	272	170	**442**
	%	44.4	44.5	**44.4**
Disagree Somewhat	**N**	58	48	**106**
	%	9.5	12.6	**10.7**
Disagree Strongly	**N**	26	30	**56**
	%	4.2	7.9	**5.6**
Total	**N**	613	382	**995**
	%	100.0	100.0	**100.0**

$x^2 = 10.392$, $df = 3$, $p = .016$

Chi-Square analysis also showed that there is a statistically significant relationship between the marital status of female participants and this criterion variable ($x^2 = 8.195$, $df = 3$, $p = .042$), as shown in Table F-14 below.

As shown in Table F-14 below, a higher percentage of married female participants (85.3%) agree (44.2 percent agreed strongly and 41.1 percent agreed somewhat) with the statement compared to not married female participants (77.9%). More than expected married female participants agreed with the statement and fewer than expected not married females selected that response. A higher percentage of not married female participants (22%) disagreed with the statement compared to married participants (14.7%). More than expected not married female participants disagreed with the statement and fewer than expected married female participants selected those responses. Therefore, the results indicate that married female participants are more inclined to

perceive being well satisfied with their life lived compared to not married female participants.

Table F- 14: Chi-Square Results for the Marital Status of Female Participants and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 521).

		Marital Status of Female Participants		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	144	73	**217**
	%	44.2	37.4	**41.7**
Agree Somewhat	**N**	134	79	**213**
	%	41.1	40.5	**40.9**
Disagree Somewhat	**N**	36	25	**61**
	%	11.0	12.8	**11.7**
Disagree Strongly	**N**	12	18	**30**
	%	3.7	9.2	**5.8**
Total	**N**	326	195	**521**
	%	100.0	100.0	**100.0**

***x²* = 8.195, *df* = 3, *p* = .042**

The Chi-Square analysis indicated that there is no significant relationship with the predictor variable of the marital status of male participants and this criterion variable "These are the best years of my life" ($x^2 = 4.464$, $df = 3$, $p = .216$).

A simple one-way variance of analysis (ANOVA) was conducted using the predictor variable of income in order to determine if the income levels of the participants has an influence on their responses to the statement "As I look back on my life I am fairly well satisfied". The results of the analysis showed that income by quartiles does not have a significant relationship with the participants' responses to the statement ($F = 1.766$, $df = 3, 729$, $p = .150$). However, income by thirds does have a significant relationship ($F = 3.754$, $df = 2, 730$, $p = .024$) as shown in Table F-15 below.

Table F- 15: ANOVA Mean Scores for Income by Thirds and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 733).

Variable	N	Mean	SD
Income by Thirds:			
Low	263	1.93	.92
Medium	214	1.85	.85
High	256	1.73	.74
Total	733	1.83	.85

***F* (2, 730) = 3.754, *p* = .024**

As shown in Table F-15, as the income levels rise, the mean scores decrease. The participants with a high income level have the lowest mean score (1.73). The lower the mean score indicates that participants with a high income level are more likely to select the response categories of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". Participants with lower income levels have a higher mean score (1.93), which indicates that they are more likely to disagree with the statement. The analysis shows that participants with low or medium income levels have higher mean scores than participants with a high income level. The higher mean scores indicate that participants are more likely to select the categories of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of the participants with low income compared to the mean score of the participants with high income (p = .025). This ANOVA results indicate that the higher the income level of the participants the more likely they are to perceive that as they look back on their life they are fairly well satisfied.

In summary, the predictor variables that were determined to have an influence on how the participants in France responded to the statement "As I look back on my life I

am fairly well satisfied" are marital status, the marital status of female participants, and income by thirds. Married participants, married female participants and participants with a high income level are more likely to agree with the statement. Interestingly, this is the only criterion variable that does not have a significant relationship with age within this French study.

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The responses to the question are Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4" with this statement.

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement.

Table F-16 below shows the frequencies of the responses.

Table F- 16: "These are the best years of my life".

	Total (N=957)	
	N	**%**
Strongly Agree	262	27.4
Agree Somewhat	308	32.2
Disagree Somewhat	214	22.4
Strongly Disagree	173	18.1

As shown in Table F-16, almost 60 percent of the respondents agreed that "these are the best years of my life" (agree strongly = 27.4% and agree somewhat = 32.2%), while

just about 40 percent disagreed with this statement (disagree somewhat = 22.4% and disagree strongly = 18.1%).

In order to determine which of the predictor variables, age, gender, marital status or income levels, have an influence on the participants' responses to this statement statistical analysis was performed.

The age of the participants may be a factor in whether or not the participants perceive that these are the best years of their life. Therefore, a simple one-way analysis of variance (ANOVA) was conducted using both versions of the age variable, by category and by decade. The results show that both types of age groupings have a statistically significant relationship with the criterion variable of "These are the best years of my life". The results of both tests are shown and discussed below.

The ANOVA analysis shows that there is a statistically significant relationship between the predictor variable of age by category (young, middle-age, old) and this criterion variable (F = 36.910, df = 2, 954, p = .000). Table F-17 shows the results of the analysis.

Table F- 17: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "These Are the Best Years of My Life" (N = 957).

Variable	N	Mean	SD
Age Category:			
Young (18 – 39)	422	2.03	.98
Middle-age (40 – 64)	360	2.41	1.06
Old (65 – 93)	175	2.79	1.04
Total	957	2.31	1.06

***F* (2, 954) = 36.910, *p* = .000**

Table F-17 above shows that the mean score of the young category is the lowest (2.03) and the mean score for the old category is the highest (2.79). This survey question "These are the best years of my life" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates the more likely the participants do not agree with the statement. The young age category has the lowest mean score which indicates that the young participants (thirty-nine and younger) are more likely to select responses of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a "2". Old participants (sixty-five and older) have the highest mean score which indicates that they are more likely to select responses of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". These results shown above indicate that the younger the participant the more likely they are to agree with the statement "These are the best years of my life", while the older the participant the more inclined they are to disagree with the statement. The Scheffe Post Hoc Test shows that there is a significant difference between the young and the middle-age participants (p = .000), between the young and old participants (p = .000), and between the middle-age participants (p = .000). Therefore, this analysis shows that the younger the participant the more inclined s/he is to perceive that these are the best years of their life.

The ANOVA findings also show that there is a statistically significant relationship between the predictor variable of age by decades and the criterion variable of "These are the best years of my life" (F = 10.425, df = 8, 948, p = .000). Table F-18 displays the results.

Table F- 18: ANOVA Mean Scores for Age by Decades and "These are the Best Years of My Life" (N = 957).

Variable	N	Mean	SD
Age by Decades:			
Teens	35	1.97	1.04
Twenties	208	1.99	.96
Thirties	179	2.10	.99
Forties	160	2.26	1.08
Fifties	134	2.63	1.03
Sixties	126	2.53	1.06
Seventies	89	2.71	1.05
Eighties	24	3.17	.92
Nineties	2	3.00	1.41
Total	957	2.31	1.06

***F* (8, 948) = 10.425, *p* = .000**

Table F-18 above shows that in general the mean scores increase as the decades increase. The mean score of the participants in their teens is the lowest (1.97) and the mean score of the participants in their eighties is the highest (3.17), which indicates that participants in their teens are more inclined to agree with the statement "These are the best years of my life", while participants in their eighties are more inclined to disagree with the statement. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of the participants in their teens and the mean score of the participants in their eighties (p = .013). There is also a significant difference between the mean scores between participants in their twenties with those in their fifties, sixties, seventies and eighties (p < .01). There is also a significant difference between the mean

scores of participants in their thirties and the mean scores of the participants in their fifties, seventies, and eighties ($p < .01$). There is also a significant difference between the mean score of the participants in their forties and the mean score of the participants in their seventies (.036). These results indicate that the younger the participant the more likely they are to perceive that these are the best years of their life. The older the participant the more likely the participants are to disagree with the statement "These are the best years of my life".

In order to determine if gender has a significant relationship with the statement "These are the best years of my life", Chi-Square analysis was employed. The results show that there is not a statistically significant relationship between the predictor variable of gender and this criterion variable ($x^2 = 3.316$, $df = 3$, $p = .345$).

Chi-Square analysis was used to determine if the marital status of the participants has an influence on whether or not they perceive these are the best years of their life. The results of the analysis showed that there is no statistically significant relationship between predictor variable marital status and this criterion variable ($x^2 = 4.983$, $df = 3$, $p = .173$).

The Chi-Square analysis did however prove that there is a statistically significant relationship with the marital status of female participants and their response to the statement "These are the best years of my life" ($x^2 = 14.052$, $df = 3$, $p = .003$). Table F-19 below displays the results of the analysis.

Table F- 19: Chi-Square Results for the Marital Status of Female Participants and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 500).

		Marital Status of Female Participants		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	99	47	**146**
	%	32.0	24.6	**29.2**
Agree Somewhat	**N**	98	53	**151**
	%	31.7	27.7	**30.2**
Disagree Somewhat	**N**	69	39	**108**
	%	22.3	20.4	**21.6**
Disagree Strongly	**N**	43	52	**95**
	%	13.9	27.2	**19.0**
Total	**N**	309	191	**500**
	%	100.0	100.0	**100.0**

***x²* = 14.052, *df* = 3, *p* = .003**

As shown in Table F-19 above, a higher percentage of married female participants (63.7%) agree (32.0 percent agreed strongly and 31.7 percent agreed somewhat) with the statement compared to not married female participants (52.3%). More than expected married female participants agreed with the statement and fewer than expected not married females selected that response. A higher percentage of not married female participants (47.6%) disagreed with the statement compared to married participants (36.2%). More than expected not married female participants disagreed strongly with the statement and fewer than expected married female participants selected that response. Therefore, the results indicate that married female participants are more inclined to perceive being well satisfied with their life lived compared to not married female participants.

The Chi-Square analysis indicated that there is no significant relationship with the predictor variable of the marital status of male participants and this criterion variable "These are the best years of my life" ($x^2 = 1.191$, $df = 3$, $p = .755$).

In order to determine if the income levels of the participants influence their perception regarding the statement “These are the best years of my life” a simple one-way analysis of variance was conducted (ANOVA). The analysis determined that there is no statistically significant relationship between income level by thirds (F = .525, df = 2, 706, p = .592) and income level by quartiles (F = 1.174, df = 3, 705, p = .319) with the criterion variable. Therefore, it was determined that the income level of the participants does not influence their response to the statement “These are the best years of my life”.

In summary, the predictor variables that were determined to have a significant relationship with criterion variable “These are the best years of my life” are age and the marital status of females. The younger the participant the more likely they are to perceive that these are the best years of their life; and married female participants are more likely than not married female participants are more likely to perceive that these are the best years of their life.

d. “*Life Satisfaction Variable”*

In analyzing each of the three criterion variables that relate to the life satisfaction of the participants:

(4) “As I grow older things seem better than I thought they would be”;

(5) “As I look back on my life I am fairly well satisfied”; and

(6) “These are the best years of my life”,

it was discovered that there was no consistent predictor variables that influenced the participants’ responses for all three criterion variables. However, the age of the participants did influence the responses to two of the variables: “As I grow older things

seem better than I thought they would be"; and "These are the best years of my life". And the marital status of the participants influenced the responses to two of the variables: "As I grow older things seem better than I thought they would be"; and "As I look back on my life I am fairly well satisfied". The marital status of female participants influenced the responses to two of the variables: "As I look back on my life I am fairly well satisfied"; and "These are the best years of my life". The level of income of the participants influenced the responses to one of the variables, "As I look back on my life I am fairly well satisfied". The predictor variable of gender did not prove to have a statistically significant relationship with any of the three criterion variables.

As described in the Methodology section above, in order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions were combined to create the "Life Satisfaction" criterion variable. This variable was analyzed with each of the predictor variables to determine which has a significant relationship with the "Life Satisfaction" scale.

For the "Life Satisfaction" scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the "Life Satisfaction" composite variable the response "Agree strongly" is scored a "1", and "Agree somewhat" is scored a "2", while "Disagree somewhat" is scored a "3" and "Disagree strongly" is scored a "4". Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction.

Statistical analyses was conducted with the predictor variables and the composite "Life Satisfaction" variable. The discussion of the analysis follows.

Conducting a simple one-way analysis of variance (ANOVA) with both age variables demonstrated a statistically significant relationship with "Life Satisfaction". The results of the analysis using age by category (young, middle-age, old) and the composite variable "Life Satisfaction" show that there is a statistically significant relationship (F = 17.499, df = 2, 901, p = .000). The results are shown in Table F- 20.

Table F- 20: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Life Satisfaction" (N = 904).

Variable	N	Mean	SD
Age Category:			
Young (18 – 39)	401	6.20	1.97
Middle-age (40 – 64)	338	6.68	2.02
Old (65 – 93)	165	7.28	2.11
Total	904	6.58	2.05

***F* (2, 901) = 17.499, *p* = .000**

As shown in Table F-20, the older the participant the higher the mean score, young participants have the lowest mean score (6.20) and the old participants have the highest (7.28). For the "Life Satisfaction" scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the "Life Satisfaction" composite variable the response "Agree strongly" is scored a "1", and "Agree somewhat" is scored a "2", while "Disagree somewhat" is scored a "3" and "Disagree strongly" is scored a "4". Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction. The Scheffe Post Hoc test determined that there is a significant difference between the mean scores of the young and the middle-age categories, as well as the young and old categories (p<.01). The Scheffe Post Hoc test also determined that there is a significant difference between the mean scores of the middle-age and old categories (p = .007). Therefore this ANOVA

analysis shows that the younger the participant the more likely they are to perceive having more life satisfaction.

The ANOVA analysis also showed a statistically significant relationship between the predictor variable age by decade with the "Life Satisfaction" criterion variable (F = 4.344, *df* = 8, 895, *p* = .000). The results are shown in Table F- 21.

Table F- 21: ANOVA Mean Scores for Age by Decades and "Life Satisfaction" Scale (N = 904).

Variable	N	Mean	SD
Age by Decades:			
Teens	35	6.09	1.82
Twenties	192	6.19	2.00
Thirties	174	6.29	1.96
Forties	151	6.66	2.04
Fifties	122	6.88	1.92
Sixties	120	6.80	2.21
Seventies	86	7.06	2.04
Eighties	22	7.91	2.04
Nineties	2	8.50	2.12
Total	904	6.58	2.05

***F* (8, 895) = 4.344, *p* = .000**

As shown in Table F-21 above, in general the mean scores increase as the age becomes older indicating that the younger the participant the more likely they are to perceive having a higher satisfaction with life. Participants in their teens have the lowest mean score (6.09) and the participants in their nineties have the highest mean score (8.50). The Scheffe Post Hoc Test results show that there is no significant difference between any of the mean scores of participants ($p > .05$). However, the ANOVA results indicate that the younger the participant the more likely they are to perceive having a higher life satisfaction.

In order to determine if there is a relationship between the predictor variable of gender and "Life Satisfaction", an Independent Samples T-Test was conducted. The results show that there is not a statistically significant relationship between gender and "Life Satisfaction" (t = .693, df = 902, p = 0.488). The results indicate that the difference between the means is not statistically significant Therefore, there is no difference in the way male and female participants responded to the composite variable "Life Satisfaction".

An Independent Samples T-Test was also conducted in order to determine if the predictor variable of marital status has a relationship with the criterion variable "Life Satisfaction". The results showed that there is a statistically significant relationship (t = -3.31, df = 654.93, p = .001). The results are shown in Table F-22.

Table F- 22: Mean Scores for Marital Status and "Life Satisfaction" Scale (N=904).

	Married (n=562)	**Not Married (n=342)**
"Life Satisfaction"	*Mean* = 6.3986, *SD* = 1.94062	*Mean* = 6.8743, *SD* = 2.18606

***t* = -3.31, *df* = 654.93, *p* = .001**

Table F-22 above shows that the mean score for the married participants (6.3986) is lower than the mean score for the not married participants (6.8743). According to the "Life Satisfaction" scale scoring, the lower the mean score, the more positive the life satisfaction of the participants. Therefore, married participants are more likely to perceive having a higher life satisfaction than not married participants.

In order to determine if there is a relationship between the marital status of the female participants and the marital status of the male participants with the "Life Satisfaction" scale, an Independent T-Test was conducted using both predictor variables. The results

for both indicate that there is a statistically significant relationship between the marital status of female participants and “Life Satisfaction” (*t* = -3.752, *df* = 322.12, *p* = .000), but there is no statistically significant relationship between the marital status of male participants and “Life Satisfaction” (*t* = -.795, *df* = 433, *p* = .427).

Table F-23 below shows the results of the T-Test of the marital status of females and “Life Satisfaction”.

Table F- 23: Mean Scores for Marital Status of Females and “Life Satisfaction” Scale (N=469).

	Married Females (n=296)	**Not Married Females (n=173)**
“Life Satisfaction”	*Mean* = 6.2466, *SD* = 1.97698	*Mean* = 7.0231, *SD* = 2.26437

***t* = -3.752, *df* = 322.12, *p* = .000**

Table F-23 above shows that the mean score for the married female participants (6.2466) is lower than the mean score for the not married female participants (7.0231). According to the “Life Satisfaction” scale scoring, the lower the mean scores, the more positive the life satisfaction is of the participants. Therefore, married female participants are more likely to perceive having a higher life satisfaction than not married female participants.

A simple one-way analysis of variance (ANOVA) was conducted using both groupings of the income variable, by thirds and by quartiles, and neither proved to have a statistically significant relationship with the “Life Satisfaction” scale: income by thirds (*F* = 1.985, *df* = 2, 669, *p* = 0.138); and income by quartiles (*F* = 2.075, *df* = 3, 668, *p* = 0.102).

In summary the data analysis using the predictor variables of age, gender, marital status and income with the criterion variable of “Life Satisfaction” demonstrated that age,

marital status, and the marital status of female participants influence how the participants perceive their satisfaction with life. The results showed that the younger the participant the more satisfied with life, married participants are more satisfied than not married participants, and that female participants who are married are more satisfied with life.

3. Perception of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite variable that contains five items that refer to quality of life for oneself. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- "a very serious problem = 1",
- "a somewhat serious problem = 2", or
- "not a problem at all for you personally = 3".

According to this "Quality of Life for Self" scale, the higher the score (such as "not a problem at all for you personally" which equals a 3), the more positive the perception of quality of life for self.

The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

(1) "decisions or choices that you make during your lifetime"

(2) "decisions made by others that are beyond your control"

(3) "genetic or inherited factors" or

(4) "blind luck"?

Each of these two variables, "Quality of Life for Self" and "Locus of Control" was analyzed using each of the predictor variables of age, gender, marital status, and income. Below is the discussion of the results.

a. "Quality of Life for Self" Variable

In order to determine the relationship between the participants' perception of quality of life for themselves and the predictor variables of age, gender, marital status and income level, statistical analysis was performed using each of these variables with the criterion composite variable of "Quality of Life for Self". The results of the analysis are discussed below.

A simple one-way analysis of variance was conducted with both age variables, age by category and age by decade. The results showed that both age variables have a significant relationship with the "Quality of Life for Self" variable. Table F-24 provides the results of the ANOVA using age by category variable (F = 10.514, df = 2, 941, p = .000).

Table F- 24: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for Self" (N = 944).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	428	7.54	2.13
Middle-Age (40-64)	357	7.65	2.29
Old (65 - 93)	159	8.50	2.81
Total	944	7.74	2.34

***F* (2, 941) = 10.514, *p* = .000**

As shown in the table above, the mean score increases as the age increases, the young age category has the lowest mean score (7.54) and the old age category has the highest mean score (8.50). According to this "Quality of Life for Self" scale, the higher the score (such as "not a problem at all for you personally" which equals a 3), the more positive the perception of quality of life for self. Therefore, according to the results of this ANOVA the older the participant the more likely they are to perceive having a better quality of life. The Scheffe Post Hoc test showed that there is a significant difference between the mean score of the young age category and the mean score of the old age category ($p = .000$). There is also a significant difference between the mean score of the middle-age category and the mean score of the old age category ($p = .001$). This result indicates that the older age participants perceive that the quality of life issues of not having enough money, poor health, loneliness, fear of crime and often feeling sad or blue are more likely to perceive these as not a serious problem for oneself.

The ANOVA results show that the predictor variable of age by decade has a significant relationship with the criterion variable "Quality of Life for Self" ($F = 3.921$, $df = 8, 935$, $p = .000$). Table F-25 below displays the results.

Table F- 25: ANOVA Mean Scores for Age by Decades and "Quality of Life for Self" Scale (N = 944).

Variable	N	Mean	SD
Age by Decades:			
Teens	36	8.02	2.18
Twenties	210	7.50	2.14
Thirties	182	7.49	2.10
Forties	166	7.38	2.08
Fifties	128	7.70	2.52
Sixties	116	8.32	2.53
Seventies	83	8.37	2.71
Eighties	21	9.14	2.82
Nineties	2	9.50	6.36
Total	944	7.74	2.34

***F* (8, 2999) = 5.422, *p* = .000**

As table F-25 shows, the mean scores increase from the age decade of forty (7.38) through the age decade of ninety (9.50), which indicates that participants in their nineties perceive having a better quality of life than participants in their forties. According to this "Quality of Life for Self" scale, the higher the score (such as "not a problem at all for you personally" which equals a 3), the more positive the perception of quality of life for self. Within the age category of young (18 – 39) this table shows that the mean scores decrease from the teen decade (8.02) through the thirty decade (7.49), this indicates that participants in their teens perceive having a better quality of life than participants in their thirties. The Scheffe Post Hoc test did not show any significant difference between the mean scores of any of the decades ($p > .05$).

The ANOVA analysis using the predictor variable of age shows that the age of the participant does have an influence on how they perceive the quality of their life, the older the participant the more likely s/he is to perceive that the quality of life issues of not

having enough money, poor health, loneliness, fear of crime and often feeling sad or blue are not a serious problem for oneself.

In order to determine if there is a relationship between the predictor variable gender and the composite criterion variable of "Quality of Life for Self", an Independent Samples T-Test was performed. It was determined that there is a statistically significant relationship between these two variables of gender and "Quality of Life for Self" (t = 4.007, df = 942, p = .000). Table F-26 shows the results.

Table F- 26: Mean Scores for "Quality of Life for Self" Scale and Gender (N=944).

	Males (n=447)	**Females (n=497)**
"**Quality of Life for Self**"	*Mean* = 8.0626, *SD* = 2.39873	*Mean* = 7.4567, *SD* = 2.24566

***t* = 4.007, *df* = 942, *p* = .000**

As shown in the table above, the mean score is higher for males (8.0626) and lower for females (7.4567), which indicates that males consider the quality of life issues of not having enough money, poor health, loneliness, fear of crime and often feeling sad or blue not a serious problem for themselves.

The Independent T-Test conducted with marital status and the "Quality of Life for Self" determined that there is no significant relationship between these two variables (t = -1.874, df = 942, p = 0.061).

The Independent T-Test demonstrated that this is no significant relationship with the marital status of females and the "Quality of Life for Self" variable (t = -1.432, df = 361.108, p = .153); and also that there is no significant relationship between the marital status of males and this variable (t = -1.027, df = 445, p = .305).

In order to determine if the income level of the participants influences their perception of the "Quality of Life for Self", a simple one-way analysis of variance

(ANOVA)was conducted. The results showed that there is no statistically significant relationship between the criterion variable and the predictor variable of income by thirds (F = 1.902, df = 2, 697, p = 0.150); and there is no statistically significant relationship with income by quartiles (F = .929, df = 3, 696, p = 0.426).

In summary, the predictor variables that influence how the participants in France perceive their quality of life for themselves are age and gender. The older the participant the more likely s/he perceives that the quality of life issues of not having enough money, poor health, loneliness, fear of crime and often feeling sad or blue as not a serious problem for themselves. Male participants are more likely to perceive having a better quality of life than female participants. The predictor variables of marital status and income level do not influence how the participants perceive the quality of their life.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

a. "Decisions or choices that you make during your lifetime";
b. "Decisions made by others that are beyond your control";
c. "Genetic or inherited factors"; or
d. "Blind luck"?

Table F-27 below displays the frequencies of responses.

Table F- 27: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=904)

	Number	%
Decisions or choices made by you	376	41.6
Blind luck	259	28.7
Decisions made by others	157	17.4
Genetic or inherited factors	112	12.4

Table F-27 shows that more than half of the respondents (58.5%) feel that the quality of their life at age 75 will not be due to decisions made by them; it will be by blind luck (28.7%), decisions made by others (17.4%), or by genetic or inherited factors (12.4%). However, almost forty-two percent of the respondents believe that their quality of life at age 75 will be determined by decisions made by them.

In order to determine if any of the predictor variables has a significant relationship with the "Locus of Control" variable, Chi-Square analysis was conducted. The results are discussed below.

The Chi-Square analysis showed that there is a statistically significant relationship with the "Locus of Control" variable and the age by category (young, middle-age, old) ($x^2 = 37.745$, $df = 6$, $p = .000$). The results are shown in Table F-28 below.

Table F- 28: Chi-Square Results for Age: Young, Middle-Age, and Old with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=904).

		Age Category			Total
		Young 18 - 39	Middle-Age 40 - 64	Old 65 - 93	
Decisions or choices made by you	**N**	210	126	40	**376**
	%	49.4	37.1	28.8	**41.6**
Blind Luck	**N**	107	96	56	**259**
	%	25.2	28.2	40.3	**28.7**
Decisions made by others	**N**	76	59	22	**157**
	%	17.9	17.4	15.8	**17.4**
Genetic or inherited factors	**N**	32	59	21	**112**
	%	7.5	17.4	15.1	**12.4**
Total	**N**	425	340	139	**904**
	%	100.0	100.0	100.0	**100.0**

$x^2 = 37.745$, $df = 6$, $p = .000$

As shown in Table F-28 the percentage of participants who perceive that decisions made by them over a lifetime will determine the quality of their life at age 75 decreases from the young category (49.4%) to the middle-age category (37.1) to the old category (28.8%). More than expected young participants selected "Decisions or choices made by you" and fewer than expected middle-age and old participants selected that response. Therefore, young participants are more likely to perceive that the quality of their life will be determined by decisions made by themselves than the middle-age and old participants. The percentage of participants who perceive that blind luck will determine the quality of their life at age 75 decreases from the old category (40.3%) to the middle-age category (28.2%) to the young category (25.2%). More than expected old participants selected "Blind luck", and fewer than expected middle-age and young participants selected that response. Therefore, old participants are more likely to perceive that blind luck will determine the quality of their life at age 75 compared to the middle-age and young participants.

The Chi-Square analysis showed that the predictor variable of age by decade has a statistically significant relationship with the criterion variable "Locus of Control" (x^2 = 59.070, *df* = 24, *p* = .000). The results of the analysis are displayed in Table F-29.

Table F- 29: Chi-Square Results for Age: Decades with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=904).

		Age: Decades									Total
		<20s	**20s**	**30s**	**40s**	**50s**	**60s**	**70s**	**80s**	**90s**	
Decisions/choices made by you	**N**	18	98	94	78	33	27	23	5	0	**37**
	%	50.0	46.9	52.2	48.8	26.6	25.7	31.9	29.4	.0	**41.6**
Blind Luck	**N**	8	56	43	38	44	38	23	8	1	**259**
	%	22.2	26.8	23.9	23.8	35.5	36.2	31.9	47.1	100.0	**28.7**
Decisions made by others	**N**	7	37	32	24	24	21	11	1	0	**157**
	%	19.4	17.7	17.8	15.0	19.4	20.0	15.3	5.9	.0	**17.4**
Genetic or inherited factors	**N**	3	18	11	20	23	19	15	3	0	**112**
	%	8.3	8.6	6.1	12.5	18.5	18.1	20.8	17.6	.0	**12.4**
Total	**N**	36	209	180	160	124	105	72	17	1	**904**
	%	100	100	100	100	100	100	100	100	100	**100**

***x*² = 59.070, *df* = 24, *p* = .000**

As shown in Table F-29, participants in their thirties have the highest percentage (52.2%) of those who selected "Decisions made by you", followed by participants in their teens (50.0%), participants in their forties (48.8%) and participants in their twenties (46.9%). More than expected participants in each of these age decades selected t hat response and fewer than expected participants in their fifties and older selected that response. Therefore, participants aged 49 and younger are more inclined to perceive that decisions made by them over their lifetime will have the biggest impact on the quality of their life at age 75 and that participants fifty and older are less inclined. Excluding participants in their nineties (because there is only one), participants in their eighties have the highest percentage (47.1%) of those who selected "Blind luck", followed by participants in sixties (36.2%), and participants in their fifties (35.5%) and participants in

their seventies (31.9%). More than expected participants in each of these age decades selected "Blind luck" and fewer than expected participants in the younger decades (forties to teens) selected that response. Therefore, participants age fifty and older are more inclined to perceive that blind luck will have the biggest impact on the quality of their life at age 75 compared to participants younger than fifty who are less inclined.

The Chi-Square analysis determined that the predictor variable of gender does not have a statistically significant relationship with the "Locus of Control" variable (x^2 = 3.154, df = 3, p = .369).

In order to determine if the marital status of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. The results of the analysis with the predictor variable of marital status and the criterion variable of "Locus of Control" show that there is a statistically significant relationship between these two variables (x^2 = 9.028, df = 3, p = .029). Table F-30 shows the results of the analysis.

Table F- 30: Chi-Square Results for Marital Status and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=904).

		Marital Status		Total
		Married	Not Married	
Decisions/choices made by you	**N**	222	154	**376**
	%	40.3	43.6	**41.6**
Blind Luck	**N**	146	113	**259**
	%	26.5	32.0	**28.7**
Decisions made by others	**N**	104	53	**157**
	%	18.9	15.0	**17.4**
Genetic or inherited factors	**N**	79	33	**112**
	%	14.3	9.3	**12.4**
Total	**N**	551	353	**904**
	%	100.0	100.0	**100.0**

***x*² = 9.028, *df* = 3, *p* = .029**

As shown in Table F-30 above, a higher percentage of not married participants (43.6%) selected “Decisions made by you” than married participants (40.3%). More than expected not married participants selected “Decisions made by you” and fewer than expected married participants selected that response. Therefore, not married participants are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75 and married participants are less inclined. However, a higher percentage of not married participants (32.0%) also selected “Blind luck” compared to married participants (26.5%). And More than expected not married participants selected “Blind luck” and fewer than expected married participants selected that response. Therefore, not married participants are more inclined to perceive that blind luck will have the biggest impact on the quality of their life at age 75 and married participants are less inclined. A higher percentage of married participants (18.9%) selected “Decisions made by others” compared to not married participants (15.0 %). More than expected married participants selected “Decisions made by others” and fewer than expected not married participants selected that response. Therefore, married participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions made by others and not married participants are less inclined.

The Chi-Square analysis also shows that there is a statistically significant relationship between the marital status of female participants and the criterion variable of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” ($x^2 = 8.359$, $df = 3$, $p = .039$). Table F-31 below shows the results of the analysis.

Table F- 31: Chi-Square Results for Marital Status of Females and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=468).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Decisions/choices made by you	**N**	121	82	**203**
	%	41.0	47.4	**43.4**
Blind Luck	**N**	73	52	**125**
	%	24.7	30.1	**26.7**
Decisions made by others	**N**	59	27	**86**
	%	20.0	15.6	**18.4**
Genetic or inherited factors	**N**	42	12	**54**
	%	14.2	6.9	**11.5**
Total	**N**	295	173	**468**
	%	100.0	100.0	**100.0**

$x^2 = 8.359$, $df = 3$, $p = .039$

As shown in Table F-31, a higher percentage of not married female participants (47.4%) selected "Decisions made by you" compared to married female participants (41.0%). More than expected not married female participants selected "Decisions made by you" and fewer than expected married female participants selected that response. Therefore, not married female participants are more inclined to perceive that decisions made by them will determine the quality of their life at age 75 and married female participants are less inclined to perceive that. A higher percentage of married female participants (20.0%) selected "Decisions made by others" compared to not married female participants (15.6%). More than expected married female participants selected "Decisions made by others" and fewer than expected not married female participants selected that response. Therefore, married female participants are more inclined to perceive that decisions made by others will have the biggest impact on the quality of their life at age 75 and not married female participants are less inclined to perceive that.

The Chi-Square analysis determined that there is no statistically significant relationship between the marital status of male participants and the “Locus of Control” variable ($x^2 = 2.255$, $df = 3$, $p = .521$).

In order to determine if the income levels of the participants is a factor in their perception of what impacts the quality of their life at age 75, Chi-Square analysis was performed. The results show that there is not a statistically significant relationship between income by thirds ($x^2 = 7.804$, $df = 6$, $p = 0.253$), and between income by quartiles ($x^2 = 9.650$, $df = 9$, $p = 0.380$) with the criterion variable of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75”.

In summary, not married participants are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75, and married participants are more inclined to perceive that decisions made by others will have the biggest impact on their quality of life at age 75. Similarly, not married female participants are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75, and married female participants are more inclined to perceive that decisions made by others will have the biggest impact on their quality of life at age 75. It was determined that the gender and the income levels of the participants has no influence on their perception of the “Locus of Control” variable.

4. Perception of Quality of Life for People Over 65

In order to ascertain how the participants in France perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for older people. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- 'a very serious problem = 1,
- 'a somewhat serious problem = 2', or
- 'not a problem at all = 3' for most people over 65 personally?".

According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine if the participants' perception of the quality of life for people over 65 is influenced by their age, gender, marital status, or income level, statistical analysis was performed using each of these predictor variables with the criterion composite variable of "Quality of Life for People Over 65". The statistical analysis determined that age, gender and income level in quartiles have a significant

relationship with “Quality of Life for People Over 65”, except the marital status of female participants. The results of each analysis are discussed below.

In order to ascertain if the age of the participants has a relationship with the criterion variable of “Quality of Life for People Over 65” a simple one-way variance of analysis (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved to be statistically significant.

The results of the ANOVA analysis of age by category (young, middle-age, old) is statistically significant (F = 14.665, df = 2, 927, p = .000), as shown in Table F-32 below.

Table F- 32: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and “Quality of Life for People Over 65” Scale (N = 930).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	426	6.04	1.31
Middle-Age (40-64)	348	5.97	1.30
Old (65 - 93)	156	6.71	2.11
Total	930	6.13	1.50

***F* (2, 927) = 14.665, *p* = .000**

As seen in the table above, the mean scores are higher for old participants (6.71) and lowest for middle-age (5.97) participants. According to the “Quality of Life for People Over 65” scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the older the participant is more inclined to perceive that they have a more positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results show that there is a significant difference between

the mean scores of the old and the middle-age participants (p = .000) and between the old and the young participants (p = .000). Therefore, the older the participant the more likely they are to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

The results of the ANOVA analysis using age categorized by decades show that there is a statistically significant relationship between age by decade and the "Quality of Life for People Over 65" criterion variable (F = 16.805, df = 8, 2757, p = .000), as shown in Table F-33 below.

Table F- 33: ANOVA Mean Scores for Age by Decades and "Quality of Life for People Over 65" Scale (N =930).

Variable	N	Mean	SD
Age by Decades:			
Teens	37	6.38	1.32
Twenties	206	6.03	1.34
Thirties	183	5.98	1.28
Forties	160	6.01	1.30
Fifties	128	5.79	1.14
Sixties	107	6.37	1.78
Seventies	87	6.85	2.24
Eighties	20	6.65	1.81
Nineties	2	5.00	.00
Total	930	6.13	1.40

***F* (8, 2757) = 16.805, *p* = .000**

As shown in Table F-33 above, the mean scores are highest for the later decades starting with the sixties (6.37%) to the eighties (6.65%), with the exception of the participants in their nineties (5.0%). This indicates that participants sixty and older are more likely to perceive a more positive quality of life for people over 65 than younger participants. According to the "Quality of Life for People Over 65" scale scoring, the

higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results show that there is a significant difference between the mean scores of participants in their seventies and the mean scores of participants in their fifties, forties, thirties, and twenties ($p < .01$). These results indicate that participants sixty and over are more likely to perceive that not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

In order to determine if gender has a significant relationship with the criterion variable of the "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that the predictor variable of gender has a statistically significant relationship with this criterion variable ($t = 2.813$, $df = 904.575$, $p = .005$). Table F-34 shows the results of the analysis.

Table F- 34: Mean Scores for Gender and "Quality of Life for People Over 65" Scale (N=930).

	Males (n=449)	**Females (n=481)**
"**Quality of Life for People over 65**"	*Mean* = 6.2695 *SD* = 1.55867	*Mean* = 5.9938 *SD* = 1.42081

***t* = 2.813, *df* = 904.575, *p* = .005**

As seen in the table above, the mean scores are higher for the male participants (6.2695) and lower for the female participants (5.9938). According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, male participants have a higher mean score,

which indicates that male participants in this study have a more positive perception of the quality of life for people over 65 compared to female participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65.

In order to determine if marital status has a significant relationship with the criterion variable of "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that marital status does not have a statistically significant relationship with this criterion variable (t = -1.013, df = 928, p = .311).

The Independent Samples T-Test determined that there is not statistically significant relationship between the marital status of female participants (t = -1.462, df = 479, p = .144), and between the marital status of male participants (t = .031, df = 447, p = .975) with the "quality of Life for People Over 65' variable.

In order to determine if the income level of the participants has an influence on how they perceive the quality of life for people over 65, a simple one-way analysis of variance (ANOVA) was performed with the two income variables. The results of the analysis determined that there is no statistically significant relationship between income by thirds and the "Quality of Life for People Over 65" composite variable (F = .813, df = 2, 691, p = .444).

The ANOVA did determine that income by quartiles has a statistically significant relationship with the "Quality of Life for People Over 65" composite variable (F = 3.011, df = 3, 690, p = .030). Table F-35 below shows the results.

Table F- 35: ANOVA Mean Scores for Income by Quartiles: Low, Low-Medium, High-Medium, and High, and "Quality of Life for People Over 65" Scale (N=694).

Variable	N	Mean	SD
Income by Quartile:			
Low	142	6.46	1.75
Low Med	191	5.97	1.29
High Med	233	6.11	1.55
High	128	6.15	1.39
Total	694	6.15	1.51

***F* 3, 690) = 3.011, *p* = 030**

As shown in Table F-35 above, the low income level has the highest mean score and the low-medium income level has the lowest mean score. According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. The Post Hoc test shows that there is a significant difference between the mean scores of the low income level and the low-medium income level (p = .034). Therefore, participants with a low income level are more inclined to perceive that people over 65 have a better quality of life, than people with a low-medium income level who are more inclined to perceive that the quality of life issues of not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are a serious problems for people over 65.

In summary, the predictor variables that influence how the participants in France perceive the quality of life for people over 65 are age, gender, and income levels by quartiles. Participants sixty and over are more likely to perceive that people over 65 have

a better quality of life than participants fifty-nine and younger. Male participants are more inclined to have more positive perception of the quality of life for people over 65 compared to female participants. And participants with a low income level are more inclined to perceive that the quality of life issues of not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not serious problems for people over 65.

C. Summary of the Findings on the Predictor Variables

1. Age

The analysis of the data collected in France shows that age is certainly a strong predictor variable influencing the perceptions of aging and older people. The studies discussed in the literature review also found that age is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults.

The study by Hummert and colleagues found age does affect how different age groups perceive older adults. They found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In the second part of the study, the researchers found that young, middle-aged and elderly adults have many of the same stereotypes of the elderly.

Davis and Douglas examined the relationship between age and life satisfaction and found that there were significant age group and life satisfaction differences (Davis and Douglas, 2004).

A study conducted by Smith and colleagues, which used data on people whose ages ranged from 70 to 103 years old, found that even between groups in their later years, age does play a role in life satisfaction (Smith, Borchelt, Maier, and Jopp, 2002). They found that there are significant differences between the young old and the oldest old regarding their level of life satisfaction.

However, Kite and Blair in their meta-analysis of literature to examine the question of perceptions of older adults stated that age seemed to be less important in determining attitudes toward the elderly than other types of information (Kite and Blare, 1988). Kite and Blair did suggest that the perception of the elderly can be influenced by factors such as type of design used or by the experimental setting (in the lab versus in the field) and that more research was needed to determine which factors influence beliefs and attitudes toward older people. Perhaps this study adds to the body of knowledge and can contribute one more study, conducted in the field, that does show that age is a strong predictor variable.

2. Gender

Gender was not as consistent as age as a predictor variable, but gender did have a significant relationship with both composite variables of the perception of "Quality of Life for Self" and "Quality of Life" for people over 65. The mixed results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review.

As discussed in the literature review, Kamilar and colleagues stated studies showed mixed results of gender differences in regards to life satisfaction in old age, with

some studies suggesting that males have a higher life satisfaction than females and others having the opposite results (Kamilar, Segal, and Qualls, 2000).

Smith and colleagues found that men reported higher life satisfaction and satisfaction with their own aging compared to women (Smith, Borchelt, Maier, and Jopp, 2002).

In a study by Kite, Deaux and Miele (Kite, Deaux and Miele, 1991), it was found that age does outweigh gender in the stereotypes, or perceptions, of the young and old regarding older adults. The study by Celejewski and Dion also showed that age as a variable was more powerful than gender in predicting stereotypical perceptions of older adults (Celejewski and Dion, 1998).

The study conducted by Canetto, et al, supported their hypothesis that perceptions of aging varied depending on the gender of the target and the age of the respondent (and the age of the target), but not on the gender of the respondent (Canetto, Kaminski and Felicio, 1995). Their findings indicated that there was no significant effect for respondent gender and perceptions of aging.

McConatha and colleagues found in their study gender plays a major role in the construction of age-related beliefs and practices (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). The authors state that the results of their study support previous findings that cultural factors influence perceptions of age and suggest that further cross-cultural studies include a larger and more varied sample which would provide a more comprehensive understanding of how people of different countries feel about aging.

Antonucci and colleagues examined the influence of gender on social relations in late life in four different countries. However, the one-way analysis of variance was

conducted separately by country and revealed no gender differences (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most research on gender differences in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are related to norms in one particular country versus the extent the differences would be found from a comparison among cultures and countries. The authors stated that having data that is similar and comparable would be advantageous in comparing gender difference across cultures. In Chapter 9, the influence of gender on the perceptions of aging and older adults will be compared among all five countries.

In this study of France, the gender of the participant did have some influence, but it was not consistent with all the criterion variables. The marital status of females proved to be a better predictor variable than gender or marital status alone.

3. Marital Status

Marital status was not a strong predictor variable for perceptions of aging in this study, but marital status did have a significant relationship with the composite variable "Life Satisfaction for Self" as well as with two of the three variables that made up the composite variable: "Things seem better than I thought they would" and "As I look back… I am fairly satisfied". Marital status also had a significant relationship with the criterion variable of "Locus of Control".

For all but one criterion variable, when marital status resulted in a significant relationship, the marital status of females also showed a significant relationship. The exception was with "These are the best years of my life" when marital status alone did not have a significant relationship, but the marital status of females did. The marital status of females proved to be as significant as marital status alone as a predictor variable.

The marital status of females was consistently significant with the life satisfaction variables and with the “Locus of Control” variable.

Interestingly, the marital status of males consistently had no significance with any of the criterion variables that measured the perceptions of aging and older adults in France.

The literature review did not uncover and therefore did not discuss studies focused on examining marital status and perception of aging and older adults.

4. Income Level

The most surprising result of the analysis of the data from France is that income levels were not a strong predictor of the participants’ perception of aging and older adults. Only for three criterion variables did income levels prove to have a significant relationship. One is with “Best defines old age” and income by thirds. The second is “Looking back… I am fairly satisfied” with income by thirds. The third is with the composite variable “Quality of life for people over 65” with income by quartiles.

It was expected that income would have a more significant role in the participants’ perception of aging. This is because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003). The findings from an American study of socioeconomic status and attitudes towards aging showed that respondents with lower socioeconomic status hold less optimistic views (Barrett, 2003). And in a cross-cultural study of attitudes towards aging, the researchers concluded that the most significant findings were due to socioeconomic status differences (Slaughter-Defoe, Kuehne, and Straker, 1992). This researcher understands the difference between socioeconomic status and income

level and perhaps it is this difference that creates the different findings from this study, which had only income level as a variable and found that it was not a good predictor of perceptions of aging; compared to the studies that used socioeconomic status and found that it was a good predictor variable.

D. Summary

These findings from the France data analysis examining the influence of the predictor variables of age, gender, marital status, and income levels on the perceptions of aging and older adults provide a snapshot of how people of France perceive their own aging and that of others. These results will be compared with the results of the other four countries in Chapter 9.

The next chapter discusses the analysis and findings in the Dominican Republic.

Chapter 8: Discussion of the Analysis and Findings in the Dominican Republic

A. Population Demographics

In order to provide a basis on which to compare demographics across time and across countries, the current relevant demographics are provided (2009 is the most current data available), as well as the relevant demographic information 2000, which is the year the data was collected for this study**.**

1. Current Demographics

Compared to the other four countries of this study, the United States, the United Kingdom, Japan, and France, the Dominican Republic ranks fifth and last in regard to population aging. The current demographics for the Dominican Republic, for 2007, indicate that people 65 and over in the Dominican Republic made up 5.0% of the population, there were 103 males for every 100 women.

Life expectancy in the Dominican Republic rose from 69.7 in 1998 to 73.6 in 2000. The Dominican Republic, like many other countries, is entering an era of hyperaging. The percentage of people aged 60 and over in 2000 was 6.6%; this is expected to rise to 20.7% by 2050 (Jackson, R. 2010).

2. Demographics in 2000

The data used for this study were collected in 2000. The participants were sampled to be representative of the population in the Dominican Republic at that time. In 2000, the Dominican Republic the population 65 and over was 4.3%.

Table DR-1 below displays the demographics of the 1001 participants in this study.

Table DR- 1: Dominican Republic Participant Demographics_ (N = 1001)

	N	%
Gender:		
Female	512	51.1
Male	489	48.9
Marital Status:		
Married	520	51.9
Not Married	480	48.0
Age:		
Teens	76	7.6
Twenties	302	30.2
Thirties	227	22.7
Forties	133	13.3
Fifties	97	9.7
Sixties	119	11.9
Seventies	47	4.7
Salary Range: (N = 993)		
5,000 DP/month or less	15	1.5
5,000 to 9,000 DP/month	54	5.4
10,000 to 15,000 DP/month	140	14.1
16,000 to 30,000 DP/month	374	37.7
30,000 DP/month or over	410	41.3

The Dominican Republic participants in this study consist of 51% females and 49% males; 52% of the total number of participants are married; and 48% are not married – either singer, divorced, separated, or widowed. The ages range from 18 to 75 with 60.4% falling into the young category (39 and younger), 28.7% of the participants (34.8%) are in the middle-aged category (40 to 64), and 10.9% in the old category (65 and older). The mean age is 42.8 and the median age is 50. The salaries range from 5,000 DP/month or less (1.5%) to 30,000 DP/month or over (41.3%), with the mean range

between 16,000 and 30,000 DP/month and the median range from 16,000 and 30,000 DP/month.

These demographics are relevant to this study in which I analyze how age, gender, marital status, and income levels influence participants' perceptions of aging.

B. Analysis of Data

The survey instrument for this study was designed to collect data that would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions:

1. Perceptions of Aging and Older People;
2. Perceptions of Life Satisfaction for Self;
3. Perceptions of Quality of Life for Self; and
4. Perceptions of Quality of Life for People Sixty-five and Older.

The following is the data analysis of each of the four categories.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people:

a) "In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning, or reaching a specific age"; and

b) “Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people”.

Each question was analyzed using the four predictor variables: age, gender, marital status, and income.

a. *“In general, which one of the following five things would you say best defines the beginning of old age”*

This question in the survey instrument is intended to understand the participants’ perception of when old age begins. There are five responses to choose from:

(1) “Retirement”;

(2) “Becoming a grandparent”;

(3) “Decline in physical ability”;

(4) “Decline in mental functioning”; and

(5) Reaching a specific age”.

Table DR-2 below displays the frequencies of the responses.

Table DR- 2: “Which one of the following five things best defines the beginning of old age”.

	Total (N=963)	
	Number	**%**
Reaching a specific age	330	34.3
Decline in physical ability	240	24.9
Decline in mental functioning	142	14.7
Retirement	141	14.6
Becoming a grandparent	110	11.4

As shown in the table above, “Reaching a specific age” is the response most frequently selected (34.3%); the second most selected response (24.9%) is “Decline in physical ability”.

Chi-Square analysis was used to determine which of the predictor variables: age, gender, marital status or income level, influence the participants' perception of when old age begins. Income level is the only predictor variable that was determined to have a statistically significant relationship with the criterion variable of "What best defines the beginning of old age".

The income level of participants can have an effect on how they perceive aging and older people. Therefore, Chi-Square analysis was performed with the predictor variable of income. The income levels of the participants were categorized in two separate ways in order to determine which would have the most sensitivity. The first grouping is in three categories: low, medium and high. The second grouping of income is in quartiles: low, low-medium, high-medium, and high. The results of the Chi-Square analysis determined that both of the groupings of the income variable have a statistically significant relationship with "What best defines the beginning of old age".

In order to determine if the independent variable of income categorized by thirds (low, medium, and high) has a significant relationship with the criterion variable of "What best defines the beginning of old age?", Chi-Square analysis was conducted. The results of the analysis determined that there is a statistically significant relationship (x^2 = 30.666, df = 8, p = .000). The results are shown in Table DR-3 below.

Table DR- 3: Chi-Square Results for Income Levels: Thirds (Low, Medium, High) with "Which one of the following five things would you say best defines the beginning of old age" (N=957).

		Income Level: Thirds			Total
		Low	Medium	High	
Reaching a specific age	**N**	116	133	79	**328**
	%	29.7	36.4	39.3	**34.3**
Decline in physical ability	**N**	101	85	54	**240**
	%	25.8	23.3	26.9	**25.1**
Decline in mental functioning	**N**	56	57	28	**141**
	%	14.3	15.6	13.9	**14.7**
Retirement	**N**	59	67	14	**140**
	%	15.1	18.4	7.0	**14.6**
Becoming a grandparent	**N**	59	23	26	**108**
	%	15.1	6.3	12.9	**11.3**
Total	**N**	391	365	201	**957**
	%	100.0	100.0	100.0	**100.0**

***x²* = 30.666, *df* = 8, *p* = .000**

Table DR-3 above shows the differences among the three income levels for the responses to the survey question "What best defines the beginning of old age?". More than half (59%) of the participants selected the top two responses "Reaching a specific age" (34.3%) and "Decline in physical ability" (25.1%). For the top common response "Reaching a specific age", the percentage of participants in each of the income categories increases as the income level increases. Also the results show that fewer than expected participants with a low income level selected this response, while more than expected participants in the medium and high income levels selected this response. This indicates that the higher the income level the more likely the participants are to perceive that reaching a specific age best defines the beginning of old age. For the second most common response "Decline in physical ability", the percentage of participants is lowest for the medium income level (23.3%) and higher in the low (25.8%) and high income (26.9%) levels. Also, the results show that more than expected participants with low and

high income levels selected this response, while fewer than expected participants in the medium income level selected this response. This indicates that participants with a low or a high income level are more likely to perceive decline in physical ability as the beginning of old age than participants in the low income level. For the third most selected response, “Decline in mental functioning”, participants in the medium income level have the highest percentage (15.6%) compared to the low (14.3%) and high (13.9%) income levels. More than expected participants in the medium income level selected this response, while fewer than expected participants in the low and high income levels selected that response. This indicates that participants with a medium income level are more likely to perceive that a decline in mental functioning is the beginning of old age than participants with a low or high income level. Of the participants who selected “Retirement” as the beginning of old age, the lowest percentage are those with a high income level (7.0%). Fewer than expected participants with a high income selected “Retirement”, while more than expected participants with a low and medium income level selected that response. This indicates that participants with a high income level are less likely to perceive retirement as the beginning of old age and participants with a low and medium income level are more likely to perceive retirement as the beginning of old age. Of those participants who selected “Becoming a grandparent” as the beginning of old age, participants with a low income level are the highest percentage (15.1%). More than expected participants with a low income level selected “Becoming a grandparent”, and fewer than expected participants with a medium income level selected that response. Therefore, participants with a low income level are more likely to perceive that becoming a grandparent is the beginning of old age than participants with a medium income level.

The results of the Chi-Square analysis using income by quartiles (low, low-medium, high-medium, and high) and the criterion variable of "What best defines the beginning of old age" also showed that there is a statistically significant relationship (x^2 = 33.173, df = 12, p = .001). The results of the analysis are shown in Table DR-4 below.

Table DR- 4: Chi-Square Results for Income Levels: Quartiles (Low, Low-Medium, High-Medium, High) with "Which one of the following five things would you say best defines the beginning of old age" (N=957).

		Income Level: Quartiles				Total
		Low	Low-Med	Hi-Med	High	
Reaching a specific age	**N**	116	133	53	26	**328**
	%	29.7	36.4	39.0	40.0	**34.3**
Decline in physical ability	**N**	101	85	40	14	**240**
	%	25.8	23.3	29.4	21.5	**25.1**
Decline in mental functioning	**N**	56	57	16	12	**141**
	%	14.3	15.6	11.8	18.5	**14.7**
Retirement	**N**	59	67	9	5	**140**
	%	15.1	18.4	6.6	7.7	**14.6**
Becoming a grandparent	**N**	59	23	18	8	**108**
	%	15.1	6.3	13.2	12.3	**11.3**
Total	**N**	391	365	136	65	**957**
	%	100	100	100	100	**100**

***x²* = 33.173, *df* = 12, *p* = .001**

Table DR-4 shows the differences among the four income levels for the responses to the survey question "What best defines the beginning of old age?". For the most frequently selected response "Reaching a specific age", the percentage of participants in each of the income categories increases as the income level increases. Also the results show that fewer than expected participants with low income levels selected this response, while more than expected participants in low-medium, high-medium and high income levels selected this response. This indicates that the higher the income level the more likely the participants are to perceive reaching a specific age as definition of the beginning of old age. For the second most frequently selected response "Decline in

physical ability", the percentage of participants is highest for the high-medium income level (29.4%), followed by participants in the low income level (25.8%). The results show that more than expected participants with a low income level selected "Decline in physical ability", and fewer than expected participants with a low-medium, high-medium, and high income level who selected that response. This indicates that participants with a low income level are more likely to perceive that the beginning of old age is a decline in physical ability compared to participants with higher income levels. For the third most selected response, "Decline in mental functioning", participants in the high income level have the highest percentage (18.5%) compared to the low (14.3%), low-medium (15.6%), and high-medium (11.8%) income levels. The results show that more than expected participants with a high income level selected "Decline in mental functioning" as did participants with a low-medium income level; and fewer than expected participants with a low income level and a high-medium income level selected that response. This indicates that participants with a high income level are more inclined to perceive that a decline in mental functioning is the beginning of old age. Of the participants who selected "Retirement" as the beginning of old age, the lowest percentage are those with a high income level (7.7%). Fewer than expected participants with a high and high-medium income levels selected "Retirement", while more than expected participants with low and low-medium income levels selected that response. This indicates that participants with high and high-medium income levels are less likely to perceive retirement as the beginning of old age and participants with a low and low-medium income levels are more likely to perceive retirement as the beginning of old age. Of those participants who selected "Becoming a grandparent" as the beginning of old age,

participants with a low income level are the highest percentage (15.1%). More than expected participants with a low income level selected “Becoming a grandparent”, and fewer than expected participants with a low-medium income level selected that response. Therefore, participants with a low income level are more likely to perceive that becoming a grandparent is the beginning of old age than participants with higher levels of income.

In order to determine if the age of the participants has a relationship with the responses to the question “Which one of the following five things would you say best defines the beginning of old age?”, Chi-Square analysis was used using two versions of the age variable, age by category and age by decade. The age by category variable consists of three groupings of age: young (39 and younger); middle-age (40 to 64); and old (65 and over). The results of the Chi-Square analysis using age by category indicates that there is no significant relationship with the criterion variable of “What best defines the beginning of old age” ($x^2 = 6.861$, $df = 8$, $p = .552$).

The second age variable is “age by decade”, which categorizes the age of the participants by the decades; such as twenties, thirties, forties, etc. In order to determine if there is a relationship between the more nuanced age variable category of age by decades and the responses to the survey question “Which one of the following five things would you say best defines the beginning of old age”, Chi-Square analysis was performed. The analysis determined that there no statistically significant relationship between age by decade and what best defines the beginning of old age ($x^2 = 28.490$, $df = 24$, $p = .240$).

In order to determine if the gender of the participants has a relationship with the responses to the question “What best defines the beginning of old age”, Chi-Square analysis was conducted. It was determined that there is no statistically significant

relationship between the independent variable gender and the criterion variable (x^2 = 2.409, df = 4, p = .661).

In order to determine if the marital status of the participants has a relationship with the responses to the question "What best defines the beginning of old age", Chi-Square analysis was conducted. It was determined that there is no statistically significant relationship between the independent variable marital status and the criterion variable (x^2 = 1.129, df = 4, p = .890).

In summary, the majority of participants in the Dominican Republic perceive the beginning of old age as first reaching a specific age and second as a decline in physical ability. The Chi-Square analysis determined that the higher the income level the more inclined the participants are to perceive that reaching a specific age is what best defines the beginning of old age.

b. "*Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to understand the participants' perception of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three responses:

(1) too much respect;

(2) too little respect; or

(3) just about the right amount of respect.

Table DR-5 below displays the frequencies of the responses selected by the participants.

Table DR- 5: "Do you feel that people over 65 get too much, too little or just about the right amount of respect".

	Total (N=998)	
	Number	**%**
Too little respect	827	82.9
Just right amount of respect	131	13.1
Too much respect	40	4.0

As shown in Table DR-5 above, the majority of the participants in the Dominican Republic (82.9%) perceive that people over 65 get too little respect from younger people; with just over 13 percent of the participants perceiving that people over 65 get just the right amount of respect.

In order to determine if age, gender, marital status or income influence the participants' perception of respect for older people, Chi-Square analysis was conducted with each of the predictor variables. It was determined that none of the predictor variables has a statistically significant relationship with the criterion variable of "Respect for People Over 65". Table DR-6 below provides the results of the analysis for each of the predictor variables.

Table DR- 6: Chi-Square results of "Do you feel that people over 65 get too much, too little, or just about the right amount of respect" with predictor variables.

Predictor Variable	**Chi-Square Results**
Age Category: Young, Middle-Age, Old	$x^2 = 7.361$, $df = 4$, $p = .118$
Age: Decades	$x^2 = 13.361$, $df = 12$, $p = .343$
Gender	$x^2 = 5.241$, $df = 2$, $p = .073$
Marital Status	$x^2 = .109$, $df = 2$, $p = .906$
Income Group: Low, Medium, High	$x^2 = 2.213$, $df = 4$, $p = .697$
Income by Quartiles	$x^2 = 5.024$, $df = 6$, $p = .541$

In summary, none of the predictor variables of age, gender, marital status, or income level influence how participants perceive younger peoples' respect for older people.

2. Perceptions of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are:

(a) "As I grow older things seem better than I thought they would be";

(b) "As I look back on my life I am fairly well satisfied"; and

(c) "These are the best years of my life".

The responses to the questions are Likert Scale scoring:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Each of these three questions is considered a criterion variable and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. "*As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants' perceive their own life as they age compared to what they had imagined it might be. The participants were asked to choose from four responses:

(5) "Agree strongly";

(6) "Agree somewhat";

(7) "Disagree somewhat"; or

(8) "Disagree strongly" with this statement.

Table DR-7 below shows the frequencies of the responses.

Table DR- 7: "As I grow older things seem better than I thought they would be".

	Total (N= 995)	
	Number	**%**
Agree Strongly	448	45.0
Agree Somewhat	289	29.0
Disagree Somewhat	214	21.5
Disagree Strongly	44	4.4

As shown in the table above, nearly three-fourths (74%) of the participants stated that they agree with this statement: 45.0 percent agree strongly and 29.0 percent agree somewhat. A little over one-fourth (25.9%) of the participants indicate that they disagree with this statement: with 21.5 percent stating that they disagree somewhat and 4.4 percent disagree strongly. Therefore, the majority of the participants in the Dominican Republic perceive that as they grow older things seem better than they thought they would.

Statistical analysis was performed with each of the predictor variables of age, gender, marital status and income, in order to determine if they have an influence on the participants' responses. As discussed below, marital status, the marital status of females,

and income levels do have a significant relationship with this criterion variable; age, gender, and the marital status of males do not.

Analysis of Variance (ANOVA) was conducted to determine if age has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought would be". The results of the analysis show that age by category (young, middle-age, and old) does not have a statistically significant relationship with the criterion variable (F = .674, df = 2, 992, p = .510). The ANOVA results also show that age by decades does not have a statistically significant relationship (F = 1.369, df = 6, 988, p = .224). Therefore, the age of the participant does not influence whether or not s/he perceives that as s/he grow older things are better than s/he thought they would be.

In order to determine if the gender of the participants has a significant relationship to their response to the survey question, Chi-Square analysis was performed. The results of the analysis determined that gender does not have a statistically significant relationship with this criterion variable (x^2 = 2.870, df = 3, p = .412).

In order to determine if the marital status of the participants has a statistically significant relationship with the criterion variable of "As I grow older things seem better than I thought they would be", Chi-Square analysis was performed. The results show that there is a statistically significant relationship between marital status and this criterion variable (x^2 = 15.027, df = 3, p = .002), as shown in Table DR-8 below.

As shown in the table below, a higher percentage of married participants (78.5%) agree with the statement: 49.1 percent agree strongly and 29.4 percent agree somewhat; compared to the 21.5 percent of married participants who disagree with the statement. Also a higher percentage of not married participants (69.2%) agree with the statement:

40.7 percent agree strongly and 28.5 percent agree somewhat, compared to the 30.8 percent of not married participants who disagree with the statement. However, more than expected married participants agree with the statement and fewer than expected not married participants agree with the statement. Therefore, married participants are more inclined to perceive that as they grow older things seem better than they thought they would be, and not married participants are more inclined to disagree with the statement.

Table DR- 8: Chi-Square Results for Marital Status and "As I grow older things seem better than I thought they would be" (N=994).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	254	194	448
	%	49.1	40.7	45.1
Agree Somewhat	**N**	152	136	288
	%	29.4	28.5	29.0
Disagree Somewhat	**N**	97	117	214
	%	18.8	24.5	21.5
Disagree Strongly	**N**	14	30	44
	%	2.7	6.3	4.4
Total	**N**	517	477	994
	%	100.0	100.0	**100.0**

***x²* = 15.027, *df* = 3, *p* = .002**

Chi-Square analysis was conducted to investigate whether the marital status of females and the marital status of males have a relationship with how the participants responded to the questions "As I grow older things seem better than I thought they would". The results show that there is no statistically significant relationship between the marital status of male participants and this criterion variable ($x^2 = 6.379$, $df = 3$, $p = .095$).

However, the results show that there is a statistically significant relationship between the marital status of females and "As I grow older things seem better than I thought they would" ($x^2 = 8.232$, $df = 3$, $p = .041$), as seen in Table DR-9 below.

Table DR- 9: Chi-Square Results for Marital Status of Females and "As I grow older things seem better than I thought they would be" (N=508).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	110	106	**216**
	%	46.4	39.1	**42.5**
Agree Somewhat	**N**	76	78	**154**
	%	32.1	28.8	**30.3**
Disagree Somewhat	**N**	44	69	**113**
	%	18.6	25.5	**22.2**
Disagree Strongly	**N**	7	18	**25**
	%	3.0	6.6	**4.9**
Total	**N**	237	271	**508**
	%	100.0	100.0	**100.0**

x^2 = 8.232, *df* = 3, *p* = .041

As shown in Table DR-9 above, more than three-fourths (78.5%) of married female participants agree with the statement "As I grow older things seem better than I thought they would be" (agree strongly = 46.4% and agree somewhat = 32.1%); compared to the 21.6 percent of married female participants who disagree with the statement. Just over two-thirds (67.9%) of the not married female participants agree with this statement (agree strongly = 39.1 % and agree somewhat = 28.8%). However, more than expected married female participants selected "agree strongly" and "agree somewhat", and fewer than expected not married female participants selected those responses. Fewer than expected female participants selected "disagree strongly" and "disagree somewhat", and more than expected female participants selected those responses. Therefore, married female participants in the Dominican Republic are more inclined to agree that "As I grow older things seem better than I thought they would", and not married female participants are more inclined to disagree with the statement.

In order to determine if the income status of the participants influenced how they responded to the question "As I grow older things seem better than I thought they would

be", a one way analysis of variance was conducted using both sets of income variables, by thirds and by quartiles. The results of the analysis indicate that both sets of the income variable have a statistically significant relationship with this criterion variable.

The significant results for the analysis using income by thirds (low, medium, and high) are shown in Table DR-10 below (F = 8.558, df = 2, 985, p = .000).

Table DR- 10: ANOVA Mean Scores for Income by Thirds and "As I grow older things seem better than I thought they would be" (N = 988).

Variable	N	Mean	SD
Income by Thirds:			
Low	406	1.7192	.90539
Medium	374	1.9840	.92609
High	208	1.8798	.83404
Total	988	1.8532	.90575

***F* (2, 985) = 8.558, *p* = .000**

As shown in Table DR-10, the mean score of the participants with a low level of income (1.7192) is lower than the mean score of the participants with the medium income level (1.9840) which is the highest mean score. This survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement. According to this ANOVA analysis, participants with a low income level are more inclined to agree with the statement "As I grow older things seem better than I thought

they would be"; and participants with a medium income level are more inclined to disagree with the statement. The Scheffe Post Hoc test determined that there is a significant difference between the mean scores of the participants with a low level of income and the mean scores of the participants with a medium level of income (p=.000). Therefore, the ANOVA analysis determined that participants with a low income level are more likely to perceive that as they grow older things seem better than they thought would be.

The ANOVA analysis also shows that there is a statistically significant relationship between the income level by quartiles (low, low-medium, high medium, and high) and the criterion variable of "As I grow older things seem better than I thought they would be" (F = 6.262, df = 3, 984, p = .000). Table DR-11 shows the results.

Table DR- 11: ANOVA Mean Scores for Income by Quartiles and "As I grow older things seem better than I thought they would be" (N = 988).

Variable	N	Mean	SD
Income by Quartiles:			
Low	406	1.7192	.90539
Low Med	374	1.9840	.92609
High Med	140	1.9357	.81542
High	68	1.7647	.86590
Total	988	1.8532	.90575

***F* (3, 984) = 6.262, *p* = .000**

As shown in DR-11 above, the mean score for the low income participants (1.7192) is lower than the mean score for the low-medium income level (1.9840), which is the highest mean score. For this survey question "As I grow older things seem better than I thought they would be" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean scores, the more participants agree with the statement, and the higher the mean scores indicate participants do not agree with the statement. The Scheffe Post Hoc Test indicates that there is a significant difference between the mean scores of the participants with a low level of income and the mean scores of participants with a low-medium level of income (p =.001). Therefore, this ANOVA analysis determines that the participants with a low level of income are more likely to perceive that as they grow older things seem to better than they thought they would.

In summary, the majority of the participants from the Dominican Republic agree with the statement that "As I grow older things seem better than I thought they would be". The statistical analysis reveals that the predictor variables that have been determined to have an influence on how the participants responded to this statement are marital status, the marital status of female participants, and income levels. Married participants are more inclined to agree with the statement compared to not married participants. Married female participants are more likely than not married female participants to agree with the statement and perceive that as they grow older things are better than they had thought they would be. And participants with a low income level are more likely to perceive that as they grow older things seem better than they thought they would be, compared to participants with higher income levels.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. The participants were asked to choose from four responses:

(5) "Agree strongly";

(6) "Agree somewhat";

(7) "Disagree somewhat"; or

(8) "Disagree strongly" with this statement.

Table DR-12 below shows the frequencies of the responses.

Table DR- 12: "As I Look Back On My Life I Am Fairly Well Satisfied"

	Total (N=1001)	
	Number	**%**
Agree Strongly	650	64.9
Agree Somewhat	259	25.9
Disagree Somewhat	72	7.2
Disagree Strongly	20	2.0

Table DR-12 above shows that the majority of the participants (90.8%) agree with this statement (agree strongly = 64.9% and agree somewhat = 25.9%). Less than ten percent (9.2%) of the participants disagree with the statement (disagree somewhat = 7.2%, and disagree strongly = 2.0%). In order to determine if any of the predictor variables of age, gender, marital status, or income has an influence on how the participants perceive whether or not they are well satisfied with their life statistical analysis was performed.

In order to ascertain if the age of the participant has a relationship with the criterion variable “As I look back on my life I am fairly well satisfied”, analysis of variance (ANOVA) was conducted with both versions of age; by category and by decades. The results indicated neither of the versions of the age variable has a statistically significant relationship with this criterion variable. The results of the ANOVA analysis using age by category variable (young, middle-age, and old) determined that there is no statistically significant relationship with the criterion variable (F = 1.853, df = 2, 998, p = .157). And the ANOVA analysis using the age by decades variable (teens, twenties, thirties, etc.) determined that there is no statistically significant relationship with this criterion variable (F =1.268, df = 6, 994, p = .269).

In order to determine if gender has predictor qualities on the participants’ response to the criterion variable of being fairly well satisfied when looking back on one’s life, Chi-Square analysis was conducted. The results of the analysis indicate that there is no statistically significant relationship between gender and the criterion variable “As I look back on my life I am fairly well satisfied” (x^2 = 4.667, df = 3, p = .198).

Chi-Square analysis was also conducted to determine if marital status influenced how the participants responded to the statement. The results of the analysis indicate that there is a statistically significant relationship between marital status and the participants’ responses to “As I look back on my life I am fairly well satisfied” (x^2 = 21.312, df = 3, p = .000). Table DR-13 below shows the results of the Chi-Square analysis.

Table DR- 13: Chi-Square Results for Marital Status and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 1000).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	360	290	**650**
	%	69.2	60.4	**65.0**
Agree Somewhat	**N**	132	126	**258**
	%	25.4	26.3	**25.8**
Disagree Somewhat	**N**	24	48	**72**
	%	4.6	10.0	**7.2**
Disagree Strongly	**N**	4	16	**20**
	%	.8	3.3	**2.0**
Total	**N**	520	480	**1000**
	%	100.0	100.0	**100.0**

***x²* = 21.312, *df* = 3, *p* = .000**

As shown in Table DR-13 above, a higher percentage of married participants (94.6%) agree (agree strongly = 69.2% and agree somewhat = 25.4%) with the statement compared to not married participants (86.7%). More than expected married participants selected "Agree strongly" and fewer than expected not married participants selected that response. A higher percentage of not married participants (13.3%) disagree with the statement compared to married participants (5.4%). More than expected not married participants selected "Disagree strongly" and "Disagree somewhat" compared to married participants. Therefore, the results indicate that married participants are more inclined to perceive being well satisfied with their life lived compared to not married participants.

In order to determine if there is a statistically significant relationship between the marital status of females and their response to the statement "As I look back on my life I am fairly well satisfied", a Chi-Square analysis was conducted. The results show that there is a statistically significant relationship between the marital status of female

participant and this criterion variable (x^2 = 11.092, *df* = 3, *p* = .011). Table DR-14 shows the results of the analysis.

Table DR- 14: Chi-Square Results for the Marital Status of Female Participants and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 512).

		Marital Status of Female Participants		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	160	158	**318**
	%	66.9	57.9	**62.1**
Agree Somewhat	**N**	65	75	**140**
	%	27.2	27.5	**27.3**
Disagree Somewhat	**N**	11	30	**41**
	%	4.6	11.0	**8.0**
Disagree Strongly	**N**	3	10	**13**
	%	1.3	3.7	**2.5**
Total	**N**	239	273	**512**
	%	100.0	100.0	**100.0**

x^2 = 11.092, *df* = 3, *p* = .011

As shown in Table DR-14 above, a higher percentage of married female participants (94.1%) agree with the statement (agree strongly = 66.9% and agree somewhat = 27.2%) compared to not married female participants (85.4%). More than expected married female participants selected "Agree strongly" and fewer than expected not married females selected that response. A higher percentage of not married female participants (14.7%) disagree with the statement (disagree strongly = 3.7% and disagree somewhat = 11.0%) compared to married participants (5.9%). More than expected not married female participants selected "Disagree strongly" and "Disagree somewhat", and fewer than expected married female participants selected those responses. Therefore, the results indicate that married female participants are more inclined to perceive being well satisfied with their life lived compared to not married female participants.

In order to determine if there is a statistically significant relationship between the marital status of males and their response to the statement "As I look back on my life I

am fairly well satisfied", a Chi-Square analysis was employed. The Chi-Square analysis did determine that there is a statistically significant relationship between the marital status of males and their response to this criterion variable ($x^2 = 9.472$, $df = 3$, $p = .024$). Table DR-15 below shows the results of the analysis.

Table DR- 15: Chi-Square Results for Marital Status of Males and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 488).

		Marital Status of Males		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	200	132	**332**
	%	71.2	63.8	**68.0**
Agree Somewhat	**N**	67	51	**118**
	%	23.8	24.6	**24.2**
Disagree Somewhat	**N**	13	18	**31**
	%	4.6	8.7	**6.4**
Disagree Strongly	**N**	1	6	**7**
	%	.4	2.9	**1.4**
Total	**N**	281	207	**488**
	%	100.0	100.0	**100.0**

***x²* = 9.472, *df* = 3, *p* = .024**

As shown in Table DR-25 above, a higher percentage of married male participants (95.0%) agree with the statement (agree strongly = 71.2% and agree somewhat = 23.8%) compared to not married male participants (88.4%). More than expected married male participants selected "Agree strongly" and fewer than expected not married males selected that response. A higher percentage of not married male participants (11.6%) disagree with the statement (disagree strongly = 8.7% and disagree somewhat = 2.9%) compared to married participants (5.0%). More than expected not married male participants selected "Disagree strongly" and "Disagree somewhat", and fewer than expected married male participants selected those responses. Therefore, the results indicate that married male participants are more inclined to perceive being well satisfied with their life lived compared to not married male participants.

In order to discover if there is a relationship between income levels of the participants (predictor variable) and their response to "As I look back on my life I am fairly well satisfied" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds shows that there is not a statistically significant relationship between this predictor variable and the criterion statement (F = .117, df = 2, 990, p = .890). The results of the ANOVA analysis using income by quartiles also shows that there is not a statistically significant relationship between this predictor variable and the criterion statement (F = .235, df = 3, 989, p = .872).

In summary, the statistical analysis conducted with the criterion variable of "As I Look Back On My Life I am Fairly Well Satisfied" and each of the predictor variables determined that there is a significant relationship with marital status, the marital status of female participants, and the marital status of male participants. There is no significant relationship with the predictor variables of age, gender and income. The results show that married participants are more likely than not married participants to agree with the statement; and that married female and married male participants are more likely to agree than their not married counterparts that as they look back on their life they are fairly well satisfied.

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The responses to the question are Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4" with this statement.

Table DR-16 below shows the frequencies of the responses.

Table DR- 16: "These are the best years of my life"

	Total (N=993)	
	Number	**%**
Agree Strongly	582	58.6
Agree Somewhat	217	21.9
Disagree Somewhat	157	15.8
Disagree Strongly	37	3.7

As shown in the table above, the majority of participants (80.5%) agree with the statement "These are the best years of my life" (agree strongly = 58.6% and agree somewhat = 21.9%), compared to less than one-fifth of the participants who disagree with the statement (19.5%).

In order to determine which of the predictor variables, age, gender, marital status or income levels, has an influence on the participants' responses to this statement statistical analysis was performed.

The age of the participants may be a factor in whether or not the participants perceive that these are the best years of their life. Therefore, analysis of variance (ANOVA) was conducted using both versions of the age variable: age by category and age by decade. The results show that both types of age groupings have a statistically significant relationship with the criterion variable of "These are the best years of my life". The results of both tests are shown and discussed below.

The ANOVA analysis shows that there is a statistically significant relationship between the predictor variable of age by category (young, middle-age, old) and this criterion variable ($F = 4.592$, $df = 2, 990$, $p = .010$). Table DR-17 shows the results of the analysis.

Table DR- 17: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "These Are the Best Years of My Life" (N = 993).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	599	1.5810	.87115
Middle-Age (40-64)	286	1.7238	.86891
Old (65 +)	108	1.8056	.90128
Total	993	1.6465	.87697

***F* (2, 990) = 4.592, *p* = .010**

Table DR-17 above shows that the mean score of the young category is the lowest (1.5810) and the mean score for the old category is the highest (1.8056). This survey question "These are the best years of my life" offers four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates the more likely the participants do not agree with the statement. The young age category has the lowest mean score which indicates that the young participants (thirty-nine and younger) are more likely to select responses of "Agree strongly" which scores a "1" or "Agree somewhat" which scores a

"2". Old participants (sixty-five and older) have the highest mean score which indicates that they are more likely to select responses of "Disagree somewhat" which scores a "3" or "Disagree strongly" which scores a "4". These results as shown above indicate that the younger the participant the more likely they are to agree with the statement "These are the best years of my life", while the older the participant the more inclined they are to disagree with the statement. The Scheffe Post Hoc Test results show a significant difference between the young participants and the old participants (p = .049), but not between the young and the middle-age participants (p = .076). There is also not significant difference between the middle-age participants and the old participants (p = .709). This analysis shows that the younger the participant in the Dominican Republic the more likely s/he is to perceive that these are the best years of their life.

The ANOVA findings also show that there is a statistically significant relationship between the predictor variable of age by decades and the criterion variable of "These are the best years of my life" (F = 2.433, df = 6, 986, p = .024). Table DR-18 below displays the results.

Table DR- 18: ANOVA Mean Scores for Age by Decades and "These are the Best Years of My Life" (N = 993).

Variable	N	Mean	SD
Age by Decades:			
Teens	76	1.4079	.75149
Twenties	299	1.5719	.86545
Thirties	224	1.6518	.91043
Forties	132	1.7348	.88981
Fifties	97	1.6804	.81069
Sixties	118	1.7627	.90278
Seventies	47	1.8723	.92353
Total	993	1.6465	.87697

***F* (6, 986) = 2.433, *p* = .024**

Table DR-18 above shows that in general the mean scores increase as the decades increase. The mean score of the participants in their teens is the lowest (1.4079) and the mean score of the participants in their seventies is the highest (1.8723), which indicates that participants in their teens are more inclined to agree with the statement "These are the best years of my life", while participants in their seventies are more inclined to disagree with the statement. The Scheffe Post Hoc Test shows that there is no significant difference between the mean scores of the participants for any of the decades.

In order to determine if gender has a significant relationship with the statement "These are the best years of my life", Chi-Square analysis was employed. The results shows that there is not a statistically significant relationship between the predictor variable of gender and the criterion variable "These are the best years of my life" (x^2 = 6.634, df = 3, p = .085).

In order to find the relationship between the marital status of the participants and their responses to the statement "These are the best years of my life", Chi-Square analysis

was conducted. The results determined that there is a statistically significant relationship ($x^2 = 34.428$, $df = 3$, $p = .000$). Table DR-19 below shows the results of the analysis.

Table DR- 19: Chi-Square Results for Marital Status and "These Are the Best Years of My Life" (N = 992).

		Marital Status		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	337	245	**582**
	%	65.4	51.4	**58.7**
Agree Somewhat	**N**	112	105	**217**
	%	21.7	22.0	**21.9**
Disagree Somewhat	**N**	57	99	**156**
	%	11.1	20.8	**15.7**
Disagree Strongly	**N**	9	28	**37**
	%	1.7	5.9	**3.7**
Total	**N**	515	477	**992**
	%	100.0	100.0	**100.0**

***x²* = 34.428, *df* = 3, *p* = .000**

As shown in Table DR-19 above, a higher percentage of married participants (87.1%) agree with the statement (agree strongly = 65.4% and agree somewhat = 21.7%) than not married participants (73.4%). More than expected married participants agree strongly with the statement and fewer than expected not married participants agree strongly with the statement. Therefore, married participants are more likely to agree with the statement "These are the best years of my life" than not married participants. A higher percentage of not married participants (26.7%) disagree with the statement (disagree somewhat = 20.8% and disagree strongly = 5.9%) than married participants (12.8%). More than expected not married participants selected "disagree strongly" and "disagree somewhat" and fewer than expected married participants selected those responses. Therefore, not married participants are more likely to disagree with the statement "These are the best years of my life" compared to married participants.

In order to determine if the marital status of female participants and the marital status of male participants has an influence on their responses for the statement "These are the best years of my life", Chi-Square analysis was performed for the marital status of each gender. The analyses found that there is not a statistically significant relationship between the marital status of male participants and this criterion variable ($x^2 = 7.614$, $df = 3$, $p = .055$), and there is a statistically significant relationship between the marital status of female participants and the criterion variable as shown in Table DR-20 below ($x^2 = 33.614$, $df = 3$, $p = .000$).

Table DR- 20: Chi-Square Results for Marital Status of Females and "These Are the Best Years of My Life" (N=509).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Agree Strongly	**N**	157	128	**285**
	%	65.7	47.4	**56.0**
Agree Somewhat	**N**	59	61	**120**
	%	24.7	22.6	**23.6**
Disagree Somewhat	**N**	17	62	**79**
	%	7.1	23.0	**15.5**
Disagree Strongly	**N**	6	19	**25**
	%	2.5	7.0	**4.9**
Total	**N**	239	270	**509**
	%	100.0	100.0	**100.0**

***x²* = 33.614, *df* = 3, *p* = .000**

As shown in Table DR-20 above, a higher percentage of the married female participants (90.4%) agree with the statement (agree strongly = 65.7% and agree somewhat = 24.7%), compared to the percentage of the not married participants who agree with the statement (70%). The Chi-Square results shows that more than expected married females selected "Agree strongly" and "Agree somewhat" and fewer than expected not married females selected those response. Therefore, married female participants are more inclined to agree that these are the best years of their life than not

married female participants. A higher percentage of not married female participants (30%) disagree with the statement compared to the percentage of married female participants who disagree with the statement (9.6%). More than expected not married females selected "Disagree somewhat" and "Disagree strongly" and fewer than expected married females selected those responses. Therefore, not married female participants are more likely to feel that these are not the best years of their life compared to married female participants.

In order to determine if there is a relationship between income levels of the participants (predictor variable) and their response to "These are the best years of my life" (criterion variable), an analysis of variance (ANOVA) was conducted. The results of the ANOVA using income by thirds shows that there is not a statistically significant relationship with the statement (F = .449, df = 2, 983, p = .638). The results of the ANOVA using income by quartiles also shows that there is not significant relationship with the criterion variable of "These are the best years of my life" (F = .476, df = 3, 982, p = .699).

In summary, the statistical analysis of the criterion variable "These are the best years of my life" and the predictor variables determined that age, marital status and the marital status of female participants have an influence on the participants' responses to the statement; the predictor variables of gender and income level do not. The results of the analysis show that participants younger than age of thirty-nine are more likely to agree with the statement than participants age thirty-nine and older. The results also show that married participants are more inclined to agree with the statement than not married participants. And married female participants are more likely to agree that these

are the best years of their life than not married female participants. The income level of the participants does not influence whether or not they perceive that these are the best years of their life.

d. *"Life Satisfaction Variable"*

In analyzing each of the three criterion variables that relate to the life satisfaction of the participants:

(7) "As I grow older things seem better than I thought they would be";

(8) "As I look back on my life I am fairly well satisfied"; and

(9) "These are the best years of my life",

it was discovered that the most consistent predictor variables that influenced the participants' responses for all three criterion variables are marital status, and the marital status of female participants. Income level was a predictor variable for responses to "As I grow older things seem better than I thought they would be"; participants with a low income level are more inclined to agree with the statement. Age was a predictor variable for responses to "These are the best years of my life"; participants thirty-nine and younger are more likely to agree with the statement. The predictor variable of gender did not prove to have a statistically significant relationship with any of the three criterion variables.

As described in the Methodology section above, in order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions were combined to create the "Life Satisfaction" criterion variable. This

variable was analyzed with each of the predictor variables to determine which one has a significant relationship with the “Life Satisfaction” scale.

For the “Life Satisfaction” scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the “Life Satisfaction” composite variable the response “Strongly agree” is scored a “1”, and “Somewhat agree” is scored a “2”, while “Strongly disagree” is scored a “3” and “Somewhat disagree” is scored a “4”. Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction.

In order to determine if the predictor variable of age has a relationship with the composite criterion variable “Life Satisfaction”, an analysis of variance (ANOVA) was conducted with both age variables. The results of the analysis determined that there is not a statistically significant relationship with age by category (young, middle-age, and old) with “Life Satisfaction” (F = 1.110, df = 2, 985, p = .330). The results of the analysis using the age variable categorized by decades also determined that there is not a statistically significant relationship with age by decade (teens, twenties, thirties, etc.) with “Life Satisfaction” (F = 1.636, df = 6, 981, p = .134).

In order to determine if there is a relationship between the predictor variable of gender and “Life Satisfaction”, an Independent Samples T-Test was conducted. The results show that there is a statistically significant relationship between gender and “Life Satisfaction” (t = -2.090, df = 986, p = .037) as shown in Table DR-21 below.

Table DR- 21: Mean Scores for Gender and “Life Satisfaction” Scale (N=988).

	Males (n=483)	**Females (n=505)**
“Life Satisfaction”	*Mean* = 4.8178, *SD* = 1.93567	*Mean* = 5.0851, *SD* = 2.07753

***t* = -2.090, *df* = 986, *p* = .037**

As shown in Table DR-21 above, the mean score for male participants (4.8178) is lower than the mean score for female participants (5.9040) indicating that male participants perceive having a higher life satisfaction than female participants.

An Independent Samples T-Test was also conducted in order to determine if the predictor variable of marital status has a relationship with the criterion variable "Life Satisfaction". The results of the analysis show that there is a statistically significant relationship (t = -5.684, df = 885.013, p = .000). Table DR-22 below shows the results of the T-Test.

Table DR- 22: Mean Scores for Marital Status and "Life Satisfaction" Scale (N=987).

	Married (n=513)	**Not Married (n=474)**
"Life Satisfaction"	*Mean* = 4.6043, *SD* = 1.71316	*Mean* = 5.3291, *SD* = 2.23496

***t* = -5.684, *df* = 885.013, *p* = .000**

Table DR-22 above shows that the mean score for the married participants (4.6043) is lower than the mean score for the not married participants (5.3291). According to the "Life Satisfaction" scale scoring, the lower the mean score, the more positive the life satisfaction is for the participants. Therefore, married participants are more likely to perceive having a higher life satisfaction than not married participants.

In order to determine if there is a relationship between the marital status of the female participants and the marital status of the male participants with the "Life Satisfaction" scale, an Independent T-Test was conducted using both predictor variables. The results for both indicate that there is a statistically significant relationship between the marital status of female participants and "Life Satisfaction" (t = -4.779, df = 489.141, p = .000),

as well as a statistically significant relationship with the marital status of male participants and "Life Satisfaction" (t = -2.998, df = 383.011, p = .000).

Table DR-23 below shows the results of the T-Test of the marital status of females and "Life Satisfaction".

Table DR- 23: Mean Scores for Marital Status of Females and "Life Satisfaction" Scale (N=505).

	Married Females (n=237)	**Not Married Females (n=268)**
"Life Satisfaction"	*Mean* = 4.6329, *SD* = 1.70376	*Mean* = 5.4851, *SD* = 2.28899

***t* = -4.779, *df* = 489.141, *p* = .000**

Table DR-23 above shows that the mean score for the married female participants (4.6329) is lower than the mean score for the not married participants (5.4851). According to the "Life Satisfaction" scale scoring, the lower the mean scores, the more positive the life satisfaction is of the participants. Therefore, married female participants are more likely to perceive having a higher life satisfaction than not married female participants.

Table DR-24 below shows the results of the T-Test with the marital status of males and "Life Satisfaction".

Table DR- 24: Mean Scores for Marital Status of Males and "Life Satisfaction" Scale (N=482).

	Married Males (n=276)	**Not Married Males (n=206)**
"Life Satisfaction"	*Mean* = 4.5797, *SD* = 1.72389	*Mean* = 5.1262, *SD* = 2.15125

***t* = -2.998, *df* = 383.011, *p* = .000**

As Table DR-24 shows, the mean score for the married male participants is lower (4.5797) than the means score of the not married male participants (5.1262). According to the "Life Satisfaction" scale scoring, the lower the mean score, the higher the life satisfaction of the participants. Since the mean score is lower for the married male

participants, they perceive themselves as having more life satisfaction than the not married male participants.

In order to determine if level of income of the participants has a relationship with the "Life Satisfaction" scale a simple ANOVA was conducted using both groupings of the income variable, by quartiles and by thirds. The analysis shows that income by thirds does not have a statistically significant relationship with the "Life Satisfaction" scale (F = 1.755, df = 2, 978, p = .173). The analysis also shows that income by quartiles also does not have a statistically significant relationship with the "Life Satisfaction" scale (F = 1.578, df = 3, 977, p = .193).

In summary, the predictor variables of gender, marital status, the marital status of female participants, and the marital status of male participants have a significant relationship with the "Life Satisfaction" scale. Male participants have higher life satisfaction than female participants. Married participants are more likely to perceive having better life satisfaction than do not married participants; similarly married female participants and married male participants express having more life satisfaction than do their not married counterparts. The predictor variables of age and income level were shown not have an influence on the "Life Satisfaction" scale of participants in the Dominican Republic.

3. Perceptions of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite

variable that contains five items that refer to quality of life for oneself. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question, such as "Would you tell me whether '*not having enough money to live on*' is:

- "a very serious problem = 1",
- "a somewhat serious problem = 2", or
- "not a problem at all for you personally = 3".

According to this "Quality of Life for Self" scale, the higher the score (such as, "not a problem at all for you personally", which equals a 3), the more positive the perception of quality of life for self.

The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

(1) "decisions or choices that you make during your lifetime"

(2) "decisions made by others that are beyond your control"

(3) "genetic or inherited factors" or

(4) "blind luck"?

Each of these two variables, “Quality of Life for Self” and “Locus of Control” was analyzed using each of the predictor variables of age, gender, marital status, and income. Below is the discussion of the results.

a. “Quality of Life for Self” Variable

In order to determine the relationship between the participants’ perception of quality of life for themselves and the predictor variables of age, gender, marital status and income level, statistical analysis was performed using each of these variables with the criterion composite variable of “Quality of Life for Self”. The statistical analysis determined that the predictor variables of age and income have a significant relationship with “Quality of Life for Self” in the Dominican Republic study. The predictor variables of gender and marital status did not prove to have an influence on the perception of the quality of life for the participants. The results are discussed below.

ANOVA analysis was used to determine if age has a significant relationship with the “Quality of Life for Self” composite variable. The results shows that there is a statistically significant relationship between “Quality of Life for Self” and age by category (young, middle-age and old) ($F = 6.519$, $df = 2, 985$, $p = .002$).

As Table DR-25 below shows, the mean scores decrease from the young to the old categories. The mean score of the young participants (6.9698) is higher than the mean score of the middle-age participants (6.6140) and the mean score of the old participants (6.3019). According to the “Quality of Life for Self” scale, the higher the mean score the more positive the perception of quality of life for self. Therefore, participants younger than thirty-nine years are more likely to perceive having a better

quality of life than participants thirty-nine and older. The Scheffe Post Hoc test results show that there is a significant difference between the mean scores of the young participants and the mean scores of the old participants (p = .008). There is no significant difference between the mean scores of the young participants and the middle-age participants, or with the middle-age participants and the old participants.

Table DR- 25: ANOVA Mean Scores for Age Category: Young, Middle-Age, Old and "Quality of Life for Self" (N=988).

Variable	N	Mean	SD
Age Category:			
Young (18-39)	597	6.9698	2.05767
Middle-Age (40-64)	285	6.6140	2.03797
Old (65 +)	106	6.3019	1.76834
Total	988	6.7955	2.03433

***F* (2, 985) = 6.519, *p* = .002**

The results of this analysis show that participants younger than thirty-nine years perceive having a better quality of life than do participants thirty-nine years and older. These results indicate that the younger participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas the middle-age and old participants are more likely to answer that these issues are a serious problem for themselves.

The ANOVA analysis using age categorized by decade (teens, twenties, thirties, etc.) and the "Quality of Life for Self" criterion variable determined that there is a statistically significant relationship (F = 3.563, df = 6, 981, p = .002) as shown in Table DR-26 below.

Table DR- 26: ANOVA Mean Scores for Age by Decades and "Quality of Life for Self" Scale (N=988).

Variable	N	Mean	SD
Age by Decades:			
Teens	76	7.4079	2.33910
Twenties	298	7.0268	2.08068
Thirties	223	6.7444	1.89883
Forties	133	6.7068	2.09900
Fifties	96	6.6667	2.08588
Sixties	118	6.3136	1.72314
Seventies	44	6.2727	1.92128
Total	988	6.7955	2.03433

***F* (6, 981) = 3.563, *p* = .002**

As Table DR-26 above shows the mean scores decrease from the decades of teens to the seventies. The mean score of the participants in their teens is higher (7.4079) than the mean score of the participants in their seventies (6.2727). According to the "Quality of Life for Self" scale, the higher the mean score, the more positive is the perception of quality of life for ones' self. Therefore, the younger the participant, the more likely s/he is to perceive having a better quality of life than older participants. The Scheffe Post Hoc Test shows that there is a significant difference between the mean score of participants in their teens and the mean score of participants in their sixties ($p = .035$). There are no significant differences between the mean scores of any of the other decades. This analysis shows that as the participants age, the more likely s/he is to perceive a decrease in the quality of life.

In order to determine if there is a relationship between the predictor variable gender and the composite criterion variable of "Quality of Life for Self", an Independent Samples T-Test was performed. It was determined that there is not a statistically significant relationship between these two variables of gender and "Quality of Life for Self" ($t = 1.446$, $df = 958.662$, $p = .148$).

A T-Test was also conducted to determine if the marital status of participants has a relationship with "Quality of Life for Self" variable. The results show that there is not a statistically significant relationship between these two variables (t = 1.616, df = 984.958, p = .106).

The T-Test analysis also determined that there is no statistically significant relationship between the marital status of female participants and the marital status of male participants and the "Quality of Life for Self" scale.

In order to determine if the income level of the participants influence their perception of the quality of life for themselves, a simple Variance of Analysis (ANOVA) was performed. The results indicate that income levels do have a statistically significant relationship with the "Quality of Life for Self" variable.

Table DR-27 below shows the results for the analysis using income categorized by thirds (F = 3.713, df = 2, 977, p = .025).

Table DR- 27: ANOVA Mean Scores for Income by Thirds and "Quality of Life" Scale (N = 980).

Variable	N	Mean	SD
Income by Quartiles:			
Low	401	6.6758	1.92084
Medium	373	6.7212	2.04453
High	206	7.1262	2.15578
Total	980	6.7878	2.02483
***F* (2, 977) = 3.713, *p* = .025**			

As can be seen in Table DR-27 above, the higher the income level of the participants, the higher the mean score. Participants with a low income level have the lowest mean score (6.6758), and participants with a high income have the highest mean score (7.1262). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A

lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, as this analysis shows, participants with a high income level have the most positive perception of "Quality of Life for Self", and participants with a low income level have the least positive perception of "Quality of Life for Self". The Scheffe Post Hoc Test results shows that there is a significant difference between the mean score of the high income level and the mean score for the low income (p = .034). There is no significant difference between the mean score for the medium income level and either the low income level or the high income level. The ANOVA results indicate that the higher the income level of participants the more they consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas lower income participants are more likely to perceive that these issues are a serious problem for themselves.

The results of the ANOVA using income by quartiles also shows that there is a statistically significant relationship between this predictor variable and the "Quality of Life for Self" scale (F = 4.648, df = 3, 986, p = .003). Table DR-28 below shows the results of the income by quartiles analysis.

Table DR- 28: ANOVA Mean Scores for Income by Quartiles and "Quality of Life for Self" Scale (N=980).

Variable	N	Mean	SD
Income by Quartiles:			
Low	401	6.6758	1.92084
Low-Medium	373	6.7212	2.04453
High-Medium	139	7.3741	2.22070
High	67	6.6119	1.93026
Total	980	6.7878	2.02483

***F* (3, 986) = 4.648, *p* = .003**

As shown in Table DR-28 above, in general the mean scores increase as the income levels of the participants increase. Participants with a low income level have the lowest mean score (6.6758) and participants with a high-medium income level have the highest mean score (7.3741). According to the "Quality of Life for Self" scale scoring, the higher the mean score, the more positive the perception of quality of life for self of the participants. A lower mean score indicates that participants have a less positive perception of their quality of life. Therefore, participants with a high-medium income level perceive themselves as having a more positive perception of their quality of life compared to the participants with lower levels of income. The Scheffe Post Hoc Test shows that there is a significant difference between the mean scores of the high-medium level of income and the low level of income (p = .006) and with the low-medium level of income (.014). But there is not a significant difference between the mean scores of the high level of income and any of the other levels of income. These results indicate that participants with a high-medium level of income consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves; whereas participants with lower levels of income are more likely to answer that these issues are a serious problem for themselves.

In summary, the predictor variables that influence how the participants in the Dominican Republic perceive their quality of life for themselves are age and income levels. Younger participants perceive having a more positive quality of life than older participants. Participants with higher levels of income perceive having a more positive quality of life than participants with lower levels of income. The predictor variables of

gender and marital status do not have an influence on how participants in the Dominican Republic perceive the quality of their life.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

- "Decisions or choices that you make during your lifetime";
- "Decisions made by others that are beyond your control";
- "Genetic or inherited factors"; or
- "Blind luck"?

Table DR-29 below displays the frequencies of responses.

Table DR- 29: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=909).

	Number	%
Decisions or choices made by you	446	49.1
Decisions made by others	182	20.0
Blind luck	182	20.0
Genetic or inherited factors	99	10.9

Almost half of the participants (49.1%) perceive that the control over the quality of their life at age 75 will be decided by decisions or choices made by themselves. The other half of the participants (50.9%) perceive that the quality of their life at age 75 will be determined by factors they cannot control, such as "Decisions made by others" (20.0%), "Blind Luck" (20.0%), and "Genetic or inherited factors" (10.9%).

In order to determine if the predictor variables of age, gender, marital status, and income level have a significant relationship with the "Locus of Control" criterion variable, Chi-Square analysis was conducted. The analysis shows that the predictor variables of marital status, the marital status of female participants, and income level have a statistically significant relationship with the criterion variable. The predictor variables of age and gender do not have a significant relationship with the "Locus of Control" criterion variable.

The results of the Chi-Square analysis determined that the predictor variable of age does not have a statistically significant relationship with the criterion variable of "Locus of Control". Neither the age variables by category ($x^2 = 8.336$, $df = 6$, $p = .215$), nor the age variable by decades ($x^2 = 27.610$, $df = 18$, $p = .068$) proved to have a statistically significant relationship with the criterion variable.

In order to determine if the gender of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. The results show that there is not a statistically significant relationship between the predictor variable of gender and the criterion variable of "Locus of Control" ($x^2 = .490$, $df = 3$, $p = .921$).

In order to determine if the marital status of the participants is a factor in their perception of what determines the quality of their life at age 75, Chi-Square analysis was performed. The results of the analysis with the predictor variable of marital status and the criterion variable of "Locus of Control" shows that there is a statistically significant relationship between these two variables ($x^2 = 9.053$, $df = 3$, $p = .029$). The results are shown in Table DR-30 below.

Table DR- 30: Chi-Square Results for Marital Status and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=908).

		Marital Status		Total
		Married	Not Married	
Decisions/choices made by you	**N**	237	208	**445**
	%	49.7	48.3	**49.0**
Decisions made by others	**N**	102	80	**182**
	%	21.4	18.6	**20.0**
Blind Luck	**N**	79	103	**182**
	%	16.6	23.9	**20.0**
Genetic or inherited factors	**N**	59	40	**99**
	%	12.4	9.3	**10.9**
Total	**N**	477	431	**908**
	%	100.0	100.0	**100.0**

x^2 **= 9.053,** df **= 3,** p **= .029**

As Table DR-30 shows, almost of half of both the married participants (49.7%) and the not married participants (48.3%) selected "Decisions or choices made by you", however a slightly higher percentage of married participants than not married participants selected that response. More than expected married participants compared selected "Decisions or choices made by me", and fewer than expected not married participants selected that response. Therefore, married participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions or choices made by themselves. A higher percentage of married participants (21.4%) selected "Decisions made by others" than not married participants (18.6%). More than expected married participants selected "Decisions made by others" and fewer than expected not married participants selected that response. Therefore, married participants are more likely to perceive that decisions made by others will influence the quality of their life at age 75 than not married participants. A higher percentage of married participants (12.4%) compared to not married participants (9.3%) selected "Genetic or inherited factors".

More than expected married participants selected “Genetic or inherited factors” and fewer than expected not married participants selected that response. Therefore, married participants are more likely than not married participants to perceive that the quality of their life at age 75 will be impacted by genetic or inherited factors. “Blind luck” is the only response selected by a higher percentage of not married participants (23.9%), compared to married participants (16.6%). More than expected not married participants selected “Blind luck” and fewer than expected married participants selected that response. Therefore, not married participants are more inclined to perceive that blind luck will impact the quality of their life at age 75.

Although married participants are more likely to perceive that the quality of their lives at age 75 will be determined by decisions made by themselves, decisions made by others, and genetic or inherited factors, a much higher percentage of married participants believe that decisions made by themselves over their lifetime will impact the quality of their life at age 75.

The Chi-Square analysis also shows that there is a statistically significant relationship between the marital status of female participants and the criterion variable of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” ($x^2 = 11.991$ $df = 3$, $p = .007$) Table DR-31 below shows the results of the analysis.

Table DR- 31: Chi-Square Results for Marital Status of Females and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=461).

		Marital Status of Females		
		Married	**Not Married**	**Total**
Decisions/choices made by you	**N**	109	112	**221**
	%	50.7	45.5	**47.9**
Decisions made by others	**N**	46	49	**95**
	%	21.4	19.9	**20.6**
Blind Luck	**N**	30	64	**94**
	%	14.0	26.0	**20.4**
Genetic or inherited factors	**N**	30	21	**51**
	%	14.0	8.5	**11.1**
Total	**N**	215	246	**461**
	%	100.0	100.0	**100.0**

x^2 = 11.991 *df* = 3, *p* = .007

Table DR-31 above shows that the percentage of married female participants (50.7%) is higher than the percentage of not married female participants (45.5%) who selected "Decisions or choices made by me". More than expected married female participants selected "Decisions or choices made by me" and fewer than expected not married female participants selected that response. Therefore, married female participants are more inclined to perceive that decisions or choices they have made over their lifetime will impact the quality of their lives at age 75 than not married female participants. A higher percentage of married female participants (21.4%) selected "Decisions made by others" than not married female participants (19.9%). More than expected married female participants selected "Decisions made by others" and fewer than expected not married female participants selected that response. Therefore, married female participants are more likely to perceive that decisions made by others will influence the quality of their life at age 75 than not married female participants. A higher percentage of married female participants (14.0%) compared to not married female

participants (8.5%) selected “Genetic or inherited factors”. More than expected married female participants selected “Genetic or inherited factors” and fewer than expected not married female participants selected that response. Therefore, married female participants are more likely than not married female participants to perceive that the quality of their life at age 75 will be impacted by genetic or inherited factors. “Blind luck” is the only response selected by a higher percentage of not female married participants (26.0%), compared to married female participants (14.0%). More than expected not married female participants selected “Blind luck” and fewer than expected married female participants selected that response. Therefore, not married female participants are more inclined to perceive that blind luck will impact the quality of their life at age 75.

Although married female participants are more likely to perceive that the quality of their lives at age 75 will be determined by decisions made by themselves, decisions made by others, and genetic or inherited factors, a much higher percentage of married female participants believe that decisions made by themselves over their lifetime will impact the quality of their life at age 75.

The results of the Chi-Square analysis show that there is not a statistically significant relationship with the marital status of male participants and the “Locus of Control” variable ($x^2 = 1.763$, $df = 3$, $p = .623$).

In order to determine if the income levels of the participants is a factor in their perception of what will have an impact on the quality of their life at age 75, Chi-Square analysis was performed. The results show that there is a statistically significant relationship between income by thirds and income by quartiles and the criterion variable

of “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75”.

Table DR-32 shows the results of the Chi-Square analysis using income by thirds and the “Locus of Control” criterion variable (x^2 = 23.793, df = 6, p = .001).

Table DR- 32: Chi-Square Results for Income Levels: Thirds and “In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?” (N=903).

		Income Level: Thirds			Total
		Low	Medium	High	
Decisions/choices made by you	**N**	168	174	100	**442**
	%	47.1	50.0	50.5	**48.9**
Decisions made by others	**N**	56	72	54	**182**
	%	15.7	20.7	27.3	**20.2**
Blind Luck	**N**	95	61	25	**181**
	%	26.6	17.5	12.6	**20.0**
Genetic or inherited factors	**N**	38	41	19	**98**
	%	10.6	11.8	9.6	**10.9**
Total	**N**	357	348	198	**903**
	%	100.0	100.0	100.0	**100.0**

***x²* = 23.793, *df* = 6, *p* = .001**

As shown in Table DR-32 above, of the participants who chose the response “Decisions or choices made by you” the ones with a high income level have the highest percentage (50.5%), and the percentage of the participants with a medium income level is close to the highest (50.0%). The Chi-Square analysis results show that more than expected participants with a high income level and with a medium income level selected “Decisions or choices made by you” and fewer than expected participants with a low income level selected that response. Therefore, participants with a high and medium income level are more inclined to perceive that the quality of their life at age 75 will be impacted by decisions or choices made by themselves. A higher percentage of

participants with a high income level (27.3%) selected “Decisions made by others” than participants with medium and low income levels. More than expected participants with a high income level and a medium income level selected “Decisions made by others” and fewer than expected participants with a low income level selected that response. Therefore, participants with a high and medium income level are more likely to believe that decisions made by others will determine the quality of their life at age 75 than participants with a low income level. A higher percentage of participants with a medium income level (11.8%) selected “Genetic or inherited factors” than participants with high and low income levels. More than expected participants with a medium income level selected “Genetic or inherited factors” and fewer than expected participants with high and low income levels selected that response. Therefore, participants with a medium income level are more likely to believe that genetic or inherited factors will determine the quality of their life at age 75 than participants with high and low income levels. A higher percentage of low income participants selected “Blind luck” (26.6%) than participants with medium and high income levels. More than expected participants with a low income level selected “Blind luck” and fewer than expected participants with medium and high income levels selected that response. Therefore, participants with a low income level are more likely to perceive that blind luck will determine the quality of their life at age 75 than participants with high and medium income levels.

Although participants with high income levels are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and decisions made by others, a much higher percentage of participants with a high income

level believe that decisions made by themselves over their lifetime will impact the quality of their life at age 75.

The Chi-Square results show that there is also a statistically significant relationship between income by quartiles and the criterion variable of "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75". Table DR-33 shows the results of the Chi-Square analysis using income by quartiles and the "Locus of Control" criterion variable ($x^2 = 27.407$, $df = 9$, $p = .001$).

Table DR- 33: Chi-Square Results for Income Levels: Quartiles and "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=903).

		Income Level: Quartiles				Total
		Low	**Low-Med**	**Hi-Med**	**High**	
Decisions/choices made by you	**N**	168	174	67	33	**442**
	%	47.1	50.0	50.8	50.0	**48.9**
Decisions made by others	**N**	56	72	40	14	**182**
	%	15.7	20.7	30.3	21.2	**20.2**
Blind Luck	**N**	95	61	15	10	**181**
	%	26.6	17.5	11.4	15.2	**20.0**
Genetic or inherited factors	**N**	38	41	10	9	**98**
	%	10.6	11.8	7.6	13.6	**10.9**
Total	**N**	357	348	132	66	**903**
	%	100	100	100	100	**100**

***x²* = 27.407, *df* = 9, *p* = .001**

As shown in Table DR-33 above, of the participants who chose the response "Decisions or choices made by you" the ones with a low income level have the lowest percentage (47.1) compared to participants with a high-medium income level (50.8%) and participants with a high income level and low-medium income level have the second highest percentage (50.0%). The Chi-Square analysis results show that more than expected participants with a low-medium, high-medium and high income levels selected "Decisions or choices made by you" and fewer than expected participants with a low

income level selected that response. Therefore, participants with a low income level are less likely to perceive that the quality of their life at age 75 will be impacted by decisions or choices made by themselves, compared to participants with higher income levels. Participants with a low income level have the lowest percentage (15.7%) of responses for "Decisions made by others" compared to participants with a low-medium income level (20.7%), high-medium (30.3%) and high income levels (21.2%). Fewer than expected participants with a low income level selected "Decisions made by others" and more than expected participants with low-medium, high-medium, and high income levels who selected that response. Therefore, participants with a low income level are less inclined to perceive that decisions made by others will have an impact on the quality of their lives at age 75 compared to participants with higher income levels who are more inclined to perceive that decisions made by others will impact the quality of their lives at age 75. A higher percentage of participants with a low income level (26.6%) selected "Blind luck" than participants with higher income levels More than expected participants with a low income level selected "Blind luck" and fewer than expected participants with higher income levels selected that response. Therefore, participants with a low income level are more likely to believe that blind luck will determine the quality of their life at age 75 than participants with higher income levels.

Although participants with low-medium, high-medium and high income levels are more likely to perceive that the quality of their lives will be determined by both decisions made by themselves and decisions made by others, a much higher percentage of the participants believe that decisions made by themselves will impact the quality of their life at age 75.

In summary, just about half (49.1%) of the participants in the Dominican Republic perceive that decisions made by themselves will impact the quality of their life at age 75. Married participants are more likely than not married participants to perceive that decisions made by themselves will determine the quality of their life at age 75. Married female participants are more likely to perceive that their quality of life at age 75 will be determined by themselves than not married female participants. Participants with higher income levels are more likely to perceive that their quality of life will be influenced by decisions made by themselves compared to participants with low income levels. And participants with low income levels are more inclined to perceive that blind luck will have the biggest impact on the quality of their life at age 75.

4. Perception of Quality of Life for People Over 65

In order to ascertain how the participants in the Dominican Republic perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for older people. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- "a very serious problem = 1",
- "a somewhat serious problem = 2", or
- "not a problem at all = 3"' for most people over 65 personally?".

According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine if the participants' perception of the quality of life for people over 65 is influenced by their age, gender, marital status, or income level, statistical analysis was performed using each of these predictor variables with the criterion composite variable of "Quality of Life for People Over 65". The statistical analysis determined that the predictor variables that have a significant relationship with "Quality of Life for People Over 65" are gender and income level by quartiles. The predictor variables that do not have a statistically significant relationship with the "Quality of Life for People Over 65" criterion variable are age and marital status. The results of each analysis are discussed below.

In order to ascertain if the age of the participants has a relationship with the criterion variable of "Quality of Life for People Over 65" Analysis of Variance (ANOVA) was conducted with both versions of age, by category and by decades. Both versions of the age variable proved not to have a statistically significant relationship with the criterion variable. The results of the ANOVA analysis of age by category (young, middle-age, old) was not to be statistically significant ($F = 2.705$, $df = 2, 979$, $p = .067$).

The results of the ANOVA analysis of age by decades (teens, twenties, thirties, etc.) was also not statistically significant ($F = 2.056$, $df = 6, 975$, $p = .056$).

In order to determine if gender has a significant relationship with the criterion variable of the "Quality of Life for People Over 65" an Independent Samples T-Test was conducted. The results indicate that the predictor variable of gender has a statistically significant relationship with this criterion variable ($t = 2.190$, $df = 945.708$, $p = .029$). Table DR-34 shows the results of the analysis.

Table DR- 34: Mean Scores for Gender and "Quality of Life for People Over 65" Scale (N=982).

	Males (n=480)	**Females (n=502)**
"**Quality of Life for People over 65**"	*Mean* = 5.7750 *SD* = 1.41694	*Mean* = 5.5896 *SD* = 1.22309

***t* = 4.332, *df* = 2764, *p* = .000**

As seen in the table above, the mean scores are higher for the male participants (5.7750) and lower for the female participants (5.5896). According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, male participants have a higher mean score, which indicates that male participants in this study have a more positive perception of the quality of life for people over 65 compared to female participants whose mean score indicates that they have a less positive perception of the quality of life for people over 65.

In order to determine if marital status has a significant relationship with the criterion variable of "Quality of Life for People Over 65" an Independent Samples T-Test

was conducted. The results indicate that marital status does not have a statistically significant relationship with this criterion variable ($t = 1.508$, $df = 975.669$, $p = .132$).

In order to determine if the marital status of the female participants and the marital status of male participants have a relationship with the criterion variable, an Independent Samples T-Test was conducted. The results indicate that there is no statistically significant relationship with the marital status of female participants and the marital status of male participants with this criterion variable of "Quality of Life for People Over 65".

In order to determine if the income levels of participants' influence their perception of the quality of life for people over 65, a simple Variance of Analysis (ANOVA) was performed using both income levels by thirds and income levels by quartiles.

The results of the analysis using income levels categorized by thirds show indicated that there is no statistically significant relationship with the criterion variable of "Quality of Life for People Over 65" ($F = 2.373$, $df = 2, 972$, $p = .094$).

The results of the ANOVA analysis using income levels by quartiles indicate that there is a statistically significant relationship with the criterion variable of "Quality of Life for People Over 65" ($F = 2.895$, $df = 3, 971$, $p = .034$). Table DR-35 shows the results below.

Table DR- 35: ANOVA Mean Scores for Income by Quartiles: Low, Low-Medium, High-Medium, and High, and "Quality of Life for People Over 65" Scale (N=975).

Variable	N	Mean	SD
Income by Quartile:			
Low	400	5.6425	1.22820
Low-Medium	368	5.6114	1.19197
High-Medium	138	5.9710	1.65199
High	69	5.5942	1.32086
Total	975	5.6738	1.29375

***F* (3, 971) = 2.895, *p* = .034**

As shown in Table DR-35 above, the mean score of the participants with a high-medium level have the highest mean score (5.9710) and the participants with the high income level have the lowest mean score (5.5942). According to the "Quality of Life for People Over 65" scale scoring, the higher the mean scores, the more positive the perception of the quality of life for people over 65. Participants with lower mean scores indicate that they have a less positive perception of the quality of life for people over 65. Therefore, as shown in the table above, the participants in the high-medium income category have a higher mean score, which indicates that these participants have a more positive perception of the quality of life for people over 65 compared to participants with low, low-medium, and high income levels whose mean score indicates that they have a less positive perception of the quality of life for people over 65. The Scheffe Post Hoc Test results indicate that there is no significant difference between any of the mean scores in this analysis. This ANOVA analysis indicates that participants with a high-medium income level in the Dominican Republic are more inclined to perceive that issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue are not a serious problem for people over 65; whereas participants

with lower income levels are more likely to answer that these issues are a serious problem for people over 65.

In summary, the predictor variables that influence how the participants in the Dominican Republic perceive the quality of life for people over 65 are gender and income level by quartiles. Male participants are more inclined to have a positive perception of the quality of life for people over 65, than female participants. Participants with a higher income level have a more positive perception of the quality of life for people over 65 than participants with lower income levels. The predictor variables of age and marital status do not have an influence on the participants' perceptions of the quality of life for people over 65.

C. Summary of the Findings on the Predictor Variables

1. Age

The analysis of the data collected in the Dominican Republic shows that age is not a consistent predictor variable influencing the perceptions of aging and older people. The age of the participants was a significant factor only with the criterion variables of "These are the best years of my life", where the younger the participant the more likely s/he is to perceive these are the best years of their life; and the composite criterion variable of "Quality of Life for Self", where younger participants consider the quality of life issues of not having enough money, having poor health, level of loneliness, fear of crime, and often feeling sad or blue as not a serious problem for themselves.

The studies discussed in the literature review found that age is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults.

The study by Hummert and colleagues found age does affect how different age groups perceive older adults. They found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In the second part of the study, the researchers found that young, middle-aged and elderly adults have many of the same stereotypes of the elderly.

Davis and Douglas examined the relationship between age and life satisfaction and found that there were significant age group and life satisfaction differences (Davis and Douglas, 2004).

A study conducted by Smith and colleagues, which used data on people whose ages ranged from 70 to 103 years old, found that even between groups in their later years, age does play a role in life satisfaction (Smith, Borchelt, Maier, and Jopp, 2002). They found that there are significant differences between the young old and the oldest old regarding their level of life satisfaction.

However, Kite and Blair in their meta-analysis of literature to examine the question of perceptions of older adults stated that age seemed to be less important in determining attitudes toward the elderly than other types of information (Kite and Blare, 1988). Kite and Blair did suggest that the perception of the elderly can be influenced by factors such as type of design used or by the experimental setting (in the lab versus in the

field) and that more research was needed to determine which factors influence beliefs and attitudes toward older people.

This findings in this study of the perception of aging and older people in the Dominican Republic are not consistent with the findings of the literature review in that this study did not show age to be a significant predictor variable. This study adds to the body of knowledge and contributes a study of a developing country and one that is younger than countries that have been studied, to demonstrates that age is not always a significant factor in the perception of aging and older people.

2. Gender

The analysis of the data collected in the Dominican Republic shows that gender is not a very significant predictor variable of influence on the perceptions of aging and older people. The criterion variables that gender has a significant relationship are: the composite variable of "Life Satisfaction"; and the composite variable of "Quality of Life for People Over 65". It was found that male participants have a more positive perception of their satisfaction with life, and that male participants have a more positive perception of the quality of life for people over 65.

The results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review.

As discussed in the literature review, Kamilar and colleagues stated that studies show mixed results of gender differences in regards to life satisfaction in old age, with some studies suggesting that males have a higher life satisfaction than females and others having the opposite results (Kamilar, Segal, and Qualls, 2000).

Smith and colleagues found that men reported higher life satisfaction and satisfaction with their own aging compared to women (Smith, Borchelt, Maier, and Jopp, 2002).

In a study by Kite, Deaux and Miele (Kite, Deaux and Miele, 1991), it was found that age does outweigh gender in the stereotypes, or perceptions, of the young and old regarding older adults. The study by Celejewski and Dion also shows that age as a variable was more powerful than gender in predicting stereotypical perceptions of older adults (Celejewski and Dion, 1998).

The study conducted by Canetto, et al, supported their hypothesis that perceptions of aging varied depending on the gender of the target and the age of the respondent (and the age of the target), but not on the gender of the respondent (Canetto, Kaminski and Felicio, 1995). Their findings indicated that there was no significant effect for respondent gender and perceptions of aging.

McConatha and colleagues found in their study gender plays a major role in the construction of age-related beliefs and practices (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). The authors state that the results of their study support previous findings that cultural factors influence perceptions of age and suggest that further cross-cultural studies include a larger and more varied sample which would provide a more comprehensive understanding of how people of different countries feel about aging.

Antonucci and colleagues examined the influence of gender on social relations in late life in four different countries. However, the one-way analysis of variance was conducted separately by country and revealed no gender differences (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most research on gender differences

in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are related to norms in one particular country versus the extent the differences would be found from a comparison among cultures and countries. The authors stated that having data that is similar and comparable would be advantageous in comparing gender difference across cultures. In Chapter 9, the influence of gender on the perceptions of aging and older adults will be compared among all five countries.

In this study of the Dominican Republic, the gender of the participant had very little influence on how the participants perceived aging and older adults.

3. Marital Status

In this study, marital status was a fairly consistent predictor variable influencing the perceptions of aging and older people. The analysis of the data collected in the Dominican Republic shows being married is a significant factor in the positive perception of many of the criterion variables, including " Life Satisfaction for Self", "As I grow older things seem better than I thought they would be", "As I look back on my life I am fairly well satisfied", "These are the best years of my life", and the "Locus of Control" variables.

Marital status in the Dominican Republic was not found to have a significant relationship with the following criterion variables: "What best defines the beginning of old age"; "Respect for People Over 65"; the composite variable "Quality of Life for Self"; and the composite variable "Quality of Life for People Over 65".

The marital status of female participants was found to be a significant predictor variable with the following criterion variables: " Life Satisfaction for Self"; "As I grow older things seem better than I thought they would be"; "As I look back on my life I am

fairly well satisfied"; "These are the best years of my life"; and the "Locus of Control" variables. It was determined that married female participants perceive having a better perception of aging and older adults than their not married counter parts for these criterion variables. The marital status of female participants did not have an influence on the following criterion variables: "What best defines the beginning of old age"; "Respect for People Over 65"; the composite variable "Quality of Life for Self"; and the composite variable "Quality of Life for People Over 65".

The marital status for male participants in the Dominican Republic was found to have a statistically significant relationship with the following criterion variables: "As I look back I am fairly satisfied" variable; and the composite "Life Satisfaction" variable. It was determined that married male participants have a more positive perception of aging and older people for these criterion variables. The marital status of male participants did not have a significant relationship with these criterion variables: "What best defines the beginning of old age"; "Respect for People Over 65"; "As I grow older things are better than I thought they would be; "These are the best years of my life" variable; the composite variable "Quality of Life for Self"; the "Locus of Control" variable; and the composite variable "Quality of Life for People Over 65".

The literature review did not uncover, and therefore did not discuss, studies focused on the relationship between marital status and the perception of aging and older adults.

4. Income

The analysis of the data collected in the Dominican Republic shows that income level does have predictor qualities for some of the criterion variables, including: "What best

defines the beginning of old age"; "These are the best years of my life"; the composite variable "Quality of Life for Self"; the "Locus of Control" variable; and the composite variable of "Quality of Life for People Over 65". However, the results show that the levels of income have a mixed influence on the perception of age and older people. Participants with a low income level are more likely to perceive that as they grow older things seem better than they thought they would be, compared to participants with higher income levels. Yet, participants with higher levels of income perceive having a more positive quality of life than participants with lower levels of income.

It was expected that income levels would play a significant role in the participants' perception of aging and older people, because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003). The findings from an American study of socioeconomic status and attitudes towards aging shows that participants with lower socioeconomic status hold less optimistic views (Barrett, 2003). And in a cross-cultural study of attitudes towards aging, the researchers concluded that the most significant findings were due to socioeconomic status differences (Slaughter-Defoe, Kuehne, and Straker, 1992). This researcher understands the difference between socioeconomic status and income and it is perhaps this difference which creates the different findings from this study, in which only income was a variable that was found not to be a good predictor of perceptions of aging compared to the studies that used socioeconomic status as a predictor variable.

D. Summary

These findings from the Dominican Republic data analysis examining the influence of the predictor variables of age, gender, marital status, and income levels on the perceptions of aging and older adults provide a snapshot of how people of the Dominican Republic perceive their own aging and that of others. These results will be compared with the results of the other four countries in the next chapter.

Chapter 9: Discussion of Comparative Analysis and Findings of the Five Countries

A. Introduction

This chapter discusses the findings from each of the five country chapters and thereby provides a cross-national or international comparison of perceptions of aging and older people. As mentioned above in Chapter Two, a literature review on cross-national and/or international studies focusing on perceptions and/or attitudes towards aging and older adults was conducted for this study. The literature search resulted in few cross-national or international studies on this topic. The research studies that are relevant to the findings from this study are discussed in section C below.

The discussion below focuses on two methods for the cross-national comparison. The first method is statistical analysis using country, i.e., the United States, the United Kingdom, Japan, France, and the Dominican Republic, as the predictor variable, and using the responses to the survey questions as the criterion variables. The statistical analysis conducted is either a simple one-way analysis (ANOVA) or Chi-Square analysis. Cross-cultural research experts caution against comparing means across countries within the same analyses, such as employing ANOVA, because despite careful translation it is impossible to be certain that the questions asked have identical meaning or variance across the countries (Antonucci, Lansford, Akiyama, Smith, Baltes, Takahashi, Fuhrer, and Dartigues, 2002). Therefore, the second method of comparison is a side by side description of the findings from the previous five chapters focusing on each individual country. The intent is to provide a statistical basis on which to compare the countries in

relation to the criterion variables and then provide a descriptive comparison of the findings from each country's statistical analysis of the predictor variables of age, gender, marital status, and income levels with the criterion variables. As unreliable as a comparison of the means of the country variable may be, the ANOVA results will at least provide some sense of any statistical significance between countries and perceptions of "Life Satisfaction for Self", "Quality of Life for Self", and "Quality of Life for People over 65", while the descriptive comparison will provide concrete evidence of the differences among the countries. The Chi-Square analysis will provide an association between the country variable and the criterion variables of perception of aging and locus of control.

B. Comparison of the Five Countries' Findings on the Criterion Variables

This section first analyzes the country variable with each of the criterion variables and then describes the differences among the countries' predictor variables of age, gender, marital status, and income levels in relation to the criterion variable.

The survey instrument for this study was designed to collect data which would provide insight into how the participants from each of the countries viewed their life as they grow older and how they view the lives of people 65 and older. There are four categories of questions:

1. Perceptions of Aging and Older People;
2. Perceptions of Life Satisfaction for Self;
3. Perceptions of Quality of Life for Self; and
4. Perceptions of Quality of Life for People Sixty-five and Older.

The following is the data analysis and findings for each of these four categories of criterion variables.

1. Perceptions of Aging and Older People

Two questions in the survey instrument capture how the participants perceive aging and older people:

a) "In general, which one of the following five things would you say best defines the beginning of old age: retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning, or reaching a specific age"; and

b) "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people".

Each question was analyzed using the variable of country in order to determine if there is a difference how the participants in each country responded to these questions.

a. *"In general, which one of the following five things would you say best defines the beginning of old age"*

This question in the survey instrument is intended to provide understanding of the participants' perceptions of when old age begins. There are five responses to choose from:

(1) "Retirement";

(2) "Becoming a grandparent";

(3) "Decline in physical ability";

(4) "Decline in mental functioning"; and

(5) "Reaching a specific age".

In order to determine if the predictor variable of country has a relationship with this criterion variable Chi-Square analysis was conducted. The results of the analysis showed that there is a statistically significant relationship between the predictor variable of country and the criterion variable of "Which one of the following five things would you say best defines the beginning of old age" ($x^2 = 639.482$, $df = 16$, $p = .000$). Table C-1 shows the outcome of the Chi-Square analysis for the five countries.

Table C- 1: Chi-Square Results for Five Countries with "Which one of the following five things would you say best defines the beginning of old age" (N=6970).

		Countries					Total
		USA	**UK**	**Japan**	**France**	**DR**	
Decline in physical ability	**N**	1212	354	455	404	240	**2665**
	%	40.7	37.1	41.2	41.6	24.9	**38.2**
Decline in mental functioning	**N**	1020	232	237	239	142	**1870**
	%	34.2	24.3	21.5	24.6	14.7	**26.8**
Reaching a specific age	**N**	404	105	172	154	330	**1165**
	%	13.6	11.0	15.6	15.9	34.3	**16.7**
Retirement	**N**	267	221	163	128	141	**920**
	%	9.0	23.2	14.8	13.2	14.6	**13.2**
Becoming a grandparent	**N**	76	42	77	45	110	**350**
	%	2.6	4.4	7.0	4.6	11.4	**5.0**
Total	**N**	2979	954	1104	970	963	**6970**
	%	100	100	100	100	100	**100**

***x²* = 639.482, *df* = 16, *p* = .000**

As shown in the Table C-1, there is a higher percentage of participants in the Unites States (40.7%), Japan (41.2%), and France (41.6%) of those who selected "Decline in physical ability". The lowest percentage of participants is in the Dominican Republic (24.9%). More than expected participants in the United States, Japan and France selected "Decline in physical ability" and fewer than expected participants in the Dominican Republic and the United Kingdom selected that response. Therefore, participants in the United States, Japan, and France are more inclined to perceive that a

decline in physical ability best defines the beginning of old age than participants in the Dominican Republic and the United Kingdom. Of those who selected "Decline in mental functioning", participants in the United States have the highest percentage (34.2%) and participants in the Dominican Republic have the lowest percentage (14.7%). More than expected participants in the United States selected "Decline in mental functioning" and fewer than expected participants in the Dominican Republic, as well as the other countries selected that response. Therefore, participants in the United States are more inclined to perceive that a decline in mental functioning best defines the beginning of old age than participants in the other four countries. A higher percentage of participants in the Dominican Republic selected "Reaching a specific age" (34.3%) than participants in the United States (13.6%), United Kingdom (11.0%), Japan (15.6%), and France (15.9%). More than expected participants in the Dominican Republic selected "Reaching a specific age" and fewer than expected participants in the other four countries selected that response. Therefore, participants in the Dominican Republic are more inclined to perceive that reaching a specific age best defines the beginning of old age compared to participants in the Unites States, United Kingdom, Japan, and France.

This Chi-Square analysis shows that participants in the developed countries of the United States, Japan, and France are more inclined to perceive that a decline in physical and mental ability best defines the beginning of old age and that participants in the developing country of the Dominican Republic are more inclined to perceive that reaching a specific age best defines the beginning of old age.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with this criterion variable of "What best defines

the beginning of old age" show that all of the predictor variables of age, gender, marital status, and income level were significant for the United States. Only age and gender were significant for the United Kingdom and Japan. In France the predictor variables that proved to be significant were age and income level by thirds. Income level was the only significant predictor variable for participants in the Dominican Republic.

The predictor variable of age was significant for the four developed countries of the United States, United Kingdom, Japan, and France and the analysis determined that the older the participant the more inclined s/he was to perceive that a decline in physical ability and/or a decline in mental function best defines the beginning of old age. Age was not a significant predictor variable with this criterion variable for the participants in the Dominican Republic.

The predictor variable of gender was significant for three of the developed countries, the United States, United Kingdom, and Japan. In each of these three countries both male and female participants equally perceive a decline in physical ability as the best definition for the beginning of old age. However, the differences between the genders are found in the other responses. In the United States female participants are more inclined to perceive a decline in mental functioning compared to male participants and male participants are more inclined to perceive reaching a specific age compared to female participants. In the United Kingdom more female participants compared to males selected decline in mental functioning as the beginning of old age. More male participants than female participants stated that retirement is the beginning of old age. In Japan more female participants compared to males selected reaching a specific age as their third most selected response, and more males than females selected retirement as

their third most common response. Gender did not prove to be a significant predictor variable for France and the Dominican Republic with the criterion variable of "What best defines the beginning of old age".

The marital status of the participants proved to be a significant predictor variable only for the United States. Married participants in the United States are more inclined to perceive a decline in physical and mental functioning as the beginning of old age compared to not married participants. Married female participants are more inclined to perceive the beginning of old age as a decline in physical and mental functioning compared to not married female participants. The same is true for married male participants who are also more likely to perceive the beginning of old age as a decline in physical and mental functioning compared to not married male participants.

The predictor variable of income level proved to be significant in the United States, France, and the Dominican Republic. However there is no consistency among the countries regarding the income levels of participants and which response they chose. In the United States participants with higher incomes are more likely to perceive the beginning of old age as a decline in physical and mental functioning, participants with lower income levels are more likely to perceive the beginning of old age as a change in status, retirement or becoming a grandparent, or reaching a specific age. In France participants with middle and high income are more likely than participants with low income to perceive that a decline in mental functioning best defines the beginning of old age. In the Dominican Republic the higher the income level the more inclined the participants are to perceive that reaching a specific age is what best defines the beginning of old age.

In summary, people sixty-five and older in the developed countries of the United States, the United Kingdom, Japan, and France perceive that a decline in physical ability best defines the beginning of old age. In the developing country of the Dominican Republic the higher the income level of the participants the more inclined they are to perceive reaching a specific age is what best defines the beginning of old age.

b. *"Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people"*

In order to provide an understanding of the participants' perceptions of younger peoples' respect for older people, the survey instrument included the question "Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?". The participants selected one of the three responses:

(1) too much respect;

(2) too little respect; or

(3) just about the right amount respect.

In order to determine if the predictor variable of country has a significant relationship with this criterion variable Chi-Square analysis was conducted. The results of the analysis determined that there is a statistically significant relationship between the predictor variable of country and this criterion variable "do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?" ($x^2 = 970.235$, $df = 8$, $p = .000$). the results of the Chi-Square analysis is displayed in Table C-2 below.

Table C- 2: Chi-Square results for Age by Category and "Do you feel that people over 65 get too much, too little or just about the right amount of respect" (N=6996).

		Countries					Total
		USA	UK	Japan	France	DR	
Too Little Respect	**N**	2248	779	491	413	827	**4758**
	%	75.4	81.7	44.8	42.7	82.9	**68.0**
Just the Right Amount of Respect	**N**	710	162	586	470	131	**2059**
	%	23.8	17.0	53.4	48.6	13.1	**29.4**
Too Much Respect	**N**	22	12	20	85	40	**179**
	%	.7	1.3	1.8	8.8	4.0	**2.6**
Total	**N**	2980	953	1097	968	998	**6996**
	%	100	100	100	100	100	**100**

$x^2 = 970.235$, $df = 8$, $p = .000$

As shown in Table C-2 above, of those who selected "Too little respect" there is a significant difference among the percentages of participants in the Dominican Republic (82.9%), the United Kingdom (81.7%), and the United States (75.4%) and the percentages of the participants in Japan (44.8%) and France (42.7%). More than expected participants in the Dominican Republic, the United Kingdom, and the United States selected "Too little respect" and fewer than expected participants selected that response in Japan and France. Therefore, participants in the Dominican Republic, the United Kingdom, and the United States are more inclined to perceive that people over sixty-five receive too little respect from younger people, than participants in Japan and France. The participants in Japan (53.4%) and France (48.6%) have higher percentages for the response "Just the right amount of respect" compared to the Dominican Republic (13.1%), the United Kingdom (17.0 %), and the United States (23.8%). More than expected participants in Japan and France selected "Just the right amount of respect" and fewer than expected participants in the Dominican Republic, the United Kingdom, and the United States selected that response. Therefore, participants in Japan and France are

more inclined to perceive that people over 65 get just the right amount of respect from younger people.

In summary, this Chi-Square analysis demonstrates that participants in the Dominican Republic, the United Kingdom, and the United States are more likely to perceive that people over sixty-five receive too little respect from young people. Participants in Japan and France are more likely to perceive that people over sixty-five get just the right amount of respect from young people.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with this criterion variable of "Do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people?" show that age is a significant predictor variable in the United States, Japan, and France; the marital status of female participants is a significant predictor variable in the United States; and income level is a significant predictor variable in the United States. The predictor variables of gender and marital status were not significant in any of the countries.

The predictor variable of age was significant for three of the developed countries, the United States, Japan and France. In the United States older participants are more likely to perceive that people over sixty-five get just the right amount of respect and younger participants are more likely to perceive that older people get too little respect from young people. Conversely, in Japan older participants feel that younger people have too little respect for people over sixty-five, and younger participants perceive that people over sixty-five get just the right amount of respect. And in France older and younger participants perceive that people over sixty-five get too little respect from young people,

while middle-age participants perceive that people over sixty-five get just about the right amount of respect.

The predictor variable of gender does not have a significant relationship to this criterion variable in any of the five countries.

The predictor variable of marital status in general did not prove to be significant with this criterion variable in any of the five countries. However, in the United States the marital status of females did prove to be significant. Married female participants perceive that people over sixty-five get too little respect from young people, and not married female participants perceive that people over 65 get just the right amount of respect.

The predictor variable of income level was significant only in the United States. Participants with a high income level perceive that people over sixty-five get too little respect and participants with a low and a medium income level perceive that people over 65 get just the right amount of respect.

In summary, there is no consistency among the countries regarding how the predictor variables of age, gender, marital status, and income level influence the participants' perception regarding respect for people over sixty-five.

2. Perceptions of Life Satisfaction for Self

The survey instrument contains three questions that are intended to capture the perception of life satisfaction of the participants. The questions are:

(a) "As I grow older things seem better than I thought they would be";

(b) "As I look back on my life I am fairly well satisfied"; and

(c) "These are the best years of my life".

The responses to the questions are Likert Scale scoring:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Each of these three questions is considered a criterion variable and the responses to each of the questions were analyzed using each of the predictor variables of age, gender, marital status, and income.

As discussed in the Methodology chapter above, a composite variable for "Life Satisfaction" was created using the three questions. This new composite criterion variable indicates the participants' level of life satisfaction for oneself. Statistical analysis was conducted using each of the predictor variables with the composite variable of "Life Satisfaction".

The results of the analysis of each of the three questions or statements are discussed first, followed by the analysis of the composite variable with each of the predictor variables.

a. *"As I grow older things seem better than I thought they would be"*

The survey question "As I grow older things seem better than I thought they would be" provides an indication on how the participants perceive their own life as they age compared to what they had imagined it might be. The participants were asked to choose from four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more participants agree with the statement and the higher the mean score indicates participants do not agree with the statement.

In order to determine if there is a relationship between the predictor variable of country with this criterion variable Simple One-Way Analysis of Variance (ANOVA) was conducted. The analysis proved that there is a statistically significant relationship between the predictor variable of country and the criterion variable of "As I grow older things seem better than I thought they would be" (F = 156.205, df = 4, 6961 p = .000). Table C-3 below shows the results of the analysis.

Table C- 3: ANOVA Mean Scores for Five Countries and "As I grow older things seem better than I thought they would be" (N = 6966).

Variable	N	Mean	SD
Country:			
USA	2977	2.0578	.96999
UK	948	2.3502	.87782
Japan	1105	2.7041	.78611
France	941	2.4431	.98942
DR	995	1.8533	.90637
Total	6966	2.2229	.96476

***F* (4, 6961) = 156.205, *p* = .000**

As shown in Table C-3, the ANOVA results show that the Dominican Republic has the lowest mean score (1.8533), followed by the United States (2.0578), the United Kingdom (2.3502), and France (2.4431). Japan has the highest mean score (2.7041).

This indicates that participants in the Dominican Republic are more likely to agree that as they grow older things seem better than I thought they would be and the participants in Japan are less likely to agree with the statement. The Scheffe Post Hoc Test indicates that there is a significant difference between the mean scores of all five countries (p=.000), with the exception of France and the United Kingdom. The Scheffe Post Hoc test indicates that there is no significant difference between the mean scores of France and the United Kingdom (p =.312).

Therefore, this ANOVA analysis determines that participants in the Dominican Republic are more likely to perceive that as they grow older things seem better than they thought they would be. In descending order the participants in the United States, the United Kingdom, and France are more likely than not to also perceive that as they grow older things seem better than they thought they would be. However, participants in Japan are less likely to perceive that as they grow older things seem better than they thought they would be.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with this criterion variable of "As I grow older things seem better than I thought they would be" show that marital status is a significant predictor variable in the United States, the United Kingdom, France, the Dominican Republic, and Japan; income level is a significant predictor variable in the United States, the United Kingdom, Japan, and the Dominican Republic; and age is a significant predictor variable only in France. Gender was a significant predictor variable only in Japan.

The predictor variable of age was significant only in France. The results of the France analysis show that middle-age participants agree with the statement "As I grow older things seem better than I thought they would be", while young and old participants disagree with the statement.

The predictor variable of gender was significant only in Japan. Female participants perceive that as they grow older things seem better than they thought they would be and male participants perceive the opposite.

The predictor variable of marital status was significant in all five countries. In the United States, the United Kingdom, France and the Dominican Republic married participants are more likely than not married participants to perceive that as they grow older things are better than they thought they would be. Conversely, in Japan married participants do not perceive that as they grow older things are better than they had thought they would be.

Income level of the participants was determined to be a significant predictor variable in the United States, the United Kingdom, Japan, and the Dominican Republic. In the United States, the United Kingdom, and Japan participants with a high income level are more likely to perceive that as they grow older things seem better than they thought they would be. However, in the Dominican Republic participants with a low income level are more likely to perceive that as they grow older things seem better than they thought they would be.

b. *"As I look back on my life I am fairly well satisfied"*

The survey question "As I look back on my life I am fairly well satisfied" provides an indication on the participants' perception of their own life satisfaction from younger days to the present. The participants were asked to choose from four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4".

Therefore, the lower the mean score, the more participants agree with the statement and the higher the mean score indicates participants do not agree with the statement.

In order to determine if the predictor variable of country has a relationship with this criterion variable ANOVA was conducted. The results of the analysis showed that there is a statistically significant relationship between the predictor variable of country and the criterion variable of "As I look back on my life I am fairly well satisfied" (F = 113.164, df = 4, 7112, p = .000). Table C-4 shows the results of the analysis.

Table C- 4: ANOVA Mean Scores for Five Countries and "As I Look Back On My Life I am Fairly Well Satisfied" (N = 7117).

Variable	N	Mean	SD
Country:			
USA	3037	1.6569	.87313
UK	976	1.9344	.79214
Japan	1108	2.1318	.79903
France	995	1.8261	.83372
DR	1001	1.4625	.71613
Total	7117	1.7652	.85028

***F* (4, 7112) = 113.164, *p* = .000**

As shown in Table C-4 above, the Dominican Republic has the lowest mean score (1.4625), followed by the United States (1.6569), France (1.8261), and the United Kingdom (1.6569). Japan has the highest mean score (2.1318). This analysis indicates that participants in the Dominican Republic are more inclined to agree that as they look back on their life they are fairly well satisfied and that participants in Japan are more likely to disagree with that statement. The other three countries fall on the continuum in between these two mean scores with participants in the United States more likely to agree with the statement, than participants in France and in the United Kingdom. The results of the Scheffe Post Hoc test indicate that there is a significant difference between the mean scores of all five of the countries (p = .000), with the exception of France and the United Kingdom. The Scheffe Post Hoc test indicates that there is no significant difference between the mean scores of France and the United Kingdom (p = .075).

Therefore, this ANOVA analysis determines that participants in the Dominican Republic are more likely to perceive that as they look back on their life they are fairly well satisfied. In descending order the participants in the United States, the United Kingdom, and France are more likely than not to also perceive that as they look back on their life they are fairly well satisfied. However, participants in Japan are less likely to perceive that as they look back on their life they are fairly well satisfied.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with this criterion variable of “As I look back on my life I am fairly well satisfied” show that marital status is a significant predictor variable in all the countries; age is a significant predictor variable in the United States, United Kingdom, and France; income level is a significant predictor variable in the

United States, the United Kingdom, Japan and France; and gender is a significant predictor variable only in Japan.

The predictor variable of age was found to have a significant relationship with the criterion variable "As I look back on my life I am fairly well satisfied" in the United States, the United Kingdom and in Japan. It was found that in all three countries older participants are more likely to perceive that as they look back on their life they are fairly well satisfied.

The predictor variable of gender was found to have a significant relationship with the criterion variable only in Japan. The analysis showed that in Japan female participants are more likely than male participants to perceive that as they look back on their life they are fairly well satisfied.

The predictor variable of marital status was found to have a significant relationship with the criterion variable in all five countries. The results showed that in the United States, the United Kingdom, France, and the Dominican Republic married participants are more likely to perceive that as they look back on their life they are fairly well satisfied. However, in Japan the results showed that not married participants are more likely to perceive that as they look back on their lives they are fairly well satisfied, and that married participants were more likely to disagree with the statement.

The predictor variable of income level was found to have a significant relationship with the criterion variable "As I look back on my life I am fairly well satisfied" in the United States, the United Kingdom, Japan, and France. In all four countries participants with a higher income level perceive that as they look back on their

life they are fairly well satisfied. Income level was found not be have a significant influence on how the participants in the Dominican Republic responded to this statement.

c. *"These are the best years of my life"*

This survey question "These are the best years of my life" is intended to ascertain how the participants perceive their life at this time. The participants were asked to choose from four Likert Scale responses:

- "Agree Strongly = 1",
- "Agree Somewhat = 2",
- "Disagree Somewhat = 3", and
- "Disagree Strongly = 4" with this statement.

Therefore, the lower the mean score, the more likely the participants agree with the statement and the higher the mean score indicates the more likely the participants do not agree with the statement.

In order to determine if the predictor variable of country has a relationship with this criterion variable ANOVA analysis was conducted. The ANOVA analysis shows that there is a statistically significant relationship between the predictor variable of country and this criterion variable ($F = 98.379$, $df = 4, 6998$, $p = .000$). Table C-5 below shows the results of the analysis.

Table C- 5: ANOVA Mean Scores for Five Countries and "These Are the Best Years of My Life" (N = 7003).

Variable	N	Mean	SD
Country:			
USA	2996	2.1031	1.05810
UK	953	2.3683	.96347
Japan	1104	2.3886	.89640
France	957	2.3114	1.06052
DR	993	1.6465	.87697
Total	7003	2.1479	1.02474

***F* (4, 6998) = 98.379, *p* = .000**

Table C-5 shows that the mean score of for the Dominican Republic is the lowest (1.6465), followed by the United States (2.1031). The country with the highest mean score is Japan (2.3886), followed by the United Kingdom (2.3683), and then France (2.3114). This indicates that participants in the Dominican Republic are more likely to agree that these are the best years of their life, and the participants in the United States are also likely to agree with the statement. The participants in Japan are more likely to disagree that these are the best years of their life, and that participants in the United Kingdom and France are also likely to disagree with the statement. The Scheffe Post Hoc test indicates that there is a significant difference between the mean scores of the United States and the Dominican Republic with each of the mean scores of the other countries ($p = .000$). However, there is no significant difference between the mean scores of the United Kingdom, Japan, and France ($p > .01$).

Therefore, this ANOVA analysis determines that participants in the Dominican Republic and in the United States perceive that these are the best years of their life and that the participants in the United Kingdom, Japan, and France do not perceive that these are the best years of their life.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with this criterion variable of “These are the best years of my life” show that age and marital status are significant predictor variables in all five of the countries; income level is a significant predictor variable in the United States, and the United Kingdom; gender is a significant predictor variable only in Japan.

The predictor variable of age was found to have a significant relationship with the criterion variable “These are the best years of my life” in all five countries. In the United States, the United Kingdom, France and the Dominican Republic the younger the participant the more likely they are to agree with the statement. However, in Japan the reverse is true; the younger participants are more likely to disagree with the statement and the older participants are more likely to perceive that these are the best years of their life.

The predictor variable of gender was found to have a significant relationship with the criterion variable “These are the best years of my life” only in Japan. In Japan female participants are more likely to agree with the statement than male participants.

The predictor variable of marital status was found to have a significant relationship with the criterion variable “These are the best years of my life” in all five countries. In the United States, United Kingdom, and the Dominican Republic married participants are more inclined to agree with the statement compared to not married participants. In France, while marital status in general did not prove to be significant, the marital status of female participants was a significant predictor variable in that married female participants are more likely to agree with the statement. The married participants in Japan prove to be different from their peers in the other countries in that in Japan it is

the not married participants that were shown to agree that these are the best years of their life and the married participants did not agree with the statement.

The predictor variable of income level was found to have a significant relationship with the criterion variable “These are the best years of my life” in the United States, and the United Kingdom. It was found in both these countries that participants with higher income levels are more likely to perceive that these are the best years of their life compared to participants with medium and low income levels who are more likely to disagree with the statement. The income level of the participants in Japan, France, and the Dominican Republic has no influence as to whether or not they perceive these are the best years of their life.

d. “*Life Satisfaction Variable”*

As described in the Methodology section above, in order to determine if there is a composite variable that can indicate the life satisfaction of the participants, all three questions:

1. “As I grow older things seem better than I thought they would be”;
2. “As I look back on my life I am fairly well satisfied”; and
3. “These are the best years of my life”,

were combined to create the “Life Satisfaction” criterion variable. For the “Life Satisfaction” scale, low mean scores indicate more satisfaction with life; this is because for each of the three survey questions that make up the “Life Satisfaction” composite variable the response “Agree strongly” is scored a “1”, and “Agree somewhat” is scored a “2”, while “Disagree somewhat” is scored a “3” and “Disagree strongly” is scored a “4”.

Therefore, the lower the score the more the participants agree with the statement pertaining to life satisfaction.

In order to determine if the predictor variable of country has a relationship with the composite criterion variable "Life Satisfaction", an analysis of variance (ANOVA) was conducted. The results of the analysis determined that there is a statistically significant relationship with the variable of country and "Life Satisfaction" (F = 205.635, df = 4, 6828, p = .000). Table C-6 shows the results of the analysis.

Table C- 6: ANOVA Mean Scores for Five Countries and "Life Satisfaction" (N = 6833).

Variable	N	Mean	SD
Country:			
USA	2930	5.8116	2.13620
UK	919	6.6746	2.00428
Japan	1092	7.2225	1.80358
France	904	6.5785	2.04880
DR	988	4.9545	2.01286
Total	6833	6.1307	2.15786

***F* (4, 6828) = 205.635, *p* = .000**

As shown in Table C-6 above, the Dominican Republic has the lowest mean score (4.9545), followed by the United States (5.8116). Japan has the highest mean score (7.2225) followed by the United Kingdom (6.6746) and France (6.5785). This indicates that participants in the Dominican Republic and the United States are more likely to perceive having a higher level of life satisfaction than participants in Japan, the United Kingdom, and France. The Scheffe Post Hoc test results show that there is a significant difference between the mean scores of all five countries (p = .000), with the exception of the mean scores between France and the United Kingdom whose mean scores do not have a significant difference (p = .908).

Therefore, this ANOVA analysis determines that participants in the Dominican Republic and in the United States perceive having a higher life satisfaction than participants in Japan, the United Kingdom and France.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with the “Life Satisfaction" criterion variable show that age was a significant predictor variable in the United States, Japan, and France; gender was a predictor variable in the United States, Japan, and the Dominican Republic; marital status was a significant predictor variable in the United States, the United Kingdom, Japan, France, and the Dominican Republic; and income level was a significant predictor variable in the United States and Japan.

The predictor variable of age was found to have a significant relationship with the criterion variable of “Life Satisfaction” in the United States, Japan, and France. In the United States and France the younger the participants the more they perceive having greater life satisfaction. In Japan the reverse is true, the older the participant the more they perceive having greater life satisfaction.

The predictor variable of gender was found to have a significant relationship with the criterion variable of “Life Satisfaction” in the United States, Japan, and the Dominican Republic. In the United States and Japan female participants have higher life satisfaction than male participants. However, in the Dominican Republic male participants have higher life satisfaction than female participants.

The predictor variable of marital status was found to have a significant relationship with the criterion variable of “Life Satisfaction” in all five countries. In the United States, the United Kingdom, France, and the Dominican Republic married participants

are more likely to perceive having higher life satisfaction than not married participants. However, the reverse is true in Japan where not married participants are more likely to perceive having higher life satisfaction than married participants.

The predictor variable of income level was found to have a significant relationship with the criterion variable of "Life Satisfaction" in the United States, the United Kingdom and Japan. In these three countries participants with higher income levels have more life satisfaction than participants with medium and lower income levels. It was found that the income levels of the participants in France and the Dominican Republic do not have an influence on whether or not the participants perceive having a higher life satisfaction.

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4. Perceptions of Quality of Life for Self

For purposes of this study, there are two variables that refer to the quality of life for oneself. The first, as described in the Methodology section above, is a composite variable that contains five items that refer to quality of life for oneself. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- "a very serious problem = 1",
- "a somewhat serious problem = 2", or
- "not a problem at all for you personally = 3".

According to this "Quality of Life for Self" scale, the higher the score (such as "not a problem at all for you personally" which equals a score of 3), the more positive the perception of quality of life for self.

The second variable of the "Perceptions of Quality of Life for Self" in this study refers to the perception of the locus of control over one's quality of life at age 75. The survey question is "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

(1) "decisions or choices that you make during your lifetime"

(2) "decisions made by others that are beyond your control"

(3) "genetic or inherited factors" or

(4) "blind luck"?

Each of these two variables, "Quality of Life for Self" and "Locus of Control" was analyzed using the predictor variable of country. Below is the discussion of the results.

a. "Quality of Life for Self" Variable

In order to determine the relationship between the predictor variable of country and the criterion variable of "Quality of Life for Self" a simple one way variance of analysis was performed. The statistical analysis determined that there is a statistically

significant relationship (F = 1942.392, df = 4, 7016, p = .000). Table C-7 displays the results below.

Table C- 7: ANOVA Mean Scores for Five Countries and "Quality of Life for Self" (N = 7021).

Variable	N	Mean	SD
Country:			
USA	3008	12.6223	2.28476
UK	980	11.5918	2.89389
Japan	1101	13.0073	1.68306
France	944	7.7436	2.33784
DR	988	6.7955	2.03433
Total	7021	11.0630	3.29884

***F* (4, 7016) = 1942.392, *p* = .000**

As Table C-7 shows, Japan has the highest mean score (13.0073), followed by the United States (12.6223), and the United Kingdom (11.5918). The Dominican Republic has the lowest mean score (6.7955) followed by France (7.7436). According to this "Quality of Life for Self" scale, the higher the score the more positive the perception of quality of life for self. Therefore, participants in Japan, the United States and the United Kingdom are more likely to perceive that quality of life issues such as not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue, are not a problem at all for them personally. Participants in the Dominican Republic and in France are more likely to perceive that the quality of life issues are a problem for them personally. The Scheffe Post Hoc test results show that there is a significant difference between the mean scores of all the countries (p = .000).

Therefore, this ANOVA analysis determines that participants in Japan, the United States and the United Kingdom perceive having a better quality of life for them personally than participants in the Dominican Republic and France.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with the "Quality of Life for Self" criterion variable show that age is a significant predictor variable in all of the five countries, gender is a significant predictor variable in the United States, the United Kingdom, and France; marital status is a significant predictor variable in the United States, the United Kingdom, and Japan; and income level is a significant predictor variable in the United States, the United Kingdom, Japan, and the Dominican Republic.

The predictor variable of age was found to have a significant relationship with the criterion variable of "Quality of Life for Self" in the United States, Japan, France, and the Dominican Republic. In the United States, Japan, and France older participants perceive having a better quality of life than younger participants. However, in the Dominican Republic younger participants perceive having a better quality of life than older participants on issues such as not having enough money, poor health, loneliness, fear of crime and often feeling sad or blue.

The predictor variable of gender was found to have a significant relationship with the criterion variable of "Quality of Life for Self" in the United States, the United Kingdom and France. In the United Kingdom female participants perceive having a better positive quality of life than males. However, in the United States and France male participants perceive having a better quality of life than females.

The predictor variable of marital status was found to have a significant relationship with the criterion variable of "Quality of Life for Self" in the United States, the United Kingdom and Japan. In the United States and the United Kingdom married participants perceive having a better quality of life than not married participants.

However in Japan not married participants perceive having a better quality of life than married participants, and not married male participants in particular perceive having a better quality of life than married male participants.

The predictor variable of income level was found to have a significant relationship with the criterion variable of "Quality of Life for Self" in the United States, the United Kingdom, Japan, and the Dominican Republic. In each of these four countries participants with higher levels of income perceive having a better quality of life than participants with lower levels of income.

b. "Locus of Control" Variable

In an effort to understand how the participants perceive the control over the quality of their lives when they are older, a "Locus of Control" variable question was included in the survey instrument. The question is: "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75:

a. "Decisions or choices that you make during your lifetime";
b. "Decisions made by others that are beyond your control";
c. "Genetic or inherited factors"; or
d. "Blind luck"?

In order to determine the relationship between the predictor variable of country and the criterion variable of "Which one of the following will have the biggest impact on the quality of your life at age 75" a Chi-Square analysis was performed. The statistical analysis determined that there is a statistically significant relationship ($x^2 = 1596.60$, $df = 12$, $p = .000$). Table C-7 displays the results below.

Table C- 8: Chi-Square Results for Five Countries with "In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75?" (N=6673).

		Countries					Total
		USA	UK	Japan	France	DR	
Decisions or choices made by you	**N**	1856	378	140	376	446	**3196**
	%	63.8	41.4	13.5	41.6	49.1	**47.9**
Decisions made by others	**N**	270	284	649	157	182	**1542**
	%	9.3	31.1	62.6	17.4	20.0	**23.1**
Blind Luck	**N**	312	144	143	259	182	**1040**
	%	10.7	15.8	13.8	28.7	20.0	**15.6**
Genetic or inherited factors	**N**	472	107	105	112	99	**895**
	%	16.2	11.7	10.1	12.4	10.9	**13.4**
Total	**N**	2910	913	1037	904	909	**6673**
	%	100	100	100	100	100	**100**

***x²* = 1596.60, *df* = 12, *p* = .000**

As shown in Table C-8 above, of the participants who selected "Decisions or choices made by you", the highest percentage is in the United States (63.8%), followed by the Dominican Republic (49.1%), then France (41.6%), and the United Kingdom (41.4%). The country with the lowest percentage is Japan (13.5%). More than expected participants in the United States and the Dominican Republic selected "Decisions or choices made by you", and fewer than expected participants in Japan, France, and the United Kingdom selected that response. Therefore, participants in the United States and the Dominican Republic are more inclined than participants in Japan, France and the United Kingdom to perceive that the biggest impact on the quality of their life at age 75 will be decisions or choices made by themselves. Of those participants who selected "Decisions made by others", Japan has the highest percentage (62.6%) and the United Kingdom has the second highest percentage (31.1%). More than expected participants in Japan and the United Kingdom selected "Decisions made by others" and fewer than expected participants in the United States, the Dominican Republic, and France selected

that response. Therefore, participants in Japan and the United Kingdom are more inclined than participants in the United States, the Dominican Republic, and France to perceive that the biggest impact on the quality of their lives at age 75 will be decisions made by others. Of the participants who selected "Blind luck" France has the highest percentage (28.7%). More than expected participants in France selected that response. Therefore, the participants in France are more inclined to perceive that blind luck will have the biggest impact on the quality of their lives at age 75.

Therefore this Chi-Square analysis determined that participants in the United States and the Dominican Republic are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75. Participants in Japan and the United Kingdom are more inclined to perceive that the quality of their life at age 75 will be determined by decisions made by others. And participants in France are more inclined to perceive that their quality of life at age 75 will be determined by blind luck.

Of the participants who selected "Genetic or Inherited Factors", the United States has the highest percentage (16.2%). More than expected participants in the United States selected this response, and fewer than expected participants in all the other countries selected this response. Therefore, the participants in the United States are more likely to perceive that "Genetic or Inherited Factors" will determine the quality of their life at age 75 than the participants in the United Kingdom, Japan, France, and the Dominican Republic.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with the "Which one of the following will have

the biggest impact on the quality of your life at age 75" criterion variable show that age and gender are significant predictor variables in the United States, the United Kingdom, and Japan; marital status is a significant predictor variable in the United States, Japan, France, and the Dominican Republic; and income level is a significant predictor variable in the United States, Japan, and the Dominican Republic.

The predictor variable of age was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States, the United Kingdom, and Japan. In the United States and the United Kingdom younger participants are more likely than older participants to perceive that decisions made by themselves will determine the quality of their life at age 75. In the United Kingdom and Japan middle-age and old participants are more likely to perceive that the quality of their life at age 75 will be determined by others.

The predictor variable of gender was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States, the United Kingdom and Japan. In the United States female participants are more likely to perceive that their quality of life at age 75 will be determined by themselves than male participants. In the United Kingdom and Japan female participants are more inclined to perceive that the quality of their life at age 75 will be determined by decisions made by others and male participants perceive that the quality of their lives will be determined by their own decisions.

The predictor variable of marital status was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States, Japan, France, and the Dominican Republic. In the United States and the Dominican Republic

married participants are more likely to perceive that their quality of life will be influenced by decisions made by themselves compared to not married participants. In France not married participants are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75, and married participants are more inclined to perceive that decisions made by others will impact on their quality of life at age 75. In Japan not married participants are more likely to perceive that their quality of life will be determined by decisions made by others compared to married participants.

The predictor variable of income level was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States and the Dominican Republic. In both countries participants with higher income levels are more inclined to perceive that decisions made by themselves will impact the quality of their lives at age 75. In the Dominican Republic participants with low income levels are more inclined to perceive that blind luck will have the biggest impact on the quality of their life at age 75.

4. Perception of Quality of Life for People Over 65

In order to ascertain how participants perceive the quality of life for people over 65, a composite variable was created, as described in the Methodology section above. The composite variable of "Perception of Quality of Life for People Over 65" contains five items that refer to the participants' perception of the quality of life for older people. The five items are:

(1) not having enough money to live on;

(2) having poor health;

(3) level of loneliness;

(4) fear of crime; and

(5) often feeling sad or blue.

Each item is part of a Likert Scale question such as "Would you tell me whether '*not having enough money to live on*' is:

- 'a very serious problem = 1,
- 'a somewhat serious problem = 2', or
- 'not a problem at all = 3' for most people over 65 personally?".

According to this "Quality of Life for People Over 65" scale, the higher the score (not a problem at all = 3) the more positive the perception of quality of life for people over 65.

In order to determine the relationship between the predictor variable of country and the criterion variable of "Quality of Life for People Over 65" a Simple One Way Analysis of Variance was performed (ANOVA). The statistical analysis determined that there is a statistically significant relationship (F = 501.478, df = 42, 6652, p = .000). Table C-9 displays the results below.

Table C- 9: ANOVA Mean Scores for Five Countries and "Quality of Life for People Over 65" Scale (N = 6657).

Variable	N	Mean	SD
Country:			
USA	2766	8.5101	2.09047
UK	920	7.9043	2.57712
Japan	1059	8.1992	2.34923
France	930	6.1269	1.49453
DR	982	5.6802	1.32397
Total	6657	7.6266	2.33241

***F* (42, 6652) = 501.478, *p* = .000**

As Table C-9 shows, the United States has the highest mean score (8.5101), followed by Japan (8.1992), and the United Kingdom (7.9043). The Dominican Republic has the lowest mean score (5.6802) followed by France (6.1269). According to this "Quality of Life for People Over 65" scale, the higher the score the more positive the perception of quality of life for people over 65. Therefore, participants in the United States, Japan, and the United Kingdom are more likely to perceive that quality of life issues such as not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue, are not a problem at all for people over 65. Participants in the Dominican Republic and France are more likely to perceive that these quality of life issues are a problem for people over 65. The Scheffe Post Hoc test results show that there is a significant difference between the mean scores of all the countries ($p < .05$).

Therefore, this ANOVA analysis determines that participants in the United States, Japan, and the United Kingdom perceive that the quality of life issues of not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue, are not a problem at all for people over 65. And participants in the Dominican Republic and France perceive that these issues are a problem for people over 65.

The results of the individual country analysis with the predictor variables of age, gender marital status and income level with the "Quality of Life for People Over 65" criterion variable show that age is a significant predictor variable in the United States, the United Kingdom, Japan and France; gender is a significant predictor variable in the United States, the United Kingdom, France and the Dominican Republic; marital status is

a significant predictor variable in the United States, the United Kingdom, and Japan; and income level is a significant predictor variable in the United States, Japan, France, and the Dominican Republic.

The predictor variable of age was found to have a significant relationship with the criterion variable of "Quality of Life for People Over 65" in the United States, the United Kingdom, Japan and France. In each of the countries it was found that the older the participant the more likely they are to have a more positive perception of the quality of life for people over 65.

The predictor variable of gender was found to have a significant relationship with the criterion variable of "Quality of Life for People Over 65" in the United States, the United Kingdom, France and the Dominican Republic. In each of these four countries, male participants are more inclined to have a positive perception of the quality of life for people over 65 compared to female participants.

The predictor variable of marital status was found to have a significant relationship with the criterion variable of "Quality of Life for People Over 65" in the United States, the United Kingdom, and Japan. In the United States married participants have a more positive perception of the quality of life for people over 65 than do not married participants. In Japan not married participants have a more positive perception of the quality of life for people over 65 than married participants. In the United States and the United Kingdom married male participants have a more positive perception on the quality of life for people over 65 than do not married male participants. But in Japan not married male participants have a more positive perception of the quality of life for people over 65 than married male participants.

The predictor variable of income level was found to have a significant relationship with the criterion variable of "Quality of Life for People Over 65" in the United States, Japan, France, and the Dominican Republic. In the United States and the Dominican Republic participants with a high income level have a more positive perception of the quality of life for people over 65 than participants with a low income level. And in Japan and France participants with a lower income level have a more positive perception of the quality of life for people over 65 than the other income levels.

B. Comparison of the Five Countries' Findings on the Predictor Variables

The discussion that follows compares the countries' findings on the predictor variables and how they influence the participants' perception of aging and older people. Each of the predictor variables of age, gender, marital status, and income levels is discussed within the four categories of the criterion variables:

1. Perceptions of Aging and Older People;
2. Perceptions of Life Satisfaction for Self;
3. Perceptions of Quality of Life for Self; and
4. Perceptions of Quality of Life for People Sixty-five and Older.

1. Age

The studies discussed in the literature review found that age is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults. This study also found that age is a significant predictor variable in assessing

perceptions of aging, including perceptions of life satisfaction and quality of life as one ages and perceptions of the quality of life for people over 65. The predictor variable of age, both the age by category of young, middle-age, and old, and the age by decades, proved to have a significant relationship with the criterion variables in all of the countries. However, the variable of age in the Dominican Republic was not as significant as in the other four countries. The predictor variable of age proved to have the most significance in the United States and France.

a. Perceptions of Aging and Older People

The predictor variable of age proved to influence how participants perceive what best defines the beginning of old age and whether or not people over 65 get the right amount of respect from younger people. The predictor variable of age was significant for the four developed countries of the United States, United Kingdom, Japan, and France where the analysis determined that the older the participant the more inclined s/he was to perceive that a decline in physical ability and/or a decline in mental function best defines the beginning of old age. However, age was not a significant predictor variable with this criterion variable for the participants in the Dominican Republic, a developing country, where level of income was a strong predictor variable. Regarding respect for people over 65, the predictor variable of age was significant for three of the developed countries, the United States, Japan and France, but not in a consistent pattern. In the United States older participants perceive that people over sixty-five get just the right amount of respect and younger participants perceive that older people get too little respect from young people. Conversely, in Japan older participants feel that younger people have too little

respect for people over sixty-five, and younger participants perceive that people over sixty-five get just the right amount of respect. And in France older and younger participants perceive that people over sixty-five get too little respect from young people, while middle-age participants perceive that people over sixty-five get just about the right amount of respect. Once again, in the Dominican Republic, the age of the participant was not influential regarding the perception of respect.

b. Perceptions of Life Satisfaction for Self

There are four criterion variables within this category of "Perceptions of Life Satisfaction for Self". The composite variable of "Life Satisfaction" and the three criterion variables that are contained within: "As I grow older things seem better than I thought they would be"; "As I look back on my life I am fairly well satisfied"; and "These are the best years of my life". This study found that age is a significant predictor as to how participants perceive their satisfaction with life as they age in the United States, Japan, and France. In the United States and France the younger the participants the more they perceive having greater life satisfaction. In Japan the reverse is true; the older the participants the more they perceive having greater life satisfaction.

When the variables are analyzed separately the study found that for the criterion variable of "As I grow older things seem better than I thought they would be", age was significant only in France. The results of the France analysis show that middle-age participants agree with the statement while young and old participants disagree with the statement. For the criterion variable of "As I look back on my life I am fairly well satisfied", age was found to have influence in the United States, the United Kingdom and

Japan. In all three countries older participants are more likely to perceive that as they look back on their life they are fairly well satisfied. For the criterion variable of "These are the best years of my life", age has an influence all five countries. In the United States, the United Kingdom, France and the Dominican Republic the younger the participants the more likely they are to agree with the statement. However, in Japan the reverse is true; the younger participants are more likely to disagree with the statement and the older participants are more likely to perceive that these are the best years of their life.

c. Perceptions of Quality of Life for Self

The category of "Perceptions of Quality of Life for Self" has two criterion variables: the composite variable of "Quality of life for self" and the "Locus of Control" variable.

The composite variable of "Quality of life for self" contains the mean scores of five survey questions related to quality of life issues for oneself, such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that age has significant relationship with this composite criterion variable in four of the countries, the United States, Japan, France, and the Dominican Republic, and not in the United Kingdom. In the United States, Japan, and France older participants perceive having a better quality of life than younger participants. However, in the Dominican Republic younger participants perceive having a better quality of life than older participants.

Age was also found to have a significant relationship with the criterion variable of "Locus of Control" in three of the countries, the United States, the United Kingdom, and

Japan. In the United States and the United Kingdom younger participants are more likely than older participants to perceive that decisions made by themselves will determine the quality of their life at age 75. In the United Kingdom and Japan middle-age and old participants are more likely to perceive that the quality of their life at age 75 will be determined by others.

d. Perceptions of Quality of Life for People Sixty-five and Older

The composite variable of "Quality of life for people over 65" contains the mean scores of five survey questions capturing how the participants perceive the quality of life issues for people over 65 such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that age has a significant relationship with this composite criterion variable in four of the countries, the United States, the United Kingdom, Japan and France. In each of the countries it was found that the older the participant the more likely they are to have a more positive perception of the quality of life for people over 65.

e. Discussion of Findings on Age and in the Literature Search

The findings of this study on age as a predictor variable is consistent with the studies described in the literature review. In the Unites States study by Davis and Douglas it was found that there is a relationship between age and life satisfaction and that there were significant age group and life satisfaction differences. They found that older people reported more life satisfaction (Davis and Douglas, 2004). A study conducted by Smith and colleagues found that even between groups in their later years, age does play a

role in life satisfaction (Smith, Borchelt, Maier, and Jopp, 2002). They found that there are significant differences between the young old and the oldest old regarding their level of life satisfaction. The young old reported higher positive well-being than the oldest old.

The study by Hummert and colleagues found age does affect how older adults are perceived in the United States. They found that middle-aged and elderly adults reported more stereotypes of the elderly than did young adults and that elderly adults reported more stereotypes than did middle-aged adults (Hummert, Garstka, Shaner and Strahm, 1994). In the second part of the study, the researchers found that young, middle-aged and elderly adults have many of the same stereotypes of the elderly.

However, Kite and Blair in their meta-analysis of literature to examine the question of perceptions of older adults stated that age seemed to be less important in determining attitudes toward the elderly than other types of information (Kite and Blare, 1988). Kite and Blair did suggest that the perception of the elderly can be influenced by factors such as type of design used or by the experimental setting (in the lab versus in the field) and that more research was needed to determine which factors influence beliefs and attitudes toward older people.

2. Gender

The studies discussed in the literature review found that there are mixed findings regarding gender as an influential variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults. This study also produced mixed results regarding gender as a predictor variable in assessing perceptions of aging. Gender was

found to have some significance in Japan, the United States, and the United Kingdom; it was least significant in France and the Dominican Republic.

a. Perceptions of Aging and Older People

The predictor variable of gender proved to influence how participants perceive what best defines the beginning of old age in three countries and had no significance in all five countries regarding whether or not people over 65 get the right amount of respect from younger people.

The predictor variable of gender was significant for three of the developed countries, the United States, the United Kingdom, and Japan. In each of these three countries both male and female participants equally perceive a decline in physical ability as the best definition for the beginning of old age. However, the differences between the genders are found in the other responses. In the United States female participants are more inclined to perceive a decline in mental functioning compared to male participants and male participants are more inclined to perceive reaching a specific age compared to female participants. In the United Kingdom more female participants than males selected decline in mental functioning as the beginning of old age. More male participants than females stated that retirement is the beginning of old age. In Japan more female participants compared to males selected reaching a specific age as their third most selected response, and more males than females selected retirement as their third most common response. Gender did not prove to be a significant predictor variable for France and the Dominican Republic with the criterion variable of “What best defines the beginning of old age”.

The predictor variable of gender does not have a significant relationship to this criterion variable of “Respect for people over 65” in any of the five countries.

b. Perceptions of Life Satisfaction for Self

There are four criterion variables within this category of “Perceptions of Life Satisfaction for Self”. The composite variable of “Life Satisfaction” and the three criterion variables that are contained within: “As I grow older things seem better than I thought they would be”; “As I look back on my life I am fairly well satisfied”; and “These are the best years of my life”.

This study found that the predictor variable of gender was found to have a significant relationship with the criterion variable of “Life Satisfaction” in the United States, Japan, and the Dominican Republic. In the United States and Japan female participants have higher life satisfaction than male participants. However, in the Dominican Republic male participants have higher life satisfaction than female participants.

When the variables are analyzed separately the study found that gender was significant only in Japan. For the criterion variable of “As I grow older things seem better than I thought they would be”, Japanese female participants perceive that as they grow older things seem better than they thought they would be and male participants perceive the opposite. For the criterion variable “As I look back on my life I am fairly well satisfied”, the analysis showed that in Japan female participants are more likely than male participants to perceive that as they look back on their life they are fairly well satisfied. For the criterion variable of “These are the best years of my life”, Japanese

female participants are more likely to agree with the statement than male participants. Therefore, in Japan, females express more satisfaction with life than do males.

c. Perceptions of Quality of Life for Self

The category of "Perceptions of Quality of Life for Self" has two criterion variables: the composite variable of "Quality of life for self" and the "Locus of Control" variable. This study found that the gender of the participants has a significant influence on both variables referring to quality of life for self in the United States and the United Kingdom; has significance with only one of the variables in Japan and France, and has no significance in the Dominican Republic.

The composite variable of "Quality of life for self" contains the mean scores of five survey questions related to quality of life issues for oneself, such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that gender has a significant relationship with this composite criterion variable in the United States, the United Kingdom, and France. In the United States and France male participants perceive having a better quality of life than females; however in the United Kingdom female participants perceive having a better quality of life than males.

Gender was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States, the United Kingdom, and Japan. In the United States female participants are more likely to perceive that their quality of life at age 75 will be determined by decisions and choices made by themselves than male participants. In the United Kingdom and Japan female participants are more inclined to perceive that

the quality of their life at age 75 will be determined by decisions made by others and male participants perceive that the quality of their lives will be determined by their own decisions.

d. Perceptions of Quality of Life for People Sixty-five and Older

The composite variable of "Quality of life for people over 65" contains the mean scores of five survey questions capturing how the participants perceive the quality of life issues for people over 65 such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that gender has a significant relationship with this composite criterion variable in four of the countries, the United States, the United Kingdom, France, and the Dominican Republic. In each of these four countries, male participants are more inclined to have a positive perception of the quality of life for people over 65 compared to female participants. In Japan gender did not play a role with this criterion variable.

e. Discussion of Findings on Gender and in the Literature Search

The results of gender in relationship to perceptions of aging found in this study echo the discussion in the literature review. As discussed in the literature review, the meta-analysis of studies in the United States conducted by Kamilar and colleagues revealed mixed results of gender differences in regards to life satisfaction in old age, with some studies suggesting that males have a higher life satisfaction than females and others having the opposite (Kamilar, Segal, and Qualls, 2000).

The literature review for this study also found there were mixed results of the influence gender has on perceptions of aging. In a study in the United States, Smith and colleagues found that men reported higher life satisfaction and satisfaction with their own aging compared to women (Smith, Borchelt, Maier, and Jopp, 2002). The study conducted by Canetto, et al, supported their hypothesis that perceptions of aging varied depending on the gender of the target and the age of the respondent (and the age of the target), but not on the gender of the respondent (Canetto, Kaminski and Felicio, 1995). Their findings indicated that there was no significant effect for respondent gender and perceptions of aging.

Similar mixed results on gender were found in international comparison studies. In their 2006 study of Americans and Koreans, Yun and Lachman found that American females showed more anxiety about aging than their male counterparts, while no gender differences were found for Koreans (Yun & Lachman, 2006). McConatha and colleagues found in their German and American study that gender plays a major role in the construction of age-related beliefs and practices (McConatha, Schnell, Volkwein, Riley, and Leach, 2003). The results also indicated significant gender differences, with women in both countries showing more concern with age-related changes in their physical appearance than the men did. Antonucci and colleagues examined the influence of gender on social relations in late life in four different countries. One of their hypotheses was that there will be few gender differences in the quantity of social relations since close relationships tend to be among the same people (i.e., spouse, children, friends) for both men and women. Their findings revealed no gender differences (Antonucci, Okorodudu, and Akiyama, 2002). They argued that most

research on gender differences in social relationships focuses on one cultural group at a time and therefore it is not clear to what extent gender differences are related to norms in one particular country versus the extent that the differences would be found from a comparison among cultures and countries. The authors stated that having data that is similar and comparable would be advantageous in comparing gender difference across cultures. Also, a limitation of most studies on stereotypes of the elderly is their neglect of the effects of gender, and conversely studies on gender stereotypes have often not considered the effect of age (Canetto, Kaminski and Felicio, 1995).

While this study did show that gender was a predictor variable for several of the criterion variables in four of the countries, age certainly proved to be a more consistent predictor variable. This finding is similar to the study by Celejewski and Dion which demonstrated that age as a variable was more powerful than gender in predicting stereotypical perceptions of older adults (Celejewski and Dion, 1998).

3. Marital Status

The literature review did not identify studies that included the variable of marital status and its possible influence on participants' perception of aging and older adults. However, this study has demonstrated that the marital status of participants does play a role on the participants' perceptions. Marital status proved to be influential in each of the five countries, more so in the United States and Japan, and less so in Japan and France, with the Dominican Republic in the middle.

a. Perceptions of Aging and Older People

Marital status was not a significant predictor variable in relation to the criterion variables within the "Perceptions of aging and older people" category: "What best defines the beginning of old age" and "Respect for people over 65". The marital status of the participants proved to be a significant predictor variable only for the United States for the criterion variable of "What best defines the beginning of old age". Married participants in the United States are more inclined to perceive a decline in physical and mental functioning as the beginning of old age compared to not married participants. Married female participants are more inclined to perceive the beginning of old age as a decline in physical and mental functioning compared to not married female participants. The same is true for married male participants who are also more likely to perceive the beginning of old age as a decline in physical and mental functioning compared to not married male participants. Marital status in general did not prove to be significant with the criterion variable of "Respect for people over 65" in any of the five countries. However, in the United States the marital status of females did prove to be significant. Married female participants perceive that people over sixty-five get too little respect from young people, and not married female participants perceive that people over 65 get just the right amount of respect.

b. Perceptions of Life Satisfaction for Self

There are four criterion variables within this category of "Perceptions of Life Satisfaction for Self"; the composite variable of "Life Satisfaction", and the three criterion variables that are contained within: "As I grow older things seem better than I

thought they would be"; "As I look back on my life I am fairly well satisfied"; and "These are the best years of my life".

This study found that the predictor variable of marital status was found to have a significant relationship with the criterion variable of "Life Satisfaction" in all five countries. In the United States, the United Kingdom, France, and the Dominican Republic married participants are more likely to perceive having higher life satisfaction than not married participants. However, the reverse is true in Japan where not married participants are more likely to perceive having higher life satisfaction than married participants.

When the "Life Satisfaction" variables are analyzed separately the study found that marital status was significant for all of the three criterion variables in all of the five countries.

For the criterion variable of "As I grow older things are better than I thought they would be", the United States, the United Kingdom, France and the Dominican Republic married participants are more likely than not married participants to perceive that as they grow older things are better than they thought they would be. Conversely, in Japan married participants do not perceive that as they grow older things are better than they had thought they would be.

For the criterion variable "As I look back on my life I am fairly well satisfied", the analysis showed that the predictor variable of marital status was found to have a significant relationship in all five countries. The results showed that in the United States, the United Kingdom, France, and the Dominican Republic married participants are more likely to perceive that as they look back on their life they are fairly well satisfied.

However, in Japan the results showed that not married participants are more likely to perceive that as they look back on their lives they are fairly well satisfied, and that married participants were more likely to disagree with the statement.

For the criterion variable “These are the best years of my life”, the analysis showed that the predictor variable of marital status was found to have a significant relationship in all of the countries. In the United States, the United Kingdom, and the Dominican Republic married participants are more inclined to agree with the statement compared to not married participants. The married participants in Japan prove to be different from their peers in the other countries in that Japanese not married participants were shown to agree that these are the best years of their life and the married participants did not agree with the statement. In France, while marital status in general did not prove to be significant, the marital status of female participants was a significant predictor variable in that married female participants are more likely to agree that these are the best years of their life compared to not married female participants.

c. Perceptions of Quality of Life for Self

The category of “Perceptions of Quality of Life for Self” has two criterion variables: the composite variable of “Quality of life for self” and the “Locus of Control” variable. This study found that the marital status of the participants has a significant influence on both variables referring to quality of life for self in the United States and Japan; has significance with only one of the variables in the United Kingdom, Japan, France, and the Dominican Republic.

The composite variable of “Quality of life for self” contains the mean scores of five survey questions related to quality of life issues for oneself, such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that marital status has a significant relationship with this composite criterion variable in the United States, the United Kingdom, and Japan. In the United States and the United Kingdom married participants perceive having a better quality of life than not married participants. However in Japan not married participants perceive having a better quality of life than married participants, and not married male participants in particular perceive having a better quality of life than married male participants.

The predictor variable of marital status was found to have a significant relationship with the criterion variable of “Locus of Control” in the United States, Japan, France, and the Dominican Republic. In the United States and the Dominican Republic married participants are more likely to perceive that their quality of life will be influenced by decisions made by themselves compared to not married participants. In France not married participants are more inclined to perceive that decisions made by themselves will have the biggest impact on the quality of their life at age 75, and married participants are more inclined to perceive that decisions made by others will impact on their quality of life at age 75. In Japan not married participants are more likely to perceive that their quality of life will be determined by decisions made by others compared to married participants.

d. Perceptions of Quality of Life for People Sixty-five and Older

The composite variable of "Quality of life for people over 65" contains the mean scores of five survey questions capturing how the participants perceive the quality of life issues for people over 65 such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that marital status has a significant relationship with this composite criterion variable in the United States, the United Kingdom, and Japan. In the United States married participants have a more positive perception of the quality of life for people over 65 than do not married participants. In Japan not married participants have a more positive perception of the quality of life for people over 65 than married participants. In the United States and the United Kingdom married male participants have a more positive perception on the quality of life for people over 65 than do not married male participants. But in Japan not married male participants have a more positive perception of the quality of life for people over 65 than married male participants.

e. Discussion of Findings on Marital Status and in the Literature Search

The literature review did not uncover studies focused on the relationship between marital status and the perception of aging and older adults.

4. Income

The studies discussed in the literature review found that socio-economic status is an important variable in understanding the perceptions, stereotypes, and attitudes towards aging and older adults. The socio-economic status of the participants was not available

for this study; instead level of income was used. This study found that level of income is a significant predictor variable in assessing perceptions of aging, including perceptions of life satisfaction and quality of life as one ages and perceptions of the quality of life for people over 65. The predictor variable of level of income, both the income level by thirds of low, medium, and high, and the income level by quartiles of low, low-medium, high-medium, and high proved to have a significant relationship with the criterion variables in all of the countries. However, income level was far less significant in France than the other four countries.

a. Perceptions of Aging and Older People

The predictor variable of income level proved to influence how participants perceive what best defines the beginning of old age in three countries and had no significance in all five countries regarding whether or not people over 65 get the right amount of respect from younger people.

The predictor variable of income level proved to be significant in the United States, France, and the Dominican Republic. However there is no consistency among the countries regarding the income levels of participants and which response they chose. In the United States participants with higher incomes are more likely to perceive the beginning of old age as a decline in physical and mental functioning, participants with lower income levels are more likely to perceive the beginning of old age as a change in status, retirement or becoming a grandparent, or reaching a specific age. In France participants with middle and high income are more likely than participants with low income to perceive that a decline in mental functioning best defines the beginning of old

age. In the Dominican Republic the higher the income level the more inclined the participants are to perceive that reaching a specific age is what best defines the beginning of old age.

The predictor variable of income level was significant only in the United States. Participants with a high income level perceive that people over sixty-five get too little respect and participants with a low and a medium income level perceive that people over 65 get just the right amount of respect.

b. Perceptions of Life Satisfaction for Self

There are four criterion variables within this category of "Perceptions of Life Satisfaction for Self"; the composite variable of "Life Satisfaction", and the three criterion variables that are contained within: "As I grow older things seem better than I thought they would be"; "As I look back on my life I am fairly well satisfied"; and "These are the best years of my life".

This study found that the predictor variable of income level was found to have a significant relationship with the criterion variable of "Life Satisfaction" in the United States, the United Kingdom and Japan. In these three countries participants with higher income levels have more life satisfaction than participants with medium and lower income levels. It was found that the income level of the participants in France and the Dominican Republic does not have an influence on whether or not the participants perceive having a higher life satisfaction.

When the "Life Satisfaction" variables are analyzed separately the study found that income level was significant for all of the three criterion variables in the United States

and the United Kingdom, and not significant for any of the three criterion variables in France.

For the criterion variable of "As I grow older things are better than I thought they would be", income level of the participants was determined to be a significant predictor variable in the United States, the United Kingdom, Japan, and the Dominican Republic. In the United States, the United Kingdom and Japan participants with a high income level are more likely to perceive that as they grow older things seem better than they thought they would be. However, in the Dominican Republic participants with a low income level are more likely to perceive that as they grow older things seem better than they thought they would be.

For the criterion variable of "As I look back on my life I am fairly satisfied", the predictor variable of income level was found to have a significant relationship in the United States, the United Kingdom, Japan, and France. In these four countries participants with a higher income level perceive that as they look back on their life they are fairly well satisfied. Income level was found not have a significant influence on how the participants in the Dominican Republic responded to this statement.

For the criterion variable of "These are the best years of my life", the predictor variable of income level was found to have a significant relationship in the United States, and the United Kingdom. It was found in both these countries that participants with higher income levels are more likely to perceive that these are the best years of their life compared to participants with medium and low income levels who are more likely to disagree with the statement. The income level of the participants in Japan, France, and

the Dominican Republic has no influence as to whether or not they perceive these are the best years of their life.

c. Perceptions of Quality of Life for Self

The category of "Perceptions of Quality of Life for Self" has two criterion variables: the composite variable of "Quality of life for self" and the "Locus of Control" variable. This study found that the income level of the participants has a significant influence on both variables referring to quality of life for self in the United States and the Dominican Republic; has significance with only one of the variables in the United Kingdom, and Japan; and has no significance with either criterion variable in France.

The composite variable of "Quality of life for self" contains the mean scores of five survey questions related to quality of life issues for oneself, such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that income level has a significant relationship with this composite criterion variable in the United States, the United Kingdom, Japan, and the Dominican Republic. In each of these four countries participants with higher levels of income perceive having a better quality of life than participants with lower levels of income.

The predictor variable of income level was found to have a significant relationship with the criterion variable of "Locus of Control" in the United States and the Dominican Republic. In both countries participants with higher income levels are more inclined to perceive that decisions made by themselves will impact the quality of their lives at age 75. In the Dominican Republic participants with low income levels are more

inclined to perceive that blind luck will have the biggest impact on the quality of their life at age 75.

d. Perceptions of Quality of Life for People Sixty-five and Older

The composite variable of "Quality of life for people over 65" contains the mean scores of five survey questions capturing how the participants perceive the quality of life issues for people over 65 such as: not having enough money to live on; having poor health; level of loneliness; fear of crime; and often feeling sad or blue. This study found that income level has a significant relationship with this composite criterion variable in the United States, Japan, France, and the Dominican Republic. In the United States and the Dominican Republic participants with a high income level have a more positive perception of the quality of life for people over 65 than participants with a low income level. And in Japan and France participants with a lower income level have a more positive perception of the quality of life for people over 65 than the other income levels.

e. Discussion of Findings on Income Levels and in the Literature Search

It was expected that income levels would play a significant role in the participants' perception of aging and older people, because studies identified in the literature review found that socioeconomic status is a major factor shaping the way individuals think about age (Barrett, 2003). The findings from an American study of socioeconomic status and attitudes towards aging show that participants with lower socioeconomic status hold less optimistic views (Barrett, 2003). And in a cross-cultural study of attitudes towards aging, the researchers concluded that the most significant

findings were due to socioeconomic status differences (Slaughter-Defoe, Kuehne, and Straker, 1992). In this study, income level was a significant predictor variable for perceptions of aging and older people in the United States, the United Kingdom, and Japan and the Dominican Republic. However, income level was not a strong predictor variable in France, where it only had a significant relationship with the criterion variable of "Quality of life for people over 65".

C. Summary

This international comparative study on perceptions of aging and older people focusing on the predictor variables of age, gender, marital status, and income level has demonstrated that there are similarities and differences among how the participants in the countries view aging and older people. This study is exploratory with the intent to demonstrate that there is much to be gained from investigating the similarities and differences in perceptions of aging among countries.

The next chapter discusses the findings and their relevance.

Chapter 10: Summary and Conclusion

A. Intent of Study

This is a descriptive comparative study which by definition is concerned with describing similarities and differences that exist across large population groups across national boundaries (Jackson, 2002). This study explores the differences and similarities of perceptions of aging among five countries and analyzes how the age, gender, marital status, income levels, and country of residence of the participants influence those perceptions. According to the literature review, demographic variables such as age, gender, and income level, influence how people perceive aging and older adults. This study was designed first, to determine if people in other countries have differing perceptions of aging and older adults, and second, to determine if and how these demographic variables influence perceptions of aging and older adults in different cultures.

The overall research question driving this study is: *Do people from differing countries, and therefore cultures, view aging and older people differently?* And based on the findings discussed in the literature review the additional questions are:

a. *Do older participants in different countries perceive having a higher life satisfaction than younger people?*
b. *Do males in different countries have a higher life satisfaction than females?*

c. *Do participants with lower income levels have less positive perceptions of quality of life for people over 65 than do participants with higher income levels?*

d. *Does marital status influence how participants in different countries perceive aging and older adults?*

In addition to answering the research questions above, the findings from this study can answer some commonly held beliefs about perceptions of aging in other countries, such as:

1. Do younger participants in Japan perceive that people over sixty-five receive the right amount of respect?
2. Do participants in the Dominican Republic perceive having poor life satisfaction?
3. Do participants in the United States perceive that the impact of the quality of life after 75 will be determined by decisions made by themselves?
4. Are there more similarities in the perceptions of aging and older people among participants in the developed countries of the United States, United Kingdom, Japan, and France than with a developing country such as the Dominican Republic?

B. Findings from the study

Although each of these questions has been answered in previous chapters this section is an opportunity to bring the findings together in answer to the research questions posed at the start.

The answer to the main research question *"Do people from differing countries, and therefore cultures, view aging and older people differently?"* has already been answered in the affirmative. There are differences among the five countries regarding perceptions of aging and older people, as discussed in the previous comparative chapter.

Below are the answers to the specific questions posed as a result of the literature review.

1. *Do older participants in different countries perceive having a higher life satisfaction than younger people?* This study found that in Japan, the older the participant the more they perceive having greater life satisfaction. However, in the United States and France the younger the participant the more they perceive having greater life satisfaction. The statistical analysis determined that age does not have an influence on the perception of life satisfaction in the United Kingdom nor in the Dominican Republic.

2. *Do males in different countries have a higher life satisfaction than females?* This study found that in the United States and Japan female participants have higher life satisfaction than male participants. However, in the Dominican Republic male participants have higher life satisfaction than female participants. The statistical analysis

found that gender does not have an influence on the perception of life satisfaction in the United Kingdom nor in France.

3. *Do participants with lower income levels have less positive perceptions of quality of life for people over 65 than do participants with higher income levels?* This study found that participants in the United States and the Dominican Republic with a low income level have a less positive perception of the quality of life for people over 65 than participants with a high income level. However, participants in Japan and France with a lower income level have a more positive perception of the quality of life for people over 65 than the other income levels. The income level of the participants in the United Kingdom does not have an influence on how they perceive the quality of life for people over 65.

4. *Does marital status influence how participants in different countries perceive aging and older adults?* This study has demonstrated that the marital status of participants does play a role on the participants' perceptions of aging and older adults. Marital status proved to be influential in each of the five countries. In the United States, the United Kingdom, France, and the Dominican Republic married participants are more likely to perceive having higher life satisfaction than not married participants. However, the reverse is true in Japan where not married participants are more likely to perceive having higher life satisfaction than married participants. In regards to perceptions of quality of life for people over 65, married participants in the United States hold a more positive perception than do not married participants. In Japan not married participants have a more positive perception of the quality of life for people over 65 than married participants.

In addition to answering the research questions above, the findings from this study also answer some commonly held beliefs about perceptions of aging in other countries, such as:

1. *Do younger participants in Japan perceive that people over sixty-five receive the right amount of respect?* Younger participants in Japan do perceive that people over sixty-five get just the right amount of respect, however younger participants in other countries do not perceive that older people get the right amount of respect. In the United States and France younger participants perceive that older people get too little respect from young people. The age of the participants in the United Kingdom did not influence how participants perceived respect for people over sixty-five. One interesting finding is that Japanese older participants feel that younger people have too little respect for people over sixty-five.

2. *Do participants in the Dominican Republic perceive having poor life satisfaction?* Participants in the Dominican Republic and the United States are more likely to perceive having a higher level of life satisfaction than participants in Japan, the United Kingdom, and France.

3. *Do participants in the United States perceive that the impact of the quality of life at age 75 will be determined by decisions made by themselves?* Participants in the United States and the Dominican Republic are more inclined than participants in Japan, France and the United Kingdom to perceive that the biggest impact on the quality of their life at age 75 will be decisions or choice made by themselves.

4. *Are there more similarities in the perceptions of aging and older people among*

participants in the developed countries of the United States, the United Kingdom, Japan, and France than with a developing country such as the Dominican Republic? It cannot be stated that there are more similarities among the developed countries regarding perceptions of aging and older people and that there are more differences between the developed countries and a developing country such as the Dominican Republic regarding perceptions of aging and older people. This study did find that there are similarities in the four developed countries, the United States, the United Kingdom, Japan and France that differ from the developing country of the Dominican Republic. For example, the participants in the developed countries scored better on the quality of life for self scale than participants in the Dominican Republic. However there are nuanced similarities. For example, in the Dominican Republic participants with a higher income level perceive having a better quality of life than those with lower income levels. This finding is similar to findings in the United States, the United Kingdom, and Japan (income level was not a significant with this criterion variable in France). And there are nuanced differences. For example, in the developed countries of the United States, Japan, and France (age was not a factor for this criterion variable in the United Kingdom), older participants perceive having a better quality of life than do younger participants; while in the Dominican Republic younger participants perceive having a more positive quality life than older participants.

Regarding perceptions of quality of life for people over 65, participants in the developed countries scored higher on the quality of life for people over 65 scale than the participants in the Dominican Republic. The findings determined that participants in the United States, Japan, and the United Kingdom perceive that the quality of life issues of

not having enough money to live on, having poor health, level of loneliness, fear of crime, and often feeling sad or blue, are not a problem at all for people over 65; and that the participants in the Dominican Republic and France perceive that these issues are a problem for people over 65. In examining the predictor variables there are similarities among the developed countries and the developing country of the Dominican Republic, such as male participants in the United States, the United Kingdom, France, and in the Dominican Republic are more inclined than female participants to have a better perception of quality of life for people over 65 (gender was not significant with this criterion variable in Japan). However, in the United States and in the Dominican Republic, participants with a higher income level have a better perception of the quality of life for people over 65 and in Japan and France, participants with lower income levels have a more positive perception of the quality of life for people over 65 (income level was not significant in the United Kingdom).

Finally, regarding the perception of life satisfaction for oneself, participants in the developing country of the Dominican Republic scored better than participants in the developed countries on the life satisfaction for self scale. In the Dominican Republic male participants perceive having better life satisfaction. Japan and France had different findings in that female participants perceive having more life satisfaction than males (gender was not a factor in the United States and the United Kingdom). In the Dominican Republic married participants perceive having more satisfaction with life. The United States, the United Kingdom, and France had similar findings; married participants perceive having higher life satisfaction. However, finding in Japan differed, not married participants perceived having more life satisfaction than married participants.

Overall, this study determined that there are similarities among the countries on perceptions of aging and older people and there are differences; however, it cannot be stated that overall the developed countries are more similar to each other and different from the developing country of the Dominican Republic regarding perceptions of aging and older adults.

When similar data are collected from several countries and compared across domains, the striking differences that are apparent can be attributed to the culture of the countries. Therefore, the findings of this study conclude that there are cultural differences in the perceptions of aging and older adults.

C. Implications of the study

This study provides an overview of perceptions of aging and older people from five different countries. It focuses on demographic variables that have shown to have an influence on how people perceive aging and older people. There are four areas in social work that can benefit from such studies; the role of social workers; social work practice; social work policies; and social work research.

1. The role of social workers

As populations age and our societies become more globalized there will be a need for increasing numbers of helping professionals who will provide health care and social services for older people and their caregivers who have great sensitivity and deep knowledge of cultural perceptions and expectations. Social workers are uniquely qualified to advocate for age related policies and programs that are responsive to the wide

diversity of older persons because of their values of social justice and human rights at all levels of intervention, from social policy implementation to clinical practice (Hokenstad and Choi, 2010).

2. Social Work Practice

Social workers in the United States have already encountered working with diverse populations; we are a country of immigrants after all. However, the growth of aging populations across the globe assures that immigrant aging will increase (Hummer, Rogers, Nam, and LeClere, 1999). It is very likely that family reunification may result in more elders leaving their countries of origins late in life to join family members who have immigrated to the United States (Portes and Raumbaut, 1990). Therefore, social workers employed in any city, town or village in the United States will encounter families from other countries that increasingly will include older adults. It is important that all social workers understand that people from other cultures will have perceptions that differ from their own perceptions of aging and older adults. The need for greater cultural sensitivity on the types and amounts of formal and informal services will also need to change in significant and unknown ways in order to accommodate immigrant families with older relatives who bring with them their own cultural practices and expectations (Jackson et al, 1995).

3. Social Work Policies

a. Social Work Education

This study was intended to provide a rationale for developing social work curriculum and practice to include the teaching of cultural competence and understanding differences in the perceptions of aging and older people. As the population in the United States ages and becomes more multicultural, it is essential to provide social work students with the knowledge they will need to be effective in working with individuals and families from a variety of cultures. Varying ethnic lifestyles will alter the way old age is encountered, perceived, and acted out (Sokolovsky, 1990b). This will require the expansion of gerontological and culturally competent education in social work to provide more knowledge and skills in working with older adults in a multicultural context. Social work policies must adapt to in order to ensure a culturally competent work force. Social work educational policy needs to include international and aging content in curricula both in terms of coursework and field experiences.

b. Social Work and Government

A major contribution social workers can make in helping the United States prepare for an aging and multicultural population is to inform policymakers regarding the development of a longer-term perspective that aids in assessing and preparing for these trends (Torres-Gil and Moga, 2001). The United Nations' International Plan on Ageing suggests that social workers advocate with governments in order to foster the participation of older adults in the planning, implementation and evaluation of aging policies and programs (Hokenstad and Roberts, 2010).

Torres-Gill and Moga suggest that “the field of social work should not look at aging and diversity as separate issues for research and policy, but as two intertwined phenomena that can inform gerontological social work.”

4. Social Work Research

This study has determined that there are differences in perceptions of aging and older people held by residents from different countries and that the demographic variables of age, gender, marital status, and income level have significance. This adds to the body of knowledge of international and cross-cultural research and offers more statistical information on the demographic variables that provide similar results with other previous studies as well as presents information that is contrary to other studies’ findings.

This study has demonstrated that perceptions of aging and older adults are altered through the cultural lens of people from various countries. The acceptance of culture as an essential ingredient in understanding social behavior can benefit social work studies, especially in understanding the behavior, customs, and expectations of people from other countries. As more scholars understand the importance of culture, it is anticipated that they will incorporate culture into their theories and studies, leading to even greater interest in the area (Singelis, 2000). Additionally, more research and knowledge that builds on evidence-based practice with older people in multicultural settings is needed (Hokenstad and Roberts, 2010).

D. Limitations of the study

While this study does provide useful information and therefore contributes to the body of knowledge of cross-national studies, there are limitations that need to be noted. This study is exploratory and comparative and only touched the tip of the iceberg of the information contained in the database. Also, the large sample size can lead to many significant finding; regression analysis would provide additional and more in-depth correlations than those offered in this study. Although quantitative analysis is preferred for such a large sample size spanning five countries, there are limitations, which a qualitative study could overcome, as well as offer additional useful information. For example, one of the findings of this study is that not married participants in Japan perceive having better life satisfaction. This is not only counter-intuitive, to an American, but also is contrary to the findings in the other countries. Having specific knowledge of Japanese culture or conducting a follow up qualitative study to analyze the reason for this finding could be quite useful. A brief informal questioning of Japanese colleagues suggested that Japanese wives feel constrained and controlled by their husbands and prefer not to be encumbered by them.

Another limitation of this study was the inability to further manipulate the database in order to provide additional analysis such as controlling for age or education or geographic area of residence. Future publications will include such analysis.

E. Future Research

There are few studies on perceptions of aging and older people that have the benefit of a single database that contains responses from participants in five countries conducted

within the same time frame. Since this is an exploratory study in order to understand the basic demographic influences on perception of aging and older, more studies can and should be conducted using this database. Additionally, future research should provide evidence-based practice for social workers working with older adults and their caregivers taking into consideration cultural perceptions and expectations.

Attachment A: Survey Instrument

Q1. In general, which one of the following five things would you say best defines the beginning of old age in America today? Would you say retirement, becoming a grandparent, a decline in physical ability, a decline in mental functioning or reaching a specific age?

Q2. Generally speaking, do you feel that people over 65 get too much, too little or just about the right amount of respect from younger people these days?

Q3. I'm going to read you some statements that people have made about life in general. For each statement, would you tell me if you agree strongly, agree somewhat, disagree somewhat or disagree strongly with it.

A. As I grow older things seem better than I thought they would be
B. As I look back on my life I am fairly well satisfied
C. These are the best years of my life

Q4. Would you tell me whether the following issue is a very serious problem, a somewhat serious problem, or not a problem at all for you personally?

A. Not having enough money to live on
B. Poor health
C. Loneliness
D. Fear of crime
E. Often feeling sad or blue

Q8. Would you tell me whether the following issue is a very serious problem, a somewhat serious problem, or not a problem at all for most people over 65 personally?

A. Not having enough money to live on
B. Poor health
C. Loneliness
D. Fear of crime
E. Often feeling sad or blue

Q9. A lot of things can influence the quality of your life <u>at age 75</u>. In your opinion, which one of the following will have the biggest impact on the quality of your life at age 75: decisions or choices that you make during your lifetime, decisions made by others that are beyond your control, genetic or inherited factors, or blind luck?

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