

To the Graduate Council:

I am submitting herewith a dissertation written by Teresa Braswell Robinson entitled "Clothing Attitudes of Elderly Female Tennesseans as Related to Life Satisfaction and Social Participation." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Home Economics.

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CLOTHING ATTITUDES OF ELDERLY FEMALE TENNESSEANS AS RELATED
TO LIFE SATISFACTION AND SOCIAL PARTICIPATION

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ABSTRACT

The purpose of this study was to investigate relationships among the elderly's attitudes toward clothing variables of thermal, psychological, and physical comfort, and care in regard to life satisfaction and social participation. The influence of sociodemographic factors such as income and educational attainment on these attitudes suggested the importance of such variables among a diverse group of Tennessee's elderly females as related to life satisfaction and social participation.

The sample consisted of 150 females who were 55 years of age or older, living in the middle Tennessee area. A survey approach was utilized and data were collected by means of a questionnaire. The instruments measured attitudes toward clothing, level of social participation, life satisfaction and identified selected sociodemographic characteristics. Six hypotheses were tested using non-parametric Chi-square and Kruskal-Wallis analysis of variance in addition to Somer's D techniques of analysis.

Individuals had relatively positive attitudes toward clothing (physical comfort, psychological comfort, thermal comfort and care). However, significant relationships were not found between the clothing variables and the sociodemographic factors. Relationships were found between social participation and current employment status as well as educational attainment. Other relationships existed between life satisfaction and income and between life satisfaction and education.

A moderately low association existed between life satisfaction and social participation. A low association existed between psychological comfort and care.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION.	1
Rationale for Study	3
Definitions	6
Purpose of the Study.	8
Objectives.	9
Assumptions	10
Theoretical Framework	10
II. REVIEW OF LITERATURE.	15
The Elderly American Female	15
Age	15
Education	16
Income.	17
Occupation and employment	19
Tennessee's elderly	20
Continuity/Discontinuity.	21
Attitudes	23
Attitudes Toward Clothing	26
Clothing and the Elderly Female	26
Physical comfort.	29
Psychological comfort	33
Thermal comfort	36
Care.	39
Social Participation.	40
Life Satisfaction	44
Summary of Literature	49
Research Hypotheses	50
III. METHODS AND PROCEDURES.	56
Survey Design	56
Development of Instruments.	57
Sociodemographic Characteristics.	57
Clothing Measure.	57
Life Satisfaction Measure	59
Social Participation Measure.	59
Sample Selection and Data Collection Pretest.	60
Sample and Data Collection.	60
Statistical Treatment	61

CHAPTER	PAGE
IV. RESULTS	62
V. DISCUSSION.	77
Attitudes about the Clothing Characteristics.	81
Associations Between the Clothing Variables, Social Participation and Life Satisfaction	83
Attitudes Toward Clothing as Related to Socio- demographic Characteristics	83
Social Participation.	86
Life Satisfaction	88
VI. SUMMARY AND CONCLUSIONS	91
Summary	91
Limitations	93
Suggestions for Further Study	94
Implications.	96
BIBLIOGRAPHY.	98
APPENDICES.	111
Appendix A.	112
Appendix B.	122
VITA.	126

LIST OF TABLES

TABLE		PAGE
1.	Summary of Median Test of Social Participation for Current Employment Status	65
2.	Kruskal Wallis Analysis of Variance	67
3.	Means of Life Satisfaction for Income	68
4.	Means of Life Satisfaction for Educational Attainment . . .	70
5.	Means of Social Participation for Educational Attainment. .	72
6.	Chi-Square Analysis	73
7.	Tests of Association Among the Dependent Variables.	76
B-1.	Descriptive Statistics for Attitudinal Variables for the Sample of Elderly Females	123
B-2.	Sociodemographic Characteristics.	124

CHAPTER I

INTRODUCTION

The "graying" of America is a current reality with which the American public is faced. As social and economic changes occur within the nation's population, the elderly are affected as well. Currently, about 23.3 million Americans, or approximately 11 percent, are 65 years of age or older. These numbers are projected to increase to 30.6 million by the turn of the century (Fact Book on Aging, 1978). In addition, our nation's elderly population is increasingly female dominated. In the United States, the ratio of elderly males to females is 75:100 (Bureau of the Census, 1980).

During the last decade, there has been an increase in numbers of those 65-and-over who live alone, maintaining their own households. This is especially true for elderly females whose predominant choice is to maintain their own households. Greater than 60 percent live alone; another 20 percent live with family members; and less than 5 percent are institutionalized (Fact Book on Aging, 1978).

Other key determinants in the life situation of the elderly include income, health and education. The 65-and-over age group is less educated than the younger age group. However, a trend toward improved educational attainment of this age group is evident. Presently, females have a somewhat higher educational level than males in the United States.

Income maintenance is another problem for most Americans. Regardless of the size of the income, it is almost always less than that of the younger population. Current levels of inflation tend to heighten the problem, with discretionary income for items like clothing dwindling for many.

Since the U. S. population is living longer, many health problems develop with increasing age. Problems and/or changes which may occur include physiological, psychological, and biological changes, as well as chronic diseases. Chronic ailments associated with the elderly include arthritis, hearing impairments, hypertension, vision impairments, and heart conditions (U. S. Department of Health, Education and Welfare, Health United States, 1975). Stature changes, cartilage and skin become thinner, drier and less elastic with age. The skin becomes wrinkled, scaly, and more sensitive to irritation as well as sensitive to temperature. Color of the skin and eyes change as one ages. Other cosmetic changes include hair loss and change of hair color. Weight gain or loss is an additional factor of aging, in addition to a re-distribution of body fat.

Furthermore, various factors constitute societal changes affecting one's later life, both socially and psychologically. Adaptations in late life include changes such as role contraction, role loss, loss of children at home, loss of friends due to death, loss of spouse, and decreased income. Such changes and losses can induce disengagement or provide for a new type of personal flexibility. With increased leisure which usually

accompanies aging, there is sufficient time to develop a positive attitude toward one's social roles and one's own personality (Donahue, Arback and Pollack, 1960).

Appearance plays an important part in the development of personality and self, especially one's social self. People often attempt to control such identities through the use of clothing, by claiming desirable images and disclaiming those which are undesirable. Therefore, it would seem that clothing as a psychological factor would be an important part of maintaining the appearance of the elderly. Clothing has added significance when considering cosmetic changes and various changes in one's physiological condition with age, such as change in hair color, skin color, texture, stature changes, wrinkling of skin, increases sensitivity of the skin.

Both the physical and the social, psychological implications of clothing as related to the elderly deserve additional research attention. It is equally important to look at the effect of social participation, overall well-being or life satisfaction of the elderly individual and how they relate to the elderly's attitudes regarding specific clothing variables.

Rationale for Study

With the larger growing numbers of elderly in our society and the trends which are evident, it becomes necessary to look upon this segment of the population with an important sense of urgency.

Until recently, the elderly individual, often with reduced income, decreased health and forced retirement, was largely ignored. Social and physical changes affecting the elderly individual put him/her at a decided disadvantage in society. Research regarding the elderly has been directed toward the chronic and life-threatening needs of the elderly such as heart problems, arthritis, vision impairments, and arteriosclerosis, which are, of course, some of the most visible problems of aging.

Such situations, however, do not constitute all of the elderly's life problems. The process of aging is a very complex phenomenon. Each individual progresses through a series of life phases or stages, beginning with birth and ending with death. Old age, for those fortunate enough to live a "normal" life span, is the last phase of life. Unfortunately, for the elderly, our society does not prepare individuals for this phase of life. Thus, as change occurs with age and discontinuities develop, the elderly may find themselves in situations in which adjustment is difficult.

Erikson has identified seven stages of the life cycle with the last, old age, related to integrity versus despair (Erikson, 1978). Bühler (1968) identifies old age as 65 years and beyond and relates to this age group both biological and psychosocial changes: regressive growth and decline; fulfillment of goals or experience of failure (Kimmel, 1981). As a result, research is needed which will eventually help the elderly to adapt to old age--physically, socially and psychologically.

Limited research attention has been given to the idea of clothing as an important element related to the elderly. Nevertheless, clothing is one of the basic human needs; perhaps the need for clothing is so basic that it is not often thought of as affecting one's overall well-being. However, like the bulk of research which has been conducted as related to the elderly, studies dealing with clothing and the elderly have been primarily concerned with physical changes and the resulting adaptations of clothing, such as fit and style characteristics.

The social and/or psychological implications of clothing and adaptation to old age have been virtually ignored. A review of literature regarding the elderly suggests that life changes can affect the development of specific attitudes regarding clothing. With these changes, the idea of comfort is expressed by elderly individuals. Therefore, as changes mandate adaptation to one's environment, one's attitude toward thermal comfort will affect attitudes toward clothing. With the physical changes accompanying aging, physical comfort and well-being may influence one's attitude regarding clothing. Discontinuities causing social interruptions in late life may affect one psychologically and, as a result, psychological comfort, or a "feeling at ease" may affect one's clothing choice.

Adeline Hoffman stresses the importance of current research in this area:

As the old, the physically handicapped, and mentally retarded take their places in society and work among other people, they must have clothing that is functional and attractive and that meets their special needs (Hoffman, 1979, p. 3).

Further analysis is needed to determine the factors influencing life satisfaction of the elderly, levels of social participation, and attitudes toward clothing. Some research has indicated that relationships exist between clothing and life satisfaction through feelings about self (Slocum, 1981). Therefore, the combined effects that various factors have on attitudes toward clothing of the elderly person may influence his/her life satisfaction.

Limited information is available specifically regarding Tennessee's elderly population. LaFleur (1982) surveyed attitudes of clothing as related to retirement among a group of elderly males in East Tennessee. Robinson (1981) also surveyed a group of East Tennesseans; her study surveyed elderly females about clothing (versatility, ease of care, comfort) and quality of life. However, a more definitive survey of Tennessee's elderly females would provide meaningful results in further developing an understanding of Tennessee's elderly; such research is needed to gain information and insight into the needs of the elderly.

Definitions

Age: The present number of years, chronologically, lived.

Attitude Toward Clothing: Feelings held by elderly females regarding clothing, particularly (a) care, (b) physical comfort, (c) psychological comfort, and (d) thermal comfort.

Care: The keeping of a garment in satisfactory condition (Carpenter, 1963).

Physical Comfort: A feeling of bodily/physical satisfaction with the clothing worn.

Psychological Comfort: A "feeling at ease" in clothing worn for various social functions.

Thermal Comfort: Conditions contributing to optimal warmth or coolness related to activity, metabolism, environment and clothing worn.

Continuity: Behavioral and goal consistency throughout a lifetime.

Discontinuity: Processes creating change, inhibiting continuity of roles. Discontinuities in late life occur when new or qualitative changes occur such as role change, role loss, economic change, psychological change and physical changes.

Educational Attainment: The highest level of formal education completed by an individual.

Employment Status: An individual's current state of employment--retired, part time work, full time work, not retired.

Former Occupation: The type of occupation held by an individual prior to retirement--unskilled, semi-skilled, skilled, clerical, professional, or "housewife."

Income: The present financial status (monthly income) of an individual.

Life Satisfaction: A person's psychological well being or perception of quality of life; one's satisfaction or dissatisfaction

with his/her life based on an evaluative judgment by that individual.

Residence: In what type of setting an individual resides: in own home, apartment, condominium, retirement complex, etc.

Retirement: Cessation of full time work from that individual's life-long profession.

Social Participation: The level of activity of an individual in various settings with other individuals. The ". . . act of common sharing among individuals" (LaFleur, 1982, p. 13).

Sociodemographic Variables: Those characteristics contributing to an individual's background such as age, marital status, income level, and education.

Purpose of the Study

The primary purpose of this study was to investigate relationships among the elderly's attitudes toward the clothing variables of thermal, psychological, and physical comfort, as well as attitudes toward care of clothing in regard to life satisfaction and selected sociodemographic variables. Based on the theoretical framework of continuity/discontinuity during development, both biological/physiological and psychosocial changes may occur as one ages. As a result, an individual's perception of comfort may change also. As identified by Ralph Goldman (1977), three broad categories of factors may affect a person's perception of comfort: environmental, physiological, and psychological. Because environmental factors are often psychological in nature, these two categories

may overlap (Vanderpoorten, 1981), and the two categories could be combined. Clothing comfort variables for this study can be grouped into two broad categories: physiological and psychological perceptions. Information regarding clothing variables determined the elderly's attitudes toward: (1) physical comfort, (2) psychological comfort, and (3) thermal comfort.

The influence of sociodemographic variables such as income and educational attainment on these attitudes toward comfort and care suggests the importance of such variables among a diverse population of Tennessee's elderly females as related to life satisfaction and social participation.

Objectives

1. To determine the existence of relationships among elderly females' attitudes toward clothing (thermal, psychological and physical comfort, and care), their life satisfaction and level of social participation, based on selected sociodemographic characteristics.

2. To determine the location of significant relationships among elderly females' attitudes toward clothing, life satisfaction, and level of social participation, based on selected sociodemographic characteristics.

Assumptions

1. The elderly's attitudes, life satisfaction, and level of social participation are influenced by a variety of sociodemographic factors.
2. Various social factors can create discontinuities in life as an individual ages.
3. Attitudes toward clothing are measurable.
4. Clothing affects the elderly both psychologically and physically.

Theoretical Framework

Within our societal structure, certain continuities and discontinuities emerge as a part of the developmental process which are identified by both biological and psychosocial change. Developmental theory considers both biological/psychosocial changes with age as well as changes within the individual which are a result of interaction with the environment. Support of both biological and psychosocial changes are the basis for Bühler's (1968) five biological stages and five life phases.

Theories of continuity and discontinuity have emerged as a part of the life span developmental framework. In essence, continuity theory postulates that individuals' behaviors during old age are consistent with behaviors in earlier years and that the same sources of change account for behavior at different points in time.

Continuity theory assumes that major goals are not altered with age, The theory accounts for participation of the elderly as being a form of adaptation to changes in later life.

Continuity refers to the smoothness of passage between life stages so that earlier expectations are no obstacle to later adaptation, and they provide the core onto which later norms are grafted. Continuity thereby represents a consistent extension rather than a revision of age norms. (Rosow, 1967, p. 19)

Such an approach suggests that people who are most likely to be in desired social roles are those who established such roles and behaviors earlier in their lives (Covey, 1981).

In terms of discontinuity, various social factors contribute to change in society which make life discontinuous. Movement into old age is experienced with various discontinuities, because our society does not prepare an individual for gradual transitions.

Old people must learn from their own experience and adapt themselves. The culture does little to help in their transition to old age or with the many problems they then face for the first time: alienation from central roles, loss of status and respect, increasing marginality, and the withering of social participation. (Rosow, 1967, p. 27)

Factors such as role change, role loss, status change and economic change influence individuals within society so that continuity of any social role faces resistance. Discontinuity occurs, therefore, when new or qualitative changes in behavior occur in late life. Physical or biological changes can create discontinuities as well. Health problems, physical impairments, ailments, and cosmetic changes of the hair and skin can be an inevitable, discontinuous aspect of later life. As a result of both social and biological factors, the

later years of life can be discontinuous. As noted by Covey (1981), the amount of continuity and/or discontinuity experienced in old age will vary among individuals. Therefore, it is possible for continuity to exist within the context of discontinuity, whereby later forms are not reducible to earlier forms. For example, an elderly individual is retired from his/her occupation, but has several sources of income to maintain a comfortable economic position, consistent with that held prior to the occupational role change. This person experiences discontinuity or change in regard to job roles, but continuity is maintained for overall well-being, since no major changes occurred in lifestyle from an economic standpoint.

As suggested by Hess and Markson (1980), there is evidence that as one ages, attitudes and values change in such a way that ". . . many personality features are relatively flexible and that the expression of any one trait is often constrained by the requirements of other roles in an age-related cluster" (Hess and Markson, 1980, p. 39). In effect, one's personality may represent a series of role adaptations, some of which may be continuous and others which may be discontinuous, requiring adjustments.

Such changes and/or losses of roles causing these adaptations in later life contribute to one's degree of continuity or discontinuity and have profound implications for the prospective socialization to old age. These changes and losses can induce disengagement or can provide for a new type of role flexibility through increased personal time. With this increase in personal time, there is

sufficient time to develop a positive attitude toward one's own personality (Donahue, Arback, and Pollack, 1960). Through this process, a new or revised identity is created--social identity and self identity. (See Figure 1.)

One manner in which a person can establish an identity is through appearance. Through appearance ". . . a person announces his identity, shows his values, expresses his mood, and proposes his attitude" (Stone, 1975, p. 87). Therefore, it can be postulated that clothing might be an important part of maintaining a positive attitude toward aging. Clothing can have added significance when considering not only psychological factors of appearance, but also when considering changes and variations in physiological conditions that accompany the aging process (Brenn, 1960).

Since continued participation is considered important to good adjustment of the elderly, being well-dressed can become essential, regardless of age (Glisson and Tate, 1961). In developing social relationships, ego support, and providing bodily protection and comfort, clothing can provide added significance for the individual as he/she ages.

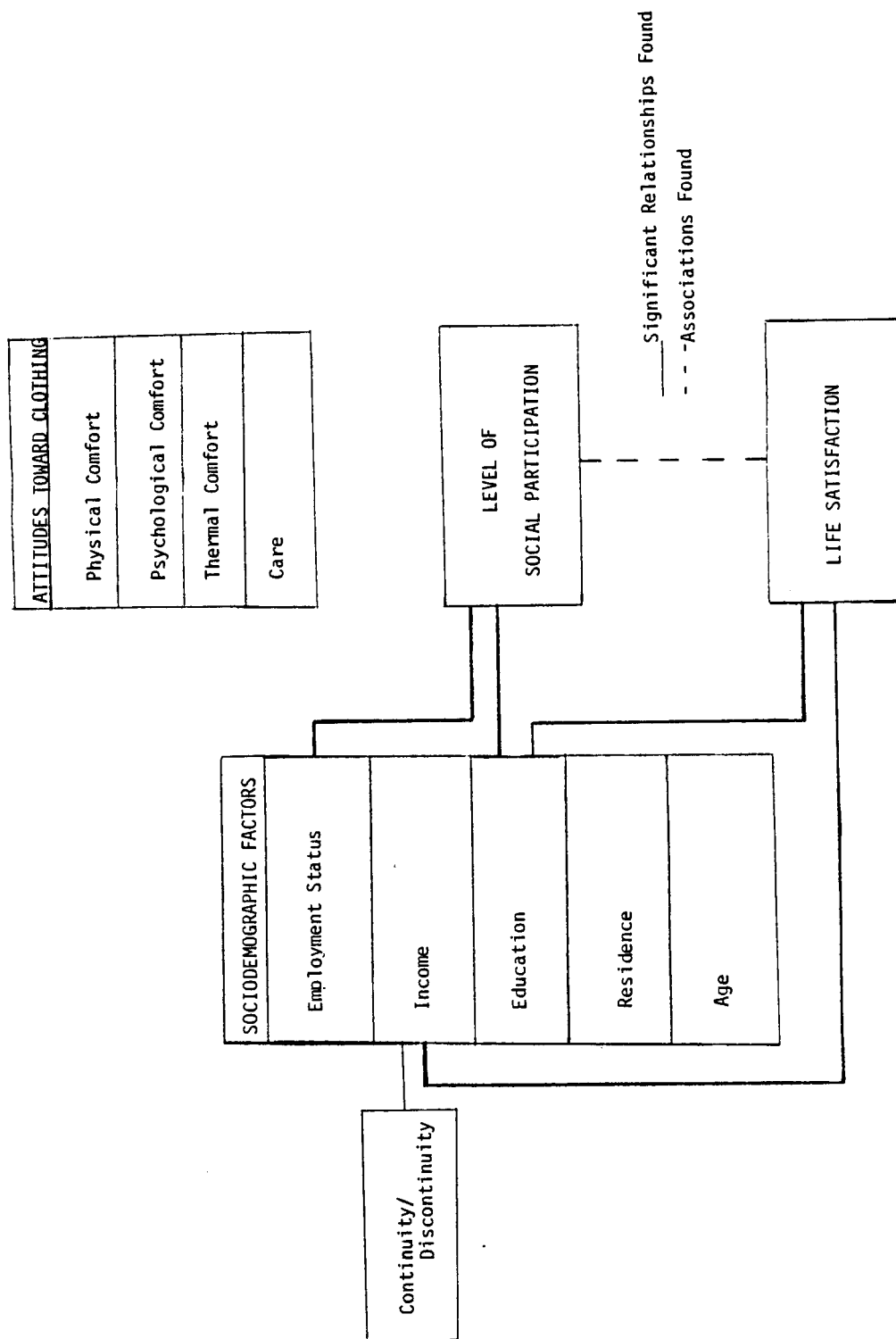


Figure 1. Conceptual model of factors relating to elderly females' attitudes toward clothing, level of social participation and life satisfaction.

CHAPTER II

REVIEW OF LITERATURE

With the greatest proportion of the elderly being female, it becomes important to understand that growing segment of society. As a result, a better understanding of the elderly female's attitudes toward life, beliefs, and needs is of absolute importance.

The Elderly American Female

Age

As the U. S. population continues to age, proportions of elderly persons not only increase numberwise, but also in terms of importance. During the past decade of the seventies and the present decade of the eighties, the numbers of elderly have continued to rise. By 1990, it is expected that 11.7 percent of the United States population will be age 65 or older. In addition, 4.7 percent of this segment of society will be at or above the age of 75. Of the elderly, the fastest growing segment is that of people age 75 or older (Fact Book on Aging, 1978). Additional future trends project the 65-and-over segment of society to represent 17 percent of the nation's population by 2030 (Fact Book on Aging, 1978).

Gender distribution of the elderly is somewhat skewed due to differing trends in mortality rates. As a result, the elderly are a female-dominated group of people. In 1976, the elderly U. S.

population was disproportionately distributed with only 75 males for every 100 females, age 65 and older. Among the over 75 age group, only 58 males per 100 females were recorded (Fact Book on Aging, 1978).

In addition to a longer life expectancy for females, a majority of U. S. females marry men older than themselves. As a result, a disproportionate number of widows to widowers evolves. According to census reports, in 1980 only 38 percent of elderly females were married as compared to 75 percent of elderly married men. This represented approximately three older unmarried females (widowed or never married) per older, unmarried male (U. S. Bureau of the Census, Current Population Reports, 1980; Cole and Harris, 1980).

Education

As research continues regarding the elderly and as researchers work with older persons, it becomes important to recognize the educational backgrounds of this group of people. In 1980, only 36.0 percent of the nation's elderly, age 65 and older, were high school graduates. The median years of school completed was nine. Such figures are low in comparison to youth related statistics. In the same year, 62.6 percent of those persons age 25 or older had completed high school with the median years of education being somewhat greater--12.3 years. Predictions indicate that the average educational attainment of the elderly will reach 12 years by the year 2000. Thus, as our nation becomes increasingly educated, so will the elderly become better educated (Current Population Reports, 1980).

Income

A controversial area of concern regarding the elderly relates to financial security and income. While incomes do tend to be lower than when an elderly person was in the labor force, the question which arises is that of income adequacy. When comparing actual incomes of the elderly to that of average workers, the picture looks rather bleak. According to U. S. Bureau of Census, Current Population Reports (1980), the median personal income for an elderly individual was \$5,186, while median income for elderly (65+) family householders was \$11,320.

However, the elderly, retired person does not bear the same expenses as previously. For example, children are grown and stay away from home and mortgages are often paid, to name only two. On the other hand, other expenses do tend to increase such as health and medical expenses (Hess and Markson, 1980).

It becomes important to ask the elderly about the adequacy of their income. Hess and Markson (1980, p. 206) indicate that ". . . survey research more often than not reports a surprisingly low level of expressed 'need' among elderly respondents."

Conversely, in the past five years, approximately one of seven elderly Americans fell below the poverty level. If those considered "threshold poverty" were included, this ratio would rise to two of seven elderly persons at the poverty level. In 1977, the poverty level for the elderly two-person family was \$3,637 while

increasing to only \$3,900 in 1978 (Hess and Markson, 1980; Cole and Harris, 1980).

The situation, therefore, appears to be two-fold. Distribution of the elderly's income tends to be positioned at two extreme ends of the income continuum--very high or very low.

Previous census reports do indicate, however, that most elderly people have more than one source of retirement income (Fact Book on Aging, 1978, p. 56). Major sources of income during old age include Social Security benefits, private pensions, veteran's benefits, savings, securities, and full- or part-time employment (Hess and Markson, 1980, p. 195).

Retirement income for females is often an area of confusion, especially in terms of Social Security benefits for . . . both those who have worked in paid employment for all or part of their adulthood and those who have been exclusively homemakers" (Hess and Markson, 1980, p. 200). As a result, benefits for retired professional women, non-employed wives of retired professional men and widows of beneficiaries vary to a great degree. The issue of Social Security benefits for homemakers is a continuous debate, often with the attitude that

. . . such activities are to be done for love alone, so that the attempt to give homemaking a market value is seen as destructive of the affectional basis of family life, and also as provoking resentment among husbands. (Hess and Markson, 1980, p. 200)

Previous research indicates that such situations can be the basis of confusion in analyzing survey data. Females never employed in

in the work force or those receiving no form of retirement compensation will often report a spouse's income as that of their own (Robinson, 1981).

Occupation and Employment

Incongruencies which arise concerning income and elderly females, extend into the classifications of occupations as well. A Harris survey (1975, p. 83) includes the following classifications: employed, full-time; employed, part-time; unemployed; housewife; retired; other. Because patterns of employment for females have been traditionally very different from that of males, it becomes increasingly difficult to delineate between the roles of unemployed female, housewife and retired females respectively (Louis Harris and Associates, 1975).

. . . retirement studies that include women do so only in relation to their reactions as wives toward the retirement of their husbands. (Heyman and Jeffers, 1968, p. 79)

However, Department of Commerce data does indicate that during the last 20 years, females have remained in the labor force longer through adulthood and into old age. Therefore, a changing trend for females' employment is evolving. According to Hess and Markson and the U. S. Department of Commerce, at the ages of 55-64, especially, male work rates tend to drop, while those of females remain fairly stable. This is attributed to the fact that

. . . women at these ages are more employable than males because their jobs usually require less skill and more experience, because they are thought to be more dependable

than young women, and . . . do not cost as much in potential retirement benefits as do men. (Hess and Markson, 1980, p. 185)

Evidence indicates that continued employment among the elderly is most often associated with marital status, high education, and good health. As well, the wish of the elderly to continue work can be related to retirement income: the lower the income, the more one needs to work.

Such information further delineates the need for research regarding clothing and the elderly female. For elderly females across the life span, clothing is a necessity, and information regarding attitudes toward aspects of clothing such as physical, psychological, and thermal comfort and care is needed.

Tennessee's Elderly

The state of Tennessee can be divided into six standard metropolitan statistical areas (SMSA's): (1) Clarksville, (2) Johnson City--Kingsport--Bristol, (3) Knoxville, (4) Chattanooga, (5) Nashville, and (6) Memphis. Geographically, the state is divided into West, Middle, and East Tennessee, which is represented by three SMSA's: (1) Memphis, (2) Nashville, and (3) Knoxville areas (U. S. Bureau of the Census, 1980, pp. 44-47).

The elderly population in Tennessee is found primarily in these urban areas. According to Census reports, approximately 70 percent of Tennessee's elderly reside within a SMSA area, within urbanized and/or central city areas, or within an urban fringe area.

While only 5 percent of the elderly in the United States are institutionalized, the majority of older persons continue to live in family settings with the most prevalent being that of the two member family living in their own home (Fact Book on Aging, 1978). When looking at the residences of the elderly population in Tennessee, similarities can be identified with nationwide statistics.

As a result of these statistics, this study was conducted in one major SMSA area--Nashville, a central city area, and Murfreesboro, an urban fringe area, representing Middle Tennessee.

Continuity/Discontinuity

Successful aging has been attributed to a variety of theories. Whether or not an individual ages successfully can influence his/her overall well-being and is determined by a number of factors. Social scientists studying the aging process have adopted interrelated ideas regarding continuity and discontinuity as experienced by the elderly individual.

Discontinuity may be experienced by the older person when roles or expectations for appropriate behavior change as a result of increasing age. Various factors such as retirement/occupational loss, status change, loss of spouse and economic change could become discontinuities affecting the elderly's overall well-being (Rosow, 1967). In view of role theory, enactment of these various and multiple roles is the primary basis for a person's attitudes, behavior, values, prestige and personal integration (Kline, 1976). However,

in analyzing roles that create discontinuities, a problem arises because individuals maintain multiple, overlapping roles, making interpretation difficult. The problem is even more typical of females, who are under greater pressure to assume a larger number of conflicting roles throughout the life cycle than is the male (Atchley, 1972).

Other research studies suggest that adjustment to aging may be more gradual for females than males and that elderly females are more satisfied than men (McEwan and Sheldon, 1969). Therefore, the continuity theory of aging could be supported, suggesting that passage between life stages is smooth, and that earlier expectations are not an obstacle to later adaptation, but are, rather, a base on which to develop and understand later norms (Rosow, 1967). Kline (1975) has suggested that the impact of socialization on women is such that it creates ". . . impermanence in the form of role loss and repeated adjustment to change in the life situation" (p. 489). Therefore, in view of continuity, females may adjust to old age smoothly because life changes have resulted in anticipatory preparation for adaptation to the aging process.

Covey (1981) suggests that the elderly prepare themselves for roles in later life by establishing such roles and behaviors earlier in life. Therefore a gradual transition to aging is made, and behaviors of old age become consistent with behaviors of earlier years. For example, in a study of elderly women, Payne (1980) found that most preferred the same activities as enjoyed during the preceding five years and expected little change during the upcoming five years.

Adjustment to aging, therefore, may vary according to the elderly population studied. Support for both continuity and discontinuity during old age may be justified. However, for the elderly female, attitudes, behaviors, and overall adjustment tend to reflect continuity, as found in the literature. Thus, a study of the elderly's attitudes should support the continuity theory with positive scores toward specific factors reflecting positive adjustment to aging.

Attitudes

Throughout an individual's life it is not surprising that one develops regularities in feelings, thoughts and inclinations to act toward his/her environment. Social scientists have studied these tendencies which are called attitudes. Attitude may be defined as a ". . . learned and relatively enduring tendency or predisposition to evaluate a person, event or situation in a certain way and to act in accordance with that evaluation" (VanderZanden, 1981, p. 140). Attitudes, therefore, represent an individual's tendency to respond favorably or unfavorably toward something.

Social psychologists have distinguished three components of attitude--cognitive, affective and behavioral. The cognitive component is the "thinking" facet of attitudes, representing the way a person perceives a situation or object. The affective component of an attitude is the "feeling" aspect, representing the emotions one holds toward an object. The third component, the behavioral facet,

represents the individual's tendency or disposition to act in certain ways toward the object.

David Katz (1960) has suggested that because all humans have a wide variety of needs, it is important to understand the function of attitudes in satisfying personality needs and motivations of individuals. Therefore, Katz' functionalist theory of attitudes holds that our attitudes are determined by four basic functions: understanding or knowledge, need satisfaction or adjustment, ego defense and value expression.

The knowledge function of attitudes reflects an individual's need for understanding, for meaningful cognitive organization and consistency. Attitudes assist in supplying standards of evaluation in understanding of events that impinge upon a person.

Need satisfaction as a function of attitudes reflects the tendency of human beings to maximize rewards and minimize penalties by developing attitudes that aid in the accomplishment of these goals. A third function of attitudes is the ego-defense function which represents formation of attitudes that protect an individual. These attitudes serve as defense mechanisms protecting a person against internal conflicts and unpleasant realities.

Other attitudes function toward maintaining a positive expression of one's self. The value-expressive function of attitudes reinforces and enhances one's self-image, self-expression and self-determination (Oskamp, 1977; VanderZanden, 1981). Therefore, social scientists often report attitudes as functioning to serve a position

in one's mental makeup and as directors of an individual's behavior.

"Hence, to understand attitudes is to understand our behavior"

(VanderZanden, 1981, p. 145). Individuals attempt to maintain consistency in their lives which suggests that one's attitudes, values and behavior are harmonious and not in conflict. Therefore the enduring nature of attitudes and the centrality of values create a relatively stable environment, whereby change occurs only if dissonance or conflict develops.

The study of attitudes has attracted considerable interest in research, due to the importance of matters for which individuals possess attitudes. In the past 20 years, more than 1600 articles have appeared in professional journals dealing with some aspect of attitudes (VanderZanden, 1981). A variety of devices have been developed for measuring attitudes including Thurstone scales of equal-appearing intervals, Guttman's scalogram analysis, Osgood's semantic differential and Likert's technique of summated ratings. Social science researchers investigating clothing attitudes have widely adopted the Likert attitude scale consisting of a series of statements expressive of a wide range of attitudes from extremely favorable to extremely unfavorable. Statements can be carefully compiled and edited for accuracy and discriminatory power. A total score for each subject can be obtained by totalling the value of each item that is investigated.

Attitudes Toward Clothing

Research regarding relationships between attitudes, in general, and clothing indicate that like other attitudes, those attitudes held toward clothing are directed by an individual's overall value system. Values act as a directive force in motivating an individual's attitudes toward choice of clothing and behaviors related to clothing (Ryan, 1966).

Previous research indicates that attitudes toward clothing vary according to socioeconomic status and/or occupation of individuals (Ryan, 1966). Other studies suggest that the most fundamental attitudes toward clothing related to an individual's desire to conform, desire for comfort, economy, aesthetics, and self-expression (Barr, 1981).

These attitudes occurred so positively and so prevalently--cutting across differences in educational background, economic status, and other variable characteristics--that they were thought to be universal in nature. (Barr, 1981, p. 256)

Later research cited by Horn (1981) indicated that many of the same attitudes toward clothing still persist. Therefore, it is appropriate that the current need for research regarding the elderly and clothing be conducted, investigating individuals' attitudes held toward specific variables.

Clothing and the Elderly Female

Clothing as related to the elderly has received some research attention, but few studies have concentrated on specific aspects of

comfort (physical, psychological, thermal) and care of clothing. Perhaps this is because clothing is considered so basic a need that it is not usually considered by many as contributing to the elderly's well-being (Retig, 1981). Nevertheless, clothing is one of the basic human needs, and its importance cannot be denied.

We might consider clothing as a vicarious artificial skin, almost an extension of the individual boundary involving important relationships between the person and his environment, spiritual as well as material. (Dearborn, 1918, p. 172)

Clothing and personal care represent only about 6.2 percent of the elderly's discretionary income according to consumer surveys (U. S. Department of Labor, 1976; Fact Book on Aging, 1978). However, the dollar amount spent on clothing is not the most important factor. Kelley et al. (1980) looked at clothing expenditures of socially active elderly couples and compared such expenditures prior to and subsequent to retirement. Results indicate that even though the total dollar amount spent on clothing decreased, a higher priority was given to clothing. Some refer to this as a means of logic:

The same conscientiousness that had been invested in the many former activities, interests and chores is now applied to the voluntarily restricted fields of activity; the same fastidiousness in appearance is maintained as before, only on a sensible scale. (Knopf, 1975, p. 36)

A commonly held misconception regards the elderly as having little or no interest in clothing. However, research does not support such an idea. In fact, studies indicate that the elderly are interested in their clothing and further research is necessary in order to obtain information regarding specific attitudes toward various clothing variables.

Bader (1963) found very little loss of interest in clothing among elderly females. In fact, over 75 percent of the respondents felt clothing was equally or more important in later years than in earlier years. Bader's findings suggest that elderly females not only have an interest in clothing, but also desire "smartly styled, attractive clothing." Knopf (1975) gives similar suggestions:

An aged person looks his or her best in an outfit that is tasteful and in harmony with the times as well as with his age. Some up-to-date adaptations are acceptable to show that one is aware of the changes in the environment. And if these modifications are employed discretely, they will enhance the general appearance. (Knopf, p. 82)

An investigation to determine clothing interests of elderly males found that older men had higher average scores regarding clothing interest than younger age groups (Drake, 1978, p. 13). Therefore, clothing may have significance for both elderly females and males.

Hoffman (1970) in a study dealing with the effects of husbands' retirement on the wives' interest in clothing revealed interesting results. Reasons for not losing interest in clothing were:

(1) appearance was as important as ever; (2) clothes were still liked; (3) maintaining an attractive appearance before others was important; (4) they were still clothes conscious, and (5) husband's retirement did not relate to their clothes.

Additionally, other variables have been found to relate to attitudes toward clothing. A Pennsylvania study (1954-55) indicated that sociodemographic factors affect clothing choice including social, cultural, and economic aspects of one's life. It was also

found that those from urban areas had greater interest in clothing, larger wardrobes and spent more for clothing than the rural.

Other findings are supportive of such evidence. Studies of elderly individuals have found that occupation and income affect clothing attitudes (Shipley and Rosencranz, 1962; Drake and Gurel, 1978). Shipley and Rosencranz also found a significant relationship between group membership and clothing interests/preferences of elderly females.

Social participation as an influence on clothing attitudes has been a significant result in other studies, lending further support. Social participation was found to relate to clothing interest, satisfaction with market offerings, self-image, and clothing image (Moore, 1968) among elderly females. Additionally, Walker (1972) found that as the amount of social activity of elderly females increased, the amount spent on clothing increased as well.

Further research delineating specific attitudes of the elderly relating to clothing is needed. Three aspects of comfort as well as care related to clothing have been reviewed, and are to be tested to gain information regarding the elderly's attitudes toward such clothing variables which seemingly would affect later life.

Physical Comfort

As one ages, there is a gradual slowing down of the body. Such changes are often first evidenced as a result of physical changes and decline. The heart must work harder to achieve less as the body ages. In addition, muscle tone and strength decline; a loss of

sensory activity is also observed which affects both an individual's physical and thermal perception of comfort. Skin wrinkling is also associated with aging as a result of a loss of subcutaneous fatty tissue, a decrease in skin elasticity and exposure to the sun and weather. As a result, the texture of the skin changes with increased age and these elastic fibers especially begin to slacken in tensile strength. Another physical factor associated with aging is the graying and thinning of an individual's hair which is due to a decrease in the number of pigment producing cells (Hess and Markson, 1980; Knopf, 1975).

Much of the research dealing with clothing and the elderly female has been in this area of physical change and comfort. Physical comfort factors relate to clothing fit, style, and design characteristics. Several physical changes associated with the aging process and physical comfort in clothing have been identified through previous research. Changes in appearance which influence clothing/physical comfort include a thickened waist, dowager's hump, sagging bust and arms, rounded shoulders, unattractive legs and elbows, double chin, and increased weight. Other physical changes include wrinkles, fading eyes, and change of hair color (Blair, 1953). Blair found that the most recognized physical problem related to clothing was the thickened waist. Such evidence has been more recently confirmed by Hoffman (1970) who suggests that a redistribution of body fat which is most often an addition of weight affects clothing choice and physical comfort of clothing among elderly women. More recent

studies have identified significant bodily changes among elderly females (65 and older) as compared to the general population (18-80 years of age). Patterson and Warden (1982) found that the elderly females in their study were heavier in body weight and larger in horizontal measurements (bust, waist, abdominal extension, and hip) than the general population sample studied.

Bartley and Warren (1962) had identified similar physical changes as those indicated in other research. It was found that clothing preferences related to comfort were affected by the aforementioned physical changes such as rheumatism, heart ailments, high blood pressure, and arthritis.

In an attempt to categorize common physical limitations among adults and identify clothing demands for daily living, Reich and Shannon (1978) also found that arthritis was the most notable physical problem. Additional research indicates the same physical characteristics influencing clothing comfort and thus supports such results (Smathers and Horidge, 1978-79; Hoffman, 1970).

Specific clothing preferences related to physical comfort have been investigated and identified. Clothing preferences as identified by Shipley (1960) include side openings, three quarter length sleeves, mid-calf lengths, gored skirts, collars, solid and/or subdued colors, small prints, and medium height heels. Other areas of concern relating to comfort have been supported through additional research. Manageable closures including front openings, stretch hosiery, long sleeves, comfortable lines, coat-dress ensembles,

princess and shift dresses (undefined waistlines) are other comfort factors which have obtained support (Bartley and Warden, 1962; AHEA Workshop on Aging, 1962; Walker, 1972; Richardson, 1975).

More recent research supports previous evidence in regard to clothing problems related to physical change. Similar findings indicate problems such as tight sleeves and armholes, waistlines which do not "give," lack of ease in shoulder/back area, openings which are too small, and closures which are difficult to manipulate. As a result, clothing interests expressed by females include dresses without waistlines, two piece garments, and front closures (Smathers and Horidge, 1978-79; Reich and Shannon, 1978).

Age can also be a factor in physical comfort and activity. A study by Shanas (1968) looked at age differences and incapacities. It was found that those age 65-69 most often reported no difficulties in daily activities such as walking, bathing, dressing, and putting on shoes. By age 75-79, a significant change in physical functioning and comfort was evident for the same activities. Among those age 80 and older, almost 50 percent indicated major difficulties in tasks such as bathing, bending, dressing, and putting on shoes. Thus, the effect which clothing can have on physical functioning and comfort is evident.

Knopf (1975) identifies that a ". . . step in self-acceptance may be enjoyment of physical comfort" (p. 35). It is suggested that as an individual adapts to aging psychologically, it becomes easier

to accept physical changes and thus opt for physical comfort over fashion or social pressure.

As the self-confidence grows, one even dares to defy the rules of fashion, for instance, by wearing comfortable shoes instead of the prescribed evening footwear. Suddenly one finds that there is no criticism even from the social arbiter of the group, because she, too, is getting on in years, and her feet also are beginning to hurt her. Actually, the rebel is admired for having the courage to put comfort above convention. In short, the sensible aged person begins more and more to assert himself instead of playing follow the leader. (Knopf, 1975, p. 35)

Such findings related to physical needs reinforce the need for additional research in relation to the elderly's clothing/physical comfort.

Psychological Comfort

Because clothing is a basic, essential need of all people, a psychological value can be associated with being well-dressed. Such feelings can be identified as psychological comfort or a sense of feeling at ease in one's choice of clothing.

Knopf identifies "psychological repercussions" as related to bodily changes and suggests ways in which clothing and appearance can give a psychological "lift" or provide a sense of psychological comfort.

One fact adds insult to injury because of its daily repetition and that is the shock every old person gets when he looks at himself in the mirror in the morning. Looking into the mirror, they expect to see a picture that corresponds to the way they feel--young. What they actually see is the reflection of an old person who may be well-preserved . . . and appearing perhaps younger than his age, but old just the same. This daily experience is a shock from which it is hard to recover. (Knopf, 1975, p. 33)

Hoffman (1979, p. 43) suggests that although clothing cannot change the physical signs of aging, it can contribute to a positive self-image and, therefore, psychological comfort in various situations. Knopf (1975) suggests advice to the elderly:

Under no circumstances should good grooming be neglected. Every old person should appear at his best at all times as much as it is possible to do so. This goes for personal fastidiousness as well as clothing. . . . Our self-esteem depends as much on our own appearance in the mirror as on the facial expression of an acquaintance we may run into. Letting one's appearance go is the beginning of letting go everywhere else. (Knopf, 1975, pp. 122-123)

Psychological comfort as related to clothing is most readily identified in social interaction situations. Regardless of age, the elderly female still interacts with others, and the importance and appropriateness of clothing may be even more important than was evident in earlier years (Heyer and Owens, 1978). This could be an especially important factor, considering the disproportionate amount of elderly females as compared to elderly, available males.

As a woman grows older and advancing age alters her body shape, a feeling of self-confidence about her appearance (i.e., psychological comfort) can improve her social interaction with others. Attractive clothing can act as a rational defense against aging; an older woman can make better use of her physical attractiveness by dressing more carefully than younger people. (Heyer and Owens, 1978, p. 164)

Additional research indicates significant relationships between social participation and psychological comfort/clothing. Ebeling and Rosencranz (1961) found that the amount of participation was affected by the lack of appropriate clothing to wear and the

effect that clothing had on feeling at ease (psychological comfort) at a social function. Older women belonging to fewer than three organizations refused more invitations to social affairs because of lack of appropriate clothing, stating that their clothing affected their feeling at ease at a social gathering. Such findings are in contrast to those elderly women who were more socially involved by participating in more than three organizations.

More recent findings indicate that the elderly have positive attitudes regarding clothing for social activities and participation in organizations. Although less need for clothing may be expressed after retirement, significances do exist in the requirement of various types of clothing during later years (LaFleur, 1982; McNeil, 1978). Studies regarding consumer satisfaction among retirees (Nagy and Pysarchik, 1982) suggest the importance of consumer goods such as clothing. However, findings among the elderly also have identified problems such as finding goods which meet the needs of the elderly and provide satisfaction with the product.

Psychological comfort is identified as an important factor in social relationships, maintenance of a good self-image and ego support. Allen (1954) suggests that clothing and personal appearance can provide such psychological comfort in building self-esteem and creating a favorable impression. Especially as one ages and discontinuities in life are experienced, the need to feel at ease, boost the ego, and maintain a positive image of self is important.

Under such circumstances, effective use of clothing to create an attractive appearance can do much to provide ego support and greater assurance of social acceptance and to retain a positive self-image. (Hoffman, 1970, p. 288)

Even though clothing cannot reverse the aging process, it can provide the psychological comfort which becomes so important in many situations for the elderly female.

Thermal Comfort

The skin of an individual is the largest sensitive surface of the body and is the "seat" of three forms of sensitivity: (1) touch/pressure, (2) temperature, and (3) pain. The thermal sensitivity/comfort theory involves two modalities--warmth and cold--which constitute temperature as a form of bodily sensitivity (Bartley, 1958).

It is most often construed that humans possess a low resistance to cold temperatures and ". . . may be truly compared to a tropical animal" (LeBlanc, 1975, p. 8). As a result, individuals protect themselves by means of manipulating the near environment--homes, clothing, etc. LeBlanc (1975) suggests that because human mechanisms did not develop to combat the cold, man's tolerance is limited. "Consequently, the best way to resist cold is to wear adequate clothing" (LeBlanc, 1975, p. 8). Bartley (1958) suggests several means of combatting heat loss which include: putting on additional clothing, seeking a different environment, becoming more physically active, or any other activity which might change the metabolic rate.

When considering clothing as a means of attaining optimal thermal comfort, several considerations have evolved as a result of research in the area. Individuals can vary tremendously in degree of comfort/discomfort in low temperatures. Additionally, the clothing worn should vary according to the temperature, the wind velocity, amount of sunshine, and activity level of the individual concerned (Bartley, 1958; LeBlanc, 1975).

. . . a multilayer clothing, which can be removed or added on, and which has the possibility of being opened or closed easily at the neck to eliminate excess heat or conserve it, is the ideal type of clothing to wear in the cold. (LeBlanc, 1975, p. 9).

Therefore, when proper clothing is worn, the face and extremities become the two bodily areas which are most difficult to control, in terms of thermal comfort.

As an individual ages, several bodily changes occur that tend to affect one's perception and feeling of thermal comfort. Fanger's research (1972) indicates that an increased temperature preference among the elderly may be due to a slight decrease in metabolic rate with increasing age. Fanger (1972) found that a difference of 4 kcal/m²/hour exists between young subjects (20 years old) and older subjects (65 years old). The skin also becomes dry, thin, and loses elasticity as a result of decreased glandular secretions. This, in turn, creates increased sensitivity to textures, fabrics, temperature fluctuations, etc. "As a result, older women often feel the need of a sweater, stole or jacket and they avoid going out of doors in the very hot and very cold weather" (Hoffman, 1970, p. 293).

Recent research suggests that an individual's perception of thermal comfort and related attitudes may affect actions related to physical comfort (Vanderpoorten, 1981). A comfort study conducted by Rohles utilized the questionnaire, a non-experimental method, seeking perceptions and preferences regarding environmental temperatures affecting thermal comfort of the elderly (Rohles, 1969). It was found that the mean preferred temperature by the elderly was 1°C higher than that of younger age groups (Rohles and Johnson, 1972).

The ASHRAE Handbook of Fundamentals further supports the idea of increased temperatures for the elderly by stating that "'all men and women over forty years of age prefer a temperature for comfort 1°F higher than that desired by persons below this age . . .'" (Fanger, 1972, p. 85). Rudeiko's studies (1965) also indicate that elderly persons prefer warmer environments than the young. However, this approach must be viewed with some caution:

. . . it might be remarked that behaviour, at least for very elderly persons, tends toward quiet activity. A person seated relaxed in an armchair all day will prefer a slightly warmer environment simply because of the low activity level. As the activity level is a variable in the comfort equation, this can naturally be taken into account in the design of environments for older people. (Rudeiko, 1972, p. 86)

Vanderpoorten (1981) found a significant difference existing between male's and female's responses regarding thermal comfort. Other research studies support such findings. Research by Messer and Yaglou (1941) indicate that American females prefer slightly higher temperatures than males. One suggestion, as a rationale,

given by Messer and Yaglou was due to the differences in clothing worn by males and females. Theoretically, as suggested by McNall et al. (1968), females may prefer higher temperatures due to a lower ". . . metabolic rate per unit surface area under basal conditions as well as at sedentary activity . . ." than that for males (McNall et al., 1968, p. 3.1). Fanger's studies (1972) provide similar results regarding preferred temperatures for optimal thermal comfort; females preferred higher temperatures than males.

As an elderly female, the individual may be faced with a significant problem in regard to temperature and thermal comfort. Clothing can become an important factor to warmth. Vanderpoorten (1981) did find, in her research, that men were likely to adjust the thermostat to improve thermal comfort. Females, however, were more apt to put on additional clothing. Therefore, an individual's perception of thermal comfort as related to clothing may affect the attainment of optimal environmental comfort.

Care

As an individual ages, additional factors relating to clothing may become significant. Research findings indicate that elderly respondents often express a desire for "easy care" garments. Care factors identified by the AHEA Workshop on Aging (1962) were easily washable, disposable, or wash/wear styles of clothing. Suggested wear factors were lightweight, warm, flexible, soft, soil resistant garments.

Additional research studies support such suggestions. Pieper (1968) found that elderly females experience difficulty in locating garments providing comfort and easy care. Over 50 percent of the elderly respondents (Hargett, 1963) in Tennessee indicated comfort and care as the two most important features for clothing. A study to explore the needs and preferences of adult Texans showed that the most desired factor was ease of care, with comfort ranking as a high priority as well (Saunders, 1981). Respondents indicated that ease of care meant washable and/or "no-iron" garments. Comfort was associated with good fit and "feels good (Saunders, 1981). A summer program in Buffalo, New York on clothing for the elderly yielded similar results. Clothing preferences expressed by the elderly included significant care factors: soil-resistance, washability, and no ironing necessary (Iskan, 1976).

As an individual ages, it is important to develop an understanding of attitudes in regard to clothing such as physical, psychological, thermal comfort and care. Furthermore, it is valuable to identify specific factors contributing to clothing attitudes such as social participation and activities of the elderly individual.

Social Participation

The increase in life expectancy which has been experienced during this century has yielded an increase in the amount of adult leisure time. In fact, the adult with the most free time is the elderly woman.

It is often concluded that social involvement declines with age:

. . . the aged are excluded from equal opportunities for social participation and rewards enjoyed by younger members of their social class, ethnic or racial group. To this extent they become relatively disadvantaged in the later years and lose significant bases of their earlier social integration. (Rosow, 1967, p. 9)

Further research does not support this idea, however. Findings suggest that one's activity depends on a variety of subjective factors and statuses. The amount of social participation has been found to relate directly to that of earlier years (Videbeck and Knox, 1965). Croog and associates (1972) determined that although many elderly are either high or low interactors, most maintain those patterns of social participation which were developed much earlier in life. Atchley (1976) found that through his research, participation was affected very little at the age of retirement and in some instances, the amount of social participation even increased.

Similarly, an earlier study by Ofslager (1956) indicated that social participation during later years is related to that of previous years. Maintenance of activity was dependent on the types of formal organizational affiliations experienced in earlier life.

Zbonowski and Eyde (1962) determined no evidence of voluntary withdrawal during later years. However, the amount of social participation was found to be influenced by several sociodemographic factors. Evidence is given (Graney, 1975) supporting the effect of social participation on well-being, indicating the importance of social participation to life satisfaction.

Some studies have found a small decrease in activity levels among the elderly. However, only very small decreases, if any, have been determined among elderly females, thus supporting the activity theory of aging (Palmore, 1968). Riley (1968), in a study of voluntary association membership, found that although a decrease in participation occurred with age, this decrease was much less for women than for men. Such evidence is also supported by Foskett (1955) and Payne, Payne and Reddy (1972).

With the greatest amount of available leisure time, it has been found that elderly females spend much time involved with both formal and informal associations (Havighurst, 1961; Payne, 1973). If disengagement occurs, it is most likely to be related to formal organizations such as work. However, the amount of social participation as related to work status may vary among the elderly. Rosow (1967) reports that whether or not the elderly worked did not have significance for self-supporting women as related to amount of social participation.

One factor receiving support deals with religious affiliations. Lazerwitz' studies indicated that elderly women both in and out of the labor force maintain greater participation in religious organizations (1961). Payne also found a relationship between social participation and church. It was also indicated that women prefer the same types of participation from the previous five years of their lives and do not anticipate change during the upcoming five years (Payne, 1973).

Other variables tend to influence social participation as well, especially socioeconomic (SES) level. Kutner (1956) found that marital status, occupation, health, and SES are related to the amount of social participation. Those with more education and higher SES levels reported higher levels of social participation as opposed to those with lower incomes and less education.

Smith (1966) reported similar results. Respondents reporting weakened financial situations regarded this as an influencer on social participation. "Decisions to give up club memberships and to buy lower quality clothing were based on financial in a clear majority of the cases" (Smith, 1966, pp. 229-230).

Investigating reasons for the elderly not attending church, Gray and Mobery (1962) found similar results: (a) they were unable to contribute financially, (b) they were not able to dress well enough, and (c) they were unable to get transportation.

Further support relating socioeconomic status and social participation is that of occupational status. Simpson and associates (1966) measured social participation of the elderly and found the amount of participation to be significantly related to former occupation. These findings suggest that higher levels of social participation found among former professionals while lower levels relate to the semi-skilled. More recently, Ward (1979) has found that social participation among the elderly to be related to occupational status as well as income, education, and health.

Although age may not be a direct influencing factor affecting social participation, evidence does indicate that such activity can change as a result of alterations in life statuses or discontinuities such as health, occupation, education, income, and marital status. Findings indicate that these factors also may relate to the overall well-being or life satisfaction of the elderly individual. Therefore, there is a need to investigate relationships or correlations which may exist between participation levels and life satisfaction particularly as related to clothing attitudes. More research is needed in this area to further understand the needs of the elderly female.

Life Satisfaction

As discontinuities develop with increased age, the overall well being of the elderly becomes an important issue. Changes in income, residence, marital status, health, etc. necessitate adjustment which may be difficult for the elderly to accept. An individual's adaptation to such changes may be referred to as one's life satisfaction or perceived quality of life (PQOL) or ". . . degree of fulfillment or satisfaction of basic physical, biological, psychological, and social needs" (Bubolz, Eicher, Evers, and Sontag, 1980, p. 107). Cantril (1965) defines life satisfaction as the extent to which people's perceptions of their current lives coincide with definitions of the best possible life.

Various measures have been used to rate life satisfaction of the elderly. Findings from Cantril's Self Anchoring Scale (1965)

indicate that on a 10-point scale, average life satisfaction among the United States population was 6.6 while that of the elderly was slightly lower, 6.5.

Neugarten and associates developed Life Satisfaction Ratings (LSR) consisting of two subscales as a means of obtaining Life Satisfaction scores, resulting in a mean score of 12.4 and a standard deviation of 4.4. Life satisfaction was conceived as a combination of five aspects of well being: zest, resolution and fortitude, congruence between desired and achieved goals; positive self concept and mood tone. Slocum (1981) measured perceived quality of life (PQOL) utilizing the human ecological model which conceptualizes three basic components: (1) human envired unit, (2) environment, and (3) interactions between and within envired unit and environment. This measure obtained perceptions of various life statuses contributing to satisfaction.

Prior research has been attempted in an effort to determine whether life satisfaction increases or decreases with advanced age. As a result, various factors have been identified which affect one's life satisfaction, whether positively or negatively.

Although age may be a contributing factor to life satisfaction, it is such in conjunction with other variables, namely social participation, socioeconomic status, and health.

In a longitudinal study of the elderly, Maddox (1963) determined the existence of a positive relationship between morale/life satisfaction and levels of activity. Guttman (1964) indicates that

satisfaction for elderly females, especially, may be a result of
 ". . . a vigorous, intense engagement with the world. . . ."

Pihlblad and McNamara (1965) add support with their findings that those better adjusted elderly persons exhibited a high degree of social participation. Results from similar studies (Cutler, 1973; Edwards and Kelemmach, 1973; George, 1978; Ward, 1979; Markides and Martin, 1979) indicate positive relationships between level of social participation and life satisfaction. A recent study of elderly male Tennesseans indicates that the socially active possessed higher life satisfaction scores than the socially inactive (LaFleur, 1982).

Atchley (1971) reported that leisure pursuits are highly valued among the elderly, especially if continuity is maintained with identities held before retirement. Peppers, as reported in Hess and Markson, found that

. . . those who increased their range of interests had higher life satisfaction scores than did respondents whose activity levels remained constant or declined. . . . these were also the preferred activities of respondents before retirement. Respondents who were able to continue engagement in sociable and physically active pursuits also scored high on life satisfaction and adjustment to retirement, even with income and health taken into account. (Hess and Markson, 1980, pp. 309-310)

The consideration of three factors contributing to social participation and life satisfaction of the elderly is, therefore, warranged: (1) lifelong patterns of adaptation, (2) current resources/needs for affiliation, and (3) social supports (Hess and Markson, 1980).

Another factor which has been found to affect the elderly's perception of life satisfaction is socioeconomic status. Pihlblad

and McNamara (1965) found that respondents with higher life satisfaction scores tended to have higher incomes than those with lower scores. Cantril (1965), Bultena (1969), Markides and Martin (1979), Spreitzer and Snyder (1979-80) found that level of life satisfaction was directly related to an individual's socioeconomic status (SES). Further support is given by Edwards (1973) whose results showed that the primary determinant of life satisfaction was socioeconomic status.

Kutner's (1956) findings suggest that good health is directly related to high levels of life satisfaction. Further evidence by Philblad and McNamara (1965) is supportive of such indications. Some studies indicate that health is the primary determinant of life satisfaction such as results provided by Edwards and Kelemmach (1973); Markides and Martin (1979), and Spreitzer and Snyder (1979-80). Evidence related to elderly Tennessee males yields similar results. Those with high life satisfaction scores who were socially active, reported better health than others (LaFleur, 1981).

Hess and Markson (1980) suggest some very basic logic related to life satisfaction and health status:

Despite a rise in functional incapacity, there was no decline in proportions who felt their health was good. Attitudes toward health are an indicator of general morale and sense of well being. Those who feel health is poor are far more likely than others to express feelings of loneliness and alienation. (p. 95)

The interaction of such physiological changes with social changes as related to life satisfaction can create changes in one's self concept as aging occurs. Research related to the effect of

clothing on such feelings about self is a recent emergence, but nevertheless an important area of concern.

The normative character of the quality of life concept compels us to examine . . . the definition of clothing adequacy, to look critically at the extent of and limits to satisfaction provided by material environments and to the function of clothing and textiles in contributing to self-formation. (Sontag, 1981, p. 8)

Results from an environmental approach to the study of life satisfaction (Butler and Eicher, 1978) indicate that inclusion of clothing as an environmental factor does warrant some value, but that perceptions of clothing as related to life satisfaction differ among individuals. Another study (Slocum, 1981) indicates that satisfaction with clothing is positively and significantly correlated to perceived quality of life (PQOL) among individuals. Results indicated that a high clothing importance score was linked with a high PQOL score, positive feelings about self, and about accomplishments; this was especially true for females.

One problem faced by researchers is the difficulty in determining what factors significantly contribute to one's life satisfaction. This, too, is a problem in determining the importance of clothing among the elderly. Retig (1981) points out that clothing is such a basic need that many do not consciously identify such as ". . . contributing to self-esteem, belonging, or creativity needs. Some needs are either below the level of consciousness, or awareness of them is not clear at all times" (Retig, p. 20).

Summary of Literature

Current research is needed to investigate the combined problems of the elderly in regard to clothing attitudes, level of activity, and overall life satisfaction. The degree to which any relationships exist among such factors are yet to be determined. The background study of the variables indicates the values of each. However, the importance placed on clothing comfort as well as care and how such affects or is affected by one's social participation and/or life satisfaction is lacking in the literature.

Although studies have indicated the positive values of psychological comfort, limited research has been conducted to investigate the importance of psychological comfort as held by the elderly female; additionally, limited research has been conducted in regard to elderly Tennesseans. Additional research is needed to determine perceptions of need in regard to clothing for thermal comfort, especially as related to factors such as age, income and level of activity. And similarly, even though changes associated with age have been identified, there is a lack of information available which determines the importance of clothing and clothing characteristics as related to physical comfort. Furthermore, an individual's perception of care may vary, depending on age, income, and level of activity which may influence the time and money available for caregiving, as well as the physical ability to care for garments. However, research has not been conducted to support any such possibilities; therefore, a need

exists to investigate individuals' attitudes in regard to ease of care, in addition to thermal, psychological, and physical comfort.

Research Hypotheses

Hypotheses formulated for use in this study were:

Hypothesis 1

- a. H_0 : There is no difference between present employment status and attitude toward physical comfort of elderly females.
 H_1 : There is a difference between present employment status and attitude toward physical comfort of elderly females.
- b. H_0 : There is no difference between present employment status and attitude toward psychological comfort of elderly females.
 H_1 : There is a difference between present employment status and attitude toward psychological comfort of elderly females.
- c. H_0 : There is no difference between present employment status and attitude toward thermal comfort of elderly females.
 H_1 : There is a difference between present employment status and attitude toward thermal comfort of elderly females.
- d. H_0 : There is no difference between present employment status and attitude toward care of clothing of elderly females.
 H_1 : There is a difference between present employment status and attitude toward care of clothing of elderly females.
- e. H_0 : There is no difference between present employment status and life satisfaction of elderly females.
 H_1 : There is a difference between present employment status and life satisfaction of elderly females.

f. H_0 : There is no difference between present employment status and level of social participation of elderly females.

H_1 : There is a difference between present employment status and level of social participation of elderly females.

Hypothesis 2

a. H_0 : There is no difference between income and attitude toward physical comfort of elderly females.

H_1 : There is a difference between income and attitude toward physical comfort of elderly females.

b. H_0 : There is no difference between income and attitude toward psychological comfort of elderly females.

H_1 : There is a difference between income and attitude toward psychological comfort of elderly females.

c. H_0 : There is no difference between income and attitude toward thermal comfort of elderly females.

H_1 : There is a difference between income and attitude toward thermal comfort of elderly females.

d. H_0 : There is no difference between income and attitude toward care of clothing of elderly females.

H_1 : There is a difference between income and attitude toward care of clothing of elderly females.

e. H_0 : There is no difference between income and life satisfaction of elderly females.

H_1 : There is a difference between income and life satisfaction of elderly females.

f. H_0 : There is no difference between income and level of social participation of elderly females.

H_1 : There is a difference between income and level of social participation of elderly females.

Hypothesis 3

a. H_0 : There is no difference between level of education and attitude toward physical comfort of elderly females.

H_1 : There is a difference between level of education and attitude toward physical comfort of elderly females.

b. H_0 : There is no difference between level of education and attitude toward psychological comfort of elderly females.

H_1 : There is a difference between level of education and attitude toward psychological comfort of elderly females.

c. H_0 : There is no difference between level of education and attitude toward thermal comfort of elderly females.

H_1 : There is a difference between level of education and attitude toward thermal comfort of elderly females.

d. H_0 : There is no difference between level of education and attitude toward care of clothing of elderly females.

H_1 : There is a difference between level of education and attitude toward care of clothing of elderly females.

e. H_0 : There is no difference between level of education and life satisfaction of elderly females.

H_1 : There is a difference between level of education and life satisfaction of elderly females.

f. H_0 : There is no difference between level of education and level of social participation of elderly females.

H_1 : There is a difference between level of education and level of social participation of elderly females.

Hypothesis 4

a. H_0 : There is no difference between place of residence and attitude toward physical comfort of elderly females.

H_1 : There is a difference between place of residence and attitude toward physical comfort of elderly females.

b. H_0 : There is no difference between place of residence and attitude toward psychological comfort of elderly females.

H_1 : There is a difference between place of residence and attitude toward psychological comfort of elderly females.

c. H_0 : There is no difference between place of residence and attitude toward thermal comfort of elderly females.

H_1 : There is a difference between place of residence and attitude toward thermal comfort of elderly females.

d. H_0 : There is no difference between place of residence and attitude toward care of clothing of elderly females.

H_1 : There is a difference between place of residence and attitude toward care of clothing of elderly females.

e. H_0 : There is no difference between place of residence and life satisfaction of elderly females.

H_1 : There is a difference between place of residence and life satisfaction of elderly females.

f. H_0 : There is no difference between place of residence and level of social participation of elderly females.

H_1 : There is a difference between place of residence and level of social participation of elderly females.

Hypothesis 5

a. H_0 : There is no difference between age and attitude toward physical comfort of elderly females.

H_1 : There is a difference between age and attitude toward physical comfort of elderly females.

b. H_0 : There is no difference between age and attitude toward psychological comfort of elderly females.

H_1 : There is a difference between age and attitude toward psychological comfort of elderly females.

c. H_0 : There is no difference between age and attitude toward thermal comfort of elderly females.

H_1 : There is a difference between age and attitude toward thermal comfort of elderly females.

d. H_0 : There is no difference between age and attitude toward care of clothing of elderly females.

H_1 : There is a difference between age and attitude toward care of clothing of elderly females.

e. H_0 : There is no difference between age and life satisfaction of elderly females.

H_1 : There is a difference between age and life satisfaction of elderly females.

f. H_0 : There is no difference between age and level of social participation of elderly females.

H_1 : There is a difference between age and level of social participation of elderly females.

Hypothesis 6

H_0 : There is no association between the clothing variables, life satisfaction, and level of social participation.

H_1 : There is an association between the clothing variables, life satisfaction, and level of social participation.

CHAPTER III

METHODS AND PROCEDURES

Survey Design

A survey design was utilized in this study through use of a questionnaire administered by the researcher. The project was descriptive in nature. Information gained concerns the elderly's attitudes toward specific clothing variables--care, physical comfort, psychological comfort, and thermal comfort--as well as degree of life satisfaction and level of social participation.

The sociodemographic factors chosen for use in this study as independent variables were: present employment status, age, income, level of education and place of residence. Additional data such as spouse's occupation, sources of income, marital status, and life-long profession were obtained. This data further assists in characterizing Tennessee's elderly females. Dependent variables studied include attitude toward physical comfort, psychological comfort and thermal comfort, care, level of social participation and life satisfaction.

The instrument determined an individual's agreement or disagreement to statements related to clothing, life satisfaction, and social participation. Procedures are presented as follows: development of instruments, sample selection, data collection, and statistical treatment of the data.

Development of Instruments

For the study four measures were utilized: a clothing attitudes measure, a life satisfaction measure, a social participation measure, and a measure of background information/sociodemographic characteristics. The questionnaire used is comparable to the types used by other researchers conducting similar studies. Attempts were made to construct the questionnaire in a manner which was advantageous to the elderly respondent. The use of large type, simple instructions, and fixed response questions contributed to clarity, amount of writing necessary, and completion time for the elderly respondent.

Sociodemographic Characteristics

To assist in characterizing the elderly respondents, specific background information was requested and utilized in the form of independent variables, such as sociodemographic questions relating to age, income, education, and residence. Two questions regarding occupation were open-ended and required short answers; the answers were categorized according to unskilled, semi-skilled, clerical, professional, or "housewife" occupations.

Clothing Measure

This instrument consisted of attitudinal statements requiring responses of elderly females to specific clothing variables. Some questions originally written by Carpenter (1966), Creekmore (1968), and LaFleur (1982) were used as a basis for study and formulation of the questionnaire.

Thirty-three statements comprise the clothing measure. Likert summated ratings were used, with scores ranging from 1 to 4. Using this scale, a score of 4 indicated a response of strongly agree and a score of 1 indicated strongly disagree. Statements worded negatively were scored inversely where strongly agree equalled a score of 1 and strongly disagree equalled a score of 4. The possible range of scores on the composite scale was 33 to 132.

Attitude toward care of garments was operationalized by utilizing the weighted responses from statements 3, 7, 11, 15, and 22. The possible range of scores for this subscale was 5 to 20.

Attitude toward physical comfort of clothing was operationalized by utilizing the weighted responses from statements 1, 4, 8, 13, 16, 19, 23, and 27. The possible range of scores for this subscale was 8 to 32.

Attitude toward psychological comfort regarding clothing was operationalized by utilizing the weighted responses from statements 2, 5, 9, 12, 17, 20, 24, 26, 31, and 33. A possible range of scores for this subscale was 10 to 40.

Attitude toward thermal comfort and clothing was operationalized by utilizing the weighted responses from statements 6, 10, 14, 18, 21, 25, 29, 30, and 32. A possible range of scores was 9 to 36.

Higher scores on each subscale represented more positive attitudes toward the clothing variables, while lower scores represented less positive attitudes.

Life Satisfaction Measure

To measure individuals' subjective feelings toward life in general, a life satisfaction index was chosen. The Life Satisfaction Index A (LSIA), as developed by Neugarten, Havighurst, and Tobin (1963), has been widely used in gerontological research and was utilized in this study. The questionnaire consisted of 20 attitudinal statements to which the respondent checked either the "agree," "undecided" or "disagree" answer. Each correct "agree" was given a score of 1; each "undecided" or "disagree" was given 0 point value. A range of scores existed between 0 and 20. A score of 20 represented optimal life satisfaction, while low scores were associated with low life satisfaction. Findings from the original sample resulted in a mean score of 12.4 and a standard deviation of 4.4. Also, Adams (1969) conducted an analysis of LSIA and assessed it as a fair measure of life satisfaction of the elderly. In LaFleur's (1982) study of elderly men, internal consistency of LSIA was evaluated using Cronbach's alpha and an alpha level of .56 was obtained.

Social Participation Measure

To obtain data related to modes of interaction, an index developed by LaFleur (1982) was used, with minor modifications. LaFleur, based on a social participation index developed by Atchley (1981), divided the scale into three categories of activities: (1) solitary activities, (2) voluntary association membership, and (3) expressive leisure pursuits. A 4-point Likert scale was used with individual responses ranging from 0 to 3 possible points. The total possible

composite measure, as modified for this study, was 0 to 62.

Sample Selection and Data Collection Pretest

Prior to beginning the study, a pilot/pretest was conducted. The entire questionnaire was administered to a group of 30 elderly females from the middle Tennessee area who were similar to the population to be studied. This pretest assisted in refining the questionnaire.

Attitudinal responses regarding clothing were taken from the pretest and interpreted for content validity to assure that the questionnaire contained a logical sampling of items reflecting the clothing variables. A panel of four professionals in the textiles and clothing area was used for determining content validity. Determining reliability of the test was approached through item discrimination analysis as a tool for identifying consistencies and inconsistencies in responses. In addition, the discriminatory power of each item was estimated to determine those items which failed to discriminate between individuals with varying attitudinal responses.

Items from the questionnaire were amended in order to further clarify and discriminate. The final questionnaire consisted of 33 statements which had been restructured for clarity; all were used in the final data analysis except number 28, which was not utilized due to a lack of discriminatory power.

Sample and Data Collection

The sample for this study consisted of 165 elderly females from the middle Tennessee area; of the 165 responses, 15 were not

complete and 150 were usable. The sample was drawn from groups in the area which represented church organizations, senior centers, and the American Association of Retired Persons (AARP).

A purposive sample was used for this study. Criteria for inclusion in the sample were: (1) subject must be female, (2) subject must be 55 years of age or older, and (3) subject must reside in Tennessee.

Statistical Treatment

In order to analyze the data accurately, non-parametric techniques of analysis were used. Tests of significance of difference were used for hypotheses 1, 2, 3, 4, and 5. Hypotheses 2, 3, and 5 consist of ordinal, interval, and ratio level data; therefore, the Kruskal-Wallis H test was used as the method of analysis, which is the most powerful non-parametric equivalent to the parametric F-test for analysis of variance.

Hypotheses 1 and 4 consist of nominal level data; therefore a chi-square test was appropriate and utilized for data analysis.

A measure of association capable of analyzing ordinal data was necessary for hypothesis 6. Thus, Somer's D was used, indicating the strength of association between variables.

To further determine where significant differences occurred, the Mann-Whitney U-test and median test were applied as two-sample probes. The .05 level of significance was used in all subsequent hypothesis tests.

CHAPTER IV

RESULTS

This study utilized questionnaires administered to 150 elderly females who resided in the middle Tennessee area who were 55 years of age and older. Respondents participating in the study held relatively positive attitudes in regard to the clothing variables. Scores for the physical comfort subscale were positive with a range of 17 to 32 of scores and a possible range of 8 to 32. A mean score of 23.3 was obtained ($SD = 2.6$) which was above the possible mid-range of 20.0.

Attitudes toward psychological comfort were positive with a mean of 27.6 ($SD = 3.5$). Possible range of scores was 10 to 40 while the actual range was 9 to 37. The obtained mean score was positive as compared to the possible mid-range of 24.5.

Scores for the thermal comfort subscale ranged from 18 to 36, with a possible range of 9 to 36. The mean score obtained was 24.8 ($SD = 2.7$) which was higher than the possible mid-range of 22.5, indicating relatively positive attitudes toward thermal comfort.

Attitudes toward ease of care were found to be positive with an 11-20 range of scores. The possible range of scores was 5 to 20 with a possible mid-range of 12.5. The obtained mean score was higher ($\bar{x} = 16.5$, $SD = 1.8$) than the possible mid-range, suggesting relatively positive attitudes held by the elderly regarding care of clothing (see Appendix B, Table B-1).

Life satisfaction scores were similar to those obtained by Neugarten and associates (1961). A mean score of 12.7 was obtained with a standard deviation of 4.4. This compares to the original test findings with a mean score of 12.4 and standard deviation was 4.4. However, mean scores for life satisfaction were less positive among this group of elderly females than mean scores of elderly males as found by LaFleur (1982) ($\bar{x}$ = 14.5, SD = 3.8). In a study conducted by Robinson (1981) the mean score for a group of elderly females residing in East Tennessee was 12.9 (SD = 3.9).

Social participation scores were moderate, ranging from 10 to 57, with a possible range of 0 to 62. The mean score obtained was 26.5 (SD = 8.9). In this study, 56.7 percent or 85 respondents (N = 150) had low levels of social participation, less than the mean of 26.5 (see Appendix B, Table B-1). However, average scores were higher among this sample of elderly females than social participation levels of elderly men, as found by LaFleur (1982) ($\bar{x}$ = 23.9, SD = 3.8).

To determine the existence of differences on independent variables between attitudes toward clothing, life satisfaction and social participation based on sociodemographic characteristics, the Kruskal Wallis H-test of significance was utilized for ordinal level data. Nominal level data was analyzed by use of the chi-square test of significance.

H₁: There is no significant difference between present employment status and attitude toward (a) physical comfort, (b) psychological comfort, (c) thermal comfort, (d) care, (e) life satisfaction and (f) social participation among elderly females.

An individual's current employment status was not significantly related to any of the four clothing variables or life satisfaction. Using a chi-square analysis, $df = 3$, the critical value for rejection at the .05 level was 7.81. Chi-square values associated with the clothing variables were: (a) physical comfort, 2.67; (b) psychological comfort, 2.99; (c) thermal comfort, 1.12; and (d) care of clothing, 1.72. Thus hypothesis 1a, b, c, and d failed to be rejected.

Life satisfaction was not significantly related to present employment status. A chi-square value of 4.17 resulted in a failure to reject hypothesis 1e.

A significant difference was found to exist between social participation scores and present employment status. A chi-square value of 10.46 led to rejection of hypothesis 1f.

To determine where significant differences existed, the median test was applied, which is a chi-square based, goodness-of-fit statistic, and appropriate for analyzing nominal level data. It was found that those individuals who worked full-time had significantly lower levels of social participation than others. Respondents who were working part-time, not working, or retired had significantly higher social participation scores than those working full-time, thus indicating significantly higher levels of social participation (see Table 1).

TABLE 1
SUMMARY OF MEDIAN TEST OF SOCIAL PARTICIPATION FOR
CURRENT EMPLOYMENT STATUS

Source	N	df	Median	χ^2	Significance
1) Retired 2) No Work, Not Retired	110	1	26	.00	N.S.
1) Retired 3) Part-Time Work	111	1	26	1.70	N.S.
1) Retired 4) Full-Time Work	111	1	25	8.05	.045*
2) No Work, Not Retired 3) Part-Time Work	39	1	29	3.23	N.S.
2) No Work, Not Retired 4) Full-Time Work	39	1	24	9.34	.009**
3) Part-Time Work 4) Full-Time Work	40	1	23	3.61	.049*

*p < .05.

**p < .01.

H₂: There is no significant difference between income and attitude toward (a) physical comfort, (b) psychological comfort, (c) thermal comfort, (d) care of clothing, (e) life satisfaction and (f) social participation among elderly females.

No significant difference was found between income and attitude toward (a) physical comfort (.606); psychological comfort (.510); (c) thermal comfort (.404); or (d) care of clothing (.293). Critical values, as determined by the Kruskal Wallis H-test were non-significant at the .05 level, thus leading to failure to reject null hypothesis 2, portions a, b, c, and d (see Table 2).

A significant difference was found to exist between life satisfaction scores and income. A critical value of .037 led to rejection of hypothesis 2e, based on the Kruskal Wallis H-test. To determine where significant differences existed, the Mann-Whitney U-test was utilized. It was found that those respondents with the lowest monthly income (less than \$400) had significantly lower life satisfaction scores than those individuals whose income was higher (see Table 3).

No significant difference existed between income and social participation. A nonsignificant value of .233 resulted in a failure to reject hypothesis 2f (see Table 2).

H₃: There is no significant difference between level of education and attitude toward (a) physical comfort, (b) psychological comfort, (c) thermal comfort, (d) care of clothing, (e) life satisfaction and (f) social participation among elderly females.

TABLE 2
KRUSKAL WALLIS ANALYSIS OF VARIANCE

Source	df	Attitude Toward Physical Comfort	Attitude Toward Psychological Comfort	Attitude Toward Thermal Comfort	Attitude Toward Care of Clothing	Social Participation	Life Satisfaction
		p	p	p	p	p	p
Income	4	.606	.510	.404	.293	.233	.037*
Education	3	.366	.244	.335	.211	.001**	.018*
Age	3	.528	.362	.443	.201	.994	.568

*p < .05.

**p < .01.

TABLE 3
MEANS OF LIFE SATISFACTION FOR INCOME

Source	$\bar{x}$	10.1	13.2	12.8	12.0	13.4
<\$400 monthly	10.1	--	3.1*	2.7*	1.9	3.3*
\$400-800	13.2		--	-0.4	-1.2	0.2
\$800-1200	12.8			--	-0.8	0.6
\$1200-1600	12.0				--	1.4
>\$1600	13.4					--

N = 143.

*All asterisks reflect significant differences at the .05 level.

Education was not found to be related significantly to any of the clothing variables. Probabilities obtained for attitude toward physical, psychological, thermal, and care were .366, .244, .335, and .211, respectively. Therefore, hypothesis 3a, b, c and d failed to be rejected (see Table 2).

A significant difference was found to exist between education and life satisfaction scores. A probability of .018 led to rejection of hypothesis 3e. To determine where specific differences existed, the Mann Whitney U-test was applied. Findings indicated that life satisfaction was significantly affected by educational attainment. Respondents whose educational level was less than the high school equivalent (12 years) held significantly low scores regarding life satisfaction in comparison to those who had completed high school, a college degree or a graduate degree. No differences existed in life satisfaction between those with a high school education, college or graduate degrees (see Table 4).

A significant difference also existed between education and social participation. A probability of .001 existed, which led to rejection of hypothesis 3f. It was found by utilizing the Mann Whitney U-test that level of social participation did significantly differ between those who did not complete high school and those who completed high school, a college degree or a graduate degree. Respondents whose educational attainment was less than 12 years (high school equivalent) held significantly low social participation scores as compared to the other educational categories,

TABLE 4
MEANS OF LIFE SATISFACTION FOR EDUCATIONAL ATTAINMENT

Source	$\bar{X}$	10.2	12.9	13.4	14.1
Less than 12 Years	10.2	--	2.7*	3.2*	3.9*
Completed High School	12.9		--	0.5	1.2
College Degree	13.4			--	0.7
Graduate Degree	14.1				--

N = 148.

*All asterisks reflect significant differences at the .05 level.

indicating low levels of social participation among this group.

There also existed significant differences in social participation levels between high school graduates and those with college or graduate degrees. Respondents who had completed college or graduate school had significantly higher social participation levels than those whose highest educational attainment was completion of high school (see Table 5).

H₄: There is no significant difference between residence and attitude toward (a) physical comfort, (b) psychological comfort, (c) thermal comfort, (d) care of clothing, (e) life satisfaction, (f) social participation among elderly females.

An individual's current resident was not found to be significantly related to any of the dependent variables. A critical chi-square value of 7.81, $df = 3$, was needed. Observed chi-square values of 6.18, 3.57, 2.99 and .963 respectively for the clothing variables resulted in the failure to reject hypothesis 4a, b, c and d.

Chi-square analysis also yielded nonsignificant values of 1.49 and .94 for life satisfaction and social participation, leading to failure to reject hypothesis 4e and f (see Table 6).

H₅: There is no significant difference between age and attitude toward (a) physical comfort, (b) psychological comfort, (c) thermal comfort, (d) care of clothing, (e) life satisfaction, and (f) social participation among elderly females.

TABLE 5
MEANS OF SOCIAL PARTICIPATION LEVEL FOR EDUCATIONAL ATTAINMENT

Source	$\bar{x}$	21.2	25.0	30.5	31.6
Less than 12 Years	21.2	--	3.8*	9.3*	10.4*
Completed High School	25.0		--	5.5*	6.6*
College Degree	30.5			--	1.1*
Graduate Degree	31.6				--

N = 148

*All asterisks reflect significant differences at the .05 level.

TABLE 6
CHI-SQUARE ANALYSIS^a

Source	df	Attitude Toward Physical Comfort χ^2	Attitude Toward Psychological Comfort χ^2	Attitude Toward Thermal Comfort χ^2	Attitude Toward Care of Clothing χ^2	Social Participation χ^2	Life Satisfaction χ^2
Employment status	3	2.67	2.99	1.12	1.72	10.46*	4.17
Residence	3	5.18	3.57	2.99	.963	.94	1.49

^aUsed for nominal level data.

*Significance found (critical value = 7.81).

An individual's age was not found to be significantly related to the clothing variables. A nonsignificant probability of .528 was associated with attitude toward physical comfort; a probability of .362 was obtained regarding psychological comfort. Additionally, attitude toward thermal comfort was nonsignificant with a probability of .443 while attitude toward care was nonsignificant with a probability of .201. Thus, the hypothesis 5a, b, c and d was not rejected.

No significant difference was found to exist between age and life satisfaction. A probability of .568 was found, thus indicating a failure to reject hypothesis 5e.

Additionally, no significant relationship existed between age of respondent and social participation. A probability of .994 was not significant and led to failure to reject hypothesis 5f (see Table 2, page 67).

H_6 : There is no association between the clothing variables, life satisfaction, and social participation level.

Somer's D values were obtained and utilized as the measure of association between the dependent variables: attitudes toward physical, psychological, thermal comfort, and care of clothing, life satisfaction, and level of social participation.

Little association was found to exist among the clothing variables. No significant associations existed between thermal comfort attitudes and care of clothing ($D = .09$); physical and psychological comfort ($D = .13$); physical and thermal comfort ($D = .18$); physical comfort and care of clothing ($D = .19$); psychological and thermal

comfort ($D = .104$). A low association existed between attitude toward psychological comfort and care ($D = .245$) (see Table 6).

No associations were found to exist among the clothing variables and life satisfaction by utilization of the Somer's D test of association (see Table 7). In addition, no association existed between level of social participation and attitudes toward the clothing variables (see Table 7).

A moderately low association was found to exist between life satisfaction and level of social participation ($D = .446$). To determine which variable was the better predictor, asymmetric Somer's D values were obtained, making it necessary to look at each variable as independent in relation to the other. Such a measure enables evaluation of the predictive utility of each variable. With level of social participation analyzed as the independent variable, a D value of .446 was obtained, suggesting a moderate association with life satisfaction. Using life satisfaction as the independent variable, a D value of .236 was obtained, suggesting a moderately low association with social participation. Thus, level of social participation influences life satisfaction more than life satisfaction influences social participation.

TABLE 7
TESTS OF ASSOCIATION AMONG THE DEPENDENT VARIABLES^a

	Attitude Toward Physical Comfort	Attitude Toward Psychological Comfort	Attitude Toward Thermal Comfort	Attitude Toward Care	Life Satisfaction	Social Participation
Attitude toward physical comfort	--					
Attitude toward psychological comfort	.132	--				
Attitude toward thermal comfort	.180	.104	--			
Attitude toward care of clothing	.192	.245	.088	--		
Life satisfaction	.048	.079	.017	.026	--	
Social participation	.089	.126	.079	.191	.446	--

N = 150

^aSomer's D test of association used.

CHAPTER V

DISCUSSION

The majority of gerontological research typifies the elderly female as a widow, living alone, surviving on a fixed income often below the poverty level. Additionally most research regarding today's elderly female characteristically identifies her as having had little formal education and/or having worked little outside the home, professionally (Cole and Harris, 1980; Fact Book on Aging, 1978; Hess and Markson, 1980; Statistical Abstract of the U. S., 1978; Steinman, 1963).

Respondents in this study were atypical of such characteristics. Since the sample was not randomly chosen, the differing characteristics found among the respondents could be a result of methodological problems. More importantly, perhaps, is the suggestion that the sample is characteristic of changing trends among elderly females.

Of the population in the United States, one of the fastest growing segments is the elderly. In this study, 32 percent of the sample were between the ages of 55 and 64, while 50 percent of the total sample were a part of the 65-74 year group. Only 18 percent of the respondents were 75 years of age or older (see Appendix, Table B-2).

Of the total sample studied, an overwhelming majority (73.4 percent) were not currently working outside the home. Of this

percentage, 12.7 percent indicated a lack of current work, but were not yet retired, while 60.7 percent of the respondents indicated that they were retired. A conservative interpretation of these facts must be made however, depending on how elderly females define "retirement" and "work roles." It is important to recognize that today's elderly female was raised during a period in which feminine roles were ill-defined and contradictory. Females who may have been educated to adopt professional work roles often found themselves adopting, instead, roles of wife, homemaker and mother (Fuller and Martin, 1980). Therefore, for some, work role may be interpreted as such, and individuals' opinions regarding retirement from such roles of wife, mother and homemaker may vary (see Appendix, Table B-2).

Occupational attainments varied among the respondents. Surprisingly, 36.7 percent of the elderly females held professional positions (accountants, professors, etc.). Technical, skilled, and clerical workers comprised 34 percent of the sample, while unskilled laborers comprised 20.7 percent of the sample. Only 6 percent expressed "housewife" as a work role; however, such data should again be approached cautiously. Since respondents were asked to specify their occupation for the 20 years before retirement age, it was possible for occupations to be specified which were not 20-year careers (see Appendix, Table B-2).

Of the total sample, 26.6 percent were participating in the work force at that time on either a part-time or full-time basis. This suggests support for trends identified by the Department of

Commerce (Hess and Markson, 1980) that females are remaining in the labor force longer through adulthood and into old age, especially at the ages of 55-64. Prior research also indicates that continued participation in work roles is associated with marital status, high education, and good health.

Such findings are also supported as a result of this study. Educational levels were relatively high, supporting U. S. Census predictions that the elderly will become better educated as the nation as a whole increases in educational attainments. Of the respondents sampled, 34.7 percent held college degrees (undergraduate and/or graduate degrees). High school was the highest level of education completed for 47.3 percent of the sample, while 16.7 percent had completed less than 12 years of formal education (see Appendix, Table B-2). This is in contrast to 1975 statistics when only one-third of women ages 65 and older had a high school education and 6 percent were college graduates (Current Population Reports, 1980).

Because life expectancy for females is higher than that for males, and because women tend to marry men older than themselves, it is likely that large numbers of those women will be widowed. Recent studies indicate that, during the past decade, over 50 percent of all elderly females were widowed, while 39 percent were married (Fuller and Martin, 1980). In this study, 52.7 percent of the respondents were married, 34.7 percent were widowed, while 7.3 percent were never married and 5.3 percent were divorced. However, this study also incorporated the 55-64 age group, which could account for

the high percentages of those married and not yet widowed (see Appendix, Table B-2).

Income levels of the respondents in this study were varied. Statistical reports show that in 1978 the median personal income for the 65 or older individual was \$7,314, which was held by half of those families headed by elderly females (Fuller and Martin, 1980; Statistical Abstract of the U. S., 1978). In this study, 32 percent of the elderly females had incomes less than \$9,600 per year (less than \$800 monthly). Conversely, 22.7 percent of the respondents specified annual incomes greater than \$19,200 (greater than \$1,600 monthly) (see Appendix, Table B-2). One reason for such findings is supported by census data indicating that most elderly people have more than one source of retirement income (Fact Book on Aging, 1978). Findings from this study lend support; respondents were asked to check all sources of personal income from a given list. The most frequently cited sources of income were work, social security benefits, retirement plans and savings accounts.

Additionally, a large portion of the sample maintained their own households versus rental residences and/or retirement complexes. Of the total sample, 83.3 percent lived in their own home, 11.3 percent rented, while 4.7 percent lived in condominiums and/or in a relative's home ("other" category) and 0.7 percent lived in exclusive retirement buildings (see Appendix, Table B-2).

Attitudes about the Clothing Characteristics

Although no significant relationships were found to exist between the clothing variables and other independent factors, pertinent findings do deem consideration. Findings indicate that attitudes toward physical, psychological and thermal comfort, as well as care of clothing were positive. Although mean scores, frequencies, and percentages cannot suggest statistical significances, they do supply a better understanding of the distribution of the specific groupings of values associated with the variables used in this study.

A mean score of 23.26 was obtained for the attitude toward physical comfort which was above the possible mid-range of 20.0. However, 56 percent of the respondents' scores were less than the mean of 23.26. Such findings lend support to work by Shanas' (1968) work reporting that physical functioning and comfort were not difficulties held by the 65-69 age group; however, physical functioning and comfort were significant problem areas for the 75-79 age group. Since 82 percent of the respondents in this study were less than 75 years of age, the findings may suggest that although attitudes toward physical comfort were positive, they were not the highest priority of attitudes held by those individuals.

Attitudes held in regard to psychological comfort, or a feeling at ease in clothing, were also relatively positive with a mean score of 27.6, which was above the possible mid-range of 24.5. Over half of the respondents, 61.3 percent, held psychological comfort

scores above the mean score, suggesting a concern for psychological ease in the clothing worn.

Thermal comfort scores were also relatively positive ($\bar{x}$ = 24.8) and were higher than the possible mid-range of 22.5. However, 72.7 percent of respondents' scores regarding thermal comfort were less than the mean of 24.8. Thus, although relatively positive attitudes were held, such attitudes were not significant. Another reason for such results could be due to the instrument used. Rudeiko (1972) suggests that thermal comfort may be influenced by activity level; those engaged in low level activities require warmer environments. Physical activity level was not measured as a variable in determining thermal comfort in this study. Also, data was collected during hot summer months, when individuals were not as concerned with thermal comfort for warmth as they might have been during colder months.

Attitude toward ease of caring for garments was positively held by respondents ($\bar{x}$ = 16.5) and above the possible mid-range of 12.5. Despite the positive attitudes held, 61 percent of all respondents held scores which were less than the mean of 16.5 (see Appendix, Table B-2).

Results of the measures of attitudes toward the clothing variables further identify the difficulties in determining the importance of clothing among the elderly. As suggested by Retig (1981) some needs are below the level of consciousness or individuals are not always clearly aware of them.

Associations Between the Clothing Variables, Social
Participation and Life Satisfaction

Little association was found to exist between any of the clothing variables. A very weak association was found to exist between care and psychological comfort attitudes, indicating that attitudes toward care moderately influence attitudes toward psychological comfort. Conversely, attitudes toward psychological comfort moderately influence attitudes toward care of clothing (see Table 6, page 71). No associations were found to exist between level of social participation and attitudes toward clothing (see Table 6).

Although respondents held relatively positive attitudes toward the clothing variables and relatively high life satisfaction scores, no association was found to exist between the variables. Such findings suggest that no direct relationship exists between life satisfaction of the elderly female and her attitudes toward physical, psychological, thermal comfort or care of clothing. It is possible that indirect relationships may exist between these and other variables, but such relationships were not tested due to the size and scope of this study.

Attitudes Toward Clothing as Related to
Sociodemographic Characteristics

No significant differences were found between physical comfort attitudes and the independent variables. In regard to age,

it is noted, however, that attitudinal scores for physical comfort did increase with advancement in age. Those individuals who were retired expressed more positive attitudes about physical comfort than those who worked or were not retired. Respondents with the lowest incomes (less than \$400 monthly) expressed more positive attitudes about physical comfort than other income groups. Lack of income adequacy and a low wardrobe budget among this group could possibly create the necessity for clothing that is physically comfortable for the individual in any situation.

Additionally, no significant differences existed between psychological comfort attitudes and any independent variables. The findings do suggest, however, that attitude toward psychological comfort was more positive among the youngest age group (55-64), those with the highest income level (greater than \$1,600 monthly) and those individuals with the highest educational attainments (graduate degrees). These combined sociodemographic factors as related to psychological comfort could possibly be explained by the need for societal approval and/or for fulfillment of the social self. Such possibilities are yet to be proven in research studies.

Attitudes toward thermal comfort were not significantly related to the independent variables. Such results suggest that no direct relationship existed. The data does show that attitudes toward thermal comfort were most positive among the 75-84 age group, which could possibly be due to physiological decrements occurring with age such as dry, thinning skin and a decreased metabolic rate (Fanger,

1972). Those individuals who had retired expressed greater concerns for thermal comfort than working respondents. Interestingly, respondents with high levels of income (\$1,200-\$1,600+ monthly) expressed more positive attitudes toward thermal comfort. This income factor may have provided the necessary financial means to maintain adequate warmth (added layers of clothing, increase in thermostat, etc.).

Social participation scores obtained in this study could lend support to the continuity theory of aging. Payne (1980, p. 18) reports that most older women ". . . still prefer the activity they enjoyed most five years ago and expect little change in preference during the next five years." It is possible, therefore, that the respondents' activities reflected the same interests of earlier years and current activities may represent a steady level of participation throughout time without major role changes. However, such cannot be proven statistically since retrospective participation (recall) was not a variable studied.

A significant difference was found to exist between social participation and education. Social participation scores were lowest for those individuals with low education; scores increased as educational attainment increased. Therefore, a direct relationship existed between the two variables. Respondents whose educational background was less than 12 years scored significantly lower than those with more education; 80 percent of those persons were low-level participants. Also, individuals holding college degrees had significantly higher social participation scores than those who had completed high

school; high level participators comprised 67.3 percent of the college group. In comparison, only 33 percent of high school graduates were high level participators. These results are further supported by previous research indicating that high levels of participation are affected by high educational levels (Kutner, 1956; Ward, 1979). LaFleur (1982), using the same social participation measure, found the same results as well.

Although none of the independent variables were significantly related to attitudes toward care, some pertinent results were found. Attitudes toward care of clothing tended to decrease with age but were highest among retired individuals in contrast to those who were working. Attitudes toward care were lowest among those individuals whose income was less than \$400 monthly, and those with the lowest educational attainment. Conversely, the most positive attitudes were held by individuals with undergraduate or graduate degrees and those whose income was highest. These combined factors of education and income could possibly suggest that these individuals possessed a broader knowledge of proper care and appropriate cost of care associated with their wardrobes. Such suggestions are not yet validated in the research literature.

Social Participation

Respondents in this study had only moderate scores for social participation, as a group ($\bar{x} = 26.5$). Scores for 56.7 percent of the females surveyed were lower than the average score, and were

categorized as low lever participators. In this study, high level participators were considered as those individuals with social participation scores greater than 26.5 (43.3 percent of the sample).

Current employment status was also related significantly to social participation of the respondents. As was expected, those persons still working full-time outside of the home had significantly low social participation scores as compared to those of other work statuses; 80 percent of the elderly full-time workers were low participators. Those who were retired, not working or working part-time had the higher social participation scores. The greatest percentages of high-level participators came from those who were working part-time; 60 percent had high level scores. One possible explanation for this could be that individuals who experience gradual transitions in roles rather than abrupt role change are able to adapt to later life more positively. This could be evidence of continuity within the context of discontinuity.

In regard to age, the lowest levels of participation were held by those individuals who were 75 years of age and older. However, the group with the highest levels of participation were those between the ages of 65 and 74. Social participation was not significantly related to age, nor to income. However, it is noted that the percentage of high-level participators did increase as income increased, which is supported in previous research (Gray and Moberg, 1962; Kutner, 1956; Smith, 1966; and Ward, 1979).

Life Satisfaction

The elderly females participating in this study held life satisfaction scores ($\bar{x} = 12.7$; $SD = 4.4$) which were consistent with other research findings. Neugarten and associates (1961) who devised the instrument obtained a mean score of 12.4 ($SD = 4.4$), while similar results were found by Adams (1969) ($\bar{x} = 12.5$; $SD = 3.6$) as well as findings reported by Cutler (1973); Edwards and Kelemmach (1973); George (1978); Markides and Martin (1979); and Ward (1979).

Two variables were significantly related to life satisfaction: income and education. Those persons whose income was lowest (less than \$400 monthly) held significantly low level scores of life satisfaction in comparison to persons with higher incomes. The highest levels of life satisfaction were held by those with the highest incomes (greater than \$1,600 monthly). Support for this evidence is found in research literature reporting similar findings. Edwards (1975) found socioeconomic status to be the primary determinant of life satisfaction, while Bultena (1969), Cantril (1965), Markides and Martin (1979), and Spreitzer and Snyder (1979-80) found a direct relationship between life satisfaction and socioeconomic status. Additionally, in this study, the findings suggest a significant and direct relationship between life satisfaction and education. Those individuals with the lowest educational attainments were significantly less satisfied (low level life satisfaction scores) than those with higher educational attainments.

Positive relationships have been identified between life satisfaction and level of activity suggesting that the better adjusted elderly exhibit higher degrees of social participation (Cutler, 1973; George, 1978; Guttman, 1964; Maddox, 1963; and Ward, 1979). In this study, a moderate association was found to exist between life satisfaction and social participation (see Table 6, page 71). A similar study of elderly male Tennesseans indicates that a direct relationship existed between life satisfaction and activity levels (LaFleur, 1982). Respondents in this study with a life satisfaction score greater than the mean of 12.5 were classified as having high levels of satisfaction while those whose scores were less than 12.5 were classified as having low levels of satisfaction. In analyzing the association between life satisfaction and level of social participation, it was found that one-third of all respondents were low participators with low degrees of life satisfaction, and nearly one-third were high participators who held high levels of satisfaction. Few respondents were high participators with low life satisfaction scores and vice versa.

Inference can again be made to continuity within discontinuity in regard to the positive life satisfaction scores found in this study, based on these findings as well as previous research reporting that adjustment to life's stages is more gradual for females than males. This could be because women ". . . are subjected to repeated role discontinuities and changes in life situations to which they adjust, the final adjustment to old age is made more easily . . ."

(Fuller and Martin 1980, p. 66). Therefore, women may tend to be relatively satisfied by the time old age is reached.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

Gerontological research and clothing research have laid the foundation for investigations regarding clothing and the elderly. A review of available literature suggests that the well being, and ultimate life satisfaction of the elderly are dependent on a number of factors such as age, income, education and occupation. This study proposed the possibility of relationships between such factors and an individual's life satisfaction as well as social participation and attitudes toward specific clothing variables based on the theories of continuity and discontinuity (see Conceptual Model, Figure 1, page 14).

Significant differences were not found between the clothing variables (attitudes toward physical, psychological, thermal comfort and care) and the sociodemographic factors. It is not possible, however, to discount the importance of such clothing variables to the elderly; attitudes toward these variables were relatively positive.

Relationships were found between social participation and current employment status as well as educational attainment. Other relationships existed between life satisfaction and income, life satisfaction and education (Figure 2).

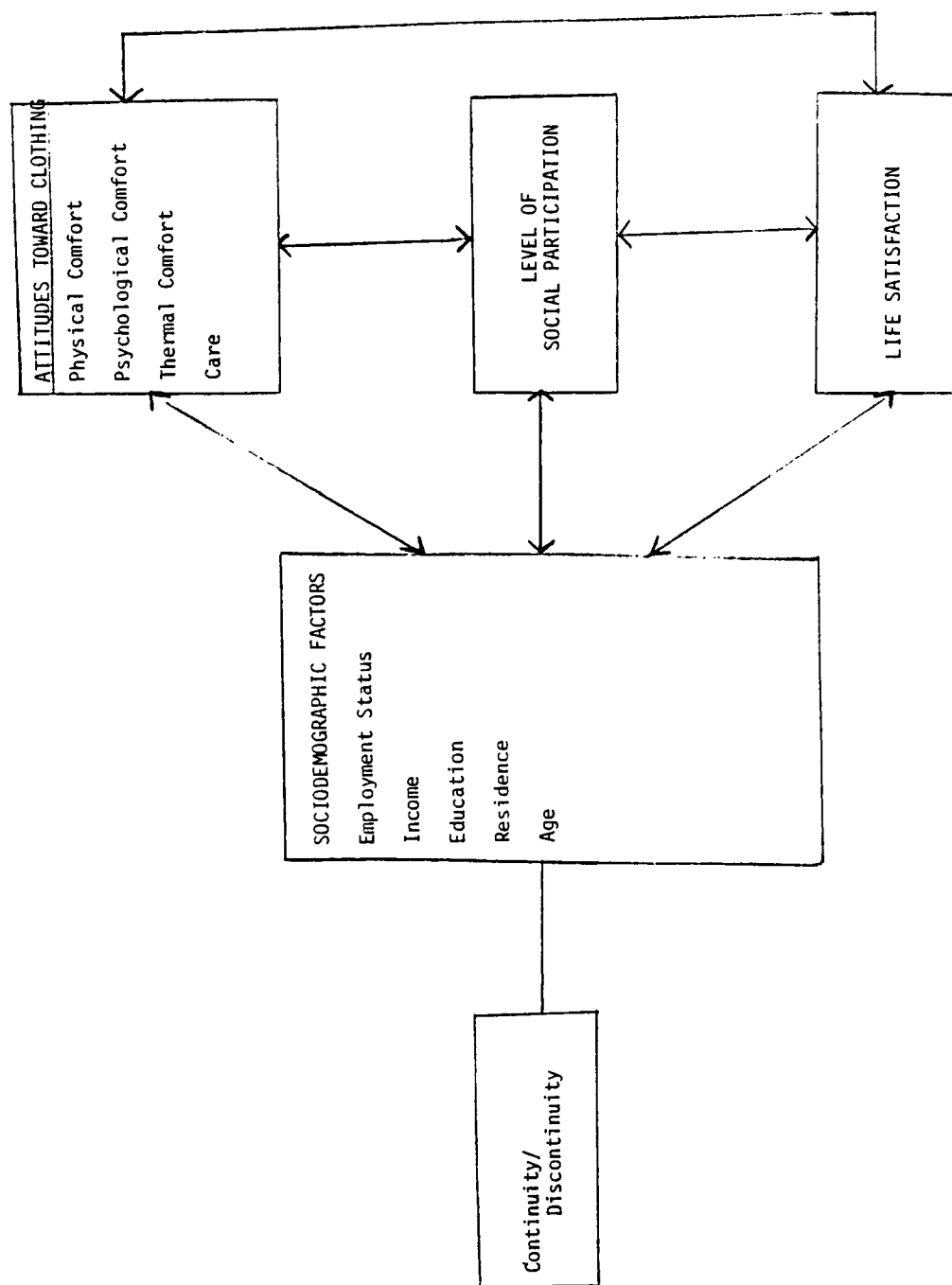


Figure 2. Relationships and associations found in this study based on conceptual model.

A moderately low association existed between life satisfaction and social participation. A very weak association existed between psychological comfort and care.

As the elderly population continues to grow, the need for continued research in this area will increase. Clothing as a basic physical need as well as a psychological need will necessitate such studies, particularly among elderly females, who have been characteristically and incorrectly regarded as having little interest in clothing.

Limitations

Some methodological problems associated with this study do demand consideration. Respondents were drawn from a purposive sample, thus limiting any generalizations beyond the actual sample population studied. As a result, non-parametric techniques of analysis had to be used, which are sometimes less powerful compared with parametric techniques.

Another problem encountered in this study was response. Agreements were made for the researcher to distribute and collect the completed questionnaires during organizational meetings. However, upon arrival at some meetings, the researcher was asked to distribute the questionnaires and allow respondents to return them by mail. Of the 250 questionnaires distributed, 165 were returned; therefore, the rate of response was increased.

Responses given in regard to the thermal comfort subscale may not have been accurate due to the season in which the information

was collected. Since most of the statements discussed thermal comfort situations in terms of warmth and cold weather, it may have been difficult to answer accurately during the hot summer months.

Although every effort was made to assure that no "right" or "wrong" answers existed, some participants still expressed a concern about lack of knowledge regarding clothing and fashion and their ability to answer "correctly."

Suggestions for Further Study

Several questions and ideas for additional study in the area were formulated as a result of this study. Health as a factor was not used in predicting life satisfaction, social participation or attitudes toward specific clothing variables. As individuals age, health becomes a very important concern, and should be studied in regard to its influence on other areas of life.

In studying thermal comfort, attitudes as well as physical activity levels need to be measured as a determinant of an individual's overall concern for thermal comfort. Additionally, a more in-depth questionnaire regarding the thermal comfort variable as well as the other variables studied could provide the researcher with more definitive results. However, length of questionnaire can be a problem when working with the elderly respondent. Therefore, future studies might investigate fewer variables but seek information from the respondents about the variables in greater depth than was done in this study.

A study of elderly females' fashion interest as compared to emphasis placed on other clothing variables such as those used in this study might yield very informative results. The elderly are often stereotyped as having little interest in clothing. However, a visual survey of the participants in this study revealed that most of these elderly females dressed in very current fashions and obviously were interested in presenting their "social selves" in fashionable manners. Therefore, future research with aging females may find that fashion, as a priority, is held in higher esteem than other clothing variables.

Furthermore, the researcher interested in clothing attitudes of elderly females should be reminded that various factors may skew results. Locale is an important factor; a random, cross section of Tennessee's elderly females would yield a sample of both rural and urban elderly. The sample in this study consisted of only urban elderly. Other important factors are income and social setting. Data for this study was collected from individuals in "activity" settings, meaning that respondents were relatively active outside the home, by their own choice. A large portion of respondents in this study had high incomes, which may have influenced attitudes and, therefore, results. These factors may have contributed to the lack of significances found. Future research regarding clothing and the elderly female, especially projects which investigate the same clothing variables, should be approached cautiously. A careful analysis of all influencing factors is necessary.

Implications

Results from this study contribute to the body of knowledge regarding today's elderly female. Although certain characteristics are definitely unique to the elderly population, current research is finding that the elderly are also very similar to the rest of the population. Information regarding the elderly suggests changing trends in areas which have typically characterized the elderly female. Reports indicate increases in income, education, continued employment and higher level occupational choices among elderly females; results from this study lend support to such trends. Thus, as such changes occur, the elderly female's demands and needs will change also regarding lifestyle, housing, interiors, transportation and clothing. To meet these needs, professionals, businesses, and agencies who offer services and /or products used by the elderly must (1) become aware of such needs, (2) cooperate in meeting these needs, and (3) abandon stereotypic views of the elderly's needs and choices.

From a theoretical viewpoint, it is necessary to view the female as an individual who, throughout life, experiences discontinuities through adopting and changing roles--student, wife, mother, homemaker, career woman. Women, more so than men, may find themselves changing such roles, especially work and mother roles, several times during a lifetime. As a result, adaptation to change is made more easily and often more gradually. Females, therefore, experience

continuity within the context of discontinuity; such situations implicate that attitudes held by females may change very gradually from earlier to more advanced years.

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APPENDICES

APPENDIX A

SURVEY OF MATURE TENNESSEANS' ATTITUDES TOWARD CLOTHING

SECTION I: CLOTHING ATTITUDES

PLEASE ANSWER EACH QUESTION AS HONESTLY AS POSSIBLE BY CHECKING THE ANSWER WHICH BEST EXPRESSES YOUR DEGREE OF AGREEMENT OR DISAGREEMENT TO EACH TOPIC. THERE ARE NO RIGHT OR WRONG ANSWERS.

PLEASE ANSWER EVERY QUESTION: DO NOT LEAVE ANY QUESTION BLANK.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The way clothes feel on my body should be important.				
2. I would feel more a part of the group if I am dressed like my friends.				
3. I should consider the time and cost of care required when purchasing a garment.				
4. I should choose clothing with an easy fit even when close fitting clothing is fashionable.				
5. I would be uncomfortable if my clothes were different from everyone else's at social events.				
6. Because a person of my age is sensitive to temperature change, I believe it is difficult to be comfortable in the same clothes throughout the day.				
7. It is important to give clothes the required care such as hand washing, dry cleaning, mending, etc.				
8. I choose not to wear garments which restrict body movement.				
9. I believe it is not important to be concerned about what others think of my clothes.				

		Strongly Agree	Agree	Disagree	Strongly Disagree
10.	I feel that it is difficult to find combinations of clothing which keep me comfortable in outdoor temperatures.				
11.	The care which is required of my clothing should not be a concern to me.				
12.	I feel more a part of the group when I am dressed in the same way as the others.				
13.	I believe that I might become irritable if my clothes are physically uncomfortable.				
14.	I feel that a lightweight fabric for clothing will be most comfortable on my body, regardless of season.				
15.	I think that fabrics such as "no iron" and "permanent press" should be chosen instead of other fabrics in order to provide easy care.				
16.	I feel that the way a fabric is constructed (knitted, woven, etc) does not affect my physical comfort.				
17.	I feel that I need to dress up more for social activities than for day-to-day activities.				
18.	I believe that I would put on more clothing instead of turning up the thermostat when it is cold.				
19.	I feel that I would choose soft fabrics rather than any others because they are comfortable and do not bother my skin.				

		Strongly Agree	Agree	Disagree	Strongly Disagree
20.	If I think my clothes are attractive, then I am comfortable.				
21.	I believe that wearing the same type of clothing during all seasons is appropriate for a person of my age.				
22.	Following care label instructions is not important to maintain a garment's appearance.				
23.	I believe that clothing irritates my skin more now than when I was younger.				
24.	I feel that I am more at ease when I dress in clothes that suit my personality.				
25.	I believe that sometimes I must sacrifice warmth in order to look fashionable.				
26.	I should always be concerned about the clothing worn to social activities.				
27.	I think that it is difficult to find clothing which feels good next to my body.				
28.	I believe that fashion is more important than comfort of clothing.				
29.	If I become cool, I feel that a good way to be comfortable is to add a sweater or jacket.				
30.	I believe that my body is often cool because I am less physically active than when I was younger.				

		Strongly Agree	Agree	Disagree	Strongly Disagree
31.	I believe that most people are not really concerned about the clothes I wear.				
32.	I feel that layering my clothing provides a good way to keep warm.				
33.	People need more clothing for social activities after retirement.				

SECTION II: LIFE SATISFACTION

HERE ARE SOME STATEMENTS ABOUT LIFE THAT PEOPLE FEEL DIFFERENTLY ABOUT. WOULD YOU READ EACH STATEMENT ON THE LIST, AND IF YOU AGREE WITH IT, PUT A CHECK MARK IN THE SPACE UNDER "AGREE". IF YOU DO NOT AGREE WITH A STATEMENT, PUT A CHECK MARK IN THE SPACE UNDER "DISAGREE". IF YOU ARE NOT SURE ONE WAY OR THE OTHER, PUT A CHECK MARK IN THE SPACE UNDER "?". PLEASE BE SURE TO ANSWER EVERY QUESTION ON THE LIST.

		Agree	"?"	Disagree
1.	As I grow older, things seem better than I thought they would be.			
2.	I have gotten more of the breaks in life than most people I know.			
3.	This is the dreariest time of my life.			
4.	I am just as happy as when I was younger.			
5.	My life could be happier than it is now.			
6.	These are the best years of my life.			

		Agree	"?"	Disagree
7.	Most of the things I do are boring or monotonous.			
8.	I expect some interesting and pleasant things to happen to me in the future.			
9.	The things I do are as interesting to me as they ever were.			
10.	I feel old and somewhat tired.			
11.	I feel my age, but it does not bother me.			
12.	As I look back on my life, I am fairly well satisfied.			
13.	I would not change my past life even if I could.			
14.	Compared to other people my age, I have made a lot of foolish decisions in my life.			
15.	Compared to other people my age, I make a good appearance.			
16.	I have made plans for things I will be doing a month or a year from now.			
17.	When I think back over my life, I did not get most of the important things I wanted.			
18.	Compared to other people, I get down in the dumps too often.			
19.	I have gotten pretty much what I expected out of life.			
20.	In spite of what people say, the lot of the average man is getting worse.			

SECTION III: SOCIAL PARTICIPATION

HOW OFTEN DO YOU TAKE PART IN EACH OF THE ACTIVITIES ON THIS PAGE?
PLEASE PLACE A CHECK IN THE APPROPRIATE BOX.

	Very Often	Often	Some- times	Never
1. Watch TV or listen to radio				
2. Work around the house and yard/ garden when weather permits				
3. Sewing, craft work, wood work, or similar hobbies				
4. Collect stamps, coins, rocks, or similar hobbies				
5. Read books and magazines				
6. Travel				
7. Attend sports events				
8. Attend plays, concerts, lectures, or exhibits				
9. Attend church/religious activities				
10. Camp, fish, or hunt				
11. Play golf, swim, tennis, or other outdoor games				
12. Play cards, checkers or other games				
13. Go to parties or dances				
14. Visit neighbors and friends				
15. Visit children, grandchildren or other family members				

		Very Often	Often	Some- times	Never
16.	Do volunteer work				
17.	Participate in civic or service groups (Example: MWCA, Rotary Club, etc.)				
18.	Participate in lodges/fraternal groups (Example: Eastern Star, Shriners, etc.)				
19.	Participate in occupational or labor groups (Example: AARP, Retired Teachers Ass'n, BPW, etc.)				
20.	Participate in cultural groups (Example: art league, theatre groups, community choir, etc.)				
21.	Participate in political organizations (Example: Democratic party, Republican party, etc.)				

SECTION IV: BACKGROUND INFORMATION

PLEASE READ EACH QUESTION AND CIRCLE THE APPROPRIATE RESPONSE.

1. What is your sex? (circle one)

- 1 FEMALE
- 2 MALE

2. What is your marital status? (circle one)

- 1 NEVER MARRIED
- 2 MARRIED
- 3 WIDOWED
- 4 DIVORCED

3. Have you ever worked outside the home? (circle one)
- 1 YES
 - 2 NO
4. If yes, what was your occupation(s) during the twenty years before your retirement? _____
5. Are you presently working outside the home? (circle one)
- 1 NO, I AM RETIRED
 - 2 NO I DO NOT WORK OUTSIDE THE HOME, BUT I AM NOT YET RETIRED
 - 3 YES, I WORK PART-TIME OUTSIDE THE HOME.
 - 4 YES, I WORK FULL-TIME OUTSIDE THE HOME
6. Have you worked outside the home in the past year? (circle one)
- 1 YES
 - 2 NO
7. If married, what is/was your husband's occupation?

8. In which of these categories is your age? (circle one)
- 1 UNDER 55
 - 2 55-64
 - 3 65-74
 - 4 75-84
 - 5 85 OR OLDER
9. What are your chief sources of income? (circle all that apply)
- 1 MY OWN WORK
 - 2 HUSBAND'S WORK
 - 3 SOCIAL SECURITY
 - 4 RETIREMENT PLAN
 - 5 SAVINGS ACCOUNT(S)
 - 6 RENTAL PROPERTIES
 - 7 GIFTS FROM CHILDREN
 - 8 OTHER SOURCES

10. What is the highest level of education completed?
(circle one)

- 1 LESS THAN 8 YEARS
- 2 LESS THAN 12 YEARS
- 3 COMPLETED HIGH SCHOOL
- 4 SOME COLLEGE
- 5 COLLEGE DEGREE
- 6 GRADUATE SCHOOL
- 7 OTHER (PLEASE EXPLAIN) _____

11. In which category does your total monthly income appear? (circle one)

- 1 LESS THAN \$400
- 2 \$400 - \$800
- 3 \$800 - \$1200
- 4 \$1200 - \$1600
- 5 MORE THAN \$1600

12. Where do you reside? (circle all that apply)

- 1 IN OWN HOME
- 2 RENTAL RESIDENCE
- 3 RETIREMENT COMPLEX
- 4 OTHER (PLEASE SPECIFY) _____

13. With whom do you reside? (circle all that apply)

- 1 ALONE
- 2 WITH SPOUSE
- 3 WITH ONE OF MY CHILDREN
- 4 OTHER (PLEASE EXPLAIN) _____

APPENDIX B

TABLES

TABLE B-1
DESCRIPTIVE STATISTICS FOR ATTITUDINAL VARIABLES FOR THE
SAMPLE OF ELDERLY FEMALES

Variable	N	Possible Range	Possible Mid-point	Mean	Standard Deviation	Minimum Score Obtained	Maximum Score Obtained
Attitude toward physical comfort	150	8-32	20.0	23.3	2.6	17	32
Attitude toward psychological comfort	150	10-40	24.5	27.6	3.5	9	37
Attitude toward thermal comfort	150	9-36	22.5	24.8	2.7	18	36
Attitude toward care of clothing	150	5-20	12.5	16.5	1.8	11	20
Life satisfaction	150	0-20	10.0	12.7	4.4	1	20
Social participation	150	0-62	31.5	26.5	8.9	10	57

TABLE B-2
SOCIODEMOGRAPHIC CHARACTERISTICS

Characteristics	Sample Frequency	Percentage
Age		
55-64 years	48	32.0
65-74	75	50.0
75-84	26	17.0
85 or older	1	0.7
Marital Status		
Never married	11	7.3
Married	79	52.7
Widowed	52	34.7
Divorced	8	5.3
	<u>150</u>	
Profession		
Professional	55	36.7
Technical-skilled	30	20.0
Clerical	21	14.0
Unskilled	31	20.7
"Housewife"	9	6.0
	<u>150</u>	
Current Work Status		
Retired	91	60.7
No work but not retired	19	12.7
Part-time work	20	13.3
Full-time work	20	13.3
	<u>150</u>	
Educational Attainment		
Less than 12 years	25	16.7
Completed High School	71	47.3
College Degree	28	18.7
Graduate Degree	24	16.0
	<u>2</u>	
	<u>150</u>	

TABLE B-2 (Continued)

Characteristics	Sample Frequency	Percentage
Current Monthly Income		
Less than \$400	15	10.0
\$400-800	33	22.0
\$800-1200	32	21.3
\$1200-1600	29	19.3
More than \$1600	34	22.7
	<u>2</u>	
	150	
Residence		
Own home	125	83.3
Rental residence	17	11.3
Retirement complex	1	0.7
Other (condominium in relatives home)	7	4.7
Living Arrangements		
Alone	59	39.3
With spouse	77	51.3
With relative	14	9.3

VITA

Teresa Braswell Robinson was born in Smithville, Tennessee, the daughter of Maurice and Elsie Braswell. She graduated from DeKalb County High School in Smithville. Undergraduate studies were completed at Middle Tennessee State University, Murfreesboro, where she received her Bachelor of Science degree in Home Economics with an emphasis in Fashion Merchandising.

In September of 1979 she entered Graduate School at The University of Tennessee, Knoxville, in the department of Textiles and Clothing of the College of Home Economics. In August of 1981, she received her Master of Science degree with a major in Textiles and Clothing.

In September of 1982 she entered the interdisciplinary doctoral program in the College of Home Economics at The University of Tennessee, Knoxville. During completion of her studies, she was a graduate teaching assistant in the department of Textiles, Merchandising and Design.

During the winter of 1982, Teresa and her husband undertook two research projects which involved an extensive survey of and travel to Brazil. She is married to Kenneth B. Robinson, also a University of Tennessee graduate.

In August of 1982 Teresa accepted a position with the Department of Home Economics at Middle Tennessee State University, Murfreesboro, Tennessee. She is currently an assistant professor

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