Correlates Of Life Satisfaction After Retirement

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Much of the literature on aging, retirement, and stages of life has focused on men. The changing role from productive members of society to that of being retired can be either viewed as an opportunity to experience new adventures or depressing for those who are unable to move successfully into the next developmental stage of life. This study examined factors that could contribute to life satisfaction in 144 individuals who were over 65 years of age. The factors that were included in this examination are self-esteem, morale, depression, and demographic characteristics (e.g., age, gender, ethnicity, educational level, marital status, income, self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations).

Retired individuals were recruited from a number of locations, including senior citizen centers and assisted living centers. The participants completed six instruments, the Life Satisfaction Scale, Rosenberg Self-Esteem Scale, Life Attitudes Profile - Revised, Geriatric Morale Scale, Geriatric Depression Scale, and a short demographic survey.

Most of the participants were female, Caucasian, and either married or
widowed. They self-reported their health and mobility as either good or fair. The majority were working as volunteers, actively pursued hobbies, and belonged to church, senior citizen, or civic groups. They interacted with family and friends frequently.

The results of the study provided evidence that male and female participants did not differ in their responses regarding life satisfaction, self-esteem, geriatric morale, and geriatric depression. The findings of the present study found that life satisfaction was increased if retired individuals were not depressed, had retired at an early age, were either currently or had been married, had achieved a college education, were active as a volunteer, were in excellent health, and did not work part-time.

Understanding which psychosocial variables contribute to life satisfaction can assist professionals working with this group develop programs and strategies to help improve the quality of their life after retirement. Further research is needed to explore the correlates of life satisfaction in the elderly as this group continues to increase its presence in society.
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DEDICATION

This study is dedicated to
my father, Mr. Fred Tackett and to
the memory of my mother, Mrs. Hildred Tackett.
Although they lacked formal education beyond the eighth grade,
they instilled a love of knowledge and a desire to be successful.
ACKNOWLEDGMENTS

My grateful acknowledgment and appreciation to Dr. John Geisler who became my committee chair when Dr. Thelma Urbick was no longer able to fill this position. His professional help, his consistently specific and clear directions guided me through the maze of doctoral requirements.

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I am eternally grateful to June Cline who has made the maze of statistics understandable and has become a dear friend and confidante in the process.

A hearty "thank-you" goes out to the senior citizens sites, the directors of those sites, and to the many participants who volunteered their services and completed my surveys.

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I would like to gratefully thank my father, Fred Tacket and my mother Hildred Tackett (deceased). Although they both possessed only an eighth-grade education, they continually encouraged me to pursue a doctorate.

Richard A. Tackett
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CHAPTER 1

INTRODUCTION

Background of the Study

The ideas about becoming old are changing drastically. Today's senior citizens are breaking old cliches and living life to the fullest. Compared to 500 years ago, senior citizens are more energetic and vigorous in their activities. For example, the myth that the elderly are not sexually active was dispelled! in a study by Matthias, Lebben, Atchison, and Schweitzer (1997). They found that nearly two thirds of the participants in his study were satisfied with their sex life and one third reported to have had sexual relations within the last 30 days.

Many grandmothers no longer bake as many cookies for their grandchildren because they are too busy playing tennis or flying to Las Vegas. Many grandfathers are spending time on the Internet making changes to their stock portfolios or investigating other topics of interest rather than sitting in rocking chairs and watching television. The question is: "How do these changes in lifestyles affect the aging process?"

The Effect of 20th Century Changes on Aging

Aging in the 21st century will be predictably different from aging in the 20th century. One of the most dramatic changes to impact the future of the United States has been the increase in human longevity. Nearly 30 years
have been added to the life expectancy of individuals in the 20th century. Medical and pharmaceutical advancements have played important roles in the mechanism that has increased human longevity. For example, childbirth is no longer a major cause of death of young mothers, and children normally do not die from illness and disease. Today, death is normally associated with old age in the United States.

World War II (WWII) also had an enormous impact on the aging process in the United States. The end of WWII ushered in the beginning of the cohort known as the "baby boomers." The baby boomers, 80 million strong, have overwhelmed many systems as they progressed through early life stages and are predicted to wreak havoc on all systems associated with aging as they enter the final stages of life.

The elderly are becoming the largest cohort in the United States, with the baby boomers maturing and beginning to move into retirement. These individuals are unique in history as they may be responsible for caring for elderly parents, children, and grandchildren, simultaneously.

Regardless of research data that suggest the fallacy of inevitable decline associated with aging, many government and private agencies blindly follow this myth (Borgatta & Loeb, 1981; Fronstin, 1999; Mutran, Reitzes, & Fernandez, 1997; Simon-Rusenowitz, Wilson, Marks, Krach, and Welch, 1998). Environmental research on aging (Lawton, 1990) suggested that environments have the potential to enhance residents' activity and improved quality of life, creating opportunities for increased life satisfaction.

Longevity also brings increased financial responsibility for these added years. Medical costs accelerate rapidly during later years of life and Medicare which was intended to cover most medical expenses is requiring higher
deductibles and increased co-pays from the elderly. To have full coverage, the elderly need to have additional medical coverage which is expected to continue to increase in cost to cover the increases anticipated from changes in Medicare. Social Security funds offered to retirees are meant to be only a supplement to their retirement, with personal savings, investments, and company pension plans contributing to retirees' incomes. As people live longer, savings and investments can become depleted and company pensions can also decrease.

**Statement of the Problem**

In general, much of the literature on aging, retirement, and stages of life have focused on men. The changing role from productive members of society to that of being retired can be either viewed as an opportunity to experience new adventures or depressing for those who are unable to move successfully into the next developmental stage of life. This research has used objective measurements of aging outcomes (health, life losses, wealth, etc.), with a paucity of research found on psychological effects often associated with the aging process (e.g., depression, life satisfaction, self-esteem, morale, etc.).

This study examined factors that could contribute to life satisfaction in approximately 150 individuals who were over 65 years of age. The factors that were included in this examination are self-esteem, morale, depression, and demographic characteristics (e.g., age, gender, ethnicity, educational level, marital status, income, self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations).
Research Questions

The following research questions were addressed in this study;

1. Are there differences in life satisfaction, self-esteem, morale, and depressive states between male and female retired individuals?

2. Can life satisfaction of individuals over 65 years of age be predicted from measures of self-esteem, morale, and depression?

3. Can life satisfaction of individuals over 65 years of age be predicted from age, gender, ethnicity, educational level, marital status, and income?

4. Can life satisfaction of individuals over 65 years of age be predicted from self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations?

Significance of the Study

As baby boomers move toward retirement, professionals who work in geriatrics need to understand the psychological effects of aging on these people. Many professionals are still using the model of aging that indicates that people move from work to retirement to death. The new paradigm shows that people live longer, remain active for more years, have better health outcomes, and attempt to resist the aging process. Blanchette & Valcour (1998) stated that "... the major social trend is an extension of the healthy years, pushing back the chronological age at which we consider a person old" (p.76). In addition, retirement has begun at an earlier age, with many retirees choosing to train for new jobs or volunteer in community organizations as a means of providing stimulus and satisfaction in their lives. This study can provide important information to professionals who work with
these individuals regarding how remaining active and feeling productive can promote emotional well-being, improve life satisfaction and minimize depression that has long been associated with old age.

Definition of Terms

Depression: A major depressive disorder is distinguished by one or more major depressive episodes.

The essential feature of a Major Depressive Episode is a period of at least 2 weeks during which there is either a depressed mood or the loss of interest or pleasure in nearly all activities. In children and adolescents, the mood may be irritable rather than sad. The individual must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; or recurrent thoughts of death or suicidal ideation, plans, or attempts. (American Psychological Association (APA), 1994, p. 320).

“Depressive episodes occur twice as frequently in women as in men” (APA, 1994, p. 325).

Elderly, aged, older adult: Terms used to identify the cohort of people over the age of 65 years of age.


Gerontology is broadening its perspective from a prior preoccupation with disease and disability to a more robust view that includes successful aging. As conceptual and empiric research in this area accelerates, successful aging is seen as multidimensional, encompassing three distinct domains: avoidance of disease and disability, maintenance of high physical and cognitive function, and sustained engagement in social and productive activities. (p. 439)

Life Satisfaction: Feelings of contentment and lack of dissatisfaction

Morale: The state of the spirits of a person or group as exhibited by confidence, cheerfulness, discipline, and willingness to perform assigned tasks (American Heritage Dictionary, 1998).

Personal Meaning: "... having a purpose in life, having a sense of direction, a sense of order and a reason for existence, a clear sense of personal identity, and a greater social consciousness" (Reker, 1997, p. 710).

Retirement: Atchley (1987) used two criteria to define retirement. An individual is considered to be retired if one is working less than full-time and prior employment provides part of one's income through a pension after retirement. Atchley considered his definition of retirement arbitrary, but important because it illustrated that retirement is an earned reward and the main effect of retirement was a separation from a job and a shift of income sources which usually was less than when working. Atchely acknowledged that housewives do not meet his criteria for retirement, but that they made an important contribution to society by maintaining a household for the family. He thought that in the future, society would reward housewives with a general public retirement pension.

Self-esteem: "The degree to which one values oneself" (Reber, 1995, p. 702).

Quality of Life: A subjective overall evaluation by an individual of one's life in general as well as specific areas such as social life, finances, employment, or living situation. (Brod, Stewart, Sands, & Walton, 1999).
Assumptions

Two assumptions are recognized for this study:

1. Changes are occurring in the accepted model of aging that has traditionally viewed the elderly as nonproductive and inactive, prone to health problems, and subject to negative emotional conditions, such as depression and poor morale.

2. As longevity increases in the United States, the elderly, through organizations such as American Association of Retired People (AARP), are perceived as becoming more vocal in their demands for social programs to improve their quality of life.

Limitations of the Study

The following limitations are included in this study:

1. The elderly who participate in this study are involved in senior citizen activities (either through assisted living facilities or in senior citizen centers) and may not be representative of all elderly.

2. Retired persons who are not involved in organizations or senior activities may not be included in the study because they cannot be identified.

3. Retired individuals in Michigan will be used for this study. Generalization beyond Michigan may not be valid, although the results may be important to professionals working with the elderly.

Organization of the Study

The first chapter of this study provides an overview of elderly and the aging process. The effects of changes in aging are also discussed in the first
chapter, along with a presentation of the statement of the problem, significance of the study, definition of terms, as well as assumptions and limitations of the study. The second chapter is a review of related literature and empirical studies that have been published on aging and retirement. The stages of life, or developmental constructs are presented as the theoretical framework of the study. Chapter III provides the methodology that was used to collect and analyze the data needed to address the research questions posed for the study. The fourth chapter provides the results of the statistical analyses that were used to summarize and test the research hypotheses. Conclusions, implications for helping professionals (e.g., psychologists, counselors, social workers, etc.) and recommendations for further study are presented in Chapter V.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

In reviewing the literature in the various social science fields of study that are intertwined with the concepts of aging and retirement a general opinion exists: The United States is rapidly changing to an older population. Life expectancy has been extended dramatically in this century. As the "baby boomer" generation came upon the American scene, medical and pharmaceutical advancements were increasing the life span for older adults. In 1900, the life expectancy for White women was 51.5 years and White men were expected to live for 48.2 years (Thompson, 1994). In 1994, the average life expectancy for newborn girls was 78.9 years and 72.5 years for boys (Thompson, 1994, p.188). The combination of 80 million baby boomers and increased life span among the elderly has created an aging society.

In 1935, 6% of the population in the United States was 65 or older (Kouri, 1990). The total population over the age of 65 in 1997 was projected to be 34,097,000 and is continuing to increase every year. Americans aged 65 or older are projected to increase 59% between 1995 and 2025; Michigan is expected to increase 36.2%. Women comprise 54% of the population from 65 to 69 years of age. The percentage of men is less with each succeeding age cohort, 31% of 85 to 89 year old elderly are men declining to 16% of people aged 100 or older (Yntema, 1997). The end results are interesting:
most older men live with their wives, while most older women live on their own.

As a result of the aging population, the life span after retirement has increased. When President Franklin D. Roosevelt initiated the Social Security program in 1935, life expectancy beyond age 65 was relatively limited. In addition, the mean retirement age since the 1950s has steadily declined due to both retirement programs in the public and private sectors and federal changes in Social Security policies. Many employing organizations have initiated programs that allow their employees to retire using a formula based on age and years of service. For example, an employee can retire from certain automotive companies if their age and years of service total 80. An employee who begins work at the age of 20 and works for 30 years can retire at 50 years of age. During the period from 1955 to 1990, the median age for retirement declined from 65.7 in 1955 to 1990 to 62.6 during the period from 1985 to 1990. (Gendell & Siegel, 1996, p. S135). As a result of increased life span and decreased age at retirement, the amount of time spent in retirement has increased. In response to increased longevity and as a means of controlling outflows from the Social Security system, the federal government, in 1999, increased the age at which an individual can retire from full-time employment and collect full Social Security benefits.

Many myths and perceptions of retirement and aging have been examined and found to be false. Freud promulgated one myth of aging by professing that people over 40 years of age would not benefit from psychoanalysis, as they were too old to change (Oberleder, 1982). Previous studies have indicated that many older adults become depressed due to life events (Kohut, Kohut, & Flieshman, 1983). The elderly have usually survived
the death of parents, and perhaps the death of a spouse, siblings, peers, and children. Retirement may represent another loss from a decrease of income and prestige. Retirement for people who obtain their identities from employment are likely to find adjusting difficult, with mandatory or involuntary retirement especially discomforting. Work schedules provide structure to life and retirement may bring a sense of aimlessness and uselessness. A major factor that exacerbates all other losses is deterioration of health.

Kohut, Kohut, & Flieshman (1983) rejected three of the myths of aging: "When people grow old, they lose their mental sharpness, their independence, and their sexuality" (p.5). Regardless of life-situations, Matthias, Lebben, Atchison, and Schweitzer (1997) found that nearly two thirds of the elderly participants in his study were satisfied with their sex life and one third reported to have had sexual relations within the last 30 days.

Oberleder (1982) believed he had helped to negate these misconceptions and reported that a recognizable change in myths and perceptions of aging were occurring. More importantly, the activities of the elderly have disproved many myths and shown that the elderly actively engage in life. However, the myth that retirement increases the risk for illness and death persists (Ekerdt, 1987). Negative views of retirement are consistent with the concept that self-worth is derived from employment. Some theoretical perspectives have supported the idea that retirement is a disruptive, life-changing event (Calasanti, 1996; Gall, Evans, & Howard, 1997).

In establishing the scope of the remainder of this paper the discussion on aging and retirement is presented using the following topics: an introduction to developmental life cycle concepts, ideas on successful living,
biological changes and exercise, adding meaning to life through volunteering, meaning of aging, life satisfaction in elderly, effects of losses on the elderly, loss of family networks in aging, depression, physiology theory of depression and treatment, retirement, gender differences in retirement, empirical studies on retirement, substance and alcohol abuse, and finally, activity after retirement.

Developmental Life Cycle

The journey of life, also referred to as the developmental life cycle, is a concept from antiquity. Aristotle divided the life cycle into three ages: (1) growth, (2) stasis, and (3) decline. The life cycles described in the Middle-ages divided these stages into various numbers of stages depending upon whose ideas were being presented. According to Cole (1991), each stage of life had specific physical, mental, behavioral characteristics, that were explained by its relationship to the four humors (black bile, phlegm, yellow or red bile, and blood), the four qualities (hot, cold, dry, moist), and the four elements (air, fire, earth, and water), and the four seasons (spring, summer, fall, and winter).

The concept of development is an evolving process throughout the lifespan, with development conveying the idea of change (Erikson 1980; Kegan, 1982). Aging is an integral part of the developmental process, however, there seems to be a separation in the literature between developmental issues and aging. The literature suggests that during the life cycle, one develops and matures until a certain point and from that point on one ages.

The developmental life course perspective has an innate positive
sense about the early developmental stages; the idea that one starts out as childish or immature and grows through the stages of development into a mature person. However, after one matures the positive sense of the earlier stages is replaced with a perception that aging is negative as one grows older. Strieb (1993) described a naturalistic classification of life stages with the last stage called "old age." The connotation could be considered negative when compared to the other stage names: infancy, childhood, maturity, and late adulthood. Perhaps the negative reflection on aging is, in part, a product of the medical and pharmaceutical advancements that has controlled diseases and illnesses until death is now normally associated with old age.

Developmental transitions and life crises can exacerbate many issues in aging. Jung suspected life stressors were associated with many of the aging problems. Developmental transitions and life crisis may have precursors in earlier transitions and crisis. Perceptions of the crisis and meanings behind these perceptions may be more important than the actual events responsible for the crisis.

Early ideas of "self" develop in an environment of relational experiences with significant others, usually parents, siblings, and other close family members (Erikson, 1980; Johnson, 1987; Kegan, 1982; Mahler, Pine, & Bergman, 1975; Teyber, 1992). The relational experiences are manifestations of how the child is loved and nourished, disciplined, and respected. Out of relational experiences the child generates meanings about self, others, and relationships.

Kegan (1982) referred to the personal processing of experiences as, "the `evolution of meaning' of self" (p. 41). These evolving meanings are organized into patterns and themes that are fundamental to a person's relational style (i.e., how that person thinks, feels, and acts toward self and others). Kegan (1982) believed that one's developing relationship of the
Evolving self with his/her environment, self, and others is an active and ongoing process which he calls, "adaption" (p. 113). This ability to actively adapt gives hope for client change in therapy. Bandura (1989) added support to Kegan's notion of adaption and states, "Through their capacity to manipulate symbols and to engage in reflective thought, people can generate novel ideas and innovative actions that transcend their past experiences" (p. 1182). Table 1 presents developmental stages as presented by several theorists.

Erikson (1980) was one of the first psychologists to write about transitions and "identity crisis" using developmental constructs. He formulated his theoretical constructs of psycho social development of the ego into eight stages of life. Erikson described the psychosocial crisis of each stage as a turning point with increased vulnerability and heightened growth potential.

Throughout the process of psycho social crises, different virtues emerge. The positive strength of each virtue has an equally forceful negative weakness. Erikson (1980) concluded that while each stage was significant to the development of the ego, failures in an earlier stage may be rectified by successes in later stage development.

Erikson (1980) described middle age in his seventh stage of development. The task for this stage is developing a sense of generativity, which is the development of a sense of concern for others beyond that of one's immediate family. Failing to develop this sense of concern for others can result in a state of self-absorption where personal needs and comforts become a predominate concern, and may be fundamental for the onset of depression in the elderly.
Table 1
Balances of Subject and Object as the Common Ground of Several Developmental Theories

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<th>Stage 0 Incorporative</th>
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<td>Sensorimotor Preoperational</td>
<td>Punishment and obedience orientation</td>
<td>Impulsive</td>
<td>Instrumental orientation</td>
<td>Power orientation</td>
<td>Industry vs. inferiority</td>
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<td>Concrete operational</td>
<td>Instrumental orientation</td>
<td>Opportunistic</td>
<td>Safety orientation</td>
<td>Power orientation</td>
<td>Affiliation orientation</td>
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<td>Early formal operational</td>
<td>Interpersonal concordance orientation</td>
<td>Conformist</td>
<td>Love, affection, belongingness orientation</td>
<td>Affiliation orientation</td>
<td>Achievement orientation</td>
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<tr>
<td>Full formal operational</td>
<td>Societal orientation</td>
<td>Conscientious</td>
<td>Esteem and self-esteem orientation</td>
<td>Self-actualization</td>
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<td>Post-formal dialectical?</td>
<td>Principled orientation</td>
<td>Autonomous</td>
<td>Self-actualization</td>
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a. I believe Erikson's theory misses a stage between "industry" and "identity." His identity stage - with its orientation to the self alone, "who am I?", time, achievement, ideology, self-certainty, and so on - captures something of late adolescence or early adulthood, but it does not really address the period of connection, inclusion, and highly invested mutuality which comes between the more independence-oriented periods of latency and (early adult) identity-formation.

b. Piaget does not posit a post-formal stage, nor does the McClelland/Murray typology posit an intimacy orientation. These are my own hunches about where their models point. For an excellent conceptual and empirical exposition of "dialectical operations," see Basseches (1980). For a developmental approach to intimacy as an orientation following achievement, see Richardson (1981).

Note: Kegan, 1982, p. 87-88
The final stage of Erikson's (1980) eight stages of man is near the end of life, a time for reflection, and a time to enjoy life. The last stage has one element that the other stages do not normally address, the inevitability of death.

The main task of old age according to Jung is the confrontation of death. Jung (as cited in Katchadourian, 1978) stated: "... an old man who cannot bid farewell to life appears as feeble and sickly as a young man who is unable to embrace it" (p. 49). Katchadourian (1978) described the main task of adulthood in more positive terms than Jung, indicating: "Rather than compete with the young or cling to the past, the individual must discover in death a meaningful goal to strive for rather than a peril to shrink from" (p. 49).

The psycho social dimension that appears in Erikson's final stage is integrity verses despair. Integrity arises when one is able to look back on one's life with satisfaction. Integrity is realized when one develops a more harmonious view of the past, accepts responsibility for his/her life as lived, and believes that his/her life has meaning. Integrity indicates an emotional integration between past memories and present realities.

According to Erikson (1980), the lack or loss of integrity is represented by despair. Despair, at the other end of the continuum from integrity, comes about when one reflects on life as a series of missed opportunities. Despair is signified by the realization and regret over one's life and the perception that it is too late to start over and live an alternate life to develop ego integrity. Despair can be hidden behind signs of anger and disgust with people and institutions, but generally signifies one's contempt for oneself. Despair is also associated with an unconscious fear of death, that life is too short. Gruen (1964) observed a correlation between failure to achieve integrity and
depression in the elderly.

Erikson's (1980) last developmental crisis (integrity vs. despair), is settled through a process of reflecting on past accomplishments, failures, losses, and changes in physiological, psychological, and social capacities. Kaufman (1993), in supporting Erikson's last developmental crisis, argued that the psychological processes of the elderly included a shift to obtaining self-esteem from a past self image. "The self draws meaning from the past, interpreting and recreating it as a resource for being in the present (p. 18).

Human development in later life is subtle. Prior to the 1950s, people over 60 were frequently diagnosed with "senility" or "chronic brain disease" and "arteriosclerosis," and as such the symptoms of aging were treated as a disease (Oberleder, 1982, p.15). Gutmann (as cited in Atchley, 1989) stated, "Later-life development does not show itself so vividly, as in earlier adulthood - instead, it may cause no more than the quiet ripening of selected mental and spiritual capacities, or a gradual shift in appetites, interests, and occupations" (p. 184). Characteristics of aging (e.g., changes in sleep patterns and appetite, somatic symptoms) are similar to characteristics of depression, and there is a tendency to confuse the two constructs when working with the elderly population.

Family rituals are important especially in times of crisis and transitions as rituals bring order to chaos (e.g., who and how families make decisions; wearing black in time of mourning; having a meal for family and friends to bring closure after a death, etc.). Family rituals are processes that foster a sense of identity for individual members and is reflective of the family's shared belief system. Family rituals may range from highly stylized, religious celebrations to less articulated daily patterns of interaction. The symbolic
significance attached to family rituals is considered central to the force of family rituals (Fiese, 1992).

Successful Living

Ardlet (1997), in a review of literature, indicated that many studies assumed that objective life conditions (i.e., health, wealth, social networks) were responsible for the well-being of the elderly. Ardlet argued that successful aging also could be influenced by one’s developmental and psycho social maturity.

Elden et al. (as cited in Ardlet, 1997) described a significant difference within the elderly cohort who had experienced the Great Depression. Emotionally healthy women, married to stable partners, responded to the Depression by becoming even stronger and more resourceful in old age. While emotional unstable men were more adversely affected in old age by the negative impact of the Depression. This outcome suggested that variations in responses to similar stimulations/experiences provided evidence that people’s well-being could be influenced by their personalities and levels of psycho social maturity.

Ardelt (1997) found a connection between wisdom and life satisfaction in later life. He defined wisdom as an integration of cognitive, reflective, and affective components in the pursuit of truth and ability to see reality as it is. Wise people comprehend the significance of the facts/situation. Ardelt operationalized life satisfaction as a feeling of contentment and a lack of dissatisfaction with one’s life.

Independence is a marker of maturity for all developmental stages of growth. Each developmental stage offers new opportunities and
responsibilities for expressions of independence. Most adults can remember the emotional experience of independence they obtained when they received their driver's license. Many adolescents start their first jobs at this time which is a step toward economic independence.

Society places a high value on independence, and once obtained is jealously guarded. Interestingly, the meaning of independence changes with increasing age. Independence means a new found freedom for the adolescent and young adult. The ability to make life decisions is the norm for the adult through late maturity. However, at some point in the aging process, independence becomes something to be protected. The markers used in earlier developmental stages to indicate maturity are the same markers used to signify a loss of independence in the elderly.

According to Atchley (1987) adult independence has four basic dimensions: (1) economic, (2) physical, (3) mental, and (4) social. Economic independence means an individual has the ability to provide him/herself with the basic necessities of life, food, clothing, and shelter. Physical independence means the capability of mobility and personal care. Mental independence is an alert mind capable of wise decisions. Social independence is the ability to voice one's opinions and rights without depending entirely on the goodwill of others.

Freud, when asked what he thought a normal person should be able to do well, replied, "Lieben und beiten" [to love and to work] (Erikson, 1978, p. 102) as part of developing a sense of successful living. According to 17th century philosopher, John Locke, a healthy body and a healthy mind are required for successful living (Locke, 1993). Locke ascribed to the notion that the mind and body duly influenced the other and hence both the body and the
mind needed proper care. Locke stated:

> A sound mind in a sound body is a short but full description of the most desirable state we are capable of in this life. He who has these two has little more to wish; and he that wants either of them will be but little the better for anything else. (Locke, 1993, p. 3)

Mental and physical health are intricately intertwined, with poor physical health negatively affecting mental health and poor mental health negatively affecting physical health.

Bandura’s (1986) self-efficacy theory posits that behavior, physiological, cognitive factors, and environmental considerations are integrated and influence one another. Positive mastery experiences at each developmental stage are likely to facilitate improvement in self-efficacy, which in turn reinforces later positive mastery experiences.

Locke (as cited in Schouls, 1992) attributed the ability to obtain mastery to proper upbringing and education. Proper upbringing and education as described by Locke consisted primarily of learning how to make the right decisions and doing the right thing “as a matter of habit” (p. 4). And yet these two concepts are lacking without the third component that he suggested: one must initiate action for the other two components to be of value. The third component, just as essential, is the person him/herself.

Locke (1993) stated, “He whose mind directs not wisely, will never take the right way” (p. 6). Proper upbringing and education only allows one to take advantage and become master of one’s destiny if one so chooses.

Pathological aging includes both mental and physical diseases and disabilities encountered as one grows older, whereas the term “normal aging” refers to commonly encountered patterns of human aging (Atchley, 1989). Because of differences between cultures and generations, successful or
normal aging can be expected to differ both culturally and generationally.

Rowe and Kahn (1997) indicated that "successful aging" included both Locke's and Atchley's normal aging components. These components are a lack of, or a low probability of disease and disease-related disabilities along with retention of high cognitive and physical functioning capacities. While Rowe and Kahn thought both of these components were important, the combination of these two components in conjunction with an active engagement with life more fully described "successful aging."

Actively engaging in the life process can take many forms, Rowe and Kahn (1997) focused on two aspects of engaging life: interpersonal relations and productive activity. Interpersonal relations involve contact and connectedness with others. A social network is important to longevity, especially for men. Isolation and a lack of connectedness can be predictors of mortality and morbidity. Marriage was found to be beneficial for men especially during the later stages of life (Calasanti, 1996). Productive activity, the second aspect of engaging life, is considered to be any activity in which a societal value is produced. For example, caring for an elderly family member or participating in volunteer work produces societal value, which does not have to be attached to a monetary value.

Successful aging includes the maintenance of one's health (e.g., cognitive and physical abilities) and the ability to actively engage in the life process. Conversely, medical burden is defined by the number of chronic medical conditions, or "hits" an individual has experienced through life. The more hits one has received, the less likely it is that a person can reach old age, or age successfully. Depression has been found to be positively correlated with poor health and disability; the more hits received, the more
likely one can become depressed (Cole, 1991; Wallsten, Tweed, Blazer, & George, 1999). Centenarians are recognized by the absence of hits.

Beck (1982) reported that medical burdens, widowhood, health factors, and income, were major causes for dissatisfaction with life and retirement, especially through a loss. In a survey of American Association of Retired Persons (AARP) members, declining health (46%) and lack of money (38%) were found to be the two greatest concerns of older adults (Crowley, 1999). Thirteen percent of their sample listed losing mental faculties as a concern.

With the decline in the mortality rate that began two decades ago, a correlating assumption was made that health of the elderly must be improving. While the elderly have lived through many acute diseases and illnesses that killed others (i.e., influenza in 1918-20), living longer can expose them to different types of disease or illness (i.e., cancer and stroke) (Crimmins, Hayword, & Saito, 1996). Increased risk for age-related, chronic diseases and disabilities make it less likely that an individual can age successfully.

The maintenance of functional capacities is due in part to both lifestyle and genetics. While genetics are inherited, lifestyles reflect choices individuals make, with certain lifestyles more conducive to successful living than others. For example, smoking cigarettes, a personal lifestyle choice, was the largest underlying cause of death in the United States in 1990 (National Institute on Aging, 1999). The second underlying cause of death is lack of exercise and poor dietary habits. Having parents who passed on healthy genes can be an important component of successful aging. People with unhealthy genes may be predestined to develop heart disease, cancer, diabetes, and other life-shortening illnesses and disabilities.
Biological Changes And Exercise

Physical activity is important for successful aging. At age 35, the human body begins to lose about one third of a pound of muscle each year (Butman, 1999). In a Chinese study of the elderly over 70 years of age, Woo, Ho, and Yu (1999) found that reduced walking speed and stride length were associated with increased risk of dependency, mortality, and institutionalization. Butman (1999) interviewed Miriam Nelson, Ph.D., a specialist on aging. She indicated that the biological processes of the human body can be reversed by 15 to 25 years through exercise. Any aerobic exercise (i.e., walking, running, biking) coupled with a light weight-training program can add muscle mass and bone density for people even into their 90s. Lord et al. (1996) reported that gait patterns in the elderly were dramatically improved after 22 weeks of exercise. They found improved walking speed and increases in both stride and cadence.

Kutner, Barnhart, Wolf, McNeely, Xu (1997) studied the practice of Tai Chi (TC) by older adults. TC participants reported an increased awareness of their bodies, as well as an improved sense of well-being and reduced stress. They reported improvements in their sense of confidence. Based on interviews of TC participants, the authors described two factors that appeared to contribute to changes in confidence among these individuals:

1. Gaining a better sense of balance and a more secure feeling in their ambulation.

2. Enhancing a generalized sense of well-being.

Based on the findings of this study, regular exercise programs, such as Tai Chi, can improve both mental and physical conditioning.
Meaning of Life

One makes meaning in life by the activities in which one chooses to engage. Work is one of the activities in which the individual’s uniqueness stands in relation to society and acquires meaning and value. Frankl (1971) believed the meaning and value of work was in its contribution to society, not the occupation itself. Any job has the potential to allow fulfillment and satisfaction.

Reker (1997), using existential constructs, demonstrated a strong connection between elderly who have a sense of meaning and purpose in life and their positive mental functioning. Because today’s senior citizens are more active and are progressing through the aging process with more vigor and health than ever before, many expend their energy serving as volunteers in social, helping organizations.

Otwell (as cited in Jedlowski, 1999) indicated that 80% of baby boomers expect to work past the retirement age of 65, with many working as volunteers for no pay. The expected increase in volunteerism is twofold: (1) future retired workers have more free time, and (2) many are compelled by their past social activism to provide services for others.

Men appear to view volunteerism differently than women. Women volunteer at more than double the rate of men, 55% for women and only 24% for men (Wagner, 1997). Predominately, men link volunteering with work and when retiring from work they retire from volunteering also. Women appear to view volunteering as a substitute for paid labor. According to Wagner, individuals who have higher levels of education, higher income levels, and are married are more likely to volunteer. Religion is important in volunteering, with Jewish people most likely to volunteer, followed by Protestants, and
Catholics least likely to volunteer. Religious organizations provide specific opportunities for men to volunteer. Socioeconomic and educational issues also may be factors in volunteering with Whites volunteering more than either Blacks or Hispanics (Kaye & Applegate, 1994; Wagner, 1997).

The economic effect of volunteering is impressive, with the dollar value estimated at $150 billion in 1988. This amount does not include informal volunteer efforts (e.g., babysitting, assisting the elderly and handicapped, assisting a paid professional, and acting as an officer of an organization). Kouri (1990) cited findings of the Independent Sector’s (IS) report, “Giving and Volunteering in the United States: Findings from a National Survey”. The report indicated that 40% of people from 65 to 74 years of age serve as volunteers, with 29% of individuals over the age of 75 volunteering in service organizations. The American Association of Retired Persons (AARP) conducted a survey in 1988 and found that 41% of people who were 75 years of age were volunteers (as cited in Kouri, 1990).

According to the IS survey (as cited in Kouri, 1990), volunteers from 65 to 74 years of age provide service for an average of 6 hours per week, which was higher than the mean of 4.7 hours for all volunteers who were over 18 years of age. In 1988, AARP reported that respondents who were 60 or more years of age volunteer for more hours than those who are under 60 years of age. In the age group that included people from 60 to 74 years of age, 20% of the respondents spent from 5 to 10 hours per week volunteering (Kouri, 1990).

The IS survey reported that religious organizations have the largest number of participants (25%). Kouri (1990) also reported that among adults over 55 years of age, 66% did volunteer work in religious organizations, with
42% working in community service agencies, 27% in social-service agencies, and 20% in youth-service organizations.

The results of the IS Survey (as cited in Kouri, 1990) indicated that the primary reasons for volunteering included (a) wanted to do something useful (56%), (b) thought I would enjoy the work (40%), (c) religious concerns (27%), and (d) had a lot of free time (14%) (p. 39). When asked why they continued to work as volunteers, the reasons included (a) liked doing something useful (53%), (b) enjoy doing the work (39%), (c) religious concerns (30%), and (d) interest in the activity (28%) (p. 39). According to the 1988 AARP Survey (as cited in Kouri, 1990), 14% of participants over 65 years of age indicated that volunteering kept them active, with others reporting that volunteer is a way “to repay some of the goodness that have come my way” (p. 65).

The nature of volunteer work varies from highly structured to informal and spontaneous. An example of highly structured volunteer positions is telephone work for the Red Cross during disaster-relief programs. Informal and spontaneous volunteering are exemplified by helping a neighbor or friend in a moment of need.

Perhaps the reason that so many elderly find value in volunteering in helping organizations is because they choose activities that reflect meaningfulness in their lives. "Human beings are capable of surviving and even flourishing despite hellish conditions when the struggle for existence has meaning for them" (Thomas, 1996, p. 57). Wheeler, Gorey, and Greenblatt (1998), through the use of meta-analysis, found that 70% of volunteers enjoy a higher quality of life (e.g., life satisfaction measures) than nonvolunteers. Musick, Herzog, and House (1999) found evidence that
volunteering has a protective effect on mortality among those who volunteered for one organization or for 40 hours or less over the last year. Life after retirement brings on a new dimension of activities and meaningful experiences for many individuals that should not be construed as "work."

**Meaning of Aging**

Regardless of advancements made in achieving equality for all individuals (e.g., racial, gender, sexual orientation, etc.), society is ambivalent when describing the last stage of the aging process. In some instances, aging is considered positive (e.g., wisdom) and in others aging is viewed as negative (e.g., loss of physical and mental health capabilities, decreased economic security, depression, etc.). Adams-Price, Henley, & Hale, (1998) compared the meaning of aging with young (undergraduate students) and old (individuals over 65 years of age) participants. The younger subjects perceived the aging process as negative, although life events they reported involved positive, age-related milestones (i.e., getting a driver’s license, being able to vote, etc.). In contrast, the elderly described aging as a positive experience, yet used negative life events as markers of the aging process (i.e, retirement, diminishing capacities, etc.). Both the young and the elderly used themes of time, body, and relationships with others in discussing their perceptions of aging.

Erikson (1980) described the last developmental crisis as coming to terms with the meaning of one's life, which may be difficult to accomplish in a society that continues to view aging as a negative process. Luborsky (as cited in Adams-Price et al., 1998) thought that finding meaning in later life could be especially difficult for the depressed elderly. In contrast, Frankl
(1971) encouraged everyone to live life. He stated that "The meaning of life . . . is not to be questioned but to be responded to, for we have the responsibility to life" (Frankl, 1971, p. 94).

Life Satisfaction in the Elderly

In previous research, life satisfaction after retirement has been defined in terms of the male model which has been derived from experiences of men and not of women (Calasanti, 1996; Monk, 1997). Two unique theoretical frameworks, crisis and continuity, have been proposed to explain life satisfaction through the retirement transition.

In 1954, crisis theory was first posed by Friedman and Havighurst (as cited in Calasanti, 1996) and was based on substituting one role for another (i.e., occupation was perceived as the primary source of cultural and personal validation and is used as the centroid about which all other roles revolve). Calasanti asserted that retirement from an occupational role can negatively affect self-identity and other roles. This theory suggests that adjusting successfully to retirement may be grounded in an individual’s ability to find meaningful activities as substitutes for the work role.

The continuity theory, as discussed by Atchely (1989), emphasized the persistence of personal identity by expanding and developing other roles after retirement. This theory, in contrast to the crisis theory, suggested that retirement has become a legitimate, acceptable role in society and can by itself provide self-esteem. Within the continuity theory, work is not the focus for all people, with most individuals basing their identity on a number of roles, including family and leisure.

Both external and internal continuity are described by Atchley’s (1989)
continuity theory. External continuity refers to responsibilities and choices that are outside of one’s self. Family and job responsibilities are examples of external pressures that influence one’s choices in life. Internal continuity is defined as the inner structures and processes of self. These processes refer to the interrelated intrapsychic structures such as appearance, abilities, preferences, emotionality, personal goals, level of performance, attitudes, roles, etc. that can affect self-concept and self-esteem.

The continuity theory posits that choices made during life reflect values and are expected to be consistent over time. The continuity theory does not deny change, but emphasizes that change occurs gradually within stable patterns of ideas and skills consistent with the individual’s past. Verbrugge, Gruber-Baldini, & Fozard (1996) found continuity in the level of activities across the lifespan with changes occurring gradually.

Effects of Losses on the Elderly

The elderly have lost their youth, energy and productivity to the aging process. Unlike the cherished "young" or the productive middle-aged, the elderly are made to feel unwanted and useless, which is a form of social alienation identified as “agism.” With aging come losses which occur throughout the aging process. Kohut, Kohut, and Fleishman (1983) divided losses into five categories, all with the potential of leading to depression: (1) losing prestige due to retirement, (2) feeling of aimlessness and uselessness, (3) changing lifestyle due to reduced income, (4) losing friends who have died, and (5) deteriorating health.

A number of writers in the 1970s and 1980s speculated that the principle tasks of aging and retirement are adapting to loss. Muslin and
Epstein (as cited in Weinberger, 1981) offered three goals for retirees: (1) acceptance of changes in phase-specific ego ideals, (2) acceptance of somatic changes, and (3) accommodation to phase-specific losses (p.154). According to these authors, retirement was depressing. They recommended a retiree should lower his/her expectations of life. They suggested that a successful retirement could consist of "replacing some of the losses, remaining active, and making do with less" (p.154).

Katzko, Steverink, Dittman-Kohl, and Herra (1998) examined self-concept of the elderly from a cross-cultural perspective. Previous studies focused on a recurrent working assumption that successful aging primarily involves adapting and coping with losses (Ebersole & Hess, 1981; Kohut, Kohut, & Fleishman, 1983). Katzko et al. realized that the elderly were not passive and that they were able to develop strategies to produce their desired results. The study summary indicated that both Dutch and Spanish elderly participants wanted to fill their time with meaningful activities. Katzko et al. suggested that developmental tasks for the elderly might better be conceived of as a search for activities to continue a meaningful and purposeful life. These tasks represented both Erikson’s ego integrity concept and Atchley’s continuity theory.

Studies on intimacy (Schaefer & Olson, 1981) generally concluded that intimacy is necessary for healthy personality development and maintenance. The death of a spouse could result in a major loss for the survivor and, intuitively, the survivor would be expected to grieve.

Tower & Kasl (1996) revealed a striking difference between genders by data obtained using a couple closeness measure: Husbands and wives react differently to mutual closeness and mutual distance. A closer
connection to a spouse decreased symptoms of depression in women, but increased symptoms for men. Nolen-Hoeksema (1987) suggested that women, who were not close to their husbands, adapt to depressive experiences by pondering their lack of closeness. In contrast, men who were not close to their wives increased their level of activity in response to depressive experiences, which may exacerbate relational issues by limiting time together with spouse. Yet, Lee, Willetts, and Seccombe (1998) reported widowhood was more depressing for men than it was for women.

Loss of Family Networks in Aging

The decline of the family unit is in part a result of broad cultural shifts that have accompanied industrialization and urbanization (Johnson, 1991). A factor that has contributed to the decline in the family unit is the dissemination of family members. This process occurs as children and grandchildren move away from home to attend college and later accept job opportunities and career advancements in distant cities and countries.

Another factor associated with loss of the family unit is the decline of the family ritual of eating meals together in the last 30 years (Merrill, 1991). In a survey to parents of teenagers, 74% reported they ate 10 or less meals out of a possible 21 meals per week with their teenagers.

Many scholars argue that the decline of the family unit can weaken the elderly’s support system. Koropeckyj-Cox (1998) tested this hypothesis and asked the question, “Are the childless elderly more vulnerable to depression or loneliness than elderly who have children?” Their study included 3,820 subjects between 50 and 84 years of age. Of this number, 256 men and 323 women were considered childless as they had never given birth, fathered a
child, or adopted a child. The participants completed the Center for Epidemiological Studies Depression Scale (CES-D) and by using a single item that asks, "How many days in the last week did you feel lonely?". The findings showed that permanent childlessness was not statistically significant in terms of greater depression or loneliness between childless women and those who had children, while men who had children were significantly less lonely than men who were childless. When men and women were compared, a significant, direct effect of gender was found, with women reporting higher levels of loneliness and depression regarding the lack of family than men. While the loss of a spouse is assumed to diminish feelings of wellness among older adults, the benefit of having adult children as part of a buffer system for the elderly in time of bereavement was not supported (Koropeckyj-Cox, 1998). Regardless of parental status, the loss of a spouse is linked with significantly greater loneliness and higher levels of depression.

Depression

Depression has been reported to be the most prevalent mental health problem among the elderly. As many as 15% of elderly living in community-based dwellings experience symptoms of depression (Wykle & Musil, 1988). Understanding the possible etiological factors contributing to depression in the elderly is complicated as normal aging processes produce symptoms that are similar to depression. For example, both elderly and younger people with depression show signs of sleep disturbances, loss of interest, loss of activities, fatiguability, pessimism, and a sense of uselessness (Katona, 1994).

Many studies on depression in the elderly compare the elderly with a
younger cohort (Katona, 1994). When compared to younger subjects, the elderly appear to be more depressed than younger subjects. When age is controlled, it seems that within the elderly cohort, age does not emerge consistently as an independent risk factor for depression. Katona suggested a rich area to explore would be to study a wide range of elderly subjects.

Levels of depression appear to differ among elderly males and females. Lee et al. (1998), through a review of the literature, determined that the differences between elderly widowed males' and females' psychological well-being may be caused by two possible reasons:

1. Many females outlive their male partners and have a longer time to adjust to a new identity as a partnerless person. Due to gender differences in life expectancy, "... at any single point in time men are likely to have been widowed for a shorter period than women" (p.613).

2. Widowed men appear to have more health problems than widowed women.

Widowhood elevates the mortality rate more for men than for women. While widowhood has a negative impact on both men and women, this effect is apparently stronger for men. Men appear to bring on many of their ill-health issues and engage in more deleterious behaviors such as smoking and drinking alcohol than do women (Barusch & Peak, 1997).

Lee et al. (1998) in their study also found that the length of widowhood is negatively related to depression for women, but not for men, as time appears to moderate the effects of widowhood more for women than men. Women are more likely to be long-term widows, as many men remarry following the death of their spouses, while most women remain widows. According to 1995 reports by the U. S. Bureau of Census (as cited in Lee, et
47.9% of the women and 14.6% of the men in the United States are widowed.

Lichtenberg, Ross, Mullis, and Manning (1995) examined the relationship between depression and cognition in the medically ill elderly. Their data supported the conjecture that depression is related to modest pathological brain changes (i.e., increased depression results in decreased cognition). They also reported a significant relationship between race and depression. African Americans reported fewer symptoms of depression than White Americans.

Koropeckyj-Cox (1998) examined the relationship between marital status, childlessness, and depression in the elderly. Multivariate analyses revealed no direct effect of childlessness on depression, however, a marginally significant effect was found for women. For both genders, loss of a spouse was linked with significantly greater loneliness and depression. The loss of a spouse is devastating to the survivor, yet the principal mechanisms linking widowhood to depression are gender specific. The predominate factor that exacerbates depression for widowed women is financial strain, while household management appears to be the major cause of depression for widowed men (Umberson, Wortman, & Kessler, 1992). The death of a spouse or divorce greatly diminishes subjective well-being among the elderly. Both divorced women and men were significantly more depressed than were married people.

**Physiology Theory of Depression and Treatment**

Science offers four biological treatments for depression: (1) monoamine oxidase (MAO) inhibitors, (2) drugs that inhibit reuptake of
norepinephrine and serotonin, (3) electroconvulsive therapy, and (4) sleep deprivation (Carlson, 1994). Electroconvulsive therapy and sleep deprivation are beyond the scope of this paper and only the physiology theory of drug treatment for depression is explored.

The bases of a physiology theory of drug treatment for depression are the neuron and the transmission of signals (Carlson, 1994). The basic neuron consists of four structures. A cell body (soma) provides the life force of the cell. The soma receives messages from other neurons through a network of tree-like tentacles called dendrites. A dendrite of one neuron receives messages from the terminal buttons of another neuron through a synapse. A synapse is a space between terminal buttons and dendrites. The received message, called an action potential is transmitted through the cell axon to the end terminal buttons. Chemicals, called neurotransmitters, are released in the terminal buttons to aid the message across the synapse and to the dendrites of another neuron.

According to Carlson (1994), depression appears to be associated with a chemical imbalance within the central nervous system. MAO inhibitors for the treatment of depression were discovered in the 1940s while clinicians were treating patients with tuberculosis. A derivative of these early drug treatments for tuberculosis (iproniazid) was found to reduce symptoms of depression through a process that increased the release of neurotransmitters, dopamine, norepinephrine, and serotonin in the synapse. However, a potentially deadly side-effect of the drug was a reaction to certain foods containing pressor amines that could affect the sympathetic nervous system.

Tricyclic antidepressants were discovered that promoted the
availability of neurotransmitters through a different mechanism that inhibited the reabsorption of the released neurotransmitters, 5-HT and norepinephrine, by the terminal buttons. Tricyclics did not produce the negative side-effects experienced when using MAO inhibitors.

Both drug mechanisms of increasing the release of neurotransmitters and inhibiting the reabsorption of neurotransmitters maintains the contact with the postsynaptic receptors, thus prolonging the action potential. The treatment of depression with chemicals is supported by positive results that patients experience after they receive drugs that increase levels of chemicals known to react within the central nervous system (Carlson, 1994).

Retirement

For many years, the age of retirement in the United States had been established at 65 years of age. Interestingly, this arbitrarily set age was a product of late 19th century Prussia. Bismark, the Prussian dictator, wanted to institute social reform and reward his subjects by providing them with an income in their later years. He established 65 years of age as the mandatory retirement age. As life expectancy was somewhat shorter and people spent few, if any, years in retirement, the government was able to provide income during retirement without substantial economic strain on society (Kohut, Kohut, & Fleishman, 1983). Beginning in 2003, the minimum age to receive full Social Security benefits will increase until 2027, when the minimum age to receive full benefits under Social Security will be 67 (Settersten, 1998).

Retirement is a complex social process that involves withdrawing from the role of provider and taking up the role of retired person. Mutran et al. (1997) asserted that one's view of retirement could be influenced by one's
previous work structure experience and could be expected to be different from that of another structural experience, (e.g., the owner of a company could have a different view of retirement from that of a company secretary). Retirement is a transition from work to a new lifestyle, which may include working part-time or volunteering in human service organizations.

Self-esteem is an important issue in retirement. Many men and women obtain a strong sense of self identity from their careers. Retirement then poses another possible loss when an individual has gained so much through work. However, in the transition from work to retirement, Reitzes, Mutran, & Fernandez (1996) found that how people think and feel about themselves in postretirement seems to reflect how they thought of themself prior to retirement. They suggested that individuals entering a new life cycle may use their past to guide their cognitive and affective behaviors in the present. To the greatest extent possible, a continuation of behaviors, lifestyles, and personality are suggested.

Gender Differences in Retirement

Many early studies on retirement focused on White men only (Gendell & Siegel, 1996; Beck, 1982). Life satisfaction after retirement has been defined in terms of the male model that has been derived from experiences of men and not women (Calasanti, 1996). In addition to the population growing older, women and minorities have joined the work force, but little is known of their retirement behaviors and issues that they face when they retire. In 1900, 69% of the men and 13% of the women were employed outside of the home. In contrast, the employment level for men in 1980 had declined to 55% and women had increased to 38%. In 1999, the gender shift in the workforce
indicated a continued increase in the presence of women, with a decline in the percentage of men.

The focus on the experiences of White males has resulted in many studies concluding that the role of paid labor is central to satisfaction in retirement. This assumption is based on a male perception of work that does not consider domestic labor as "work" because no pay is received for these tasks (Atchley, 1987). This assumption also ignores the "double day" that many women experience when they do obtain work outside of the home; women leave work only to be confronted with the domestic needs of their households when they arrive at their homes.

Atchley (1987) used two criteria to define retirement. People are considered to be retired if they are working less than full-time and prior employment provides part of their income through a pension after retirement. Atchley considered his definition of retirement arbitrary, but important because it illustrated that retirement is an earned reward and the main effect of retirement was a separation from a job and a shift of income sources, which usually was less than when working. While Atchley acknowledged that housewives did not meet his criteria for retirement, he concluded they made an important contribution to society by maintaining a household for their families. He thought that in the future, society would reward housewives with a general public retirement pension.

Calasanti (1996) examined the relationship between gender, work, and life satisfaction in retirement. Calasanti concluded that work experiences, that may be gender-specific, could be intrinsically connected to satisfaction during retirement. Given the ways in which gender structures labor market access, women typically have not had the same availability for powerful and
financially-rewarding careers as have men. Women continue to earn less money than men, even when performing the same work. For example, in 1994 (a) among people who were from 55 to 64 years of age, men earned $28,980 and women earned $12,381 per year, and (b) among people 65 and older, men earned $16,484 and women earned $9,355 per year. In examining gender differences, Monk (1997) indicated that women may be more at risk to a negative reaction to retirement resulting from the differences in wages earned by men and women. This trend appears to be changing as women from the baby-boomer generation enter the 65-plus age group, the average postretirement income for women may increase substantially (Yntema, 1997).

Specific interactions within the work environment can condition both men and women especially in regards to effects of health and financial satisfaction during retirement. Because differential life satisfaction in retirement can result from gender discrepancies, experiences of White, middle class men may not necessarily be the norm for other groups, (e.g., women and minorities) when considering the effects of retirement.

**Empirical Studies on Retirement**

Gall et al. (1997) studied life satisfaction in men using a cross-sectional research design. They administered their instruments to 224 men who were either pre- and postretired. The retirees were further divided into two groups, those who had retired voluntarily and those who were forced to retire (nonvoluntary). The study found that voluntary retirees in the first year of postretirement reported an increase in psychological health, energy level, financial, and interpersonal satisfaction. Conversely, in the first year of
retirement, nonvoluntary retirees reported less life satisfaction than voluntary retirees. Their findings supported previous work by Beck (1982) who attained similar results for nonvoluntary retirement. Longitudinally, the type of retirement (voluntary or nonvoluntary) is not an important predictor of satisfaction with either life or retirement.

Gall et al. (1997) findings were consistent with Atchley (1989), who described early retirement as a honeymoon phase. Gall et al. suggested that positive changes immediately after retirement for voluntary retirees may reflect freedom from time demands and structure of work-related issues. Whereas nonvoluntary retirees may sense retirement as another type of loss, which could be perceived as stressful. According to Balswick and Balswick (1989), retirement was perceived as a stressful event, receiving a rating of 45 out of a possible 100 points on a stress chart.

At 6 to 7 years postretirement, Gall et al. (1997) found significant decreases in interpersonal satisfaction and psychological health. To account for these decreases, they suggested that the honeymoon effect may have worn off. In contrast, Beck (1982) found “that the loss of the work role did not have a significant negative effect on personal happiness” (p.623). However, Gall et al. (1997) found that levels of financial, health, and life satisfaction did not decrease below preretirement levels. The mean level of life satisfaction showed relatively little change over time, suggesting that retirees’ satisfaction simply may have stabilized over time and they did not become increasingly disenchanted with retirement. They offered three explanations for their findings concerning the stabilization of life satisfaction over time after retirement:

1. Retirement, as a normal life transition, may not have a significant
impact on life satisfaction.

2. As one grows older one may change the criteria that is used to evaluate life satisfaction.

3. "...successful adjustment in retirement depends on the retiree's ability to maintain a sense of stability in life goals and purpose" (p115) (e.g., volunteer work after retirement is one avenue that retirees have used to provide and maintain a sense of purpose).

**Substance Abuse and Alcohol in Retirement**

Men use illegal drugs at a ratio of four to one over women (Barusch & Peak, 1997) and men over 65 years of age abuse alcohol significantly more than younger men. Isolation is a primary factor cited for substance abuse in older men. This conjecture is supported by data that show men who are either married or cohabiting report being drunk less than men who are widowed, never married, divorced or separated. Loss of employment is also a factor that is attributed to alcohol abuse in men, but not women. Older men, who either work full time or are retired, drink significantly less than older men who are unemployed or work part-time.

The importance of isolation and employment on substance use are controversial, with no research on cause and effect relationships found in a comprehensive review of related literature. According to Barusch and Peak (1997), men who are unemployed and isolated drink significantly more than men who are socially active and employed. The opposite view may be that men become isolated and lose their jobs as a result of alcohol abuse.
Activity After Retirement

The amount of time spent at home increases before retirement and continues to increase after retirement and through old age. The increased time at home is due in part to a loss of roles outside of the home and to an increased preference to in-home activities (Atchley, 1987). For 75% of retirees, the overall level of activity remains constant after retirement, with work and work-related activities decreasing after retirement and personal favorite activities increasing.

Numerous authors have discussed the notion that financial support and adequate health are of major importance for life satisfaction in later years of life. If these two ideas are adequately met, or if an individual is able to cope with a given situation, two additional dimensions of life become critical: (1) quality of relationships and (2) regular engagement in physical and social activities (Kelly, 1993).

Quinn & Keller (1983) examined the quantitative variables of intergenerational processes between the elderly and their adult children. Through a review of the literature, they identified six qualitative dimensions (1) affection, (2) communication dynamics, (3) consensus, (4) individuation, (5) filial responsibility, and (6) filial expectations that were believed to affect intergenerational family relationships.

Physical and social activities refer to what people do other than employment. Yet, activity is more than "doing something," activity has the potential to offer value and meaning to one's life. The intrinsic meaning of an activity may be related to developmental and social issues.

Choices of activities vary among the elderly and may reflect their attempt to remain independent. Many elderly compensate for their declining
abilities by adapting their activities. For example, as visual ability declines, some elderly drivers shift their driving to daylight only.

The meaning of an activity can be specific to an individual, with the same activity having different meanings for various people. For example, a garden planted for food has a different meaning than a garden planted for leisure activity.

Activities also provide opportunities to establish new friendships and relationships. Relationships appear to change in later years for the elderly, with friends becoming fewer in number and family members becoming closer (van Tilburg. 1998). Many kinds of activities are social in nature where the most important factor is the people involved and the quality of their relationship and not the activity itself.

Activities have been categorized using various paradigms to determine their meanings. As with many forms of classifications, divisions described are arbitrary with many overlapping features. For example, activities of daily living (ADL) are frequently used to determine the dependency of the elderly. ADL include bathing, dressing, moving, toileting, and eating (Cutler, 1992).

Leisure activities were divided into three broad categories, experiential, social, and developmental by Powell Lawton (1993).

1. Experiential leisure offers an intrinsic satisfaction and is motivated by the enjoyment of the activity itself.

2. Social leisure is sub-divided into three divisions, social interaction, social status, and service. The first division is social interaction, with personal contact the common denominator for participants. Social status is the second division of social leisure. Competition is the goal of social status activities and winning is important. The third division of social leisure is service; with
volunteering an example of service leisure activities.

3. Developmental leisure is based on the characteristic of helping or improving a person. Intellectual pursuits are an example of this type of leisure activity.

Atchley (1987) described eight classifications of at-home activities: (1) work, (2) relaxation, (3) diversion, (4) personal development, (5) creativity and problem solving, (6) sensory gratification, (7) socializing, and (8) appreciation of nature. Examples of each of these types of activities are summarized in Table 2.

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>Housework, home maintenance, household chores</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Resting, sleeping, meditating</td>
</tr>
<tr>
<td>Diversion</td>
<td>Television watching, listening to music, reading</td>
</tr>
<tr>
<td>Personal Development</td>
<td>Studying, learning, practicing, personal care, worshiping</td>
</tr>
<tr>
<td>Creativity and Problem Solving</td>
<td>Crafts, cooking, planning, handiwork, arts</td>
</tr>
<tr>
<td>Sensory gratification</td>
<td>Sexual activity, eating, drinking, smoking</td>
</tr>
<tr>
<td>Socializing</td>
<td>Discussing, arguing, entertaining, gossiping</td>
</tr>
<tr>
<td>Appreciation of nature</td>
<td>Walking, gardening, bird watching</td>
</tr>
</tbody>
</table>

Centenarians are noted for their lack of medical problems. Centenarians are generally found in specific geographic location, especially the northern mid-western states. Many older rural people are active, with most still farming, growing vegetables and flowers in their garden, and providing for their own needs.
Aging in the 21st century will be predictably different from aging in the 20th century. One of the most dramatic changes to impact the future of the United States has been increases in longevity. During the 20th century, nearly 30 years have been added to the life expectancy of individuals. World War II also had an enormous impact on the aging process, with the end of this war ushering in the beginning of the cohort known as the "Baby Boomers." The baby boomers, 80 million strong, overwhelmed many systems as they progressed through their early life stages. As they approach retirement age, they are expected to wreak havoc on all systems associated with aging.

Many developmental theories have shown that becoming elderly is the end of the life cycle and most take a pessimistic view of this development stage. These theories may not be applicable to the present group of elderly, who have retired from occupations and careers and moved into retirement with optimism.

Crisis and continuity theories were developed to help understand the complex issues of retirement. Crisis theory posited that a career is a main source of life satisfaction and is central to all other roles. Therefore, retirement may have adverse effects on retirees unless they are able to find other roles in which to participate. The continuity theory maintained that work is just one of many roles and that retirees can continue to exist in similar patterns as before retirement.

Retirement has become another developmental stage of life that integrates many intricacies of living. A benchmark of maturity is independence. The type of independence that is associated with retirement
generally is achieved through work or career. The success of retirement and the ability to remain independent can depend on perceptions of anticipated outcomes when a person is forced to, or voluntarily, retires.

Morale is a multidimensional concept. High morale means a basic sense of satisfaction with life, that life is worth living. It also communicates the idea that the person-environment fit is acceptable and offers appropriate stimulation. In gerontology, morale is a term that has been used to try and convey the meaning of adjustment to the aging process with the acceptance of the inevitable (Lawton, 1972).

Life satisfaction, according to Ardelt (1997), is defined as a general feeling of contentment and a lack of dissatisfaction with one's life. Life satisfaction is similar to Erikson's (1980) description of the consequences for personality that emerge when the ego conflict of integrity versus despair is resolved in the direction of integrity. Yet, Erikson's last developmental stage of integrity verses despair involves a process that focuses on past life events. Erikson's view of looking backwards to connect life events into a meaningful whole for life satisfaction negates the aspect that the person is still living. Dignity in later years is related to the coping abilities of the elderly, yet more than coping, living life. Older people are not just ending their lives, they are producing new chapters and are still able to engage in what Bateson (as cited in Kelly, 1993) called “composing a life” (p. 3).

Depression is a leading cause of mental illness in the elderly and is associated with suicide and decreased quality of life (Katona, 1994). In a review of the literature, Katona reported clinically significant depressive symptoms in 10% to 25% of the elderly, a majority of the studies reported approximately 15% of the elderly exhibited signs of depression.
"Human beings are capable of surviving and even flourishing despite hellish conditions when the struggle for existence has meaning for them." (Thomas, 1996, p. 57). Many retirees provide meaning to their existence through volunteering. Volunteering reflects personal values and identity and gives back to the volunteer an enhanced sense of purpose. "Older people do not perceive meaning in aging itself; rather, they perceive meaning in being themselves in old age" (Kaufman, 1986, p.6).

Health, followed by socioeconomic issues and degree of social interaction still continue to be the major factors contributing to satisfaction/dissatisfaction with life in old age. Failing health and not enough money exacerbate all other issues of aging.

Most previous studies on life satisfaction and retirement have used men as their primary target populations. Women have become an increased presence in the workplace, both in terms of absolute numbers, as well as being in higher-level management positions. As women begin to retire in greater numbers, additional research is needed to determine the effect of retirement on morale, depression, self-esteem, and life satisfaction and if this effect differs from men.
CHAPTER 3

METHODOLOGY

Introduction

A description of the methods that were used to collect and analyze the data needed to address the research questions developed for this study are presented. The topics included are the research design, participants, instrumentation, data collection procedures, and data analysis. Each of these topics is presented separately.

Statement of the Problem

This study examined factors that can contribute to life satisfaction in individuals who are over 65 years of age and/or retired. The factors that were included in this examination are: self-esteem, geriatric morale, geriatric depression, and demographic characteristics (e.g., age, gender, ethnicity, educational level, marital status, income, self-reported health status, self-reported mobility status, activity level, work status, and membership in organizations).
Research Design

A non-experimental, descriptive research design was used in this study. Five instruments (Rosenberg Self-Esteem Scale, Geriatric Depression Scale, Satisfaction with Life Scale, Philadelphia Geriatric Center Morale Scale, and Life Attitudes Scale) and a short demographic survey were used as the data collection tools. This type of research design is appropriate when the independent variables are not manipulated and no intervention or treatment is provided to the participants. While this type of research is not prone to the same types of threats to internal and external validity as experimental studies, the results can be affected by extraneous variables. These extraneous variables could influence outcomes leading to alternative conclusions.

Research Questions

The following research questions were addressed in this study;

1. Are there differences in life satisfaction, self-esteem, geriatric morale, and geriatric depression between male and female retired individuals?

2. Can life satisfaction of individuals over 65 years of age be predicted from measures of self-esteem, geriatric morale, and geriatric depression?

3. Can life satisfaction of individuals over 65 years of age be
predicted from age, gender, ethnicity, educational level, marital status, and income?

4. Can life satisfaction of individuals over 65 years of age be predicted from self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations?

Participants

The participants in this study were individuals over the age of 65 and/or retired. These people were expected to be retired from their primary occupations, although they could be employed part-time or full-time in secondary careers. The participants had to be able to read and write English at a 6th grade level.

A total of 144 elderly individuals participated in this study. This number was based on a power analysis using six independent variables in a multiple linear regression analysis (Borenstein, Rothstein, Cohen, & SPSS, Inc., 1997). Using 144 participants ensured the analysis had adequate power to minimize a possible Type 2 error.

Senior citizen centers, nursing homes, and senior center residences were contacted by telephone to obtain written permission to recruit members to participate in the study. The researcher discussed the purpose and importance of the study with agency directors and showed them the instruments that were planned for use in the study. They were asked to write
a letter on agency letterhead to affirm their willingness to allow the researcher to recruit participants.

Instrumentation

Five instruments and a short demographic questionnaire were used in this study. These instruments included: Satisfaction with Life Scale (SWLS), Rosenberg Self-Esteem Scale (RSES), Life Attitude Profile-Revised (LAP-R), Philadelphia Geriatric Center Morale Scale (PGCMS), and the Geriatric Depression Scale (GDS).

Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale (SWLS) developed by Diener, Emmons, Larsen, and Griffin (1985) measures subjective life satisfaction using a self-report. The 5-item scale refers to the cognitive-judgmental aspects of general life satisfaction. In contrast to other scales that apply external standards to determine life satisfaction, the participant's own judgment of his/her quality of life is measured. The scale assesses one dimension of life satisfaction, which is considered a component of mental well-being. The instrument uses a 4-point Likert scale with a "0" indicating "Strongly Disagree" and "3" "Strongly Agree." The items on the scale were summed to obtain a total score for life satisfaction. Possible scores could range from 0 to 15 with higher scores reflecting more life satisfaction. The
original scale used a 7-point Likert scale, with a “1” indicating “Strongly Disagree” and a “7” “Strongly Agree.” A neutral point was provided for participants who neither agreed nor disagreed with a statement. The “Disagree” and “Slightly Disagree” responses were collapsed into a “Disagree” response and “Agree” and “Slightly Agree” responses were collapsed into an “Agree” response. The neutral point was eliminated to force a choice on the scale. Although there is no research to support the modification of this test from a 7-point scale to a 4-point scale, it is assumed that the psychometric outcomes improved as a result of this change (Capps, 1998).

Reliability

The 5 items on the SWLS that are included on the scale were selected from a pool of 48 items. Using a principal components factor analysis, the 48 items were reduced to 5 items. Tests for internal consistency have provided an alpha coefficient of .87. Test-retest reliability over a 2-month period was established. The resultant correlation of .82 between test and retest scores indicated good stability of the instrument over time (Diener et al., 1985).

Validity

The SWLS has been tested for concurrent validity with several measures of subjective well-being (Diener, Emmons, Larsen, and Griffin
1985). These scales included:


The results of these correlations indicated that the SWLS did not evoke a social desirability response set as verified by the r-value of .02 with the Marlowe-Crown measure (N=176). Correlations with the other measures are presented in Table 3. Individuals who have completed this scale appear to be psychologically well adjusted (Diener et al., 1985).

Rosenberg Self-Esteem Scale (RSE)

The RSE (Rosenberg, 1965) is a 10-item Guttman scale measuring a single dimension of self-esteem. Since its development, the scale has become widely used by researchers with a number of other groups including adults, senior citizens, and children. Although norms are available for high school students based on testing of 5,000 participants of varying ethnic backgrounds, additional research involving other groups has been completed.
Table 3

Construct Validity of the SWLS

<table>
<thead>
<tr>
<th>Scale</th>
<th>r-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fordyce’s Measure of Happiness</td>
<td>.58</td>
</tr>
<tr>
<td>Fordyce’s Percent of Time Happy</td>
<td>.58</td>
</tr>
<tr>
<td>Differential Personality Questionnaire</td>
<td>.68</td>
</tr>
<tr>
<td>Bradburn Positive Affect Scale</td>
<td>.50</td>
</tr>
<tr>
<td>Bradburn Negative Affect Scale</td>
<td>-.34</td>
</tr>
<tr>
<td>Affect Intensity Measure</td>
<td>.09</td>
</tr>
<tr>
<td>Cantril Self-Anchoring Ladder</td>
<td>.66</td>
</tr>
<tr>
<td>Andrews and Withey D-T Scale</td>
<td>.68</td>
</tr>
<tr>
<td>Campbell, et. al Semantic Differential-Like Scale</td>
<td>.75</td>
</tr>
<tr>
<td>Summed Key Life Domain’s Satisfaction</td>
<td>.57</td>
</tr>
<tr>
<td>Rosenberg Self-Esteem Scale</td>
<td>.54</td>
</tr>
<tr>
<td>Symptom Checklist</td>
<td>-.41</td>
</tr>
<tr>
<td>Eyseneck Personality Scale — Neuroticism Subscale</td>
<td>-.48</td>
</tr>
<tr>
<td>Buss and Plomin’s EASI - III</td>
<td>-.25</td>
</tr>
<tr>
<td>Activity</td>
<td>.08</td>
</tr>
<tr>
<td>Sociability</td>
<td>.20</td>
</tr>
<tr>
<td>Impulsivity</td>
<td>-.03</td>
</tr>
</tbody>
</table>


with norms available on those groups.

The participants rate each of the 10 items using a 4-point Likert scale with a “1” indicating “Strongly Agree” and a “4” indicating “Strongly Disagree.” Low self-esteem responses are “Disagree” or “Strongly Disagree” on 5 of the 10 items (1, 3, 4, 7, 10), with “Agree” or “Strongly Agree” ratings on 5 items.
(2, 5, 6, 8, 10) indicating high self-esteem. The low self-esteem items are recoded to reflect high self-esteem ratings. The scores are then summed to obtain a total score for self-esteem, with higher scores reflecting higher levels of self-esteem and lower scores indicating lower levels of self-esteem.

**Reliability**

The RSE has a Guttman scale of reproducibility of .92 which indicates good internal consistency. In a study by Capps (1997) of 32 adults over 65 years of age, a Cronbach's alpha coefficient of .81 was obtained supporting the internal consistency of the RSE with older adults. Stability of the RSE was determined by Silber and Tippett (1965) who obtained a test-retest correlation coefficient of .85 over a 2-week interval. According to Crocker, Voelkl, Testa, & Major (1991), a test-retest reliability coefficient of .80 was obtained over a 6-week period, indicating the RSE had good stability. McCarthy and Hoge (cited in Hagborg, 1996) tested the RSE for test-retest reliability. They obtained a coefficient of .74 for a two-week interval. Midgley, Arunkumar, & Urdan (1996) reported a test-retest coefficient of .85, at a two-week interval, with an alpha coefficient of .75. These studies indicated the instrument has excellent stability and internal consistency in measuring self-esteem over time.
Validity

The RSE has been shown to have concurrent, predictive, and construct validity through extensive research (Hunter, Linn, and Harris, 1981-82). When correlated with other measures of self-esteem, such as the Coopersmith's Self-esteem Inventory, significant relationships in the predicted direction were found. In a similar manner, correlations between the RSE and measures of depression, anxiety, and peer-group reputation were in the predicted direction indicating good construct validity by correlating positively with measures with which it should theoretically correlate and not correlating with measures that it should not.

Life Attitude Profile-Revised (LAP-R)

The Life Attitude Profile - Revised (LAP-R) (Reker, 1992) is a 48-item self-report scale that measures discovered meaning and purpose in life and the motivation to find meaning and purpose in life. The LAP-R is scored and profiled in terms of six dimensions and two composite scales. The six dimensions are: (1) Purpose, (2) Coherence, (3) Choice/Responsibleness, (4) Death Acceptance, (5) Existential Vacuum, and (6) Goal Seeking, with two composite scales: (1) Personal Meaning Index and (2) Existential Transcendence.

Each item on the LAP-R is rated on a 7-point Likert scale of agreement (1 to 7) ranging from "Strongly Agree" (7) to "Strongly Disagree" (1) (Reker,
1992). For the purpose of this study, the LAP-R was modified to simplify choice selection by eliminating two alternative categories, "Moderately Agree" and "Moderately Disagree," thus establishing a 5-point Likert scale of agreement ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

Although there is no research to support the modification of this test from a 7-point scale to a 5-point scale, it is assumed that the psychometric outcomes can be improved from this change.

Scores are obtained by summing item scores for the respective dimensions. Scale scores for Purpose, Coherence, Choice/Responsibleness, Death Acceptance, Existential Vacuum, and Goal Seeking, which include eight items each, range from 8 to 40, respectively. A high total score on each dimension reflects a high degree of the attribute in question. Scale scores for the Personal Meaning Index range from 16 to 80. Scale scores for Existential Transcendence can range from 48 to 144. The following is an explanation of the six dimensions as described by Reker (1992):

**Purpose (PU).** This dimension refers to having life goals, a mission in life, and a sense of direction from the past, in the present and toward the future. Implicit in the Purpose dimension is the notion of the worthwhileness of life and an awareness of what is of central importance to one's life.

**Coherence (CO).** This dimension refers to having a logically integrated and consistent analytical and intuitive understanding of self, others, and life in general. Implicit in coherence is a sense of order and reason for existence, a
clear sense of personal identity, and a greater social consciousness.

**Choice/Responsibleness (CR).** This dimension refers to the perception of freedom to make all life choices, the exercise of personal responsibility, personal decision making, and internal control of life's events. It is an operational index of the degree to which a person perceives one's self as having personal agency in directing one's life.

**Death Acceptance (DA).** This dimension refers to the absence of fear and anxiety about death and the acceptance of death as a natural aspect of life. It is an operational index of the degree to which a person has achieved death transcendence.

**Existential Vacuum (EV).** This dimension refers to having a lack of meaning, goals and direction in life, accompanied by feelings of boredom, apathy, and indifference. It is an operational index of a frustrated "will to meaning."

**Goal Seeking (GS).** This dimension refers to the desire to get away from the routine of life, to search for new and different experiences, to welcome new challenges, to be on the move, and to experience an eagerness to get more out of life.

An explanation of the two composite scales are as follows:

**Personal Meaning Index (PMI).** The Personal Meaning Index provides a more focused measure of personal meaning. Personal meaning is a dual component construct defined as having life goals, and a mission in life. It is
having a sense of direction from the past, in the present, and toward the
future, and having a logically integrated and consistent understanding of self,
others, and life in general. The PMI is derived by summing the Purpose and
Coherence dimensions.

Existential Transcendence (ET). Existential Transcendence is a global
measure of attitudes toward life that takes into account both the degree to
which meaning and purpose have been discovered and the motivation to find
meaning and purpose. The individual who has achieved existential
transcendence has a new perspective on life, has internalized successes,
has risen above the failures of living, has a good understanding of self, has
come to accept the prospect of personal death, has an appreciation for the
past, present and future, and views life as inevitable and meaningful. ET is
derived by summing the scores on the LAP-R dimensions of Purpose,
Coherence, Choice/Responsibleness, and Death Acceptance, and
subtracting the scores on Existential Vacuum and Goal Seeking.

Reliability

Alpha coefficients were computed to assess internal consistency of the
six dimensions. The coefficients are highly satisfactory for older adults
ranging from .79 to .86 across gender. The internal consistency of the two
composite scales also indicates satisfactory internal consistency with alpha
coefficients ranging from .90 to .91 across gender.
Stability

Test-retest stability coefficients for the six dimensions and two composite scales were computed on a subsample of participants (n=200) retested at a 4-6 week interval. Stability estimates for the six dimensions ranged from .77 to .90. The stability estimates for the two composite scales were .90. The satisfactory test-retest coefficients provide strong support for the short-term stability of the LAP-R. Correlations among the LAP-R dimensions for the normative sample (N=750) and separately for men (N=259) and women (N=491) are comparable.

Construct Validity

The LAP-R was developed to measure six specific dimensions of attitudes toward life. Given the moderate sample size, items with factor loadings equal to or greater than .40 were deemed salient. Five interpretive factors emerged, accounting for 47% of the variance. The only divergence was the fact that Purpose (PU) and Coherence (CO) did not emerge as independent dimensions. Since PU and CO were hypothesized, a priori, to constitute the construct of personal meaning, the divergence does not pose a problem. Results of the factor analysis lend support for the construct validity of the LAP-R.
The Philadelphia Geriatric Center Morale Scale (PGCMS)

The Philadelphia Geriatric Center Morale Scale (PGCMS) was developed by Lawton (1972) for use with frail elderly people in housing for the elderly. The standardization sample had a mean age of 77.9. The PGCMS consists of 16 self-report items that are answered using a dichotomous response format (True/False) (Lawton, 1972). The items measure three main factors in later life: (1) Attitude Toward Own Aging/Satisfaction with Life Progression; (2) Agitation/Tranquility, and (3) Lonely Dissatisfaction. Scoring was accomplished by counting the number of items that were assigned to each of the three subscales, as well as a total score to determine an overall factor score.

Reliability

This scale has a split-half reliability coefficient of .74 (n=300) that was corrected to .79 by using the Spearman-Brown Formula (Lawton, 1972) indicating good internal consistency. He reported that the coefficient of internal consistency was .81 when the Kuder-Richardson Formula 21 was used. A study by Morris, Wolf and Klerman (1975) produced a coefficient alpha of .80 using Cronbach’s alpha procedures. Fletcher, Dickinson, and Philp (1992) reported internal consistency as .80. Lawton (1972) reported a test-retest reliability of .75 was obtained using 25 participants who were tested at 3-month intervals. A second study using 14 elderly Lutheran Home
residents over a 5-week period resulted in a correlation coefficient of .91. Twenty-five elderly participants in an adult education class conducted in a day center for older people completed the morale scale at a one week interval. A correlation coefficient of .80 was obtained for this study. These studies provided support for both internal consistency and stability of the Geriatric Morale Scale.

**Validity**

The PGCMS was shown to correlate with other measures of satisfaction and morale (e.g., Life Satisfaction Index; Southampton Self-esteem Scale), with r values ranging from .60 to .90, indicating the instrument has concurrent related validity (Fletcher, et al. 1992). The instrument was reported to be highly acceptable when used with elderly populations in the community and was responsive to major service interventions. Morris et al. (1975) reported that morale as measured by the PGCMS was highly correlated with measures of depression obtained from the Gardener-Hetznecker Sign and Symptom Check List and the Zung Self-Rating Depression Scale.

**Geriatric Depression Scale (GDS)**

The Geriatric Depression Scale (Yesavage et al., 1983) is a 30 item scale that provides a measure of depression in older adults. The GDS is
written in simple language and can be administered either orally or in pencil/paper format. The primary purpose of the GDS is to provide a screening test for depression in older populations that would be easy to administer and not require special training for the interviewer. The GDS has been used successfully with both physically healthy and samples of older ill adults.

The initial data for the GDS were obtained from two groups of older adults. The first group (N=40) was recruited from senior citizen centers and housing projects. These participants were well-functioning, with no prior history of mental problems. The second group (N=60) was comprised of older adults who were under treatment for depression, both on an inpatient and outpatient basis. The results of these tests provided evidence that scores from 0 to 10 were considered normal, with scores from 11 to 20 considered evidence of moderate or severe depression. Lesher (1986) reported that using recommended cutoff scores, the Geriatric Depression Scale significantly differentiated between nursing home residents with no depression, depressive features, and Major Depression.

Of the 30 items on the instrument, 20 indicate the presence of depression when answered positively, with 10 items (1, 5, 7, 9, 15, 19, 21, 27, 29, and 30) indicating depression when answered negatively. The GDS was scored by totaling one point counted for each "depressed" answer and zero points counted for each "nondepressed" answer.
Reliability

The GDS has excellent internal consistency with an alpha coefficient of .94 and a split-half reliability coefficient of .94. The GDS also has excellent stability with a one-week test-retest correlation of .85. The GDS results also compare favorably with the split half and alpha coefficients of the Beck Depression Inventory when used in geriatric populations (Gallagher, Nies & Thompson, 1982).

Validity

According to Yesavage et al. (1983), the GDS has excellent concurrent validity, with a correlation of .83 obtained between the GDS and Zung's Self-Rating Depression Scale (SRDS) and .84 for the correlation between the GDS with the Hamilton Rating Scale for Depression (HRS-D). Compared to the Zung Self-rating Depression Scale and the Hamilton scale, the GDS appeared to have superior validity in terms of its ability to distinguish between depressed and non-depressed elders (Brink, Yesavage, Lum, Heersema, Adey & Rose, 1982).

According to Ysesavage et al. (1983), the GDS was also found to have good validity in distinguishing between participants who have been classified as normal, mildly depressed, or severely depressed. The difference between depressed and nondepressed physically-ill older adults and between depressed and nondepressed older adults undergoing cognitive treatment for
senile dementia have also been determined by the GDS.

Information regarding the sensitivity and specificity of the GDS was provided in a study by Brink et al. (1982). They found that a cut-off score of 11 on the GDS yielded a 84% sensitivity rate and a 95% specificity rate. A more stringent cut-off score of 14 yielded a slightly lower sensitivity rate (80%), but resulted in the complete absence of nondepressed persons being incorrectly classified as depressed (100% specificity rate).

Demographic Survey

A short demographic questionnaire was used to obtain information about personal characteristics of the participants. The items that were included on this survey are as follows: age, gender, marital status, ethnicity, educational level, income, employment status, self-reported health status, self-reported mobility levels, participation in hobbies, and membership and extent of participation in social groups.

Data Collection Procedures

After receiving approval from the Human Subjects Institutional Review Board, the researcher met with each of the directors of the participating agencies to set up times for data collection. Flyers and notices were distributed at each of the senior citizen centers, nursing homes, and senior citizen residences to recruit participants. The data collection was completed
using small groups of less than 15 people. This size group allowed the researcher to give each person attention and assistance in completing the instruments. The procedures that were used were:

1. Anonymous informed consent forms were distributed and explained to the participants.
2. The survey packets were then distributed to the group members for completion.
3. Following completion of the surveys, participants were instructed to place the surveys back in the envelope and return them to the researcher.
4. A short question and answer session was held for the participants who wanted additional information regarding the research.

The survey packets for each group were counterbalanced by altering the sequence of the instruments, but were consistent within the groups. This method of data collection should control for order effect of the instruments. All data collection was completed at the group meetings. Only people who were present at the meetings were included in the study.

Data Analysis

The data collected from the surveys was entered into a computer file for analysis using SPSS - Windows, ver. 10.0. The data analysis was divided into two sections. The first section provided a description of the sample using frequency distributions, cross tabulations, and measures of central tendency.
and dispersion. The choice of descriptive statistics was based on the scaling of the variables (e.g., nominal, interval, etc.).

The second section of the data analysis used inferential statistical procedures to answer the research questions posed for this study. The types of statistical procedures that were used included multiple analysis of variance and stepwise multiple linear regression analyses. An alpha level of .05 was used as the criterion for determining the statistical significance of the findings. Table 4 presents the statistical analysis that was used to address each research question.

Table 4
Statistical Analysis

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are there differences in life satisfaction, self-esteem, geriatric morale, and depression between male and female retired individuals?</td>
<td>Dependent Variables</td>
<td>A multiple analysis of variance (MANOVA) was used to determine if there is a difference in the dependent variables between male and female retired individuals. If a significant difference is obtained on the MANOVA, the univariate F tests were interpreted to determine which of the variables are contributing to the significant findings. An inspection of the mean scores was made to examine the differences between male and female retired individuals on each of the dependent variables.</td>
</tr>
<tr>
<td></td>
<td>Life Satisfaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geriatric morale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independent Variable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender of participant</td>
<td></td>
</tr>
<tr>
<td>Research Question</td>
<td>Variables</td>
<td>Statistical Analysis</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2. Can life satisfaction of individuals over 65 years of age be predicted from</td>
<td>Dependent Variable</td>
<td>A stepwise multiple linear regression analysis was used to determine which of the</td>
</tr>
<tr>
<td>measures of self-esteem, geriatric morale, and depression?</td>
<td>Life Satisfaction</td>
<td>independent variables can be used to predict life satisfaction. The stepwise method</td>
</tr>
<tr>
<td></td>
<td>Independent Variables</td>
<td>of variable entry is used because there is not a preexisting theory that can determine</td>
</tr>
<tr>
<td></td>
<td>Self-esteem</td>
<td>variable entry into the regression equation.</td>
</tr>
<tr>
<td></td>
<td>Geriatric morale</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td></td>
</tr>
<tr>
<td>3. Can life satisfaction of individuals over 65 years of age be predicted from</td>
<td>Dependent Variable</td>
<td>A stepwise multiple linear regression analysis was used to determine which of the</td>
</tr>
<tr>
<td>age, gender, ethnicity, educational level, marital status, and income?</td>
<td>Life Satisfaction</td>
<td>independent variables can be used to predict life satisfaction. The stepwise method</td>
</tr>
<tr>
<td></td>
<td>Independent Variables</td>
<td>of variable entry is used because there is not a preexisting theory that can determine</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>variable entry into the regression equation.</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational Level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>4. Can life satisfaction of individuals over 65 years of age be predicted from</td>
<td>Dependent Variable</td>
<td>A stepwise multiple linear regression analysis was used to determine which of the</td>
</tr>
<tr>
<td>self-reported health status, self-reported mobility status, activity level, work</td>
<td>Life Satisfaction</td>
<td>independent variables can be used to predict life satisfaction. The stepwise method</td>
</tr>
<tr>
<td>status, and memberships in organizations?</td>
<td>Independent Variable</td>
<td>of variable entry is used because there is not a preexisting theory that can determine</td>
</tr>
<tr>
<td></td>
<td>Self-reported health status</td>
<td>variable entry into the regression equation.</td>
</tr>
<tr>
<td></td>
<td>Self-reported mobility status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Activity level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work Status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memberships in organizations</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4

RESULTS OF DATA ANALYSIS

Introduction

The purpose of this study was to examine factors that could contribute to life satisfaction in individuals who were retired and/or over 65 years of age. The factors that were included in this examination were self-esteem, morale, depression, and demographic characteristics included: age, gender, ethnicity, educational level, marital status, self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations. The results of the data analysis that were used to describe the sample and address the research questions are presented in this chapter.

A total of 144 older individuals who were members of or attending programs at 10 different senior citizen sites agreed to participate in the study. These participants completed five instruments and a short demographic instrument.

The results of the data analysis are presented in three sections. The first section provides a description of the participants, the second section describes each of the scaled variables, and the final section presents results of the inferential statistical analyses that were used to address the five research questions posed for this study.
Description of the Sample

The participants were asked to provide their current age and the age at which they retired from their jobs. Their responses were summarized using descriptive statistics. Table 5 presents the results of this analysis.

The mean age of the participants was 77.91 (SD=7.88) years, with a median age of 77 years. The ages of the participants ranged from 57 to 95 years. Twenty-seven participants did not provide their age on the survey.

The participants reported their age at retirement. Their responses ranged from 45 to 80 years, with a median of 65 years. The mean age at retirement was 63.33 (SD=5.06) years. Eighty of the respondents did not provide their age at retirement, possibly because some of them did not consider themselves to be fully retired when they completed the survey.

Table 5

Descriptive Statistics
Current Age and Age at Retirement

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>117</td>
<td>77.91</td>
<td>7.88</td>
<td>77</td>
<td>57</td>
<td>95</td>
</tr>
<tr>
<td>At Retirement</td>
<td>64</td>
<td>63.33</td>
<td>5.06</td>
<td>65</td>
<td>45</td>
<td>80</td>
</tr>
</tbody>
</table>

The participants were asked to provide information on their personal characteristics. Their responses to gender, ethnicity, educational level, and
marital status questions were summarized using frequency distributions. Table 6 presents the results of this analysis.

The majority of the participants (n=96, 66.7%) were female. The remaining 48 (33.3%) respondents indicated their gender as male.

Caucasian was the ethnicity reported by 125 (86.8%) of the participants, with 10 (7.2%) indicating their ethnicity as African American. One (.7%) participant was Asian and 2 (1.4%) reported their ethnicity as “other,” but did not provide additional explanations. Six participants did not provide a response to this question.

The largest group of participants (n=50, 35.7%) indicated they had completed high school, with 29 (20.7%) reporting some high school as their educational level. Twenty-eight (20.0%) participants had some college and 3 (2.1%) had obtained an associate’s degree. A bachelor’s degree was reported as the educational level for 9 (6.4%) of the participants and 14 (10.0%) had completed a graduate degree. Seven (5.0%) reported “other” as their highest level of education, but did not provide additional explanation regarding degree type. Four participants did not provide a response to this question.

The largest group of participants (n=70, 48.6%) reported their marital status as widowed, with 55 (38.2%) indicating they were married. Nine (6.3%) of the participants were single and 10 (6.9%) were divorced.
Table 6
Frequency Distributions
Personal Characteristics (N=144)

<table>
<thead>
<tr>
<th>Personal Characteristics</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48</td>
<td>33.3</td>
</tr>
<tr>
<td>Female</td>
<td>96</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>10</td>
<td>7.2</td>
</tr>
<tr>
<td>Asian</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Caucasian</td>
<td>125</td>
<td>90.6</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>(Missing 6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>29</td>
<td>20.7</td>
</tr>
<tr>
<td>High school graduate</td>
<td>50</td>
<td>35.7</td>
</tr>
<tr>
<td>Some college</td>
<td>28</td>
<td>20.0</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>9</td>
<td>6.4</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>14</td>
<td>10.0</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>5.0</td>
</tr>
<tr>
<td>(Missing 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>55</td>
<td>38.2</td>
</tr>
<tr>
<td>Single</td>
<td>9</td>
<td>6.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>10</td>
<td>6.9</td>
</tr>
<tr>
<td>Widowed</td>
<td>70</td>
<td>48.6</td>
</tr>
</tbody>
</table>

Participants were asked to indicate their health status and mobility levels. Their responses were summarized using frequency distributions for presentation in Table 7.

Sixteen (11.3%) of the participants reported their health status as excellent and 78 (54.9%) indicated their health status as good. Fair was the health status reported by 43 (30.3%) of the participants, with 5 (3.5%) indicating their health status as poor. Two participants did not provide a response to this question.
Thirty-one (21.5%) of the participants indicated their mobility was excellent, while 61 (42.4%) considered their mobility as good. Forty-eight (33.3%) self-reported their mobility as fair, with 4 (2.8%) indicating it was poor.

Table 7

Frequency Distributions
Health and Mobility (N=144)

<table>
<thead>
<tr>
<th>Self-reported Health and Mobility</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>16</td>
<td>11.3</td>
</tr>
<tr>
<td>Good</td>
<td>78</td>
<td>54.9</td>
</tr>
<tr>
<td>Fair</td>
<td>43</td>
<td>30.3</td>
</tr>
<tr>
<td>Poor</td>
<td>5</td>
<td>3.5</td>
</tr>
<tr>
<td>(Missing 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>31</td>
<td>21.5</td>
</tr>
<tr>
<td>Good</td>
<td>61</td>
<td>42.4</td>
</tr>
<tr>
<td>Fair</td>
<td>48</td>
<td>33.3</td>
</tr>
<tr>
<td>Poor</td>
<td>4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Participants were asked to report on their employment status. Their responses to this question were summarized using frequency distributions for presentation in Table 8.

The largest group of participants (n=114, 79.2%) reported they did not work. Three (2.1%) participants worked full-time and 15 (10.4%) worked part-time. Twelve (8.3%) reported "other" as their employment status, but did not provide additional explanations for their responses.

The participants were asked if they volunteered and if so, where did they volunteer. Their responses were summarized using frequency
Table 8

Frequency Distributions
Employment Status (N=144)

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>3</td>
<td>2.1</td>
</tr>
<tr>
<td>Part-time</td>
<td>15</td>
<td>10.4</td>
</tr>
<tr>
<td>I do not work</td>
<td>114</td>
<td>79.2</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>8.3</td>
</tr>
</tbody>
</table>

distributions, which are presented in Table 9.

The majority of participants (n=103, 71.5%) indicated they volunteered. The remaining 41 (28.5%) of the participants did not volunteer.

When asked what types of organizations in which they volunteered, 12 (8.3%) indicated hospitals and 9 (6.3%) volunteered in nursing homes. Seven (4.9%) were volunteers in schools and 18 (12.5%) were involved in adult day care centers. Church-related activities were indicated by 46 (31.9%) of the participants and 44 (30.6%) reported "other" types of volunteer organizations. As the participants were able to indicate all of their volunteer activities, the number of responses exceeded the number of respondents who indicated they participated in volunteer activities.

The participants volunteered \( \bar{x} = 9.24, \text{SD}=8.71 \) hours per week, with a median of 8 hours per week. The range of time spent in volunteer activities ranged from 1 to 64 hours.

The participants were asked if they participated in hobbies and if they did, the frequency with which they participated in their hobbies. The results of
Table 9

Frequency Distributions
Volunteer (N=144)

<table>
<thead>
<tr>
<th>Volunteer</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>103</td>
<td>71.5</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>28.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Organization</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>12</td>
<td>8.3</td>
</tr>
<tr>
<td>Nursing Home</td>
<td>9</td>
<td>6.3</td>
</tr>
<tr>
<td>School</td>
<td>7</td>
<td>4.9</td>
</tr>
<tr>
<td>Adult Day Care Center</td>
<td>18</td>
<td>12.5</td>
</tr>
<tr>
<td>Church related activities</td>
<td>46</td>
<td>31.9</td>
</tr>
<tr>
<td>Other</td>
<td>44</td>
<td>30.6</td>
</tr>
</tbody>
</table>

this analysis is presented in Table 10.

The majority of the participants (n=103, 72.0%) reported they engaged in hobbies. Forty (28.0%) did not engage in these types of activities. Three respondents did not provide a response to this question.

When asked how often they participated in hobbies, 34 (33.0%) indicated daily, with 28 (27.2%) reporting three to four times a week. Nineteen participants reported they engage in hobby activities weekly, and 5 (4.9%) participated bimonthly. Monthly engagement in hobbies was indicated by 3 (2.9%) participants, while 14 (13.6%) were likely to participate in hobbies occasionally.

The participants were asked if they belonged to groups, and if they did, what types of groups. Frequency distributions were used to summarize their responses for presentation in Table 11.

The largest group of participants (n=129, 89.6%) indicated they
Table 10

Frequency Distributions
Participation in Hobby Activities (N=144)

<table>
<thead>
<tr>
<th>Hobbies</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in Hobbies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>103</td>
<td>72.0</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>28.0</td>
</tr>
<tr>
<td>(Missing 1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Participation in Hobbies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>34</td>
<td>33.0</td>
</tr>
<tr>
<td>Three to four times weekly</td>
<td>28</td>
<td>27.2</td>
</tr>
<tr>
<td>Weekly</td>
<td>19</td>
<td>18.4</td>
</tr>
<tr>
<td>Bimonthly</td>
<td>5</td>
<td>4.9</td>
</tr>
<tr>
<td>Monthly</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Occasionally</td>
<td>14</td>
<td>13.6</td>
</tr>
<tr>
<td>(Missing 41)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

belonged to groups, with 15 (10.4%) reporting they did not belong to groups.

Two participants did not provide a response to this question.

Eighty-three (57.6%) participants belonged to church-related groups, with 100 (69.4%) indicating membership in senior citizen groups. Fifteen (10.4%) participants were members of civic groups and 20 (13.9%) belonged to other types of groups, but did not provide additional information regarding the type of group. As the participants could indicate more than one type of group, the number of responses to this question exceeded the total number of participants who belonged to groups.

The participants were asked to indicate their current residence. Their responses were summarized using frequency distributions for presentation in Table 12.

The largest group of respondents (n=72, 51.1%) lived in private
Table 11

Frequency Distributions
Group Membership (N=144)

<table>
<thead>
<tr>
<th>Belong to Groups</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>129</td>
<td>89.6</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>10.4</td>
</tr>
<tr>
<td>Types of Groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church-related groups</td>
<td>83</td>
<td>57.6</td>
</tr>
<tr>
<td>Senior citizen groups</td>
<td>100</td>
<td>69.4</td>
</tr>
<tr>
<td>Civic groups</td>
<td>15</td>
<td>10.4</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>13.9</td>
</tr>
</tbody>
</table>

homes, with 27 (19.1%) residing in senior citizen housing. Nineteen (13.5%) were living in assisted living centers and 15 (10.6%) in apartments with no additional care. One (0.7%) participant was living with relatives and 7 (5.0%) were living in other residences. Three participants did not provide a response to this question.

Table 12

Frequency Distributions
Type of Residence (N=144)

<table>
<thead>
<tr>
<th>Volunteer</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private home</td>
<td>72</td>
<td>51.1</td>
</tr>
<tr>
<td>Senior citizen center</td>
<td>27</td>
<td>19.1</td>
</tr>
<tr>
<td>Assisted living center</td>
<td>19</td>
<td>13.5</td>
</tr>
<tr>
<td>Apartment – no care</td>
<td>15</td>
<td>10.6</td>
</tr>
<tr>
<td>Relatives</td>
<td>1</td>
<td>0.7</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>5.0</td>
</tr>
</tbody>
</table>

(Missing 3)

The participants were asked to indicate the number of visits they had with family members and friends in a typical month. Their responses were summarized using descriptive statistics. Table 13 presents the results of this
The mean number of visits with family members in a typical month was 8.50 (SD=8.84), with a median of 4 visits. The range of visits was from 1 to 30 visits in a typical month. Twenty-three participants did not provide a response to this question.

Visits with friends in a typical month ranged from 1 to 30, with a median of 15 visits. The mean number of visits was 15.98 (SD=10.86. Fifteen participants did not provide a response to this question.

Table 13
Descriptive Statistics
Number of Visits with Family and Friends in a Typical Month (N=144)

<table>
<thead>
<tr>
<th>Visits</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>121</td>
<td>8.50</td>
<td>8.84</td>
<td>4</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Friends</td>
<td>129</td>
<td>15.98</td>
<td>10.86</td>
<td>15</td>
<td>1</td>
<td>30</td>
</tr>
<tr>
<td>Missing</td>
<td>Family</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Description of Scaled Variables

The scaled variables were scored using the protocols developed by the authors of each scale. Summed scores were obtained for each of the scales and subscales to provide a baseline of the responses on each instrument. Table 14 presents the results of these analyses.

Satisfaction with Life (Diener, Emmons, Larsen, & Griffin, 1985). The
mean score on this instrument was 8.89 (SD=3.32), with a median score of
9.00. Actual scores on this measure ranged from 0 to 15. Possible scores on
this instrument could range from 0 to 15, with higher scores indicating greater
satisfaction with life.

Self-esteem (Rosenberg, 1965). The mean score for self-esteem was
26.87 (SD=2.99), with a median score of 27. The range of actual scores on
self-esteem were from 20 to 33. Possible scores could range from 10 to 40,
with higher scores providing evidence of greater self-esteem.

Geriatric Depression (Yesavage, Brink, Rose, Lum, Huang, Adey, &
Leirer, 1983). Actual scores on geriatric depression ranged from 1 to 23, with
a median of 7. The mean score for geriatric depression was 8.20 (SD=4.58).
Possible scores on this instrument could range from 0 to 30, with higher
scores indicating higher levels of depression.

Geriatric Morale (Lawton, 1972). This scale was divided into three
subscales. The mean score for the Lonely/Dissatisfaction subscale was 4.90
(SD=1.67), with a median score of 6. Actual scores on this subscale ranged
from 0 to 6. Possible scores could range from 0 to 6 with higher scores
indicating better morale.

Agitation/Tranquility was the second subscale measuring geriatric
morale. The mean score on this scale was 3.68 (SD=1.59), with a median of
4. The range of actual scores was from 0 to 5. Possible scores could range
from 0 to 5, with higher scores indicating better morale.
The third subscale, Attitude toward Aging, produced a mean score of 2.13 (SD=1.31), with a median of 2.00. The range of actual scores on this subscale was from 0 to 4. Possible scores could range from 0 to 4, with higher scores providing evidence of better morale.

Life Attitudes (Reker, 1992). The Life Attitude Profile included six subscales that measured specific life attitudes. The first subscale was Purpose. The mean score on this subscale was 28.83 (SD=5.55), with a median score of 30. Actual scores on this subscale ranged from 8 to 40. Possible scores ranged from 5 to 40, with higher scores indicating a more positive attitude regarding purpose.

Coherence was the second subscale on the Life Attitude Profile. The mean score was 29.17 (SD=5.63), with a median score of 30. The range of actual scores on this subscale was from 8 to 40. Possible scores could range from 8 to 40, with higher scores indicating more positive perceptions of Coherence.

Choice/Responsibility was the third subscale measured on this instrument. Actual scores ranged from 8 to 39, with a median of 30. The mean score was 28.69 (SD=5.92). Possible scores ranged from 8 to 39, with higher scores indicating more positive attitudes regarding Choice/Responsibility.

The fourth subscale measured by the Life Attitude Profile was Death Acceptance. The mean score on this subscale was 28.82 (SD=5.74), with a
median of 29. Actual scores on this subscale ranged from 9 to 40. Possible
scores ranged from 8 to 40, with higher scores indicating more positive
perceptions regarding Death Acceptance.

Existential Vacuum was the fifth subscale measured on the Life
Attitude Profile. The mean score on this instrument was 20.13 (SD=4.44),
with a median of 20. The range of actual scores on this subscale was from 8
to 32. Possible scores ranged from 8 to 40, with higher scores indicating
more positive attitudes toward Existential Vacuum.

The sixth subscale on the Life Attitude Profile was Goal Seeking. The
mean score on this scale was 24.51 (SD=4.89), with a median of 24.50.
Actual scores ranged from 11 to 35 on Goal Seeking. Possible scores on this
subscale ranged from 8 to 40, with higher scores indicating more positive
attitudes toward Goal Seeking.

Research Questions

Four research questions were posed for this study. Each of these
questions were addressed using inferential statistical analyses. An alpha
level of .05 was used as the criterion for determining statistical significance of
the findings.

Research question 1. Are there differences in Life Satisfaction, Self-
esteem, Morale, and Depressive states between male and female retired
individuals?
### Table 14

**Descriptive Statistics**

Scaled Variables (N=144)

<table>
<thead>
<tr>
<th>Scaled Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Life</td>
<td>141</td>
<td>8.89</td>
<td>3.32</td>
<td>9.00</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>139</td>
<td>26.87</td>
<td>2.99</td>
<td>27.00</td>
<td>20</td>
<td>33</td>
</tr>
<tr>
<td>Geriatric Depression</td>
<td>144</td>
<td>8.20</td>
<td>4.58</td>
<td>7.00</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Geriatric Morale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lonely/Dissatisfaction</td>
<td>144</td>
<td>4.90</td>
<td>1.67</td>
<td>6.00</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Agitation/Tranquility</td>
<td>144</td>
<td>3.68</td>
<td>1.59</td>
<td>4.00</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Attitude toward Aging</td>
<td>144</td>
<td>2.13</td>
<td>1.31</td>
<td>2.00</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Life Attitude Profile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td>130</td>
<td>28.83</td>
<td>5.55</td>
<td>30.00</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Coherence</td>
<td>133</td>
<td>29.17</td>
<td>5.63</td>
<td>30.00</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>Choice/Responsibility</td>
<td>135</td>
<td>28.69</td>
<td>5.92</td>
<td>30.00</td>
<td>8</td>
<td>39</td>
</tr>
<tr>
<td>Death Acceptance</td>
<td>135</td>
<td>28.82</td>
<td>5.74</td>
<td>29.00</td>
<td>9</td>
<td>40</td>
</tr>
<tr>
<td>Existential Vacuum</td>
<td>127</td>
<td>20.13</td>
<td>4.44</td>
<td>20.00</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Goal Seeking</td>
<td>134</td>
<td>24.51</td>
<td>4.89</td>
<td>24.50</td>
<td>11</td>
<td>35</td>
</tr>
</tbody>
</table>

A one-way multivariate analysis of variance (MANOVA) was used to determine if there was a difference in Life Satisfaction, Self-esteem, Morale, and Depressive States between male and female retired individuals. Descriptive statistics were obtained for each of the dependent variables by the gender of the participant. Table 15 presents the results of this analysis.

The MANOVA produced a Hotelling's Trace of .08. The associated F ratio of 1.62 was not statistically significant at an alpha level of .05 with 6 and 129 degrees of freedom. Based on this finding, there does not appear to be a difference in Life Satisfaction, Self-esteem, Geriatric Depression, and Geriatric Morale between male and female retired individuals. Table 16
Table 15

Descriptive Statistics
Life Satisfaction by Gender (N=144)

<table>
<thead>
<tr>
<th>Scaled Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction with Life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>9.13</td>
<td>3.15</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>8.91</td>
<td>3.35</td>
</tr>
<tr>
<td>Self-esteem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>27.31</td>
<td>3.01</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>26.60</td>
<td>3.00</td>
</tr>
<tr>
<td>Geriatric Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>8.49</td>
<td>4.50</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>7.98</td>
<td>4.63</td>
</tr>
<tr>
<td>Lonely/Dissatisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>4.58</td>
<td>1.83</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>5.16</td>
<td>1.49</td>
</tr>
<tr>
<td>Agitation/Tranquility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>3.49</td>
<td>1.75</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>3.85</td>
<td>1.48</td>
</tr>
<tr>
<td>Attitude toward Aging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45</td>
<td>1.96</td>
<td>1.40</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>2.30</td>
<td>1.26</td>
</tr>
</tbody>
</table>

presents the results of this analysis.

Table 16

Multivariate Analysis of Variance
Life Satisfaction, Self-esteem, Geriatric Depression and
Geriatric Morale by Gender

<table>
<thead>
<tr>
<th>Hotelling's trace</th>
<th>F ratio</th>
<th>DF</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.08</td>
<td>1.62</td>
<td>6, 129</td>
<td>.146</td>
</tr>
</tbody>
</table>

Research question 2. Can Life Satisfaction of individuals over 65 years...
of age be predicted from measures of Self-esteem, Morale, and Depression?

Life Satisfaction was used as the dependent variable in a stepwise multiple linear regression analysis. The independent variables in this analysis were Self-esteem, Geriatric Morale (Lonely/Dissatisfaction, Agitation/Tranquility, and Attitude toward Aging), and Geriatric Depression. Results of this analysis are presented in Table 17.

One independent variable, Geriatric Depression, entered the stepwise multiple linear regression equation, explaining 13% of the variance in satisfaction with life. The associated F ratio of 21.78 was statistically significant at an alpha level of .05 with 1 and 142 degrees of freedom. This result indicate that the amount of variance in Satisfaction with Life that was explained by Geriatric Depression was statistically significant. The negative relationship between the dependent and independent variables provided evidence that those participants who were more satisfied with life were less likely to have high levels of depression. The remaining independent variables did not enter the stepwise multiple linear regression equation, indicating they were not significant predictors of satisfaction with life.

Research question 3. Can life satisfaction of individuals over 65 years of age be predicted from age, gender, ethnicity, educational level, marital status, and income?

The personal characteristics of the respondents (age, gender, ethnicity, educational level, and marital status) were used as the independent
Table 17
Stepwise Multiple Linear Regression Analysis
Life Satisfaction by Psychosocial Variables

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Constant</th>
<th>Weight</th>
<th>Beta Weight</th>
<th>( r^2 ) change</th>
<th>t-value</th>
<th>Sig of t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geriatric Depression</td>
<td>11.04</td>
<td>-.26</td>
<td>-.37</td>
<td>.13</td>
<td>-4.67</td>
<td>&lt;.001</td>
</tr>
<tr>
<td><strong>Excluded variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-esteem</td>
<td>.14</td>
<td></td>
<td></td>
<td>1.65</td>
<td>.101</td>
<td></td>
</tr>
<tr>
<td>Lonely/Dissatisfaction</td>
<td>.17</td>
<td></td>
<td></td>
<td>1.86</td>
<td>.065</td>
<td></td>
</tr>
<tr>
<td>Agitation/Tranquility</td>
<td>.06</td>
<td></td>
<td></td>
<td>.52</td>
<td>.607</td>
<td></td>
</tr>
<tr>
<td>Attitude toward Aging</td>
<td>.08</td>
<td></td>
<td></td>
<td>.89</td>
<td>.377</td>
<td></td>
</tr>
</tbody>
</table>

Multiple R: .37
Multiple R\(^2\): .13
F Ratio: 21.78
DF: 1, 132
Sig of F: <.001

variables in a stepwise multiple linear regression analysis. Data on income were not collected. The nominal variables (gender, ethnicity, educational level, and marital status) were dummy coded to allow their use in the stepwise multiple linear regression analysis. The dependent variable in this analysis was life satisfaction.

Four independent variables, age at retirement, being married, being widowed, and having a bachelor's degree, entered the stepwise multiple linear regression equation, explaining 18% of the variance in life satisfaction. The associated F ratio of 7.57 was statistically significant at an alpha level of .05 with 4 and 139 degrees of freedom. This result provided evidence that the four independent variables were explaining a statistically significant amount of variance in the dependent variable, life satisfaction.
Age at retirement entered the stepwise multiple linear regression equation first, explaining 6% of the variance in life satisfaction. The $t$-value of -2.86 yielded for this analysis was statistically significant, indicating the amount of variance at age at retirement was explaining in life satisfaction was significant. The negative relationship indicated that those respondents who had retired earlier were more likely to have higher levels of life satisfaction.

Being married explained an additional 5% of the variance in life satisfaction. The associated $t$-value of 3.97 was statistically significant indicating that being married was a statistically significant predictor of life satisfaction.

The third independent variable that entered the stepwise multiple linear regression equation was widowed. Being widowed explained an additional 4% of the variance in life satisfaction. The $t$-value of 2.75 obtained for this analysis was statistically significant, indicating that being widowed was explaining a significant amount of variation in life satisfaction.

Having obtained a bachelor's degree entered the stepwise multiple linear regression equation, explaining 3% of the variance in life satisfaction. The $t$-value of 2.24 obtained for this analysis was statistically significant. The results of this analysis provided evidence that respondents who had attained a bachelor's degree were more likely to have higher levels of life satisfaction.

The remaining independent variables did not enter the stepwise multiple linear regression equation, indicating they were not significant.
predictors of life satisfaction. Table 18 presents the results of this analysis.

**Research question 4.** Can life satisfaction of individuals over 65 years of age be predicted from self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations?

The demographic variables that were concerned with self-reported health and mobility as well as types of activities (volunteering, working, and being a member of a group) were used as independent variables in a stepwise multiple linear regression analysis. The dependent variable in this analysis was life satisfaction.

Three independent variables, being a volunteer, self-reporting health as excellent, and working part-time, entered the stepwise multiple linear regression equation. These three variables accounted for 22% of the variance in life satisfaction. The $F$ ratio of 12.82 obtained on this analysis was statistically significant at an alpha level of .05 indicating the amount of variance in life satisfaction explained by these three independent variables was statistically significant.

Being a volunteer entered the stepwise multiple linear regression equation first, explaining 12% of the variance in life satisfaction. The associated $t$-value of 4.27 was statistically significant at an alpha level of .05, indicating that being a volunteer was explaining a significant amount of variance in life satisfaction.

Self-report of health as excellent entered the stepwise multiple linear
Table 18
Stepwise Multiple Linear Regression Analysis
Life Satisfaction by Personal Characteristics

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Constant</th>
<th>b</th>
<th>Beta</th>
<th>r² change</th>
<th>t-value</th>
<th>Sig of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at retirement</td>
<td>20.27</td>
<td>-.22</td>
<td>-.22</td>
<td>.06</td>
<td>-2.86</td>
<td>.005</td>
</tr>
<tr>
<td>Married</td>
<td>3.21</td>
<td>.48</td>
<td>.05</td>
<td>3.97</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>2.18</td>
<td>.33</td>
<td>.04</td>
<td>2.75</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>2.33</td>
<td>.17</td>
<td>.03</td>
<td>2.24</td>
<td>.027</td>
<td></td>
</tr>
<tr>
<td>Excluded variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of participant</td>
<td>.03</td>
<td>.32</td>
<td>.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>.06</td>
<td>.68</td>
<td>.496</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>-.03</td>
<td>-.42</td>
<td>.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td>-.01</td>
<td>-.10</td>
<td>.919</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>.09</td>
<td>1.09</td>
<td>.280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate degree</td>
<td>-.07</td>
<td>-.93</td>
<td>.350</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Graduate degree</td>
<td>-.03</td>
<td>-.39</td>
<td>.697</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other education</td>
<td>.11</td>
<td>1.38</td>
<td>.169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>.05</td>
<td>.48</td>
<td>.629</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>-.05</td>
<td>-.48</td>
<td>.629</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple R                   | .42
Multiple R²                  | .18
F Ratio                      | 7.57
DF                            | 4, 139
Sig of F                     | <.001

Regression equation, accounting for an additional 7% of the variance in life satisfaction. The t-value obtained for this independent variable was 3.82, which indicated that having excellent health was associated with higher levels of life satisfaction.

The third independent variable, working part-time, accounted for an additional 3% of the variance in life satisfaction. The t-value of -2.19 yielded on this analysis was statistically significant at an alpha level of .05. This result indicated that working part-time explained a significant amount of variance in
satisfaction with life. The negative relationship between working part-time and satisfaction with life provided evidence that those individuals who were working part-time were more likely to have lower levels of life satisfaction.

The remaining independent variables did not enter the stepwise multiple linear regression equation, indicating they were not significant predictors of life satisfaction. Table 19 presents the results of this analysis.

Summary

The participants in this study had a mean age of 77.91 (SD=7.88) years. The age at which participants had retired was 63.33 (SD=5.06) years. Ninety-six females and 48 males, who were mostly Caucasian participated in the study. These participants had generally had completed high school or had some college. The largest group was widowed, with married participants comprising the second largest group. Most of the participants self-reported both their health and mobility as good. The majority of the elderly in the study indicated they were not working, but were performing some type of volunteer work. Most of the participants participated in hobbies more than once a week, and belonged to groups (e.g., church-related or senior citizen groups). The largest group of elderly were living in private homes and received frequent visits from family and friends.

A multivariate analysis of variance was used to determine if there were differences between male and female participants on life satisfaction,
Table 19

Stepwise Multiple Linear Regression Analysis
Life Satisfaction by Health and Active Life Styles

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>b Weight</th>
<th>Beta Weight</th>
<th>r² change</th>
<th>t-value</th>
<th>Sig of t</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being a volunteer</td>
<td>11.83</td>
<td>.33</td>
<td>.12</td>
<td>4.27</td>
<td>.001</td>
</tr>
<tr>
<td>Excellent health</td>
<td>3.05</td>
<td>.29</td>
<td>.07</td>
<td>3.82</td>
<td>.001</td>
</tr>
<tr>
<td>Working part-time</td>
<td>-1.80</td>
<td>-.17</td>
<td>.03</td>
<td>-2.19</td>
<td>.031</td>
</tr>
<tr>
<td><strong>Excluded variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good health</td>
<td>.16</td>
<td>1.89</td>
<td>.061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair health</td>
<td>-.12</td>
<td>-1.47</td>
<td>.144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor health</td>
<td>-.07</td>
<td>-1.90</td>
<td>.372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent mobility</td>
<td>.02</td>
<td>.18</td>
<td>.860</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good mobility</td>
<td>.14</td>
<td>1.81</td>
<td>.073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair mobility</td>
<td>-.13</td>
<td>-1.67</td>
<td>.097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor mobility</td>
<td>-.09</td>
<td>-1.17</td>
<td>.245</td>
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<td></td>
</tr>
<tr>
<td>Work full time</td>
<td>-.03</td>
<td>-1.35</td>
<td>.728</td>
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<tr>
<td>Do not work</td>
<td>-.09</td>
<td>-1.89</td>
<td>.376</td>
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<td></td>
</tr>
<tr>
<td>Number of hours</td>
<td>.13</td>
<td>1.75</td>
<td>.082</td>
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<td></td>
</tr>
<tr>
<td>volunteer per week</td>
<td>.11</td>
<td>1.41</td>
<td>.162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in hobbies</td>
<td>.10</td>
<td>-1.29</td>
<td>.198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of participation in hobbies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belong to groups</td>
<td>.04</td>
<td>.46</td>
<td>.643</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of visits with</td>
<td>-.02</td>
<td>-1.24</td>
<td>.813</td>
<td></td>
<td></td>
</tr>
<tr>
<td>family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of visits with</td>
<td>-.09</td>
<td>-1.20</td>
<td>.233</td>
<td></td>
<td></td>
</tr>
<tr>
<td>friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current residence</td>
<td>.02</td>
<td>.24</td>
<td>.809</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Multiple R = .46
Multiple R² = .22
F Ratio = 12.82
DF = 3, 140
Sig of F = <.001

self-esteem, geriatric depression, and geriatric morale. The results of this analysis were not statistically significant indicating no difference between the men and women on these measures.

A negative relationship was found between geriatric depression and life satisfaction, indicating that those participants who had lower levels of
depression had higher levels of life satisfaction. Age at retirement was a negative predictor of life satisfaction, with being married or widowed or having a bachelor's degree were significant predictors in a positive direction. Life satisfaction could also be predicted from being a volunteer, self-reporting excellent health, while working part-time was a negative predictor.

Conclusions based on these findings can be found in Chapter V. Also included in this chapter are the limitations of the study and recommendations for practice and further research.
SUMMARY, CONCLUSIONS, & RECOMMENDATIONS

Summary

Ideas about becoming old are changing drastically. Today's senior citizens are breaking old cliches and living life to the fullest. Compared to 50 years ago, senior citizens are more energetic and vigorous in their activities.

Aging in the 21st century is going to be predictably different from aging in the 20th century. One of the most dramatic changes to impact the future of the United States has been the increase in human longevity. Nearly 30 years have been added to the life expectancy of individuals in the 20th century. Many of these additional years are lived while in retirement.

World War II (WWII) also had an enormous impact on the aging process in the United States. The end of WWII ushered in the beginning of the cohort known as the "baby boomers." The baby boomers, 80 million strong, have overwhelmed many systems as they progressed through early life stages and are predicted to wreck havoc on all systems associated with aging as they enter retirement and the final stages of life. Not only are the baby boomers different from other generations, the world is different. The very meanings and allegories of work and retirement are being recast.

Men comprise 44% of the population from 65 to 69 years of age. The percentage of men decreases with each succeeding age cohort, (i.e., 31% of 85 to 89 year old elderly are men declining to 16% of people aged 100 or
older) (Yetema, 1997). Yet, many studies on retirement focus on men and not on women (Calasanti, 1996; Gendell & Siegel, 1996; Monk, 1997).

In addition, more women are joining the work force. In 1900, 69% of men and 13% of women were employed outside of the home. In contrast, the employment level for men in 1980 had declined to 55% and women had increased to 38%. In 1999, the gender shift in the work force indicated a continued increase in the presence of women, with a decline in the percentage of men.

The changing role from being productive members of society to that of being retired can be either viewed as an opportunity to experience new adventures or depressing for those who are unable to move successfully into the next developmental stage of life. Much of the previous research has used objective measures of aging outcomes (e.g., health, life losses), with a paucity of research found on the psychological effects often associated with the aging process (e.g., life satisfaction, self-esteem, morale).

As baby boomers move toward retirement, professionals who work in geriatrics need to understand the psychological effects of aging on these people. Many professionals are still using the model of aging that indicates that people move from work to retirement to death. The new paradigm shows that people live longer, remain active for more years, have better health outcomes, and attempt to resist the aging process. Blanchette & Valcour (1998) stated that “... the major social trend is an extension of the healthy years, pushing back the chronological age at which we consider a person old” (p.76).

In addition, retirement has begun at an earlier age, with many retirees choosing to train for new jobs or volunteering in community organizations as
a means of providing stimulus and satisfaction in their lives. The present study provides important information to professionals who work with senior citizens regarding how remaining active and feeling productive can promote well-being, improve life satisfaction, and minimize depression that has long been associated with old age.

The purpose of the present study was to examine factors that could contribute to life satisfaction in individuals, both males and females, who were retired and/or over 65 years of age. Factors that were included in this examination were self-esteem, morale, depression, and demographic characteristics (e.g., age, gender, ethnicity, educational level, marital status, self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations).

A total of 144 participants completed a demographic survey and five inventories. The instruments that were completed by the participants included the Rosenberg Self-Esteem Scale (Rosenberg, 1965), The Geriatric Depression Scale (Yesavage, Brink, Rose, Lum, Huang, Adley, & Leirer, 1983), The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), Philadelphia Geriatric Center Morale Scale (Lawton, 1972), and The Life Attitudes Scale (Reker, 1992).

A nonexperimental, descriptive research design was used in this study. This type of research design is appropriate when the independent variables are not manipulated and no intervention or treatment is provided to the participants.

Senior citizen centers, nursing homes, and senior center residences were contacted by telephone to obtain written permission to recruit members to participate in this study. The researcher discussed the purpose and importance of the study with agency directors. Directors were asked to write a
letter on agency letterhead to affirm their willingness to allow the researcher
to recruit participants. A copy of the demographic survey and the five
instruments to be used were provided for the agency's file.

After receiving permission from Western Michigan University's Human
Subject Institutional Review Board, the researcher contacted the directors
from the volunteering sites to arrange a date and time to collect the data.
Flyers announcing the date and time for the data collection were posted at
each site.

Findings

The participants in this study had an average age of 77.91 (sd=7.88)
years, and had retired at a mean age of 63.33 (sd=5.06) years. Based on
this data, it appeared that the participants had extensive experience with
being retired. As the study included people who were from 57 to 95 years of
age, the responses included those who were newly retired and those who
were many years past retirement.

In keeping with statistics on gender in aging, the majority of the
respondents in this study were female. The racial composition of the group
was primarily Caucasian (90.6%), with few minorities (8.4%) included in the
study. The lack of heterogeneity among racial groups of the sample may
reflect the racial distribution of the area. Most of the participants had
completed high school and/or some college and were either married or
widowed.

The self-reported health of the participants generally was either good
(54.9%) or fair (30.3%). Similar results were obtained for self-reported
mobility, with the two largest groups reporting their mobility as either good
(42.4%) or fair (33.3%). Most of the participants did not work (79.2%), but were involved in volunteer work (71.5%). They were also involved in hobbies on a frequent basis (72.0%). The senior citizens in this study were members of church (57.6%) and senior citizen (69.4%) groups, as well as civic groups (10.4%). They were most likely to live in private homes (51.1%), and socialized with their family (M=8.50, SD=8.84 visits monthly) and friends (M=15.98, SD=10.86) frequently.

Research questions.

Four research questions were developed for this study. Each of these questions was addressed using inferential statistical analyses, with an alpha level of .05.

Research question 1. Are there differences in life satisfaction, self-esteem, morale, and depressive states between male and female retired individuals?

A one-way multiple analysis of variance was used to determine if there was a difference in the psychosocial variables, life satisfaction, self-esteem, morale, and depression between male and female participants. The results of the analysis provided no evidence of statistically significant differences between male and female retired individuals.

Research question 2. Can life satisfaction of individuals over 65 years of age be predicted from measures of self-esteem, morale, and depression?

A stepwise multiple linear regression analysis was used to determine if life satisfaction could be predicted from the psychosocial measures of self-esteem, morale, and depression. One predictor variable, geriatric depression,
entered the stepwise multiple linear regression equation explaining a statistically significant amount of variance ($R^2 = .13$) in life satisfaction. The relationship between the two variables was negative, indicating that those participants who had less depression were more likely to experience higher levels of life satisfaction.

**Research question 3.** Can life satisfaction of individuals over 65 years of age be predicted from age, gender, ethnicity, educational level, marital status, and income?

Demographic variables (age, gender, ethnicity, educational level, and marital status) were used as predictors in a stepwise multiple linear regression analysis, with life satisfaction used as the criterion variable. Four variables: (1) age at retirement, (2) being married, (3) being widowed, and (4) having a bachelor's degree, explained 18% of the variance in life satisfaction. Age at retirement was negatively related to life satisfaction, indicating that participants who retired at a younger age had higher levels of life satisfaction than those who had retired at a later point in their lives. The other relationships were positive, indicating that participants who were married or widowed enjoyed higher life satisfaction than those who had divorced or never married. Individuals with a bachelor's degree had higher life satisfaction than those with other levels of education.

**Research question 4.** Can life satisfaction of individuals over 65 years of age be predicted from self-reported health status, self-reported mobility status, activity level, work status, and memberships in organizations?

The life satisfaction of the participants was used as the criterion variable in a stepwise multiple linear regression analysis, with the health and life style variables used as the predictor variables. Three predictor variables:
(1) being a volunteer, (2) reporting excellent health, and (3) working part-time, entered the stepwise multiple linear regression equation, explaining 22% of the variance in life satisfaction. Individuals who volunteered, reported excellent health, or were not working part-time reported higher levels of life satisfaction.

Discussion

The results of the analysis provided no evidence of statistically significant differences between male and female retired individuals. The results may indicate that there may be that no true differences exist between male and female retired individuals as measured by the psychosocial variables of life satisfaction, self-esteem, morale, and depression. This finding could suggest that issues of life impact males in much the same way as these issues impact females.

The instruments may not have been sensitive enough to distinguish differences. Perhaps gender differences were of a nature that were not measured by the given instruments. However, it seemed logical that males and females encountered both the positive and negative aspects of retirement and aging in a similar manner.

The results of the stepwise multiple linear regression analysis found one psychosocial variable, geriatric depression, was a significant predictor (in a negative direction) of life satisfaction. This negative relationship between the two variables indicated participants who reported less depression were more likely to experience higher levels of life satisfaction.

Intuitively, this negative relationship between depression and life satisfaction is logical. Life satisfaction, according to Ardelt (1997), is defined
as a general feeling of contentment and a lack of dissatisfaction with one's life. In contrast, depression is defined as:

\[\ldots\] a loss of interest or pleasure in nearly all activities... must also experience at least four additional symptoms drawn from a list that includes changes in appetite or weight, sleep, and psychomotor activity; decreased energy; feelings of worthlessness or guilt; difficulty thinking, concentrating, or making decisions; recurrent thoughts of death or suicidal ideation, plans, or attempts" (American Psychiatric Association, 1998, p. 320).

Living with depression can diminish many of the pleasures associated with being retired and alive.

Depression is a leading cause of mental illness in the elderly and is associated with suicide and a decreased quality of life (Katona, 1994). In a review of the literature, Katona reported clinically significant depressive symptoms in 10% to 25% of the elderly, a majority of the studies reported approximately 15% of the elderly exhibited signs of depression. Depression has been found to be positively correlated with poor health and disability (Cole, 1991; Wallsten, Tweed, Blazer, & George, 1999).

Care must be taken in interpreting this result as the amount of variance \(R^2=0.13\) that was explained by the stepwise multiple linear regression analysis may not have been substantive, although it was statistically significant. The negative relationship between life satisfaction and depression is logical and perhaps valid, but the strength of the relationship is problematic.

Four demographic variables: (1) age at retirement, (2) being married, (3) being widowed, and (4) having a bachelor's degree were found to be significant predictors of life satisfaction \(R^2=0.18\). Age at retirement was negatively related to life satisfaction, indicating that participants who retired at a younger age had higher levels of life satisfaction than those who had retired
at a later point in their lives. The other relationships were positive, indicating that participants who were married or widowed enjoyed higher life satisfaction than those who had divorced or never married. Individuals with a bachelor's degree had higher life satisfaction that those with other levels of education.

This study's findings that age at retirement was negatively related to life satisfaction were consistent with both the study from Atchley (1989) and Gall, Evans, & Howard, (1997); participants who retired at a younger age had higher levels of life satisfaction than those who had retired at a later point in their lives. Gall et al. (1997) suggested that positive changes after retirement may reflect freedom from time demands and structure of work-related issues allowing more time to pursue other interest such as relaxation and travel, this was described as the honeymoon phase of retirement.

Interestingly, many retiree's return to the workforce as volunteers after retirement and find great satisfaction through their efforts. Volunteers' satisfaction with their work may reflect a choice, an element of control over their lives and an effort to give something back to society. Gall, et al (1997) found a shift toward a more internal locus of control for retirees at 1 year postretirement.

Some theoretical perspectives have supported the idea that retirement is a disruptive, life-changing event and is a marker of old age (Calasanti, 1996; Gall, Evans, & Howard, 1997). The results from this study for early retirees did not support previous findings.

Research in gerontology has constantly documented the importance of family and spousal support. Emotional help and companionship provided by a spouse is unique and invaluable to the well-being of the elderly. Marriage is one of the major relationships in American society and has been shown to be correlated with life satisfaction (Pavot & Diener, 1993). Marriage was found to
be beneficial for men, especially during the later stages of life (Calasanti, 1996). Marriage offers men an opportunity to remain socially engaged after retirement. Many men who are employed in autonomous and diverse occupations, are less likely to develop support from co-worker ties thus marriage is an avenue to retaining a social network and to remain socially integrated.

"The most intriguing aspect of the research on widowhood to date is not the finding that widowhood is accompanied by lower levels of psychological well-being, but rather the differences between widowed and married persons are not greater than they appear to be" (Lee, Willetts, & Seccombe, 1998, p.611). Perhaps the memories of once being happily married are the source of contentment influenced by a sense of connection to a significant other and self-worth derived from it. The presence of children from the marriage may serve to provide life satisfaction to the surviving spouse. The opposite of this is that the marriage may not have been happy and the widowed spouse may be happier and experience greater life satisfaction alone. Another idea may be that the dying spouse may have been seriously or chronically ill and the surviving spouse is content with the knowledge that his/her spouse is no longer suffering.

Lee et al. (1998), through a review of the literature, determined that the differences between elderly widowed males' and females' psychological well-being may be caused by two possible reasons:

1. Many females outlive their male partners and have a longer time to adjust to a new identity as a partnerless person. The negative effects of widowhood lessen with time. Due to gender differences in life expectancy, "... at any single point in time men are likely to have been widowed for a shorter period than women" (Lee et al., 1998, p. 613).
2. Widowed men appear to have more health problems than widowed women. Men seem to bring on many of their ill-health issues and engage in more deleterious behaviors such as smoking and drinking alcohol than women (Barusch Peak, 1997). Individuals with a bachelor's degree had higher life satisfaction than those with other levels of education. A bachelor's degree allows one to work in many fulfilling jobs where the income is adequate to provide for a rewarding lifestyle.

The total amount of variance explained by the four statistically significant predictor variables, age at retirement, being married, being widowed, and having a bachelor's degree, was small, although it was statistically significant. Other variables that were not included in this study may have been impacting on the responses to the surveys and outcomes of the study.

Volunteer work was positively associated with life satisfaction. "Human beings are capable of surviving and even flourishing despite hellish conditions when the struggle for existence has meaning for them" (Thomas, 1996, p.57). Many retirees provide meaning to their existence through volunteer activities. Volunteering reflects personal values and identity and gives back to the volunteer an enhanced sense of self. "Older people do not perceive meaning in aging itself; rather, they perceive meaning in being themselves in old age" (Kaufman, 1986, p.6).

In a study by Kouri (1990), volunteers were asked why they continued to work as volunteers. Their reasons included (a) liked doing something useful (53%), (b) enjoy doing the work (39%), (c) religious concerns (30%), (d) interest in the activity (28%) (p. 39). These reasons may help explain the data that indicated that the earlier one retired, the more satisfied with life one is likely to be. Interestingly, many early retirees are either working another job
or volunteering. Perhaps the retiree's main occupation, or career, may have been out of necessity, a need to provide an income. The job or volunteer work after retirement provides personal satisfaction. Katzko, Steverink, Dittman-Kohl, and Herra (1998) realized that the elderly were not passive and that they were able to develop strategies to produce their desired results. Volunteering in an area of interest may be one of those strategies used by the elderly to produce life satisfaction. Wheeler, Gorey, and Greenblatt (1998), through the use of meta-analysis, found that 70% of volunteers enjoyed a higher quality of life (e.g., life satisfaction) than nonvolunteers. In addition, 85% of clients who received direct services from an elderly volunteer were improved (e.g., less isolate or depressed) (Wheeler, Gorey, & Greenblatt, 1998).

Ardlet (1997), in a review of the literature, found that health, wealth and social networks were responsible for the well-being of the elderly. Pavot and Diener (1993) found a correlation between health and life satisfaction. The present study found that self-reported health as excellent accounted for 7% of the variance in life satisfaction. It was not surprising that self-reported health as excellent was related to satisfaction with life. Being able to perform activities for daily living and taking care of oneself independently requires a healthy body. One of the hallmarks of independence is the ability provide for one's self (Cutler, 1992).

In contrast, societal attitudes and values toward aging are mixed. Self-reported lower health level may have led to an identification with the stereotyped "old person." It is conceivable that identification with "old person" could lower one's description of life satisfaction. Larson (1978) reported that poor health was clearly related to lower satisfaction with life scores.

The methods of obtaining participants for this study may have
hindered the importance of health in life satisfaction. The people with poor health may not be in attendance in senior centers and/or may not have the energy to do volunteer work.

Part time work after retirement was negatively related to life satisfaction. Perhaps part time work was not by choice where one was able to pick and chose when and at what kind of job in which one wishes to engage. As age increases, physical abilities diminish, often limiting the types of available jobs. A need to work for an income does not allow one to be as selective regarding when and where one is to work. A certain amount of envy may be present when the elderly who are working part-time see their retired neighbors going off on trips, participating in group activities, or able to volunteer for no pay.

Conclusions

Rowe and Kahn (1997) defined successful aging as the lack of disease and disease related disabilities along with retention of high cognitive and physical functioning capacities. In addition, they thought that to age successfully one needed to "engage life" through interpersonal relationships and productive activity. In contrast, the present study did not find interpersonal relationships, as measured by the number of monthly visits with either family members or friends to be significant in satisfaction with life. Productive activity through part time work was negatively related to life satisfaction, while working full time had no significance. Productive work through volunteering was significant to life satisfaction.

Crisis and continuity theory have been proposed to explain life satisfaction through the retirement transition. The crisis theory was based on
substituting one role for another. Adjusting successfully to retirement may be grounded in an individual's ability to find meaningful activities as substitutes for the work role (Calasanti, 1996).

Retirement has become another developmental stage of life that integrates many intricacies of living. Continuity theory emphasized the persistence of personal identity by expanding and developing other roles after retirement. Continuity theory posits that choices made during life reflect values and are expected to be consistent over time (Atchley, 1987). Verbrugge, Gruber-Baldini, & Fozard (1996) found continuity in the level of activities across the lifespan with changes occurring gradually.

A number of writers in the 1970s and 1980s speculated that the principal tasks of aging and retirement are adapting to loss. While the crisis theory may be pertinent for some retirees (e.g., people who were forced to retire before they were ready to retire) continuity theory seems to be supported by outcomes from the present study. Katzko, Steverink, Dittmann-Kohl, and Herrera (1998) suggested that developmental task for the elderly might be conceived as a search for activities to continue a meaningful and purposeful life.

Life satisfaction, according to Ardelt (1997), is defined as a general feeling of contentment and a lack of dissatisfaction with one's life. Life satisfaction is similar to Erikson's (1980) description of the consequences for personality that emerge when the ego conflict of integrity versus despair is resolved in the direction of integrity. Yet, Erikson's last developmental stage of integrity versus despair involves a process that focuses on past life events. Erikson's view of looking backwards to connect life events into meaningful whole for life satisfaction negates the aspect that the person is still living. Dignity in later years is related to coping abilities of the elderly, yet more than
coping, living life. Older people are not just ending their lives in a vacuum, they are producing new chapters and are still able to engage in what Bateson (as cited in Kelly, 1993) called "composing a life" (p.3).

The life course perspective is a dynamic approach to the study of contextual changes in the lives of individuals. A different way of understanding the life course in later years of life has emerged. Erikson's theory of development may need to be expanded to include retirement as another developmental stage in the life cycle with its own needs, demands, and expectations of society and government policies and agencies.

Some anecdotal comments from the participants in the survey proved to be interesting in terms of their satisfaction with life. These comments included:

1. One female participant wrote on the margin of the Life Attitude Profile-Revised inventory that she was not in control of her life but that God controlled both her life and destiny.

2. A male participant left blank several questions that asked if one was in control. At the bottom of the page he wrote, "Put your life in the LORD's hands."

3. Another male participant wrote in response to the control questions, "Only God makes my choices." Concerning death he wrote, "God knows the day." To the statement, "When it comes to important matters, I make my own decisions." he wrote, "with God's help." From a secular standpoint their responses of not being in control would indicate more depression.

Statements regarding their belief that God was in control of their life were real for them may have affected their responses on the questionnaires. They also reflected the importance of religion in determining life satisfaction, especially among the elderly who are aware that their lives are in the final stages.
Limitations

The following limitations may have affected the outcomes of this study.

The findings from this study are limited to the Southwest Michigan area and may not apply to other areas (e.g., large metropolitan areas, Southern States, etc.). The outcomes of this study, while interesting to people who are working with the elderly in other settings (e.g., nursing homes, assisted living centers, counseling groups) may not be able to use the same criteria to determine life satisfaction.

The methods of obtaining volunteers through senior citizen site selection may have biased results of this study. This method of recruiting volunteers excluded senior citizens who were unable to come to a senior center due to transportation problems, health related concerns, disabilities, or caring for an ill spouse. These factors may have resulted in different outcomes in terms of depression, self-esteem, morale, and life satisfaction.

The demographic survey could have addressed additional areas. A more specific survey could be developed to determine if women worked outside of the home prior to reaching retirement age. The extent to which alcohol and drugs are used by the elderly and their participation in organized physical exercise and to what level of participation could be included on the demographic survey. Sources of income and satisfaction with their economic status could also be the focus of questions on the demographic survey.

The issues of widowhood could be better understood if questions were included regarding the length of time since the death of the spouse. In addition, since widowhood has been shown to effects men and women differently, exploring these differences may provide additional understanding of why widows were more likely to be satisfied with life than single and
divorced elderly individuals.

**Recommendations for Further Study**

As the population of the United States and other industrialized countries continue to expand, additional research is needed to determine types of interventions and programs that could help retiring individuals make a successful transition from the work place to the home place. The following recommendations should be considered to advance research in this area:

Replicate this study with a larger group and in a more ethnically, economically, and socially diverse area. In addition to the increase in the senior citizen population is the increase in immigrants who are getting ready to retire. Research on these groups are needed to determine how social and governmental agencies can best serve all senior citizens.

Research is needed on women who are retiring from jobs outside the home to determine if their adjustment is different from men's adjustment. Women are now beginning to retire in greater numbers than ever before and they may not be content to cleaning and cooking after being in positions of responsibility and power. It may be important to examine their depression and morale after retirement to develop programs to address issues of retirement and adjusting to a less stressful life.

An examination of health-related problems in the elderly is needed to determine how to prepare retirees to fight off the effects of illness and maintain their stamina as they age. Health problems of the aged (e.g., Parkinson's, senile dementia, etc.) often are not a major focus of research because of segment of society who have these problems are small and not expected to contribute to the general society for long periods. These health
problems need additional attention and should be the focus of research.

The socialization of senior citizens should also be a focus of research, especially for elderly who are unable to get out of their homes on a regular basis or who lack relatives and other outside contact. These individuals may have extensive undiscovered problems with depression, low self-esteem, and morale that can negatively affect their satisfaction with life.
Appendix A
Demographic Survey
Answer the following questions as they apply to you. There are no right or wrong answers and all responses will be kept confidential. Please answer all the questions.

<table>
<thead>
<tr>
<th>Current age</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Educational Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>African American</td>
<td>Some High School</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Asian</td>
<td>High School Graduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caucasian</td>
<td>Some College</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>Associate Degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle Eastern</td>
<td>Bachelor Degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
<td>Graduate Degree</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age at retirement</th>
<th>Age at retirement</th>
<th>Education Level</th>
<th>Employment Status</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>How would you rate your health in general?</th>
<th>How would you rate your mobility?</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Full-time</td>
</tr>
<tr>
<td>Single</td>
<td>Good</td>
<td>Good</td>
<td>Part-time</td>
</tr>
<tr>
<td>Divorced</td>
<td>Fair</td>
<td>Poor</td>
<td>I do not work</td>
</tr>
<tr>
<td>Widowed</td>
<td>Poor</td>
<td>Poor</td>
<td>Other</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you volunteer?</th>
<th>If yes, how many hours per week?</th>
<th>Where do you volunteer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>Hospital</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>Nursing Home</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adult Day Care Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Church-related Activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you participate in any hobbies?</th>
<th>How often do you work on your hobbies?</th>
<th>What types of groups do you belong to?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Daily</td>
<td>Church Related Groups</td>
</tr>
<tr>
<td>No</td>
<td>3 - 4 times a week</td>
<td>Senior Citizen Groups</td>
</tr>
<tr>
<td></td>
<td>Weekly</td>
<td>Civic Groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How many times per month do you visit with family members?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How many times per month do you visit with friends?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Where do you live?</th>
<th>Senior Citizen Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private home</td>
<td></td>
</tr>
<tr>
<td>Apartment - no care</td>
<td>With Relatives</td>
</tr>
<tr>
<td>Assisted Living Center</td>
<td>Other</td>
</tr>
</tbody>
</table>

Thank You for Participating in this Study!! Richard A. Tackett

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Appendix B
Correspondence
Richard Tackett, MA, LLP

3739 Greenleaf Circle, Apt. 111
Kalamazoo, Michigan 49008
(616) 353-7659

October 26, 1999

Jerome A. Yesavage, Ph.D.
Veterans Administration Medical Center
3801 Miranda
Palo Alto, CA 94304

Re: Geriatric Depression Scale

Dear Dr. Yesavage:

I am a doctoral candidate at Western Michigan University in Kalamazoo, Michigan in Counselor Education and Counseling Psychology. My dissertation study is examining psychosocial attributes associated with retirement and the aging process.

The purpose of this letter is to obtain written permission from you to use this scale in my research and publish it in the completed dissertation. Please let me know your decision on this matter as soon as possible, so I can proceed with my treatment groups.

I would be happy to share the results of the study with you if you are interested and provide copies of the data if you would like this information.

Thank you in advance for your cooperation in this matter.

Sincerely,

Richard Tackett
Ed Diener. Ph.D.
Psychology Department
University of Illinois
603 E. Daniel
Champaign, IL 61820

Re: Satisfaction with Life Scale

Dear Dr. Diener:

I am a doctoral candidate at Western Michigan University in Kalamazoo, Michigan in Counselor Education and Counseling Psychology. My dissertation study is examining psychosocial attributes associated with retirement and the aging process.

My committee asked me to reduce the scaling on the instrument from a 7-point scale to a 4-point scale because they felt that older adults may have trouble recognizing the finer distinctions between slightly and somewhat agree or slightly and somewhat disagree. They also felt that elimination of the neutral point would force the participants to make a choice on each item.

The purpose of this letter is to obtain written permission from you to use this scale in my research and agree to the change in the ratings and publish it in the completed dissertation. Please let me know your decision on this matter as soon as possible, so I can proceed with my treatment groups.

I would be happy to share the results of the study with you if you are interested and provide copies of the data if you would like this information.

Thank you in advance for your cooperation in this matter.

Sincerely,

Richard Tackett

[Handwritten note: I think the scale is fine as is -- has been used with older adults frequently. You have my permission to use it as you see fit. Ed Diener]
Dr. Morris Rosenberg  
University of Maryland  
2112 Art-Sociology Building  
College Park, Maryland, 20742-1315  

Re: Rosenberg Self-Esteem Scale  

Dear Dr. Rosenberg:  

I am a doctoral candidate at Western Michigan University in Kalamazoo, Michigan in Counselor Education and Counseling Psychology. My dissertation study is examining psychological attributes associated with retirement and the aging process.  

The purpose of this letter is to obtain written permission from you to use this scale in my research and publish it in the completed dissertation. Please let know your decision on this matter as soon as possible, so I can proceed with my treatment groups.  

I would be happy to share the results of the study with you if you are interested and provide copies of the data if you would like this information.  

Thank you in advance for your cooperation in this matter.  

Sincerely,  

Richard A. Tackett
Dear Requestor:

Thank you for your interest in the 'Self-Esteem Scale' of Dr. Morris Rosenberg. Regrettably, Dr. Rosenberg passed away several years ago. However, Dr. Florence Rosenberg, Manny's widow, has given permission to use the Self-Esteem Scale for educational and professional research. Please be sure to give the credit due to Dr. Morris Rosenberg when you use it. We would also appreciate receiving copies of any published works resulting from this research.

Due to budget constraints we no longer mail out the Self-Esteem Scale. A fuller description of the scale may be found in the Appendix of Society and the Adolescent Self-Image. You may wish to contact Dr. Rosenberg's co-authors for more information relating to his work as this office has no further information. This document is available on the University of Maryland, College of Behavioral and Social Sciences, Sociology Department Website:

http://www.hsos.umd.edu/socv/rosenberg.htm

There is no charge associated with the use of this scale in your professional research.

Sincerely,

Wanda E. Towles
Administrative Assistant II/Office Manager

Email: wtowles@socv.umd.edu
Dr. Gary T. Reker  
Trent University  
Department of Psychology  
Peterborough, Ontario  
Canada, K9J 7B8  

Re: The Life Attitude Profile-Revised (LAP-R)  

Dear Dr. Reker:  

I am a doctoral candidate at Western Michigan University in Kalamazoo, Michigan in Counselor Education and Counseling Psychology. My dissertation study is examining psychological attributes associated with retirement and the aging process.  

The purpose of this letter is to obtain written permission from you to use this scale in my research and publish it in the completed dissertation. Please let know your decision on this matter as soon as possible, so I can proceed with my treatment groups.  

I would be happy to share the results of the study with you if you are interested and provide copies of the data if you would like this information.  

Thank you in advance for your cooperation in this matter.  

Sincerely,  

Richard A. Tackett
Mr. Richard Tackett  
3739 Greenleaf Circle, #111  
Kalamazoo, MI 49008  
U.S.A.  

Dear Mr. Tackett:  

Re: The Life Attitude Profile-Revised (LAP-R)  

Permission is granted to use the Life Attitude Profile-Revised as part of your dissertation research investigating variables that contribute to life satisfaction after retirement.  

Upon completion of your study, please provide an abstract of your findings. Include the title of your study, key words, etc. The purpose of the latter is to share your study with others who are interested in the meaning in life construct.  

Wishing you all the best for a successful dissertation.  

Sincerely,  

Gary T. Reker, Ph.D.  
Professor
Richard Tackett, MA, LLP

3739 Greenleaf Circle, Apt. 111
Kalamazoo, Michigan 49008
(616) 353-7659

October 26, 1999

M. Powell Lawton, Ph.D.
Clinical Research Center
Philadelphia Geriatric Center
5301 Old York Road
Philadelphia, PA 19141

Re: Philadelphia Geriatric Center Morale Scale

Dear Dr. Lawton:

I am a doctoral candidate at Western Michigan University in Kalamazoo, Michigan in Counselor Education and Counseling Psychology. My dissertation study is examining psychosocial attributes associated with retirement and the aging process.

The purpose of this letter is to obtain written permission from you to use this scale in my research and publish it in the completed dissertation. Please let me know your decision on this matter as soon as possible, so I can proceed with my treatment groups.

I would be happy to share the results of the study with you if you are interested and provide copies of the data if you would like this information.

Thank you in advance for your cooperation in this matter.

Sincerely,

Richard Tackett

---

M. Powell Lawton, Ph.D.

Dear Mr. Tackett,

The PGC Morale Scale is in the public domain. You are free to use and reproduce it in any way you wish. Good luck with your research.

Sincerely,

M. Powell Lawton
Appendix C

Protocol Clearance From the Human Subjects
Institutional Review Board
Date: 22 September 2000

To: John Geisler, Principal Investigator
    Richard Tackett, Student Investigator for dissertation

From: Sylvia Culp, Chair

Re: HSIRB Project Number: 00-09-06

This letter will serve as confirmation that your research project entitled "Correlates of Life Satisfaction After Retirement" has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note that you may only conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: 22 September 2001


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