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FACTORS ASSOCIATED WITH AGEISM: A SURVEY
OF COLLEGE STUDENTS

DISSERTATION

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By

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Questionnaires were administered to 254 university students in a north Texas city whose population is approximately 65,000.

The relevant literature dates from 1922 to 1996 and examines a wide range of concepts associated with the definition of ageism, attitudes and beliefs in society, the development of stereotypes and discrimination against the aged.

The primary question addressed was, "What effect does educational attainment and acquired knowledge of ageing have on negative ageism?" Subsidiary questions are, "What effect does; age, sex, and positive/negative experiences with aged individuals, have on ageism?" Nine hypotheses were tested: One, the younger the respondent, the more negative the response toward older individuals. Two, the more knowledge a respondent has about the aging process, the less likely the respondent is to respond to the aged in a negative manner. Both of these hypotheses were supported by the research findings. The third, fourth and fifth hypotheses

all examined educational attainment of mother, father, and respondent and their attitudes toward the aged, expecting that the higher the educational level, the less likely to respond in a negative manner toward the aged. These hypotheses were not supported by the findings in this research. Six, male students would respond more negatively toward older individuals than would female students. This hypothesis was not supported by the research findings. Seven, students that reported their education major as being gerontology, would respond less negatively toward the aged than non-gerontology students. This hypothesis was supported by the research findings. Eight, the more courses completed in gerontology, the less likely to respond negatively toward the aged. This hypothesis was not supported in the research findings. Nine, individuals that encounter predominantly positive experiences with the aged would respond more positively toward the aged. This hypothesis was supported by the research findings.

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CHAPTER I

INTRODUCTION

The aging of society is rapidly becoming one of the most distinct features of modernity. Older individuals will exist in our society in greater numbers than ever before, which draws focus to not only significant changes in the age composition of our society, but in various changes in the norms, values, and attitudes concerning the elderly. In the 21st century, approximately one in five persons will be age 65 or over, a demographic reality that suggests enormous implications.

The overall life expectancy in the United States in 1900 was 47.3, in 1987 we see an increase in longevity of nearly 50 percent, averaging 75.0 years. In 1900 only 4 percent of the total population of the United States were 65 years old or older. In 1940 the population consisted of 7 percent of individuals 65 years of age and older, which constituted 9 million people. By 1987 the numbers had increased to 29.8 million or about 12.3 percent of the population (Cockerham, 1991).

Currently there are approximately 25 million persons age 65 years or older in the United States (Sloane, Slatt, & Baker, 1988). The population of individuals 65 years or older in the United States is expected to rise to 39 million

people by the year 2010 (Schick, 1986). Furthermore, it is estimated that 68.5 million people will reach the age of 65 years by the year 2050 and will represent 22.9 percent of the estimated total of population for that year (U.S. Bureau of the Census, 1989).

Not only have we seen an increase in longevity, but since 1958 the birthrate in the United States has been declining. The lower death rate coupled with the lower birthrate, has resulted in a much higher proportion of older Americans in relation to the overall total population (Cockerham, 1991). With this marked increase and the current demographic projections, a clear trend emerges that Americans are living longer, and the percentage of elderly in the population is significantly increasing.

This trend will bring about a marked change in American society, including heightened societal pressures. We will see an aged population that will be healthier, better educated, and more affluent than any comparable cohorts of elderly persons in the past (Cockerham, 1991). Even though elderly Americans will be healthier than previous generations, pressure is likely to be put on health care delivery systems and public health insurance to keep them fit (Cockerham, 1991). Pressure will also be put on the Social Security system to maintain or increase payments for old-age benefits. With relatively fewer children resulting from the Baby Boom generation that were born between 1946

and 1964 and is currently passing into middle age, the financing of old-age benefits will require increasingly more money in the future from a much smaller working population. In 1955, there were 8.6 taxpayers per Social Security beneficiary; but by 2005, the ratio is expected to be 2.7 taxpayers per retiree. By 2035, the ratio is expected to drop to about 1.9 taxpayers per retiree. A future crisis in the financing and provision of services for the elderly population of the United States is certain (Cockerham, 1991).

As the rising number of older Americans increases, in relations to our areas of societal pressures associated with this dramatic demographic change, our perception tends to focus on the factors that are associated with attitudes of society toward our elders. Attitudes are positive or negative positions we take toward the aged.

Ageism is a primary concern in association with perceptions, and has been defined as "thinking or believing in a negative manner about the process of becoming old or about old people" (Butler, 1989). Ageism can be represented in thinking, or believing leading to prejudicial attitudes against the aged, and or in actions, such as discrimination of the aged.

Statement of Problem

The central question addressed in this study is what effect educational attainment and acquired knowledge of

aging have on negative ageism? Subsidiary questions are what effect does; age, sex, and positive/negative experiences with aged individuals, have on negative ageism. This study is concerned with the examination of specific factors associated with negative ageism in our current society.

Design of the Research

This was a study of university students, both at the undergraduate and graduate levels. The sample was drawn from a university in a north Texas city whose population is estimated to be about 65,000. Volunteer classes participated during the summer months of 1996. The students responded to a survey questionnaire. A copy of the questionnaire is included in the Appendix of this dissertation. The sample size was 254 voluntary students that chose to participate in this sample. Specific procedures of data collection and analysis are delineated in succeeding chapters.

Significance of Study

There are numerous possibilities for the utilization of this study. Since many older Americans may be involved in an intensive rehabilitation program, this study may be essential by aiding in the development of strategies in vocational and medical rehabilitation, in addition to improving the quality of patient care in the hospital by addressing the negative attitudes toward the elders.

Governmental agencies will be able to utilize information obtained in this study by developing programs that will directly affect the elders. By focusing on the factors that are associated with ageism, the quality of service can be improved.

Sociologists and Gerontologists will be able to utilize information obtained in this study to expand their present knowledge. The information obtained from this study can be utilized by both academic and applied professionals for the expansion of knowledge and the development of future research.

Limitations

There are limitations associated with this particular study: The size of the sample is limited to the number of instructors and students willing to participate in this study. The respondent's biases are always a concern whenever relying on self-reporting information. The limitations of the setting as being used as an indicator for societal implications. All of these factors represent less than ideal research situations. This is a sample from one university and may not reflect the general population.

Major Divisions of the Research Report

Chapter One indicates the problems with which this dissertation was concerned. The problem explored in this study is, what effect does educational attainment and acquired knowledge of aging have on ageism. The first

chapter is an introduction to the dissertation as well as a concise indication of the scope and purpose of the research.

Chapter Two includes a review of literature in the field of Gerontology, with direct focus on attitudes associated with the aged/aging process. Chapter two indicates the types of studies that have been conducted as well as the generalized findings on attitudes and aging.

Chapter Three examines the theoretical considerations of this research. Key concepts and major terms used in this study are defined. The theoretical model to be used in this research is examined and the nine hypotheses to be tested are delineated.

Chapter Four contains the methodological considerations of this study. Techniques of data collection and data analysis are operationalized. The research variables are operationalized, as well as an indepth examination of the instrument is presented in this chapter.

Chapter Five discusses the findings of the research. The data analysis procedures are addressed. The results are discussed in terms of each of the stated hypotheses.

Chapter Six contains the summary and conclusions that were drawn from this research. An analysis of each of the nine hypotheses are examined, as well as how several theoretical and practical conclusions can be drawn from this research. This last chapter also contains numerous suggestions for future research which are suggested as a

result of this study.

Summary

In this dissertation, research, analyses, and conclusions from a sociological perspective focus on the impact educational attainment and acquired knowledge of aging have on negative ageism. Subsidiary questions addressed in this research are; how does age, sex, and positive/negative experiences with aged individuals effect attitudes of ageism?

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter presents a review of the literature relating to the subject of this study. It will begin by examining a range of literature associated with the definition of ageism, then examine attitudes and beliefs in society, moving to the development of stereotypes and concluding with discrimination against the aged. This chapter will include relevant literature dating from 1930's to 1996.

Ageism

Numerous authors have attempted to define the meaning of the term "ageism." The term "ageism" was originally coined by Robert N. Butler in 1968. He was acting chairman of the District of Columbia Advisory Committee on Aging at the time. He had been actively involved in the acquisition of public housing for older people. When Butler was asked to give a definition of the term ageism, he replied with the following; "Ageism can be seen as a systematic stereotyping of and discrimination against people because they are old, just as racism and sexism accomplish this with skin color and gender. Old people are categorized as senile, rigid in thought and manner, old-fashioned in morality and skills...

Ageism allows the younger generation to see older people as different from themselves; thus they subtly cease to identify with their elders as human beings" (Butler, 1969a). His concern was that he was seeing ageism manifested in a wide range of phenomena, on both individual and institutional levels with stereotypes, myths, outright disdain and dislike, and simple subtle avoidance of contact, as well as discriminatory practices in housing, employment, and services of all kinds (Butler, 1989). Ageism has been described as "thinking or believing in a negative manner about the process of becoming old or about old people" (Doty, 1987). Ageism, or age prejudice, can be summarized by saying it is a "dislike of aging and older people based on the belief that aging makes people unattractive, unintelligent, asexual, unemployable, and senile" (Comfort, 1976). Laws (1995) indicates that ageism is a product of our dislike of the aged body. This disdain for the aged body is socially constructed as the target for ageist practices.

Attitudes and Beliefs

Society's attitudes and beliefs about aging are culturally embedded and can have a profound effect on how people view themselves as well as others who are aging (Grant, 1996). It may be that only a quarter or less of the general public endorses this extreme and inaccurate view of the aged, (McTavish, 1971), but most Americans probably

subscribe to some erroneous beliefs about aging and have at least a mild degree of prejudice against the aged and the overall process of aging.

When we are dealing with specific older people in specific social roles and situations, age is seldom seen as a negative trait. But when we deal with older people as a social category, especially in terms of social policy, we tend to do so in terms of negative images or perceptions, or beliefs. Being widely held has nothing to do with whether or not beliefs are actually true or not. An example of this is a sample done by Harris and Associates in 1981, in which 65 percent of the general public was found to believe that most older people were lonely, but only 13 percent of older people in the sample said that loneliness was a problem for them.

Another example of general beliefs about the aged population is the acceptance by many that suicide rates increase after the age of 65, which implies that entering the older population increases the risk of suicide. This is both true and misleading. It is true that suicide rates increase with age after age 65, but it is misleading to imply that before 65 suicide rates do not increase. Suicide rates do increase with age steadily after the age of 15, and there is no change in the rate of increase at 65 or any other older age (Atchley, 1991).

Beliefs are used to make inferences and draw

conclusions. To the extent that our beliefs are faulty, so too will be our conclusions. Our beliefs are our ideas about what is true. Beliefs are difficult to study because they tend to be specific. Tuckman and Lorge (1953) asked people if they agreed or disagreed with over 150 specific beliefs about older people. Some of the questions or beliefs they were asked to respond to were statements such as; "Older people are set in their ways," "Older people walk slowly," "Older people worry about their health," "Older people are forgetful," "Older people are able to learn new things," "Older people can manage their own affairs." This research showed that in the 1950's, before the rapid increase in older people in the population, beliefs about people were often as negative as they were positive. The research results showed that some of the responses or beliefs were accurate and sometimes they were inaccurate. Sometimes their accuracy or inaccuracy had not been determined. Negative beliefs were more likely than positive beliefs to be inaccurate.

Attitudes are positive or negative positions we take toward experiences, physical objects, people and/or ideas. Attitudes contain elements of both emotional liking or disliking and positive or negative cognitive evaluation. This may develop out of purely personal preferences, but often they are logical extensions of beliefs and values. One main way people learn what to think about aging is

through the media portrayals. The media is one of the most potent informal sources of socialization in our current culture. The recognition of this source has resulted in increasing research attention to the role of the media in promoting or supporting common societal stereotypes associated with aging. It is likely that the media plays a very important role in the shaping and formation of attitudes toward the elderly, particularly among children who have limited, superficial, or no contact with the elderly in society (Vasil, 1993). One study conducted by Aronoff (1974) examined television and the portrayal of the aged. It was found that older characters were portrayed as "bad guys," prone to failure, and generally unhappy. Jeffreys-Fox (1977) found that older characters were rated as less attractive.

Vasil and Wass (1993) conducted an analysis of twenty-eight published studies conducted between 1974 and 1988. The under-representation of the elderly was particularly obvious in prime-time programming, with elders comprising only 1.5% to 4.9% of the overall prime-time television population (Bell, 1992). Of the studies analyzed, the largest sample of characters (16,688) reported a particularly low percentage of elderly characterizations on television (2.3%) (Gerbner, 1980; Davis, 1986). Of the nine studies that actually assessed the quality of elderly character portrayal on television, five concluded that the

elderly were generally depicted in a negative light (Vasil, 1993). Aronoff (1974) found that only 40% of older males and even fewer older female characters were portrayed as successful, happy, and good. Northcott (1975) found that elderly characters were predominantly relegated to minor roles and that negative comments about aging far outnumbered the positive. Gerbner (1980) observed that the elderly characters, more than other age groups, were treated with disrespect and older characters were more likely to be depicted as eccentric or foolish. Especially on prime-time programs, "the elderly tend to be shown as more comical, stubborn, eccentric, and foolish than other character. They are more likely to be treated with disrespect" (Davis, 1986). "It is likely that the media is increasingly influential in shaping children's perceptions and attitudes toward the elderly and the overall aging process given recent sociocultural shifts in American society that have resulted in less contact between children and elderly people than in previous time periods" (Vasil, 1993).

Stereotypes

Stereotypes are composites of beliefs we attribute to categories of people. Stereotypes provide the foundation for ageist ideology. Unfortunately, negative stereotypes about aging are still quite prevalent (Rowe, 1987). Utilizing the psychological process of stimulus generalization, stereotypes allow us to treat widely

differing individuals as a member of a single category. In this process, stereotypes never capture diversity because they are intended to reflect central tendency. All stereotypes are ethnocentric in that the ideas used to categorize people reflect the value hierarchies of the group creating the stereotype. Some stereotypes are basically accurate descriptions of characteristics within a social category, and others are inaccurate and disparaging composites. "Negative stereotyping of the elderly circumscribes their potential by allowing the placement emphasis on the unproductive and unsuccessful older person and may become a self-fulfilling prophecy, limiting capacities and experiences of aged persons" (Vasil, 1993). Palmore (1990) discusses some of the major societal stereotypes about the elderly in his book, Ageism: Negative and Positive. Negative stereotypes include the belief that the elderly are in poor health, asexual, lacking in physical attractiveness, senile or mentally ill, useless, poor, and depressed, all of which is untrue. Even the seemingly positive view of the elderly can have negative consequences. Positive beliefs have been used to justify scaling back programs for the elderly. Binstock (1983) believes that the elderly have been made scapegoats for a depletion of societal resources, which has in turn, created a "shrinking of compassion" on the part of society. Negative stereotyping and ageism may not only affect the elderly, but

also may serve to create negative expectations, fear, and dread of aging in the young (Vasil, 1993).

Many studies report that respondents view the aged and the specific problems that they face negatively. The elderly are judged to be weak, in poor health and dependent; to be of lower competence, intelligence, and attractiveness than are the young; and to be asexual and socially isolated (Seccombe, 1991). We find the reports of these negative sentiments by children (Mitchell, 1985), adolescents (Doka, 1986), college students (Levin, 1988,; Palmore, 1988), and adults at large (Harris, 1981; Locke-Conner, 1980).

According to Schmidt and Boland (1986), stereotypes of older people in general differ from stereotypes of older workers, older volunteers, and so on. They found that older people are characterized according to three separate kinds of stereotypes: physical characteristics, negative social characteristics, and positive social characteristics. The physical stereotype of older people included; gray hair, wrinkled skin, false teeth, hearing impediment, poor eyesight, gnarled hands, and hair loss. The negative social stereotype included negative affect characteristics such as; needing nursing care, being dependent on family, or being senile, and vulnerabilities to crime. There were some shrewish characteristics such as; complaining, demanding, being selfish, or having no sense of humor, and some inflexible characteristics such as living in the past,

finding it difficult to change, or being old-fashioned. The positive social stereotypes included conservative characteristics such as; patriotism, being Republican, or not liking handouts, and patriarchal/matriarchal traits such as living through the children. There were some exemplary characteristics such as being capable, wise, useful, understanding and generous. These indicate that there is no single umbrella stereotype of a so-called "older person." Instead, there are numerous stereotypes of older people based on appearance, behavior, and capabilities. Certain combinations of characteristics are put together to form a stereotype projected in society.

Based on appearance alone, young people generally call up negative stereotypes when dealing with older adults. DeRenzo and Malley (1992) focus their attention on the linguistic representation of the "elder" as a negative aspect and possible encourager of ageism in our culture. Contemporary reactions to growing or being "old" are consistently negative in our Western culture (Vasil, 1993; McTavish, 1971; Butler, 1975; Harris, 1975; Rodin, 1980; Issaks, 1986). "Biases associated with aging are culturally transmitted; adults pass beliefs on to children. Therefore, the same myths and misconceptions about the elderly and the aging process that exist among adults are to a large extent shared by children" (Kupetz, 1994; McTavish, 1971). The images of the elderly were examined, concentrating on

children's perceptions of the elderly. It was found that children as young as 3 years old had overwhelmingly negative attitudes toward the aged, (DeRenzo, 1992; Burke, 1982; Jantz, 1977; Treybig, 1974) and unfortunately these views coincide with those of the adults in our society (Kupetz, 1994). With significant support of continued findings indicating negative images of the aged, DeRenzo decided to examine a popular magazine and analyze it for occurrence of use of ageist language. They examined the magazine and analyzed it for occurrence of use of ageist language. They examined the magazine, Vogue from 1969 through 1988. Five ageist root words were selected; age, young, old, wrinkle, line. They examined the advertising for various products for occurrences of these words. Variations of occurrences were found. In 1969, 25.77 were found, it declined to 17.86 for 1978. Between 1978 and 1984 it climbed to 40.28 occurrences. By 1988 it was at 66.81. So in spite of the population increase of our aged, and more information on the topic of age, we see a continued increase in words associated with ageism in one examination of popular literature. We see the possible formation of societal attitudes toward the aged (DeRenzo, 1992).

Historically, from the 1930's through the late 1970's, stereotypes of the elderly were compassionate ones, based on the belief that the elderly were; (1) poor, frail, and required assistance; (2) that they were politically

ineffective; and (3) that they were among the "deserving poor" whose needs should be met by the wealthy nation that they supported (Binstock, 1983). By the 1980's the images and stereotypes about the elderly had dramatically changed. The elderly were perceived as wealthy, politically powerful, and self-interested. Due to the demographic changes, the elderly began to be perceived as a threat to the future financial stability of the country (Binstock, 1983). What Binstock is basically stating is that this new negative image of the elderly has recently emerged and is taking hold in our attitudes throughout our society. Several social scientist might disagree as the time period of the beginning of this societal "change" in attitudes toward our elders, (Aronoff, 1974; Jeffreys-Fox, 1977) citing a earlier beginning for this social phenomenon.

With attention to the socialization that children are receiving from the media, special concern has risen over the depiction of the elderly for children in print. Ten studies examined the depiction of the elderly, yielding a sample of 922 books, 101 magazines, and 24 basal reader series. Eight studies quantified the portrayal of the elderly of which 7 found that the elderly were under-represented in children's picture books, basal readers, children's literature, and magazines. The only close exception to this was found in adolescent literature. In the children's literature that included the elderly, it was done in a stereotypical and

negative fashion in picture books and children's literature. Ansello (1977) reported that the adjectives, "old," "little," and "ancient," represented 85% of all physical descriptions of elderly characters. Hurst (1981) and Janelli (1988) found that the majority of elderly characters were depicted with little diversity in appearance. The older characters were frequently portrayed with gray hair, wearing glasses, and using a cane or walking stick.

Upon examination of the representation of the elderly in magazine cartoons, (2,217) magazine advertisements, (17,662) newspapers, (383) and birthday cards (736) it is found that the elderly were under-represented (Vasil, 1993). Negative themes such as sexual dysfunction and extreme conservatism were prevalent. Buchholz and Bynum (1982) reported that only 3% of the newspaper stories about the elderly and aging dealt with significant issues such as health, retirement, housing, crime, employment, income, transportation, and demographic shifts. Demos and Jache (1981) found that negative portrayals of aging was clearly the trend in birthday cards. It was found that 88% of the cards that had an aging theme portrayed aging in a negative light. Despite efforts and impressive advances in gerontological research, service, and training over the past few decades, stereotyping and ageism are still very common and perpetuated in the mass media (Vasil, 1993).

Many studies report that respondents view the aged and

the specific problems that they face negatively. The elderly are judged to be weak, in poor health and dependent; to be of lower competence, intelligence, and attractiveness than are the young; and to be asexual and socially isolated (Seccombe, 1991). We find the reports of these negative sentiments by children (Mitchell, 1985), adolescents (Doka, 1986), college students (Levin, 1988,; Palmore, 1988), and adults at large (Harris, 1981; Locke-Conner, 1980).

Whitbourne and Hulicka (1990) analyzed 139 psychology textbooks written over 40 years for any evidence of ageism. It was discovered that aging issues received very little attention, even in the later editions. When aging was addressed, the texts tended to focus primarily on problems rather than successes. Older adults were consistently described as suffering from multiple deficits and handicaps that were attributed to the aging process. Infrequently mentioned was intellectual plasticity, the difference between normal aging and disease processes, and the ways in which individuals can compensate for losses associated with the aging process. Conclusions indicated that the texts exposed students to a "narrow and permanently fixed view of the aging process."

Discrimination

Age discrimination is some sort of negative treatment that is unjustly applied to members of a category of people due to their age. It is treating people in some unjustly

negative manner because of their chronological age or their appearance and for no other reason. Age discrimination occurs when human beings are avoided or excluded in everyday activities because they are "the wrong age." In 1981, 80 percent of adults believed that most employers discriminate against older people and make it difficult for them to find work, and 61 percent of employers agreed with this assessment (U.S. Senate Special Committee on Aging, 1986).

Older people sometimes must intrude into various spheres of daily life in order to make people aware that they have something to offer. Most older people are not willing to fight for this recognition, and as a result, there is a great deal of age segregation in many activities and interactions. Only in the family do older people usually escape this sort of informal age discrimination (Atchley, 1991).

Equally important is the impact of age discrimination on opportunities for beginning or continuing participation in various organizations. Job discrimination makes it more difficult for the older individuals to continue in the labor force or find jobs if unemployed. The stigma of implied inability and the resulting discrimination sometimes extend past paying jobs and can even be found in volunteer jobs as well. Organizations, especially for the older adults, offer an alternative to those who have been rejected by organizations in the "mainstream" of society, but at the

cost of segregation. Many older adults prefer to associate with their age peers, but for those who do not, alternatives are not easily found.

Age discrimination can also be found in the form of unequal treatment by public agencies. In a report from the U.S. Commission of Civil Rights conducted in 1977, it was found that age discrimination was present in numerous federally funded program; community mental health centers, legal services, vocational rehabilitation, social services to low-income individuals and families, employment and training services, the Food Stamp Program, Medicaid, and vocational education. This problem was found to exist in all regions of the country. People in the oldest cohorts were more likely to experience discrimination from public agencies, than were the younger cohorts.

In addition to age discrimination, it was often compounded by other factors of race, sex, national origin, or handicap status. The Commission on Civil Rights concluded that much of this discrimination stems from a narrow interpretation of the goals of legislation. For example, community health centers generally interpret "preventative health care" as applying only to children and adolescents, excluding the elderly. Directors of employment programs see their most appropriate clients as males age 22 to 44. Even age 22 is considered too old for some job-training programs. The Commission of Civil Rights found

that state legislatures sometimes convert federal programs, designed to serve all Americans, into categorical programs aimed at specific age groups. One example they gave was a strong child abuse and neglect law passed by the State of Missouri, a worthy goal, but the state didn't have the money to put it into action. Instead, federal funds for social services to everyone were earmarked to support the child abuse program, and as a result, most cities in the state discontinued their adult protective services programs. In many cases where the state or local governments are responsible for defining the population eligible for federal programs, age discrimination results. One example of this is that several states exclude older people from vocational rehabilitation programs because they were not of "employable age." Age discrimination sometimes occurs when services are provided under contract with agencies that limit the ages of people they will serve. For example, a general social services contract with a child welfare agency is very unlikely to result in social services to older adults. The commission also found that outreach programs tended to be aimed at specific age groups, which lessens the probability that older age groups will find out about programs for which they are eligible.

One overall conclusion that the Commission of Civil Rights in 1977 reached was that general age discrimination in public and private job market was an important underlying

factor in age discrimination in employment, training, and vocational rehabilitation programs. As long as older adults are denied jobs, agencies see little value in preparing them for jobs. It appears that it is seen as a waste of money, time and effort on the part of the various agencies.

Subtle ageism may be partly to blame for the deficits in service delivery to the elder population. Kimmel (1988) reviewed the effects of ageism on public policy, finding that 45 percent of U.S. community mental health centers reported having no programs that were specifically for the elderly people and that 41 percent did not have any clinical staff members trained to deliver geriatric services. Roybal (1988) called for an expansion of mental health services to meet the needs of the aged. He points out that the elderly are greatly under-represented empirically in mental health services, accounting for only 6 percent of people served by mental health centers.

The American Psychological Association and the American Psychological Society were co-sponsors of a report entitled, "Vitality for Life: Psychological Research for Productive Aging" (Adler, 1993). This report addresses the lack of representation in research and funding of the aged. There are four priorities in the area of aging: (1) learning how best to maximize elderly people's productivity at work, (2) developing mental health assessment and treatment strategies to enhance vitality, (3) learning how to change older

people's health behavior, and (4) increasing research on how to optimize the functioning of those over age 75. This report is being used by Congress to address the growing needs of the elderly. Grant (1996) is urging professionals that work with the elderly population to make a concerted effort to confront ageism in society as a whole in a very active manner. Perhaps the need to write an article addressing the "effects" ageism has on health care speaks for the prevailing problems.

Discrimination in Health Care

The issue of health care in our country has been both a public issue as well as political. The attitudes of health care providers or professionals toward the geriatric population affects the quality of care they receive, according to numerous findings in recent publications (Kenyon, 1992; Belgrave, et. al., 1982; Coccaro & Miles, 1984; Coe, Miller, & Prendergast, 1982; Jarvik et. al., 1981; Levenson, Thornby, & Tollett, 1980). It is alarming to note that numerous researchers have found health care workers in general, have negative attitudes toward the elderly. These negative attitudes tend to focus on perceived deterioration, rigidity, dependence, and resistance to treatment in the elderly population. Jarvik et. al. (1981) suggests that the physicians' negative attitudes result from the chronic conditions found in the aged that can be treated but not actually cured. Butler

(1969b) describes "medical ageism" with it's roots ascending from medical school. The use of terms like; "crock" - originally applying to patients with no organic basis for disease thought to be hypochondriacal-applied to middle-aged women and older persons, "gomer" ("get out of my emergency room"); "vegetable"; and "gork" (God only really knows" the basis of this persons's many symptoms). The medical schools enhance this "virus" routinely with it's general procedures. The first older person that the medical students encounters is a cadaver. These young people, fresh out of college are confronted with death and their own personal anxieties about the death experience, yet no group or individual counseling is provided them. Shortly after, they are exhausted with sleeplessness and hostility for not learning everything fast enough; by the time they are in their third or fourth year of medical school, they are ripe from cynicism. Next, is the internship, where they are working in excess of eighty hours per week, up in the middle of the night, dragging themselves in to see one more "gork" (Butler, 1969b). Few medical school graduates enter the field of geriatrics. On the whole, physicians do not invest the same amount of time in dealing with the elderly patients as they do their younger ones. "Doctors question why they should even bother treating certain problems of the aged; after all, the patients are old. The problems are irreversible, unexciting, and unprofitable" (Butler, 1969b).

Studies attempting to assess medical students' attitudes toward the elderly have been somewhat ambiguous. There is some indications that students adopt the attitude of their role models, viewing the care of the elderly as frustrating (Green, Keith, & Pawlson, 1983), and are uncomfortable asking elderly patients about their feelings (Prendergast et. al., 1984). The issue of health care is examined by Callahan, who proposed an elaborate and extensive proposal that as a society health care has to be rationed. He uses the rationing of health care to be done on the basis of old age, that is, to withhold high-technology health care designed principally to extend the lives of persons once they reach a certain chronological age, estimating age 80 years, (Callahan, 1987: Callahan, 1990, Levinsky, 1990). There appears to be evidence in our literature that indicates that implicit age-based rationing is already the norm for certain medical technologies in the United States (Kilner, 1988: Fuchs, 1984: Schitovsky, 1984) as well as existing in other countries (Aaron & Schwartz, 1984). Supporters of such a policy that limits medical care for those over a certain designated age argue: (1) that the old have obligations to the young that necessitate that they relinquish demand for expensive health care at the end of life; (2) that society overall should expend fewer resources on the elderly in order to have greater resources to expend on the welfare of

children; (3) that the old can find meaning in old age by returning to the acceptance of death common in earlier times; (4) that withholding care from the old is acceptable because death is not premature, e.g., the old have already had the opportunity to live a natural life span; and (5) that if health care has to be rationed, it is more fair to ration by age, since age is a criterion that affects all persons equally (Zweibel, Cassel, & Karrison, 1993).

Discrimination in Employment

In society, employability is often seen as a primary measure of one's ability to contribute meaningfully to society and also serves as a source of self-identity and self-esteem (Moody, 1988). Botwinck (1984) reviewed the literature on the effects of ageism on employment. It was found that although age was not an important factor in the evaluation of work competence, "older age" was given as one of the reasons for the evaluation of a poor applicant if the person was not hired. It was discovered that when a younger applicant was not hired, lack of effort or inability was typically given as the reason for rejection.

Snyder and Barrett (1988) reviewed 272 federal court cases that dealt with age discrimination and employment, filed between 1970 and 1986. The analysis of the outcomes found that 65 percent were decided in favor of the employer. Upon further analysis the researchers found numerous problems associated with how these decisions were reached.

First, there were frequent use of generalities about the differences between older and younger worker's abilities, despite the fact that there was no documentation of supportive evidence of consistent group differences in actual job performance. Often, neither the employers nor the expert witnesses were asked for specific evidence concerning the plaintiff's actual physical capabilities and the specific job requirements. Second, the variability of decreased physical strength and fitness with age was frequently not addressed. Third, the consideration of possibly redesigning the work place to accommodate older employees was often not considered.

Bodily (1991) surveyed inactive nurses to find out why they were not working. Many of the respondents cited their age as the major reason for not being able to work. The biggest concern that Bodily expressed was the ease in which acceptance for work exclusion due primarily to age was expressed consistently, exemplifying how societal attitudes can affect not only how elderly people are perceived, but also how they view themselves. "Negative stereotyping in society can lead to viewing elderly people in a depreciatory manner and as less valuable members of society" (Grant, 1996). Elderly people who adopt these aging myths may see decline as inevitable and comply (Rodin, 1980). With the compliance to stereotypes, comes reinforcement of acceptance of the misconceptions (Butler, 1987).

"Ageism affects relations between people; it makes a difference to our daily lives. It is oppressive and limiting" (Laws, 1995).

Summary

Chapter Two is a review of the literature that relates to the subject of ageism. The review began by addressing the term ageism. This overview demonstrated the diverse nature of the problems associated with ageism. From the literature it is obvious that the scope of this social problem is a complex issue and that no single factor is adequate to explain the entire social phenomena related to ageism.

CHAPTER III

THEORETICAL FRAMEWORK

Introduction

This chapter will focus on the theoretical frame of reference which served to guide this research. Key concepts and basic terms that are used in the study are defined and the major hypothetical propositions which were tested are presented.

Theoretical Framework of the Study

Individuals live in a symbolic world in which they determine the meanings of objects through interaction with others. The term "symbolic interaction" refers to the distinctive character of interaction as it takes place between human beings. Humans beings interpret or define each other's actions instead of merely reacting to each other's actions. Their response is not made directly to the actions of one another, but instead is based on the meaning which they attach to these actions.

Thus, human interaction is mediated by the use of symbols, by interpretation, or by ascertaining the gathered meaning of another's actions (Blumer, 1969). Several symbolic interactionists (Blumer, 1969; Manis, 1978; Rose, 1962) have enumerated the basic assumptions of this theory. There are seven basic elements: (1) Humans live in

a symbolic world of learned meanings. (2) Symbols arise in the social process and are shared; (3) Symbols have motivational significance; meanings and symbols allow individuals to carry out distinctively human action and interaction; (4) The mind is a functional, volitional, teleological entity serving the interests of the individual. Humans, unlike the lower animals, are endowed with the capacity for thought; The capacity for thought is shaped by social interaction; (5) The self is a social construct; just as individuals are born mindless, so too, are they born selfless; our selves arise in social interaction with others; (6) Society is a linguistic or symbolic construct arising out of the social process; it consists of individuals interacting. (7) Sympathetic introspection is a mandatory mode of inquiry (Herman, 1995).

Humans live in a symbolic world of learned meanings. We begin at birth through our interactions to develop an understanding of our world through our learned meanings of the symbols we experience. We develop the understanding that our parents smiles mean pleasure. Through our continued interaction and shared meaning, we begin to emulate the expression of the symbol through our interactions in society. Symbols arise in the social process and are shared. The symbol of smiling is achieved through our interaction and it's meaning develops with it's continuation of exposure. We interact with others and

various symbols arise and through the interaction meaning of the symbols are established. Symbols have motivational significance; meanings and symbols allow individuals to carry out distinctively human action and interaction. In order to interact successfully and be understood the shared meanings of the symbols is vital.

The mind is a functional, volitional, teleological entity serving the interests of the individual. The mind allows us to explore variations of symbols with an endless range. The mind allows individuals to continue the development of ourselves and our societal understanding of successful interaction.

The self is a social construct; just as individuals are born mindless, so too, are they born selfless; our selves arise in social interaction with others. We develop our selves through our interactions with others and the shared meaning that we develop as a result of these interactions. Society constructs the individual through the meaning of the symbols of interaction.

Society is a linguistic or symbolic construct arising out of the social process; it consists of individuals interacting. The language or the symbols that we construct arise out of the social process of interaction. As the linguistic or symbolic meanings change through our social process, our interaction will reflect these changes.

Sympathetic introspection is a mandatory mode of

inquiry (Herman, 1995). The awareness of the meaning of the symbols in our interaction affects the social interaction. Individuals pursue the route of sympathetic introspection for successful societal interaction. To gain a clear understanding, an introspective analysis is continuously examined through our interaction in society.

Social meanings are conceived as social products arising through the defining acts of individuals as they engage in social interaction. Social products may, in return, exert influences upon them. These socially created and socially shared meanings function in determining the behavior of individuals (Herman, 1995).

The self is one object whose meaning is socially determined (Quadagno, 1996). Symbolic interactionism emphasizes the dynamic and meaningful processes of social interaction (Blumer, 1969; Mead, 1934). "Symbolic interaction, as a distinctive perspective in social psychology, focuses on the nature of human social interaction" (Herman, 1995). Symbolic interactionists view humans as self-conscious beings; individuals possess selves and minds, which although absent at birth, originate as a consequence of their participation in society (Herman, 1995). From this perspective, individuals develop a sense of self through interpreting others' responses to their behavior. The interaction is ongoing and social order is contingent on the shared meanings that develop. As people

grow older, their sense of self-worth, is shaped by evaluations others hold about the nature of aging. Some of these evaluations may be based on fact, but much of what we understand as characteristic of aging is fundamentally based on stereotypes (Quadagno, 1996). For the purpose of research, there have been instruments devised to measure how stereotypes affect attitudes toward elderly people. In one study, pictures of the same man at age 25, 52, and 73 were shown to college students. The students rated the 73 year-old man significantly more negatively on a number of dimensions than the younger men (Levin, 1988). There have been "quizzes" developed to try to identify what facts and myths people "know" about the elderly in society (Palmore, 1977). These quizzes demonstrate that many people hold erroneous ideas about the elderly. People believe that most older people in society experience a high degree of social isolation, that people who are old tend to be poor, and that few older people are interested in sex. These are examples of stereotypes that are untrue for the majority of the aged population. Walter Lippman (1922) states that ageism is more than a tendency to discriminate, it also consists of "pictures in our heads" (Lippman, 1922). We develop these pictures through our interactions and shared meanings with others in society.

Explanation of Model

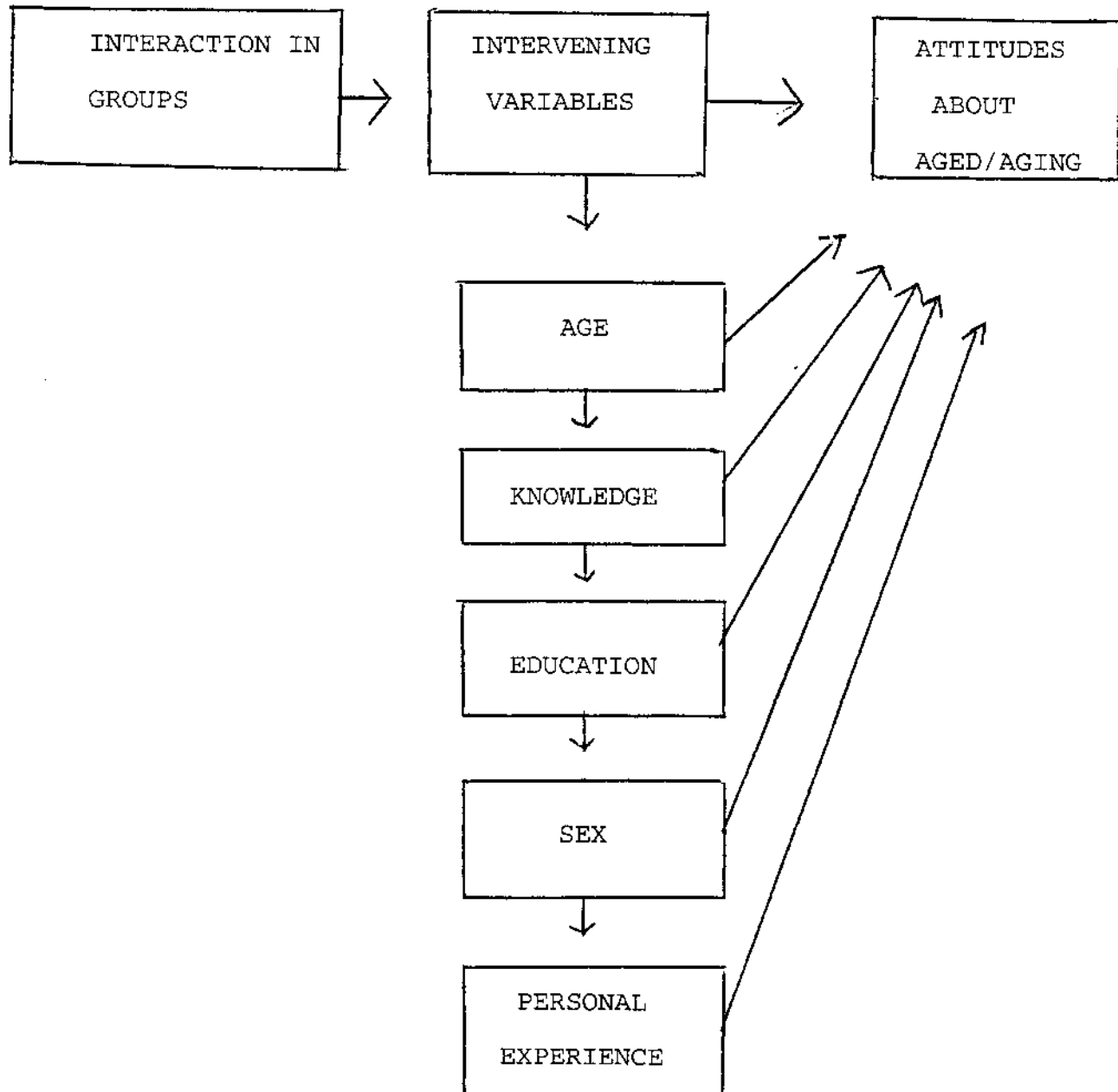
Following these propositions of symbolic interactionism

theory, symbolic interactionism became the basis of the theoretical framework for this study, and has served as the foundation for the development of the model in this section, the hypotheses and the operationalization of concepts and variables that were tested. Our interaction in groups, intervened by selective variables are factors that affect our attitudes about the aged and/or the aging process.

The examination of the term "group" in the sociological sense, has the following characteristics: (1) its members are linked by a distinctive set of relationships; (2) they are interdependent; (3) they feel that the behavior of each is relevant to the others; and (4) they share a sense of togetherness, a "we" feeling. Groups may vary in size, in the intensity of their bonds, and in stability over time, but all groups share two elements; mutual awareness of and responsiveness to the other members of the group.

We primarily interact in groups which are similar to ourselves and reflect a homogeneous format in which our attitudes about aging and the aging process begin to formulate. These attitudes are tested with interaction within groups. Numerous intervening factors may intervene in this process, thus allowing continuation of development of attitudes toward the aged and the aging process, or may alter the formation of attitude. Finally leading to the development of attitude toward the aged and the aging process.

FIGURE 1
THEORETICAL MODEL



Hypotheses

1. The younger the respondent, the more negative the response toward older individuals.

Hypothesis number one is based on the assumption that with maturation will come understanding and increased acceptance for the aged.

2. The more knowledge a respondent has about the aging process, the less likely the respondent is to respond in a negative manner to the aged.

Hypothesis number two is based on the assumption that our knowledge affects our attitudes. The more knowledge the respondent has about aging, the less likely the respondent is to have negative responses toward the aged.

3. The higher the level of reported educational achievement of respondents' mother, the less likely to respond in a negative manner toward older persons.

Hypothesis number three is based on the assumption that the education level of the mother will affect the students' attitude toward the older student. The expectations are that the higher achievement of education, the less likely the student is to exhibit negative attitudes toward older persons.

4. The higher the level of reported educational achievement of respondents' father, the less likely the student is to respond in a negative manner to older persons.

Hypothesis number four is based on the assumption that

the education level of the father will affect the students' attitude toward older individuals. The expectations are that the higher achievement of education, the less likely it is for negative attitudes to exist toward the aged.

5. The higher the level of reported educational achievement of respondent, the less likely respondent is to respond in a negative manner to older students.

Hypothesis number five is based on the assumption that the higher the education level, reported as student classification, the less likely it is for negative attitudes to be directed toward the aged.

6. Male students will respond in a more negative manner toward older individuals than will female students.

Hypothesis number six is based on the assumption that male students will be less nurturing and understanding of the aged than will be the female students.

7. Students that have self-reported their education major as being "Aging or Gerontology" will respond less negatively toward the aged.

Hypothesis number seven is based on the assumption that students that are pursuing an educational direction in the area of "Aging" will respond to the aged in a less negative manner than those students whose majors are not "Aging."

8. The more courses in Aging/Gerontology, the less likely students will respond negatively to the aged.

Hypothesis number eight is based on the assumption that

the more interaction and exposure to correct information in an educational setting toward aging, the less likely students are to have a negative response to the aged.

9. Individuals that encounter predominantly positive experiences with the aged will respond more positive toward the aged.

Hypothesis number nine is based on the assumption that the more positive the interaction between individuals and the aged, the more positive an attitude toward the aged emerges.

Specification of Variables

This section will identify and examine both the dependent and the intervening variables.

Dependent Variable

Ageism is the dependent variable in this study. Ageism is a dislike of aging and older people based on the belief that aging makes people unattractive, unintelligent, asexual, unemployable, and senile (Comfort, 1976). Ageism is defined as any prejudice or discrimination against an age group (Palmore, 1990).

Intervening Variables

Nine intervening variables have been chosen for this study:

1. Age of Respondent
2. Knowledge of aging
3. Education level of Mother

4. Education level of Father
5. Education level of Respondent
6. Sex of Respondent
7. Major area of study
8. Number of course work in "Aging"
9. Positive/Negative Experiences with aged individuals

Definition of Terms

Age- will be defined as the current age of respondent. The respondent will be requested to report his or her current age. The research instrument will question age directly by asking respondent to report age.

Gender- will be defined as either male or female, and will be self-reported on questionnaire.

Education- will be defined by respondent on self-reporting questionnaire by requesting the classification of the current student; freshman, sophomore, junior, senior, and graduate student. Each will be presented for respondent to circle appropriate classification.

Education level of Mother- The respondent will self-report the level of educational achievement obtained by his or her mother. The levels of; less than high school, high school, some college, college degree, and advanced/professional degree, will be presented and respondent will be requested to circle the appropriate level.

Education level of Father- The respondent will self-

report the level of educational achievement obtained by his or her father. The levels of; less than high school, high school, some college, college degree, and advanced/professional degree, will be presented and respondent will be requested to circle the appropriate level.

Major Department- The respondent will self-report whether or not their primary area of study is in the area of Aging.

Aging Courses- The respondent will self-report the number of courses in the area of aging they have completed.

Summary

This chapter focuses on the theoretical frame of reference which served to guide this research. Key concepts and basic terms that are used in the study are defined and the major hypothetical propositions which were tested are presented.

CHAPTER IV

METHODOLOGY

Introduction

This section will focus on the research methodology used in this study. It will begin with a restatement of the problem and will continue with a description of the research methods used to test certain major hypotheses relevant to the stated purpose of the study.

The research variables used in the research will also be operationalized. First, the operationalization of the dependent variable for the sample will be described, and then the intervening variables will be operationalized.

Techniques of Data Collection

A sample of college students was drawn in the following manner. Numerous instructors at the University of North Texas were contacted at random, general information concerning the study was explained and permission to survey their students was sought. The acceptance of the survey into the classroom was determined either by the instructor or, as in many situations, the students voted to allow classroom participation time or not. This resulted in 254 voluntary student participants in this sample.

This particular university was located in a medium sized metropolitan community with an approximate population

of 65,000 people. At the beginning of fall 1996 the enrollment of students was 24,964. The student enrollment for the summer of 1996 was divided into two short semesters, summer I and summer II. Summer I had an enrollment of 11,505 students. Summer II had an enrollment of 9,105 students. A variety of departments participated in the study, which include; Sociology, Psychology, Business, Aging (Gerontology). The participating classes ranged from introductory courses to graduate classes.

Research Design

The data were collected during the summer months during 1996, using self report questionnaire survey techniques. A pre-test was conducted to establish the clarity of the instrument and potential of findings. Based on the examination of the pre-test findings, a determination to continue data collection was made.

Description of Sample

This study investigated the effect educational attainment and acquired knowledge of aging have on ageism. Subsidiary questions addressed; age, sex, and positive/negative experiences with aged individuals in regard to possible effect on negative ageism.

This study utilized survey generated data (collected during the summer of 1996). The data were gathered from a university located in a north Texas city whose population is approximately 65,000, with a student enrollment of about

27,000 during long semesters. Major questions of this study, were developed from the theoretical framework of symbolic interaction theory. Two major questions addressed are: What are the factors that intervene between the interaction in groups and the development of attitudes about aged/aging? What is the relative strength of these factors?

Techniques of Data Analysis

Nine hypotheses were listed in Chapter Three which emerged from the theoretical framework which guided this research. The hypotheses were tested using Oneway Analysis of Variance (ANOVA) procedures for hypotheses 1 through 9, and in addition, Multiple Regression Analysis was used for hypothesis number 9.

The first section, "The Facts on Aging Quiz" is a questionnaire that contains 25 questions that address the respondent's knowledge about aging. Each of the questions weighed 4 pts each. The closer the score to 100 percent, the more knowledge of aging or the aged is presumed.

The second section consists of items consisting of both positive and negative attitudes toward the aged. The items alternate between negative and positive, and responses range on a scale ranging from possible responses; "strongly disagree, disagree, slightly disagree, slightly agree, agree, strongly agree" (see Table 1). Each item was assigned a number and responses categories were scored 1, 2, 3, 4, 5, 6. The scale is in two separate parts, one is a

negative attitudinal direction, the other scale is a positive attitudinal direction. Thus on the negative scale, the higher the score the more negative the attitude toward the aged, the lower the score the more positive the attitude toward the aged. The higher the score on the positive scale, the more positive the attitude toward the aged, the lower the score the more negative the attitude toward the aged. Each attitude item was assigned a value of 3, with a maximum score possible of 104 for each attitude direction of negative and positive. The negative scale was used to reflect the hypotheses in analyzing hypotheses 1 through 8. The positive attitude scale was used to reflect the hypothesis in analyzing hypothesis number 9. The negative scale is divided into intervals of 1, 2, 3, representing a score of 1= 0 to 34, very positive, 2= 35 to 68, negative, and 3= 69 to 102, very negative. The positive scale was divided into intervals of 1, 2, 3, with 1= 0 to 34 is a very negative attitude, 2= 35 to 68 is a positive attitude, 3 = 69 to 102 is a very positive attitude.

Table 1

Negative Attitude Scale

Original coding

Alpha=.89

1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree,
4=Slightly Agree, 5=Agree, 6=Strongly Agree.

Negative Statements:

1. It would probably be better if most old people lived in residential units with people their own age.
2. There is something different about most older people; it's hard to figure out what makes them tick.
3. Most old people get set in their ways and are unable to change.
4. Most old people would prefer to quit work as soon as pensions or their children can support them.
5. Most old people tend to let their homes become shabby and unattractive.
6. It is foolish to claim that wisdom comes with old age.
7. Old people have too much power in business and politics.
8. Most old people make one feel ill at ease.
9. Most old people bore others by their insistence on talking about the "good old days."
10. Most old people spend too much time prying into the affairs of others and in giving unsought advice.
11. If old people expect to be liked, their first step is to try to get rid of their irritating faults.
12. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.
13. There are a few exceptions, but in general most old people are pretty much alike.
14. Most old people should be more concerned with their personal appearance, they're too untidy.
15. Most old people are irritable, grouchy, and unpleasant.
16. Most old people are constantly complaining about the behavior of the younger generation.
17. Most old people make excessive demands for love and reassurance.

Table 1 cont.

Positive Attitude Scale

Alpha=.85

1= Strongly Disagree, 2=Disagree, 3=Slightly Disagree,
4=Slightly Agree, 5=Agree, 6=Strongly Agree.

Positive Statements:

1. It would probably be better if most old people lived in residential units that also housed younger people.
2. Most old people are really no different from anybody else: they're as easy to understand as younger people.
3. Most old people are capable of new adjustments when the situation demands it.
4. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.
5. Most old people can generally be counted on to maintain a clean, attractive home.
6. People grow wiser with the coming of old age.
7. Old people have too little power in business and politics.
8. Most old people are very relaxing to be with.
9. One of the most interesting qualities of old people is their accounts of their past experiences.
10. Most old people respect others' privacy and give advice only when asked.
11. When you think about it, old people have the same faults as anybody else.
12. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.
13. It is evident that most old people are very different from one another.
14. Most old people seem to be quite clean and neat in their personal appearance.
15. Most old people are cheerful, agreeable, and good humored.
16. One seldom hears old people complaining about the behavior of the younger generation.
17. Most old people need no more love and reassurance than anyone else.

The third section consists of self-reported information about the respondent used for this study were ; age, major area of study, courses in Gerontology, personal experience

with the aged, school classification, parental education. The range of the ages of the respondents were from age 19 to age 61. Age was represented in survey question 60 and recoded to represent group 1= 19 to 25 years of age, group 2= 26 to 31 years of age, and group 3= above age 31 years. Major area of study was represented by 1= Gerontology major, and 2= Non-Gerontology major. Personal experience with the aged were represented by survey questions; 64, 67, 68. Courses in Gerontology were represented by question 62. School classification was represented by survey question 71. Parental education was represented by survey questions 73 and 74.

Survey researchers often find that a given dependent variable is affected simultaneously by several independent variables. Multiple regression analysis provides a means of analyzing this situation in testing the weight of the intervening variables and was used in analyzing the three intervening variables associated with hypothesis number nine; experience, interaction, and outcome (Babbie, 1990).

Instrument

The instrument chosen for use in this study is a self-reporting questionnaire. The questionnaire is divided into three sections; the first section is "The Facts on Aging Quiz" created by Erdman B. Palmore, the second section consists of a series of questions that relate to our biases concerning aging and the aged, the third section requests

self-reporting SES information.

Section I consists of twenty-five statements in which the respondent is asked to evaluate and respond to each statement with either a "T" for True or "F" for False. The instrument was developed by Dr. Erdman B. Palmore in 1975 in order to stimulate class discussions at Duke University Medical Center and to cover the basic physical, mental, and social facts and the most common misconceptions about aging. "The Facts on Aging Quiz" has been used in well over 100 documented research studies since it's first publication appeared in The Gerontologist in 1977. According to the permissions editor at The Gerontologist, more requests have been made for the reprint of "The Facts on Aging Quiz" than any other article. There has even been a video-tape series produced on the "Quiz" (Courtenay & Suhart 1980). It still remains today the only published tests of knowledge about aging that are both short and extensively documented. Palmore selected twenty-five known users of the "Facts on Aging Quiz," to compile a generalization of the findings (Palmore, 1988).

The groups to whom the quiz was administered varied in size and educational background. Size of the groups ranged from 10 to 15 persons to larger groups of 250 to 300. The most frequent application was to groups in sizes of 50 to 100 participants. Groups were most often made up of undergraduate students (15), followed next by nurses, agency

staff personnel, and the general public (6 groups).

The mean scores on the quiz achieved by the various groups ranged from a high of 66%, attained by nurses, to a low score of 54% attained by the high-school students. The mean score of all undergraduate groups is 56%, which is lower than several other groups, including general public groups, which had a mean score of 61%. A college faculty group of home economics department members scored 62%, while a group of high-school faculty scored 61%. Overall, the reported means scores from the various applications were not impressive, when one takes in consideration that a 50% score can be attributed to chance factors alone.

Some of the major findings of the studies using the "Facts on Aging Quiz," were:

1. The average person with a high-school education has almost as many misconceptions as correct items of information about aging.

2. The average person with some college education has misconceptions on about one-third of the items.

3. The average person with at least a college-level course in gerontology gets over 80% of the items correct.

4. The most frequent misconceptions, with a majority of respondents not knowing the correct answer, include three psychological items numbers; 11, 16, and 24; and four socioeconomic items; 7, 19 21 and 23.

5. The average person tends to have more anti-aged bias

than pro-aged bias.

6. Bias toward the aged is associated with lack of knowledge about the aged.

7. The quiz can measure learning about aging.

8. Both knowledge levels and the most frequent misconceptions tend to be similar in all the countries studied.

9. Knowledge level tend to be similar in all age, sex, and racial groups. The only variables consistently related to knowledge levels are education and attitudes toward the aged.

10. Intergroup and test-retest reliability on the quiz is relatively high.

In contrast to the extensive use of Palmore's "Facts on Aging Quiz," statistical analysis is confined to the calculations of a mean score. Palmore's direction was in establishing a mean for comparison of different groups and their knowledge of the aged and the aging process, which is well noted throughout his documentation of findings (Palmore, 1988).

The most statistically documented use of this instrument was conducted by Carmel, ET AL, in 1992. This study evaluated short and long term effects of courses in gerontology and geriatrics on changes in knowledge, attitudes, and work preferences among medical, nursing, and social work students in Israel. The comparisons among group

scores were tested by t-test and by Duncan's multiple range test. Pearson Correlation Coefficients were calculated to assess relationships among scores on knowledge, attitudes, and work preferences within each of the studied groups. The results showed that nursing and social work students increased their knowledge measured by Palmore's "Facts on Aging Quiz." No significant changes were found in the level of knowledge of medical students and in the attitudes and work preferences of any of the studied groups. No correlation was found among knowledge, attitudes, and work preferences within each of the three groups, which implies that increases in knowledge about the elderly does not necessarily lead to changes in negative attitudes and work preferences. Gerontology course(s) did have a positive effect among nursing students in the short run (t test = $p \leq .05$) and among social work students in the long run (Duncan's multiple range test = $p \leq .05$).

This instrument was used to measure and compare levels of knowledge and most frequent misconceptions in different groups. Such comparisons are useful in aiding the development of understanding of the causes of ignorance and prejudice toward the aged. These comparisons can also be helpful in determining which groups are most in need of information to correct their misconceptions about the aged and the aging process (Palmore, 1988).

Palmore gives account for each question with the following documentation (with some updated current literature and findings to add further support):

Question number one is "false." The majority of people aged 65 and over are not senile; that is, they do not have defective memory, nor are they disoriented or demented. Only an estimated 2% of persons aged 65 or over are institutionalized with a primary diagnosis of psychiatric illness (George, 1984). Community studies of psychopathology among the aged agree that less than 10% have significant or severe mental illness and another 10% to 32% have mild to moderate mental impairment; but the majority are without impairment (Blazer, 1980).

Question number two is "true." All five senses do tend to decline in old age. Most studies of taste and smell show that the taste and odor sensitivity decreases with age. Some of these decreases may be the result of other factors, such as disease, drugs, and smoking (Schiffman, 1987). Nearly all studies of touch, hearing, and vision agree that these specific senses tend to decline in old age (Birren, 1977; Corso, 1987; Hoyer, 1987).

Question number three is "false." The majority of persons past age 65 continue to have both interest in and capacity for sexual relations. It was found by Masters and Johnson (1966) that the capacity for satisfying sexual relations usually continues into the decades of the

seventies and eighties for healthy couples. The Duke Longitudinal Studies (Palmore, 1981) found that sex continues to play a very important role in the lives of the majority of men and women through their seventies. Starr and Weiner (1981) found that most aged individuals indicated that sex after 60 was as satisfying or even more satisfying than when they were younger.

Question number four is "true." Research indicates that lung vital capacity tends to decline about 3 or 4 deciliters per decade, regardless of whether measured longitudinally or cross-sectionally (Kannel, 1982). This decline is even greater for those who smoke.

Question number five is "false." The majority of old people do not feel miserable most of the time. Studies of happiness, morale, and life satisfaction either find no significant difference by age group or find about one-fifth to one-third of the aged score "low" on various happiness or morale scales (Larson, 1978; Palmore, 1981). One study found that only one-fourth of persons aged 65 or older reporting that "This is the dreariest time of my life," while about half said "I am just as happy as when I was younger," and one-third said "These are the best years of my life" (Harris, 1981).

Question number six is "true." Physical strength does tend to decline in old age. Physiological, biochemical, anatomic, and histocytological measurements of muscle all

exhibit decreased levels with age from about thirty years of age on. About one-third of the muscle mass is lost by age 80 (Tonna, 1987).

Question number seven is "false." Only 5% of persons aged 65 or over are residents of any long-stay institution at any one time (E. Kahana, 1987). Only 9% of those aged 75 and over are residents of institutions. However, about 25% to 30% of the elderly spend time in a nursing home at some point in their lifetimes.

Question number eight is "true." Drivers aged 65 and over have fewer accident per drive than drivers under age 65. Older drivers have about the same accident rates per 100 as those drivers in middle-age. They have a much lower rate than drivers under age 30 (National Safety Council 1981). It has been found that older drivers tend to drive less miles per year and apparently compensate for declines in perception, as well as reaction speed by driving more carefully (Hogue, 1980).

Question number nine is "false." The majority of older workers can work as effectively as younger workers. Despite declines in perception and reaction speed under laboratory conditions among the general aged population, studies of employed older persons under actual working conditions generally show that they perform as well as, if not better than younger workers on most measures (Krauss, 1987; Riley, 1968). When speed and accuracy of movement are important to

the job, some studies indicate decline with age (Rhodes, 1983). It has been found that intellectual performance, on which much of work performance depends, does not show decline until the seventies in most individuals and even later in others (Labouvie-Vief, 1985). The consistency of output tends to increase with age, and older workers have less job turnover, fewer accidents, and less absenteeism than do younger workers (Riley, 1968).

Question number ten is "true." About 78% of the aged are healthy enough to engage in their normal activities. About 5% of those 65 years of age and over are institutionalized and another 17% among the non-institutionalized say they are unable to engage in their major activity (such as work or housework) due to chronic conditions (National Center for Health Statistics, 1981). About 81% of the non-institutionalized elderly have no limitation in their activities of daily living; eating, bathing, dressing, toileting, and so forth (Soldo, 1983).

Question number eleven is "false." The majority of older persons are able to adapt to change. It is obvious and clear that most older persons do adapt and change to the many changes that occur in old age, such as retirement, children leaving home, widowhood, moving to new homes, and serious illness. The political and social attitudes of the aged also tend to shift with the rest of society with approximately the same rate of change (Cutler, 1987).

Question number twelve is "true." Older people do tend to take longer to learn something new, compared with their own performances when they were younger or with performances of a younger cohort (Poon, 1987). However age may not be the only variable of explanation; illness, motivation, learning style, lack of practice needs to also be considered. When these other variables are taken into account, chronological age does not provide a significant amount of influence on learning ability.

Question number thirteen is "false." It is not impossible for the average old person to learn new things. Studies show that most older people can eventually learn new things about as well as younger persons, if given enough time and repetitions of the material to be learned (Poon, 1987).

Question number fourteen is "true." The reaction time of most older persons tends to be slower than that of younger people. This appears to be true regardless of the kind of reaction that is measured (krauss, 1987). However, the increased reaction time in the usual experiment is only a small fraction of a second, which does not prevent adequate performance in most ordinary activities.

Question number fifteen is "false." Old people, like any other group of people in society are not pretty much alike. There is at least as much variation among older people as there is at any age; there are the rich and poor,

happy and sad, healthy and ill, and those of high and low intelligence. In fact, some evidence indicates that as people age they tend to become less alike and more heterogeneous on many dimensions (Maddox, 1974).

Question number sixteen is "true." The majority of old people do say they are seldom bored. Only 21% say that "Most of the things I do are boring or monotonous" (Harris, 1981), and only 17% say that "not enough to do to keep busy" is a problem for them (Harris, 1975). The Duke Second Longitudinal Study of Aging (Palmore, 1981) indicated that 87% said that they had not been bored in the past week.

Question number seventeen is "false." The majority of old people are not socially isolated. According to the U.S. Bureau of Census, (1983) about two-third live with their spouse or family. Only about 4% of the elderly are extremely isolated and most of these have had lifelong histories of withdrawal (Kahana, 1987). It has been found that most elders have close relatives within easy visiting distance, and contacts between them are relatively frequent (Binstock, 1976).

Question number eighteen is "true." Older worker do tend to have fewer accidents than do younger worker (Root, 1981), it may be because they tend to avoid dangerous situations and hazardous jobs (Krauss, 1987). A study of manufacturing workers found that those aged 65 years old and over had about one-half the rate of non-disabling injuries

as those under 65 years of age, and also substantially lower rates of disabling injuries (Kossoris, 1948).

Question number nineteen is "false." The number of persons 65 years of age and over doubled between 1960 and 1990, going from 16.7 million to 31.2 million or from 9.2 to 12.6 percent of the population (Aday, 1993). The number is expected to increase to nearly forty million or 14 percent by the year 2010 (Aday, 1993), and may reach 21% by the year 2030 (U.S. Bureau of the Census, 1984).

Question number twenty is "true." The majority of medical practitioners do tend to give low priority to the aged. All studies of attitudes toward the aged among medical and human service professionals agree that they tend to believe the negative stereotypes about the aged and prefer to work with younger adults or children rather than to work with the aged (Quinn, 1987). There are few that specialize in geriatrics and the interest in specializing in this area is low. The aged are labeled resistant to treatment, rigid in outlook, senile, unreliable, and unable to learn new things or to change their ways.

Question number twenty-one is "false." The majority of persons aged 65 and older have incomes well above the poverty level. In 1984 only 12.4% had incomes below the official poverty level. This was a lower poverty rate than for persons under 65 years of age. The near poor are included, the total in or near poverty was only 29% (U.S.

Senate Special Committee on Aging, 1986).

Question number twenty-two is "true." Over three-fourths of old people are working or would like to have some kind of work to do (this includes housework and volunteer work). About 7% of persons 65 years of age and older are employed, 21% are retired, but say they would like to be employed, 17% work as homemakers, 19% are not employed but do volunteer work, and another 9% are not employed or doing volunteer work but would like to do volunteer work (Harris, 1975, 1981).

Question number twenty-three is "false." Older people do not tend to become more religious as they age. While it is true that the present generation of older persons tends to be more religious than the younger generations, this appears to be a generational difference due to the older persons' more religious upbringing, rather than an effect of aging. Basically, members of the present older generation have been more religious all their lives, rather than becoming more religious as they aged (Blazer, 1976; Markides, 1987).

Question number twenty-four is "true." The majority of old people do say they are seldom irritated or angry. The Duke Second Longitudinal Study (Palmore, 1981) found that 90% of persons aged 65 or older said that they were never angry during the past week. About three-fourth of the aged in the Kansas City Study said they were never or hardly ever

angry (Deal, 1962).

Question number twenty-five is "false." The health and economic status of old people (compared to younger people) in the year 2000 is expected to improve. Measure of health, income, occupation, and education among older people are all rising in comparison to those of younger people. The gaps between older and younger people on these dimensions will probably be substantially less (Palmore, 1976, 1986). This reduction in gaps is due to the many improvements in health, income, occupation, and education among the younger cohorts moving into the 65 and older age category.

Section II Consists of 17 positive and negative statements concerning the aged. This scale, "Old People Scale" (OP) was designed by Kogan in 1961 to measure attitudes toward old people with respect to norms and individual differences. Items are concerned with such things as the residential aspect of old people's lives, vague feelings of discomfort and tension in the presence of old people, qualities of old people, and interpersonal relationship across age generations. The set of items expressing negative sentiments about old people was constructed, and then the set of positive items was formulated in such a way that the content was the reverse of the negative ones.

Kogan administered this scale to introductory psychology students from Northeastern University (two male

samples, $N_s = 128$ and 186) and Boston University ($N = 168$, 87 males and 81 females). Kogan reports a "high degree of consistency among the sample means." A test for the statistical significance of these overall means differences yields t 's significant beyond the .01 level for each of the samples. The variable of sex showed no significant differences in this particular study. Reliability coefficients and interscale correlations range from .66 to .85. Kogan reports "a greater reliability for the OP- as opposed to the OP+ scale, but falls short of an acceptable reliability level."

Product-moment coefficients between positively and negatively worded scales are uniformly positive. The r 's between OP+ and OP- range from .46 to .52 in the three samples, all significant beyond the .01 level. "Given correlations that can theoretically range from +1.00 (perfect logical consistency) to -1.00 (perfect logical inconsistency), content must necessarily be a more powerful influence than response set for the OP items of the present battery" (Kogan, 1961). This scale was found to "have reasonably good content validity" (Shaw, 1967).

Reliability Analysis (ALPHA) was conducted for both the knowledge scale and attitude scales. The knowledge scale was found to have a moderately strong reliability with Alpha at .5500. The attitude scales were tested separately, positive and negative, as well a total combined scale of

positive and negative statements. The positive attitude scale was found to have a moderately strong reliability with Alpha at .8456. The negative attitude scales not recoded was found to have a strong reliability with Alpha at .8889. The total combined scale of positive and negative statements were found to have a very strong reliability with Alpha at .9201. The negative attitude scale with the items recoded to reverse the scores was found to have a strong reliability with Alpha at .8508. The total overall attitude scale based on the positive and reversed negative scores reflect a strong reliability in a negative direction with Alpha at -.81. The reliability of the attitude scale was found to have a strong reliability.

Section III contains several items pertaining to the individual respondent's background. There are fifteen items in this section that requires the respondent to complete. Item number 1 asks the respondent's "age." Item number 2 asks the respondent "Is your major area of study gerontology (aging)?" Item number 3 asks the respondent "How many courses in Aging have you completed?" Item number 4 asks the respondent to "check any and all courses from a list of courses in Aging which they have completed." A space is provided for the student to add any possible "Aging" courses that the student may have completed that does not appear on the list. Item number 5 asks the respondent to indicate as to whether or not "In your experience have you known aged

individuals personally"? Item number 6 asks respondent to "estimate how many 'aged individuals' they have had a personal relationship with." Item number 7 asks respondent to "identify as to whether or not the 'aged individuals' were or were not relatives." Item 8 asks respondent "how often have you interacted on a personal level with 'aged' individuals; very often, often, occasionally, not often, never." Item number 9 asks respondent to "indicate the overall outcome of their experience with the aged individual/individuals: very negative experience(s), negative experience(s), somewhat negative experience(s), somewhat positive experience(s), positive experience(s), very positive experience(s)." Item number 10 asks respondent to "indicate current residence; on campus, off campus." Item number 11 asks respondent to "identify gender; female/male." Item number 12 asks respondent to "identify classification; freshman, sophomore, junior, senior, graduate student." Item number 13 asks respondent to identify "Ethnicity/Race: Black, White, Hispanic, Asian, Native American, Other." Item number 14 asks respondent to identify the "Years of mother's schooling: less than high school, high school, some college, college degree, advanced/professional degree." Item number 15 asks respondent to identify the "Years of father's schooling: less than high school, high school, some college, college degree, advanced/professional degree."

Summary

This chapter contains the sample, techniques of data collection, research design, and techniques of data analysis. This chapter also contains a detailed description of the instrument.

CHAPTER V

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Introduction

This chapter contains a discussion of the data analysis procedures and tests of hypotheses. Each hypothesis is individually examined and a discussion of the findings will be presented. The failure to reject or failure to accept each hypothesis will be qualified.

Description of Sample

The sampling procedure produced a total sample size of 254. Table 2 provides an overview of frequency distributions and valid percentages according to each Variable. The discussion that follows are based on the findings demonstrated in Table 1. The sample is broken down by sex (see Table 2). The sample findings indicate that 115 or 45.3 percent of the sample are male students and 137 or 53.9 percent of the sample are female.

The age distribution of the respondents in this sample range from age 19 to age 61, with a mean of 25.4498, the median age was found to be 23.000, with a standard deviation of 6.6677. The number of valid cases were 249.0 with 5.0 missing cases (2 percent).

The respondent's school classification was categorized as; freshman, sophomore, junior, senior, and graduate

student (see Table 2). The findings indicate that 2 (.8 percent) of the respondents were freshman, 4 (1.6 percent) of the respondents were sophomore, 55 (21.7 percent) of the respondents were juniors, 172 (67.7 percent) of the respondents were seniors, and 17 (6.7 percent) of the respondents were graduate students. There are 4 (1.6 percent) missing cases.

The sample is broken down by division of major areas of study. The findings indicate that 10 (3.9 percent) of the sample are gerontology or "Aging" majors. This sample represents 10 percent of the aging majors at this university. The sample findings indicate that 241 (94.9 percent) of this sample are not gerontology or Aging majors. There are 3 (1.2 percent) missing cases.

The sample is broken down by the number of courses in "Aging" the student has completed, ranging from 0 to 9. The majority (136) of the students responded to this question (53.5 percent of the sample population) reported having completed no courses in aging. Twenty-one (8.3 percent) students report completing one course in aging. Eight (3.1 percent) students report completing 2 courses in aging. Two (.8 percent) students report completing 4 courses in aging. One (.4 percent) student reports completing 5 courses in aging. Three (1.2 percent) students report completing 6 courses in aging. One (.4 percent) student reports completing 7 courses in aging. One (.4 percent) student

reports completing 9 courses in aging.

Respondents that reported having personal experience with aged individuals resulted in the majority (245, 96.5 percent) indicated that in their personal experience they had known aged individuals. Seven (2.8 percent) students reported that they had not known aged individuals personally; 81 (31.9 percent) of the students did not respond to this question. Respondents were asked to estimate the number of aged individuals with whom they have had a personal relationship with. Three (1.2 percent) respondents reported having no personal relationship with aged individuals. Ninety-two (36.3 percent) respondents reported having had a personal relationship with 1-5 aged individuals. Eighty-seven (34.4 percent) of respondents reported having had a personal relationship with 6-15 aged individuals. Seventy-two (28.4 percent) respondents reported having had a personal relationship with 16 to 99 aged individuals. There are 22 missing cases.

The frequency of interaction on a personal level with aged individuals ranged from very often to never. Forty-seven (18.5 percent) respondents report interacting on a personal level with aged individuals very often. Ninety-nine (39.0 percent) respondents report interacting often on a personal level with aged individuals. Eighty-three (32.7 percent) respondents report interacting occasionally on a personal level with aged individuals. Twenty-two (8.7

percent) respondents report interacting not often on a personal level with aged individuals. No persons responded as never interacting with aged individuals. There are 3 (1.2 percent) missing cases.

The respondents reported the relationship(s) with aged individual(s) as being relatives, not relatives or both. One hundred and forty-one (55.1 percent) respondents report their relationship(s) with aged individual(s) were familial/ relative(s). Thirty-two (12.5 percent) respondents reported their relationship(s) with aged individual(s) as not being familial/relatives. Seventy-three (28.5 percent) respondents report their relationship(s) with aged individuals consisted of both familial/relatives and non-familial/relative. There are 10 (3.9 percent) missing cases.

The overall outcome of the respondent's experience with the aged individual(s) range from very negative to very positive. One (.4 percent) respondent reports their experience(s) to be very negative. One (.4 percent) respondent reports their experience(s) to be negative. Five (2.0 percent) respondents reports their experience(s) to be somewhat negative. Forty-five (17.9 percent) respondents reports their experience(s) to be somewhat positive. One-hundred and twenty-three (48.4 percent) respondents reports their experience(s) to be positive. Seventy-six (29.9 percent) respondents reports their experience(s) to be very

positive. Three (1.2 percent) persons did not respond to this question.

The respondent's mother's educational level ranges from less than high school to advanced/professional degree. Thirteen (5.1 percent) respondents report their mother's education level to be less than high school. Sixty-eight (26.8 percent) respondents report their mother's education level to be high school. Eighty-eight (34.6 percent) respondents report their mother's educational achievement level to include some college. Forty-nine (19.3 percent) respondents report their mother's educational achievement level to have college degrees. Twenty-seven (10.6 percent) respondents report their mother's educational achievement level to be advanced/professional degree obtained. Nine persons (3.5 percent) did not respond to this question.

Respondents father's educational level ranges from less than high school to advanced/professional degree. Fourteen (5.5 percent) respondents report their father's educational level to be less than high school. Fifty-eight (22.8 percent) respondents report their father's educational level to be high school. Sixty-three (24.8 percent) respondents report their father's educational level to include some college. Seventy-seven (30.3 percent) respondents report their father's educational level to have college degrees. Thirty-two (12.6 percent) respondents report their father's educational level to have advanced/professional degrees.

Ten individuals (3.9 percent) did not respond to this question.

Table 2
Frequencies of Data

Variable	Frequency (N)	Valid Percentage
Gender		
Male	115	45.3
Female	137	53.9
Missing Cases	2	.8
Total	254	100
Age		
19	4	1.6
20	20	8.0
21	35	14.1
22	43	17.3
23	33	13.3
24	21	8.4
25	19	7.6
26	14	5.6
27	10	4.0
28	4	1.6
29	8	3.2
30	3	1.2
31	2	.8
32-44	25	10.0
45-61	8	3.2
Missing Cases	5	
Total	254	100.0
School Classification		
Freshman	2	.8
Sophomore	4	1.6
Junior	55	21.7
Senior	172	67.7
Graduate	17	6.7
Missing Cases	4	1.6
Total	254	100

Educational Majors		
Gerontology Majors	10	3.9
Non-Gerontology Majors	241	94.9
Missing Cases	<u>3</u>	<u>1.2</u>
Total	254	100

Variable	Frequency (N)	Valid Percent
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Courses in Aging		
0	136	53.5
1	21	8.3
2	8	3.1
4	2	.8
5	1	.4
6	3	1.2
7	1	.4
9	1	.4
Missing Cases	<u>81</u>	<u>31.9</u>
Total	254	100

Personal Experience with Aged		
Yes	245	96.5
No	7	2.8
Missing Cases	<u>2</u>	<u>.8</u>
Total	254	100

Number of Aged Individuals by Personal Relationships		
0	3	1.3
1-5	92	36.3
6-15	87	34.4
16-99	72	28.4
Missing Cases	<u>22</u>	<u>8.7</u>
Total	254	100

Frequency of Interaction		
Very Often	47	18.5
Often	99	39.0
Occasionally	83	32.7
Not Often	22	8.7
Never	0	0
Missing Cases	<u>3</u>	<u>1.2</u>
Total	254	100

Familial/Non-Familial Relationship		
Familial	141	55.1
Non-Familial	32	12.5
Both Familial/ Non-Familial	73	29.7
Missing Cases	<u>10</u>	<u>3.9</u>
Total	256	100
Overall Outcome of Experience		
Very Negative	1	.4
Negative	1	.4
Somewhat Negative	5	2.0
Somewhat Positive	45	17.7
Positive	123	48.4
Very Positive	76	29.9
Missing Cases	<u>3</u>	<u>1.2</u>
Total	254	100.0

Variable					
<hr/>					
Parental Education	Freq. Valid		Freq. Valid		
	(N)	Percent	(N)	Percent	
	Father		Mother		
Less than High School	14	5.5	13	5.1	
High School	58	22.8	68	26.8	
Some College	63	24.8	88	34.6	
College Degree	77	30.3	49	19.3	
Advanced/Professional Degree	32	12.6	27	10.6	
Missing Cases	<u>10</u>	<u>3.9</u>	<u>9</u>	<u>3.5</u>	
Total	254	100	254	100	

Hypotheses

Hypothesis one states that, the younger the respondent, the more negative the response toward older individuals. The overall findings of the study support this hypothesis.

An analysis of variance (ANOVA) was conducted to determine the effect of age and negative attitude between

groups and within groups. One-hundred and sixty-seven respondents fell into the age range of 19 years of age to 25 years of age, with a mean score of 1.7006, indicating a positive attitude toward the aged. Forty respondents fell into the age range of 26 years of age to 31 years of age, with a mean score of 1.7750, indicating a positive attitude toward the aged. Thirty-two respondents fell into the age range of 32 years of age to 61 years of age, with a mean score of 1.5000, indicating a positive attitude toward the aged. Respondents at the higher range of age indicated a more positive attitude than did respondents at the lesser age ranges. This resulted in an F-ratio of 3.31 and F-probability of .038. This is significant at the $p \leq .05$ level (see Table 3). Examination of the results of the ANOVA confirms that younger persons have more negative than positive attitudes toward the aged.

Table 3

One-Way Analysis of Variance
Age and Negative Attitudes

	df	Sum of Squares	Mean Squares	F-Ratio	F Probability
Between Groups	2	1.4595	.7297	3.31116	.0382
Within Groups	236	52.0049	.2204		
Total	238	53.4644			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct	Conf Int	for Mean
Grp 1	167	1.7006	.4723	.0365	1.6284	TO	1.7728
Grp 2	40	1.7750	.4229	.0669	1.6397	TO	1.9103
Grp 3	32	1.5000	.5080	.0898	1.3168	TO	1.6832
Total	239	1.6862	.4740	.0307	1.6258	TO	1.7466

Hypothesis two states that, that the more knowledge a respondent has about the aging process, the less likely the respondent is to respond in a negative manner to the aged. A one-way analysis of variance was conducted to determine effect of knowledge between groups and within groups based on negative attitudes. The overall findings from this study support this hypothesis.

An analysis of variance was conducted to determine the significance of knowledge and negative attitude between groups and within groups. Group one consisted of forty-two respondents with scores between 32 and 52 on the facts on aging test, had a mean score of 1.8333, indicating a negative attitude toward the aged. Group two consisted of sixty-four respondents with scores between 56 and 60 on the facts on aging test, with a mean score of 1.7031, indicating a more positive attitude toward aged individuals than group one. Group three consisted of ninety-two respondents with scores between 64 and 72 on the facts on aging test, with a mean score of 1.6957, indicating a more positive attitude toward the aged than group two. Group four consisted of

forty-five respondents with scores between 76 and 100 on the facts on aging test, with a mean score of 1.5333, indicating a more positive attitude toward the aged than any of the previous groups mentioned. This resulted in an F-ratio of 2.9294 and F-probability of .0343. This is significant at the $p \leq .05$ level (see Table 4). Examination of the results of the ANOVA confirms that the more knowledge an respondent has about the aging process, the less likely the respondent is to respond in a negative manner toward the aged.

Table 4

One-Way Analysis of Variance
Knowledge and Negative Attitudes

		df	Sum of Squares	Mean Squares	F-Ratio	F Probability
Between Groups		3	1.9809	.6603	2.9294	.0343
Within Groups		239	53.8710	.2254		
Total		242	55.8519			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int for Mean
Grp 1	42	1.8333	.4371	.0674	1.6971 TO 1.9695
Grp 2	64	1.7031	.4605	.0576	1.5881 TO 1.8182
Grp 3	92	1.6957	.4858	.0507	1.5950 TO 1.6849
Grp 4	45	1.5333	.5045	.0752	1.3818 TO 1.6849
Total	243	1.6914	.4804	.0308	1.6307 TO 1.7521

Hypothesis three states that, the higher the level of reported educational achievement of respondents' mother, the less likely to respond in a negative manner toward the aged. A one-way analysis of variance (ANOVA) was conducted to

determine effect of mother's education between groups based on negative attitudes. The overall findings of this study led to the rejection of this hypothesis.

An analysis of variance was conducted to determine the significance of mother's education and negative attitude between groups and within groups. Thirteen respondents report their mother's education level to be less than high school, with a mean score of 1.6923, indicating a positive attitude. Sixty-five respondents report their mother's education level to be completion of high school, with a mean score of 1.6769, indicating a positive attitude toward the aged. Eighty-six respondents report their mother's education level to include some college, with a mean score of 1.6628, indicating a positive attitude toward the aged. Forty-six respondents report their mother's education level to have a college degree, with a mean score of 1.7826, indicating a positive attitude toward the aged. Twenty-five respondents report their mother's education to have an advanced/professional degree, with a mean score of 1.6400, indicating a positive attitude toward the aged. This resulted in an F-ratio of .5684 and F-probability of .6858. This is not significant at the $p \leq .05$ level (see Table 5).

Analysis of Variance of mother's level of education and respondents negative attitude indicates that there is no significance between the groups or within the groups. Therefore it is concluded that mother's level of education

is not significant in determining respondents attitude toward the aged.

Table 5
One-Way Analysis of Variance of
Mother's Education and Negative Attitudes

	df	Sum of Squares	Mean Squares	F-Ratio	F Probability
Between Groups	4	.5318	.13229	.5684	.6858
Within Groups	230	53.7916	.2339		
Total	234	54.3234			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct	Conf Int	for Mean
Grp 1	13	1.6923	.4804	.1332	1.4020	TO	1.9826
Grp 2	65	1.6769	.4713	.0585	1.5601	TO	1.7937
Grp 3	86	1.6628	.4997	.0539	1.5557	TO	1.7699
Grp 4	46	1.7826	.4673	.0689	1.6438	TO	1.9214
Grp 5	25	1.6400	.4899	.0980	1.4378	TO	1.8422
Total	235	1.6894	.4818	.0314	1.6274	TO	1.7513

Hypothesis four states that, the higher the level of education of the respondents' father, the less likely to respond in a negative manner toward the aged. A one-way analysis of variance (ANOVA) was conducted to determine interaction of father's education between groups based on negative attitudes. The overall findings of this study led to the rejection of this hypothesis.

An Analysis of Variance was conducted to determine the significance of father's education and negative attitude between groups and within groups. Thirteen respondents report their father's education level to be less than high

school, with a mean score of 1.6923, indicating a positive attitude toward the aged. Fifty-seven respondents report their father's education level to be a high school graduate, with a mean score of 1.7193, indicating a positive attitude. Sixty-two respondents report their father's education level to include some college, with a mean score of 1.5806, indicating a positive attitude toward the aged. Seventy-five respondents report their father's education level to be a college graduate, with a mean score of 1.6933, indicating a positive attitude toward the aged. Twenty-eight respondents report their father's education level to be advanced/professional degree, with a mean score of 1.8571, indicating a positive attitude toward the aged. This resulted in an F-ratio of 1.7 and F-probability of .1475. This is not significant at the $p \leq .05$ level (see Table 6). The Analysis of Variance of father's education and respondents negative attitude indicates that there is no significance between the groups or within the groups. Therefore it is concluded that father's level of education is not significant in determining respondents attitude toward the aged.

Table 6
One-Way Analysis of Variance
of Father's Education and Negative Attitudes

	df	Sum of Squares	Mean Squares	F- Ratio	F Probability
Between Groups	4	1.5734	.3933	1.7151	.1475
Within Groups	230	52.7500	.2293		
Total	234	54.3234			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	13	1.6923	.4804	.1332	1.4020	TO 1.9826
Grp 2	57	1.7193	.4533	.0600	1.5990	TO 1.8396
Grp 3	62	1.5806	.5294	.0672	1.4462	TO 1.7151
Grp 4	75	1.6933	.4925	.0569	1.5800	TO 1.8066
Grp 5	28	1.8571	.3563	.0673	1.7190	TO 1.9953
Total	235	1.6894	.4818	.0314	1.6274	TO 1.7513

Hypothesis five states that, the higher the level of reported educational achievement of respondent, the less likely it was for the respondent to have negative attitudes directed toward the aged. A One-way Analysis of Variance was conducted to determine interaction of education between groups based on negative attitudes. The overall findings of this study led to the rejection of this hypothesis.

An Analysis of Variance was conducted to determine the effect of education and negative attitude between groups and within groups. Two respondents report their educational level to be freshman, with a mean score of 2.000, indicating a negative attitude toward the aged. Four individuals report their educational level to be sophomore, with a mean score of 1.7500, indicating a positive attitude toward the

aged. Fifty-four respondents report their educational level to be junior, with a mean score of 1.7593, indicating a positive attitude toward the aged. One-hundred and sixty-four respondents report their educational level to be senior, with a mean score of 1.6951, indicating a positive attitude toward the aged. Sixteen respondents report their educational level to be graduate, with a mean score of 1.3750, indicating a positive attitude toward the aged. This resulted in an F-ratio of 2.27 and F-probability of .0620. This is not significant at the $p \leq .05$ level (see Table 7).

The Analysis of Variance of education and negative attitude indicates that there is no significance between the groups of within the groups at $p \leq .005$ level. The ANOVA indicates a possible significance at the $p \leq .006$ level. Therefore if the probability had been set at $p \leq .10$ this hypothesis would be confirmed. However, in keeping within the standard $p \leq .05$ it can be concluded that the educational level of the respondent is not significant in determining respondents attitude toward the aged.

Table 7
One-Way Analysis of Variance
Education and Negative Attitudes

	df	Sum of Squares	Mean Squares	F-Ratio	F	Probability
Between Groups	4	2.0569	.5142	2.2746		.0620
Within Groups	235	53.1265	.2261			
Total	239	55.1833				

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	2	2.0000	.0000	.0000	2.0000	TO 2.0000
Grp 2	4	1.7500	.5000	.2500	.9544	TO 2.5456
Grp 3	54	1.7593	.4733	.0644	1.6301	TO 1.8884
Grp 4	164	1.6951	.4749	.0371	1.6219	TO 1.7683
Grp 5	16	1.3750	.5000	.1250	1.1086	TO 1.6414
Total	240	1.6917	.4805	.0310	1.6306	TO 1.7528

Hypothesis six states that, male students will respond in a more negative manner toward older individuals than will female students. The overall findings of this study led to the rejection of this hypothesis. The findings indicate that females respond in a more negative manner toward the aged than do males.

A One-way Analysis of Variance was conducted to determine effect of sex between groups and within groups based on negative attitude. An Analysis of Variance was conducted to determine the significance of sex and negative attitude between groups and within groups. One-hundred and eight males had a mean score of 1.7778, indicating a positive attitude toward the aged. One-hundred and thirty-four female respondents had a mean score of 1.6269,

indicating a positive attitude toward the aged. This resulted in an F-ratio of 6.0 and F-probability of .0146. This is significant at the $p \leq .05$ level (see Table 8). Males responses range from 1 to 2, female responses range from 1 to 3, indicating that females in this sample had more negative attitudes toward the aged than did the male students.

These analysis indicate that sex of respondent is significant. However, there are mixed results when comparing males and females. It appears that females are more negative toward the aged than males. Thus the hypothesis that male students will respond in a more negative manner toward older individuals than will female students is rejected.

Table 8

One-Way Analysis of Variance
Sex and Negative Attitudes

		df	Sum of Squares	Mean Squares	F-Ratio	F Probability
Between Groups		1	1.3620	1.3620	6.0520	.0146
Within Groups		240	54.0100	.2250		
Total		241	55.3719			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	108	1.7778	.4177	.0402	1.6981 TO	1.8575
Grp 2	134	1.6269	.5155	.0445	1.5388 TO	1.7149
Total	242	1.6942	.4793	.0308	1.6335 TO	1.7549

Table 8 cont.

GROUP	MINIMUM	MAXIMUM
Grp 1	1.0000	2.0000
Grp 2	1.0000	3.0000
TOTAL	1.0000	3.0000

Hypothesis seven states that, those students that self-report their educational major as being Gerontology "Aging" would respond in a less negative manner toward the aged. A One-way Analysis of Variance was conducted to determine effect of major between groups and within groups based on negative attitude. The overall findings of this study support this hypothesis.

An Analysis of Variance was conducted to determine the significance of major and negative attitude between groups and within groups. Ten respondents report their educational major as being Gerontology, with a mean score of 1.4000, indicating a positive attitude toward the aged. Two-hundred and thirty respondents report that Gerontology is not their educational major, with a mean score of 1.6957, indicating a positive attitude toward the aged. This resulted in an F-ratio of 3.75 and F-probability of .053. This is significant at the $p \leq .05$ level (see Table 9).

Examination of the ANOVA confirms that those students that report their major as being Gerontology ("Aging") responded in a less negative manner toward the aged than

students that report Gerontology as not being their major area of study. Thus the major concentration of study in Gerontology is significant in determining respondents attitude toward the aged.

Table 9

One-Way Analysis of Variance
Major and Negative Attitudes

	df	Sum of Squares	Mean Squares	F-Ratio	F	Probability
Between Groups	1	.8377	.8377	3.7549		.0538
Within Groups	238	53.0957	.2231			
Total	239	53.9333				

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 1	10	1.4000	.5164	.1633	1.0306 TO	1.7694
Grp 2	230	1.6957	.4705	.0310	1.6345 TO	1.7568
Total	240	1.6833	.4750	.0307	1.6229 TO	1.7437

Hypothesis eight states that, the more courses students take in aging, the less likely students will respond negatively to the aged. An ANOVA was conducted to determine interaction of aging courses between groups and within groups based on negative attitude. The overall findings of this study led to the rejection of this hypothesis.

An ANOVA was conducted to determine the significance of aging courses and negative attitude between groups and within groups. One-Hundred and thirty-three respondents report having no courses in aging, with a mean score of 1.6842, indicating a positive attitude toward the aged.

Twenty students report having 1 course in aging, with a mean score of 1.5000, indicating a positive attitude. Sixteen students report having 2-9 courses in aging, with a mean score of 1.7500, indicating a positive attitude toward the aged. This resulted in an F-ratio of 1.5147 and F-probability of .2229. This is not significant at the $p \leq .05$ level (see Table 10). Examination of the ANOVA leads to the rejection of the hypothesis that taking Gerontology courses is significant in the determination of attitude toward the aged.

Table 10
One-Way Analysis of Variance
of Aging Courses and Negative Attitudes

		D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.	
Between Groups	2		.7069	.3535	1.5147	.2229	
Within Groups	166		38.7368	.2334			
Total	168		39.4438				

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Grp 0	133	1.6842	.4826	.0418	1.6014 TO	1.7670
Grp 1	20	1.5000	.5130	.1147	1.2599 TO	1.7401
Grp 2	16	1.7500	.4472	.1118	1.5117 TO	1.9883
Total	169	1.6686	.4845	.0373	1.5951 TO	1.7422

Hypothesis nine states that, individuals that encounter predominantly positive experiences with the aged will respond more positive toward the aged. Three items were selected to represent the predominant experience;

experience, interaction and outcome. A combination score of the three items; experience, interaction and outcome, creates a fourth category; overall experience with aged. Multiple Regression Analysis was conducted. An ANOVA was also conducted on interaction and positive attitude, outcome and positive attitude, and experience and positive attitude. The overall findings of this study support this hypothesis.

Table 11

Multiple Regression with Positive Attitude

Variable	B	SE of Beta	95% Confidence	Beta	t-Value	t-Sig.
Outcome	.090	.04	.011	.15	2.2	.03
Interact -	.081	.03	-.15	-.14	-2.2	.03
Experience	-.16	.18	-.52	-.05	-8.69	.39
R-Square=.07		F-Ratio= 6.6		Sign. F= .0003		

The findings indicate that outcome and interaction have more affect on positive attitudes on individuals toward the aged than did experience. Outcome weights the heaviest and has the most significant impact on positive attitude toward the aged. Experience has no significance when paired with the variables; outcome and interaction. Therefore, concluding that individuals are most impacted by the overall outcome of the experience with the aged in forming attitudes.

From R-Square we conclude that in our sample we can explain 7% of the variance which indicates that there are other factors that determine our positive attitude that are

not included in this grouping of variables. The F-Ratio indicates a significance of relationships between groups and tests the hypothesis that all of the groups have the same mean in the population. The results of F-Ratio of 6.6 and Sign. F of .0003 is significant at the $p \leq .05$ level, which indicate that we must reject the hypothesis that all the means are equal. The Standardized Regression Coefficient (Beta) evaluates the net change in standard deviation, if the independent changes on standard deviation, then the dependent variable will change that same amount if correlated. The findings suggest that there is a correlation between interaction, outcome and positive attitude with Beta for outcome at .15 and interaction at -.14, and lacked a correlation with experience at -.05. The possible reason that experience was not found to be significant is the use of the term "personally" in the questionnaire, leaving the respondent to conclude their own interpretation, therefore lacking uniformity in responses. The unstandardized regressions coefficient (B) is the unexplained variance in the dependent variable that is not related to the independent variable. The findings of outcome at .09 and interaction at .08 indicates that 91% and 92% of the variance is explained. The findings of experience at -.16 indicates that 84% of the variance is explained (see Table 11).

An ANOVA was conducted to determine the significance of

interaction and positive attitude between groups and within groups. Forty-seven respondents indicate their interaction with aged individuals was very often, with a mean score of 2.8085, indicating a positive to very positive attitude toward the aged. Ninety-nine respondents indicate their interaction with aged individuals was often, with a mean score of 2.6768, indicating a positive to very positive attitude toward the aged. Eighty-three respondents indicate their interaction with aged individuals were occasional, with a mean score of 2.5542, indicating a positive attitude toward the aged. Twenty-two respondents indicate their interaction with aged individuals is not often, with a mean of 2.4545, indicating a positive attitude toward the aged. This resulted in an F-ratio of 4.2527 and F-probability of .0060. This is significant at the $p \leq .05$ level (see Table 12).

Table 12

One-Way Analysis of Variance of Interaction
and Positive Attitude

	df	Sum Squares	Mean Squares	F-Ratio	F Probability
Between Groups	3	2.8354	.9451	4.2527	.0060
Within Groups	247	54.8937	.2222		
Total	250	57.7291			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Group 1	47	2.8085	.3977	.0580	2.6917	To 2.9253
Group 2	99	2.6768	.4701	.0472	2.5830	To 2.7705
Group 3	83	2.5542	.5001	.0549	2.4450	To 2.6634
Group 4	22	2.4545	.5096	.1087	2.2286	To 2.6805
Total	251	2.6414	.4805	.0303	2.5817	To 2.7012

An ANOVA was conducted to determine the significance of outcome and positive attitude between groups and within groups. One respondent indicates their outcome of experience with aged individuals to be very negative, with a mean score of 3, indicating a very negative attitude toward the aged. One respondent indicates their outcome of experience with aged individuals to be negative, with a mean score of 2.000, indicating a positive attitude toward the aged. Five respondents indicate their outcome of experience with aged individuals to be somewhat negative, with a mean score of 2.4000, indicating a positive attitude toward the aged. Forty-five respondents indicate their outcome of experience with aged individuals to be somewhat positive, with a mean of 2.4000, indicating a positive attitude toward

the aged. One-hundred and twenty-three respondents indicate their outcome of experience with aged individuals to be positive, with a mean score of 2.6748, indicating a positive attitude toward the aged. Seventy-six respondents indicate their outcome of experience with aged individuals to be very positive, with a mean score of 2.7500, indicating a positive attitude toward the aged. This resulted in an F-ratio of 4.1297 and F-probability of .0013. This is significant at the $p \leq .05$ level (see Table 13).

Table 13

One-Way Analysis of Variance of Outcome
and Positive Attitude

	df	Sum Squares	Mean Squares	F-Ratio	F Probability
Between Groups	5	4.4872	.8974	4.1297	.0013
Within Groups	245	53.2419	.2173		
Total	250	57.7291			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Group 1	1	3.0000				
Group 2	1	2.0000				
Group 3	5	2.4000	.5477	.2449	1.7199	To 3.0801
Group 4	45	2.4000	.4954	.0739	2.2512	To 2.5488
Group 5	123	2.6748	.4359	.0500	2.6504	To 2.8496
Total	251	2.6414	.4805	.0303	2.5817	To 2.7012

An ANOVA was conducted to determine the significance of experience and positive attitude between groups and within groups. Two-hundred and forty-five respondents indicates that they have known aged individuals personally, with a mean score of 2.6531, indicating a very positive attitude

toward the aged. Seven respondents indicates that they have not known aged individuals personally, with a mean score of 2.2857, indicating a somewhat positive attitude toward the aged. This resulted in an F-ratio of 4.0323 and F-probability of .0457. This is significant at the $p \leq .05$ level (see Table 14).

Table 14

One-Way Analysis of Variance of Experience
and Positive Attitude

	df	Sum Squares	Mean Squares	F-Ratio	F Probability
Between Groups	1	.9184	.9184	4.0323	.0457
Within Groups	250	56.9388	.2278		
Total	251	57.8571			

Group	Count	Mean	Standard Deviation	Standard Error	95 Pct Conf Int	for Mean
Group 1	245	2.6531	.4770	.0305	2.5930	To 2.7131
Group 2	7	2.2857	.4880	.1844	1.8344	To 2.7370
Total	252	2.6429	.4801	.0302	2.5833	To 2.7024

Summary

This chapter began with an examination of each of the individual hypotheses. The data analysis procedures and tests of hypothesis were reported and discussed. The acceptance or rejection of each of the hypotheses is presented. Hypotheses numbered 1,2,7 and 9 were found to be supported. Hypotheses numbered 3,4,5,6 and 8 were not supported.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Introduction

This study has investigated a selection of various factors that affect ageism. The final chapter describes what has been done in this research, and identifies several theoretical and practical conclusions that can be drawn from the research, as well as suggestions for further research.

Summary of Problem

The central problem of this study was what effect does educational attainment and acquired knowledge of aging have on ageism. Subsidiary questions addressed; age, sex and positive/negative experiences with aged individuals in regard to possible effect on negative ageism.

Summary of Findings

To address the central problem of this study nine hypothesis were selected. Hypothesis number one states that they younger the respondent, the more negative the response toward older individuals. In an overall examination of the findings from this study, it is indicated that the respondents moved toward a more negative direction toward the aged than positive overall. In reviewing the past findings of Palmore's studies, these findings are congruent in direction.

This sample produced a total sample size of 254 respondents, with ages ranging from 19 to 61 years of age. The average age of the sample was 25 years. The majority of the sample that answered the age question, 175 out of 249 respondents, were 25 years of age and younger. The overall findings of this research support this hypothesis. The younger persons had more negative than positive attitudes toward the aged. Thus we can conclude that with maturation comes increase in understanding and increased acceptance for the aged.

Hypothesis number two states that the more knowledge a respondent has about the aging process, the less likely the respondent is to respond in a negative manner to the aged. The overall findings of this research support this hypothesis. The more knowledge respondents had about the aging process, the less likely the respondent was to respond in a negative manner toward the aged. This supports the major findings concluded by Palmore; bias toward the aged is associated with lack of knowledge about the age. Therefore, with increased knowledge about the aged and the aging process, we can conclude that negative ageism will decrease.

Hypotheses three and four states that the higher the level of reported educational achievement of respondents' mother/father, the less likely to respond in a negative manner toward the aged. The overall findings of this study do not support either of these hypotheses, therefore

leading to the rejection of these hypotheses. Concluding that parental education was not found to be significant in determining the attitude of the respondents toward the aged.

Hypothesis five states that the higher the level of reported educational achievement of respondent, the less likely it was for the respondent to have negative attitudes directed toward the aged. This hypothesis was also found to be unsupported by the overall findings of this study, leading to the rejection of this hypothesis. However, the F-probability of .06 should be considered. Even though significance was set at .05, the findings are close enough to merit further examination, if the significance had been .10, the hypothesis would have been supported. Overall, based on the findings of these three hypothesis it can be concluded that the educational achievement level does not appear to affect attitudes toward the aged, however, knowledge does impact respondents attitudes toward the aged.

Hypothesis number six states that male students will respond in a more negative manner toward older individuals than will female students. The findings did not support this hypothesis, therefore leading to the rejection of this hypothesis. However, findings indicated that females responded in a more negative manner toward the aged than did the males in this study. Females were much more decisive in their attitudes than were the males. The males tended to stay in the middle range, whereas the females responded more

decisively negative or positive in their attitudes toward the aged. This could conclude that females view aging as more negative, with strong perceptions about the loss of status associated with aging. This finding could also represent how females perceive themselves as being in a more care giving role to the aged than did the male respondents, leading to more decisive conclusions due to directness of perceptual repercussions. Conceivably the males were unsure of how they felt about the aged and aging. This uncertainty could be due to lack of experience with the aged or the comparatively lessened perception of loss of status in society with age, than with the female. Even though this hypothesis is rejected, we can conclude that the sex of the respondent impacts the attitude.

Hypothesis number seven states that those students that self-report their educational major as being Gerontology or "Aging" would respond in a less negative manner toward the aged. The overall findings of this study support this hypothesis. The students that reported their major area of study to be Gerontology or Aging had less negative responses toward the aged than did those respondents that were not Gerontology or Aging majors. The majority of this sample reported not being a Gerontology or Aging major (241) and 10 of the respondents reported Gerontology or Aging as being their major area of study. The 10 Gerontology majors represented ten percent of the overall Gerontology majors,

both undergraduate and graduate combined, of this university population.

When hypotheses 3, 4, 5, and hypothesis 7 are examined, parental education, respondents' education and the major area of education, the conclusion can be made that the level of education is not as significant in determining attitudes toward the aged as is the specific focus of the education. This leads us to conclude that specific educational direction that offers specific knowledge about the aged will have the most impact on the formation of attitudes toward the aged.

Hypothesis number eight states that the more courses completed in the area of aging, the less likely students will respond negatively to the aged. The overall findings of this study does not support this hypothesis. The more courses completed by the students, did not indicate a lessening of negative attitude toward the aged. The majority (136) or 53 percent of the respondents reported having completed no courses in Gerontology, with (81) or 32% of the cases missing, gives us a understanding of the effects of not having courses in aging. The conclusion that can be drawn from these findings are that specific courses, were not as significant as were the obtaining of specific knowledge about the aged and the aging process. With this finding, a case could be made for the potential significance of inclusion of basic Gerontology to be included in the core

curriculum of institutions for higher learning. This inclusion would need to contain specific units of knowledge about the aged and the aging process addressed for the optimum impact on the formation of negative attitudes toward the aged.

Hypothesis number nine states that individuals that encounter predominantly positive experiences with the aged will respond more positive toward the aged. The overall findings support this hypothesis. This hypothesis is actually the reverse of direction of the previous hypotheses. This hypothesis directs toward examining the positive direction. Three survey items were selected to represent the predominant experience; experience, interaction and outcome. These were selected due to the perception of significance in relationship to the hypothesis. In item 64, the respondent was ask "In your experience have you known 'aged individuals' personally?" This question was designed to give an indication as to whether or not a relationship with an aged individual(s) has existed for the respondent. The findings suggest that this question was found to be significant singularly, but when grouped with the other two items it was found to be insignificant. When Multiple Regression was conducted the t-significance was found to be .38. In retrospect the use of the term "personally" may have been too vague, lacking clarity for a true representation.

The next item examined in this grouping was item number 67 of the survey instrument. The respondents were asked to indicate "How often have you interacted on a personal level with 'aged' individuals." This item was found to be significant in determining the attitude of the respondents toward the aged. It appears to indicate that the negative attitude is more impacted by interaction than positive attitude was. It is interesting to note that the term "personal" was also used in this item, and evidently was perceived with more clarity than the previous item.

The final item in this grouping was the outcome of their contact with the aged. Item number 68 asks the respondent to "Please indicate the overall outcome of your experience with the 'aged' individual/individuals." This item weighed the most in determining the impact that the predominate experience has in determining the direction of attitude. How we perceive the overall outcome of the predominate experience(s) will impact our attitudes toward the aged.

The basic conclusions can be made about this study are; hypotheses numbered 1, 2, 7, and 9 were all supported by the findings in this research, hypotheses numbered 3, 4, 5, 6 and 8 were not supported by the findings of this research and therefore rejected. These conclusions support the theoretical model in that the intervening variables of age, knowledge, education, sex, and personal experiences impact

the attitudes about aged and aging.

Implications of Findings

Governmental agencies may be able to gain a better understanding of the factors that are associated with ageism. These insights can be used to design new or redesign existing programs that may encounter problems associated with ageism. Ageism associated with employment can be better understood and steps taken to lessen ageism in the work place, especially in regard to preventative measures.

Sociologists and Gerontologists, especially at the academic level can devise new courses that take in consideration of the factors that are associated with ageism. As we face the aging of the baby-boomer generation, the largest aging population in the history of recorded time, measures need to be explored now, that could lessen the potential of ageism.

Suggestions

With critical examination, both during the research process and in retrospect, numerous suggestions for future research emerge. The sample population was in keeping with the direction of this study. However, even though the Gerontology students were an acceptable representation of that discipline (10%), a larger sample of these students would be recommended in hopes of generating stronger significance in overall outcome of findings. Consideration

needs to be given of the gathering time of data. It proved to be very challenging, on a university campus, to gather data during the summer semesters. The representation of the Gerontology students was a maximum representation of the designated time period.

The attitude section of the instrument was found to be challenging. The reversal of the attitudinal direction of the questions were obvious and represented a paradox to the respondents, which may or may not have influenced their overall attitude scores. An instrument that could determine attitude of respondents without the complexities mentioned, would add ease to the research process as well as potentially add to the strength of the overall findings.

Even though parental education was not found to be significant in this particular study, it would be of interest to survey the knowledge of the parents on aging. It could be of interest to determine if the parental knowledge of the aged and aging process had an impact on their children's attitude toward the aged. With parents as the primary agent of socialization, it could be potentially significant in overall understanding of the formation of attitudes toward the aged and the aging process.

The impact of the media on the development of attitudes toward the aged and the aging process would be another direction to explore in the future. The review of literature indicates that pre-school children have negative

attitudes toward the aged, does this attitude come from parental or media influence. There are numerous references throughout the review of literature that suggests the influence of the media on the development of negative attitudes toward the aged and the aging process. It would be interesting, as well as potentially useful, to determine the specifics of the source or sources of the development of these attitudes. For the purpose of this study, the inclusion of the media was not possible.

Another possible direction for a separate study would be race/ethnicity. This variable was not being tested in this particular study. Race/ethnicity is well documented throughout specific literature. When this variable was examined, it was found that a variance between the groups existed.

The final conclusions of this dissertation were based upon one study, whose limitations were clearly defined in the dissertation. What this research indicates is that there are various factors, or variables that affect our formation of attitude toward the aged. These data suggests that; age, knowledge, sex, education, experiences with the aged affect negative ageism, therefore supporting the theoretical model.

APPENDIX

AGING SURVEY

Read each statement and respond by checking either the "True" column if the statement is true, or the "False" column if the statement is false.

Section I

Statement	True	False
1. The majority of old people (age 65+) are senile (have defective memory, are disoriented, or demented).		
2. The five senses (sight, hearing, taste, touch, and smell) all tend to weaken in old age.		
3. The majority of old people have no interest in, nor capacity for, sexual relations.		
4. Lung vital capacity tends to decline in old age.		
5. The majority of old people feel miserable most of the time.		
6. Physical strength tends to decline in old age.		
7. At least one-tenth of the aged are living in long-stay institutions (such as nursing homes, mental hospitals, homes for the aged, etc.).		
8. Aged drivers have fewer accidents per driver than those under age 65.		
9. Older workers usually cannot work as effectively as younger workers.		
10. Over three-fourths of the aged are healthy enough to carry out their normal activities.		
11. The majority of old people are unable to adapt to change.		
12. Old people usually take longer to learn something new.		
13. It is almost impossible for the average old person to learn something new.		

Statement	True	False
14. Older people tend to react slower than younger people.		
15. In general, old people tend to be pretty much alike.		
16. The majority old old people say they are seldom bored.		
17. The majority of old people are socially isolated.		
18. Older workers have fewer accidents than younger workers.		
19. Over 15% of the population are now age 65 or over.		
20. The majority of medical practitioners tend to give low priority to the aged.		
21. The majority of old people have incomes below the poverty line (as defined by the federal government).		
22. The majority of old people are working or would like to have some kind of work to do (including housework and volunteer work).		
23. Old people tend to become more religious as they age.		
24. The majority of old people say they are seldom irritated or angry.		
25. The health and economic status of old people will be about the same or worse in the year 2000 (compared to younger people).		

SECTION II

In the following pages, you will find a number of statements expressing opinions with which you may or may not agree. Following each statement there are six columns representing specific responses. Please read each of the statements and check the number column that best reflects your desired response.

1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Slightly Agree, 5=Agree, 6=Strongly Agree.

Statement	1	2	3	4	5	6
26. I would probably be better if most old people lived in residential units with people their own age.						
27. It would probably be better if most old people lived in residential units that also housed younger people.						
28. There is something different about most older people; it's hard to figure out what makes them tick.						
29. Most old people are really no different from anybody else; they're as easy to understand as younger people.						
30. Most old people get set in their ways and are unable to change.						
31. Most old people are capable of new adjustments when the situation demands it.						
32. Most old people would prefer to quit work as soon as pensions or their children can support them.						
33. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.						
34. Most old people tend to let their homes become shabby and unattractive.						

Statement	1	2	3	4	5	6
35. Most old people can generally be counted on to maintain a clean, attractive home.						
36. It is foolish to claim that wisdom comes with old age.						
37. People grow wiser with the coming of old age.						
38. Old people have too much power in business and politics.						
39. Old people have too little power in business and politics.						
40. Most old people make one feel ill at ease.						
41. Most old people are very relaxing to be with.						
42. Most old people bore others by their insistence on talking about the "good old days."						
43. One of the most interesting qualities of old people is their accounts of their past experiences.						
44. Most old people spend too much time prying into the affairs of others and in giving unsought advice.						
45. Most old people respect others' privacy and give advice only when asked.						
46. If old people expect to be liked, their first step is to try to get rid of their irritating faults.						
47. When you think about it, old people have the same faults as anybody else.						

Statement	1	2	3	4	5	6
48. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.						
49. You can count on finding a nice residential neighborhood when there is a sizeable number of old people living in it.						
50. There are a few exceptions, but in general most old people are pretty much alike.						
51. It is evident that most old people are very different from one another.						
52. Most old people should be more concerned with their personal appearance; they're too untidy.						
53. Most old people seem to be quite clean and neat in their personal appearance.						
54. Most old people are irritable, grouchy, and unpleasant.						
55. Most old people are cheerful, agreeable, and good humored.						
56. Most old people are constantly complaining about the behavior of the younger generation.						
57. One seldom hears old people complaining about the behavior of the younger generation.						
58. Most old people make excessive demands for love and reassurance.						
59. Most old people need no more love and reassurance than anyone else.						

Section III

Please answer the following questions about yourself by writing an answer in the blank or by putting a check mark in the desired response column.

60. Age: _____

61. Is your major area of study gerontology (aging) ? Yes _____ No _____

62. How many courses in "Aging" have you completed? _____

63. Please read the title and course number of each course listed below and check "yes" if you have completed that course and "no" if you have not completed the course.

Course number	Course title	Yes	No
4020	Psychology of Death and Dying		
4060	Leisure and Aging		
4250	Topics in Gerontology		
4550	Sociology of Aging		
4780	Aging Programs and Services		
4840-4850	Studies in Aging Field Practicum		
4960-4970	Studies in Aging Institute		
5200	Seminar on Research Methods and Design		
5250	Topics in Gerontology		
5300	Computer Applications in Long-Term Care		
5400	Health Delivery Systems		
5500	Retirement and Retirement Preparation		
5600	Housing for the Elderly: Planning, Public Policy and Research.		
5650	Ethnic and Cultural Variations in Service Delivery		
5700	Social Gerontology		
5710	Health Aspects of Human Aging		

Course number	Course title	Yes	No
5750	Processes of Aging		
5780	Federal, State and Local Programs in Aging		
5790	Developing community Programs for the Elderly		
5800	Seminar on Programs in Aging		
5810	Seminar on Administration of Programs in Aging		
5840-5850	Internship in Administration of Programs in Aging		
5860	Seminar on the Psychology of Aging		
5890	Psychological Counseling for Late Maturity and Old Age		
5900-5910	Special Problems		
5960-5970	Studies in Aging Institute		

Please List Any Courses in Gerontology (Aging) that you have completed that were not on the check list.

Question	Yes	No
64. In your experience have you known "aged individuals" personally?		

65. How many "aged individuals" would you estimate that you have had a personal relationship with? _____

Question	Yes	No
66. Were these individuals relatives?		

1=Very Often, 2=Often, 3=Occasionally, 4=Not often, 5=Never

Question	1	2	3	4	5
67. How often have you interacted on a personal level with "aged" individuals:					

1=Very Negative Experience (s) 2=Negative Experience (s) 3=Somewhat Negative Experience(s)
4=Somewhat Positive Experience (s) 5=Positive Experience(s) 6=Very Positive Experience(s).

Question	1	2	3	4	5	6
68. Please indicate the overall outcome of your experience with the "aged" individual/individuals: (Please check one response).						

1=On Campus 2=Off Campus

Question	1	2
69. Where do you currently reside?		

1=Male 2=Female

Question	1	2
70. What is your gender/sex?		

1=freshman, 2=sophomore, 3=junior, 4=senior, 5=graduate student

Question	1	2	3	4	5
71. School Classification:					

1=Black, 2=White, 3=Hispanic, 4=Asian, 5=Native American, 6=Other

Question	1	2	3	4	5	6
72. Your Race/Ethnicity:						

1=less than high school, 2=high school, 3=some college, 4=college degree, 5=advanced/professional degree

Question	1	2	3	4	5
73. Years of Mother's Education					
74. Years of Father's Education					

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