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LIFE SATISFACTION AMONG URBAN AND RURAL  
ELDERLY WIDOWS

By

Judith Klaas Hoekzema Walters

A DISSERTATION

Submitted to  
Michigan State University  
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## ABSTRACT

### LIFE SATISFACTION AMONG URBAN AND RURAL ELDERLY WIDOWS

By

Judith Klaas Hoekzema Walters

The purpose of this study was to investigate the interaction of urban and rural elderly widows with their environments. The investigator wanted to find which environments were associated with life satisfaction for elderly widows. This study provided a descriptive profile of elderly widows; compared life satisfaction of urban and rural elderly widows using contextual variables age, years of widowhood, years of schooling, church attendance, and income; compared emotional closeness of elderly widows with their children, siblings, and friends; investigated whether any relationship existed between emotional closeness and life satisfaction for elderly widows; and investigated whether any relationship existed between life satisfaction and morale.

A human ecological model (Bubolz, Eicher, & Sontag, 1979) was used for this research. The envired unit was the elderly widow. The environments comprised the natural environment, which in this study was urban and rural residence; the human constructed environment, which included income, church attendance, and years of schooling; and the human behavioral environment, which comprised the elderly widows' interaction with children, siblings, and friends.



A survey method was used. One investigator interviewed the 26 urban and 23 rural widows in the sample, who were 55 years of age or older and not widowed before 50 years of age. They were selected from four sources in Kent, Ottawa, and Ingham Counties, Michigan.

The major instrument was composed of several smaller instruments, including questions concerning selected characteristics and socio-economic demographics, the Life Satisfaction Index A (LSIA), the Philadelphia Geriatric Center Morale Scale (PGC), and a Closeness Scale. Techniques for analyses included descriptive statistics, Spearman rank-order correlations, Pearson product-moment correlations, point-biserial correlations, and t-tests for differences between correlations.

This sample of elderly widows was found to be highly competent, independent, had high life satisfaction and morale scores, and high scale scores on Closeness I, i.e., closeness of elderly widows with their children. The correlation between life satisfaction and income of elderly widows and the correlation between life satisfaction and morale were positive and statistically significant. No other correlations were statistically significant.

## DEDICATION

To my God, who makes all things possible and works all things for good.

To my dear family, who were most often patient and supportive and maintained a grand sense of humor throughout this process:

--my beloved husband, Alden, who emphasized clearness of meaning and brevity in writing style, and who encouraged with love my working forward to a final goal;

--my son, Grant, who, with his sense of proportion, was helpful in analyses and in discovering balance in new ideas and theories;

--my daughter Amy, who was creative with ideas and programs and calming and helpful in times of stress and need for family organization;

--my daughter Marguerite, who constructively criticized, suggested new ideas, and helped in coding the instruments;

May we all have grown as Christians through this experience.

To the memory of my parents, Ruth M. and Jack K. Hoekzema, who encouraged my interest in new fields of learning since early childhood and who helped me experience and understand the process of aging in a personal way.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	viii
LIST OF FIGURES . . . . .	ix
LIST OF APPENDICES . . . . .	x
 Chapter	
I. INTRODUCTION . . . . .	1
Background of the Problem . . . . .	1
Statement of the Problem . . . . .	4
Purpose . . . . .	6
Conceptual Framework . . . . .	6
Introduction . . . . .	6
A Human Ecological Framework . . . . .	7
Definitions of Ecosystems Concepts . . . . .	8
The Application of an Ecosystem Framework to a Study of Elderly Widows . . . . .	11
Definitions . . . . .	15
Assumptions . . . . .	17
Research Questions and Hypotheses . . . . .	18
Limitations . . . . .	19
Overview . . . . .	19
II. REVIEW OF THE LITERATURE . . . . .	21
Introduction . . . . .	21
Contextual Variables . . . . .	22
Age . . . . .	22
Years of Widowhood . . . . .	24
Church Attendance . . . . .	24
Years of Schooling . . . . .	25
Income . . . . .	26
Differences Between Rural and Urban Elderly Widows . . . . .	27
Interaction and Life Satisfaction . . . . .	32
Interaction With Children . . . . .	33
Interaction With Siblings . . . . .	38
Interaction With Friends . . . . .	40
Widows and Widowers . . . . .	42
Instruments . . . . .	43
Life Satisfaction Index A . . . . .	43
Philadelphia Geriatric Center Morale Scale . . . . .	46
Summary . . . . .	47

	Page
III. METHODOLOGY . . . . .	48
Introduction . . . . .	48
Protection of Human Subjects . . . . .	49
Sample . . . . .	49
Sources From Which the Sample Was Drawn . . . . .	50
Procedure for Contacting Sources . . . . .	51
Process for Access . . . . .	52
The Response Rate . . . . .	54
The Research Design and the Instrument . . . . .	56
Instrument for the Total Project . . . . .	58
Instrument Used for This Study . . . . .	59
Interview Procedure . . . . .	63
Data Preparation . . . . .	65
Techniques for Analyses . . . . .	66
Descriptive Statistics . . . . .	66
Spearman Rank-Order Correlation and Point-	
Biserial Correlation . . . . .	66
Frequencies and Percentages . . . . .	67
Pearson Product-Moment Correlation . . . . .	67
T-Test for the Difference Between Two Correlations . . . . .	68
Summary . . . . .	68
IV. FINDINGS . . . . .	71
Introduction . . . . .	71
Descriptive Characteristics . . . . .	72
Contextual Variables . . . . .	72
Support Systems . . . . .	76
Perceived Changes . . . . .	78
Findings Reported for the LSIA, PGC, and Closeness	
Scales . . . . .	78
Analysis of Data . . . . .	79
Discussion of Findings . . . . .	88
Age . . . . .	90
Years of Widowhood . . . . .	90
Church Attendance . . . . .	91
Years of Schooling . . . . .	92
Income . . . . .	93
Health . . . . .	96
Interaction With Children . . . . .	96
Interaction With Siblings . . . . .	99
Interaction With Friends . . . . .	99
Life Satisfaction and Morale . . . . .	99
Summary . . . . .	99
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . . . .	101
Introduction . . . . .	101
Summary . . . . .	101

	Page
Conclusions and Recommendations . . . . .	109
Suggestions for Further Research . . . . .	117
Suggestions for a Theoretical Model . . . . .	117
Suggestions for Program Development . . . . .	118
APPENDICES . . . . .	120
REFERENCES . . . . .	149

## LIST OF TABLES

Table	Page
4.1 Age of Widows in Sample . . . . .	74
4.2 Years of Widowhood . . . . .	74
4.3 Church Attendance . . . . .	74
4.4 Schooling Completed . . . . .	75
4.5 Total Income Per Year From All Sources . . . . .	75
4.6 Frequency of Responses to Items in the Closeness Scale for All Widows . . . . .	80
4.7 Frequency of Responses to Items in the Closeness Scale for Widows Who Have Both Children and Siblings . . . . .	81
4.8 Correlation of Contextual Variables With Life Satis- faction for Entire Sample . . . . .	82
4.9 Correlation of Contextual Variables With Life Satis- faction for Urban Widows . . . . .	84
4.10 Correlation of Contextual Variables With Life Satis- faction for Rural Widows . . . . .	85
4.11 Pearson Product-Moment Correlation: Life Satisfaction and Closeness of Elderly Widows With Children, Siblings, and Friends . . . . .	86
4.12 Mean Scores and Standard Deviations on Life Satisfac- tion for Four Samples . . . . .	89



## LIST OF FIGURES

Figure	Page
1.1 A Human Ecosystem Model Adapted from Bubolz et al. (1979), Illustrating the Natural Environment, the Human Behavioral Environment, and the Human Constructed Environment of Elderly Widows . . . . .	12
3.1 Methods Used for Analyses of Data . . . . .	69

## LIST OF APPENDICES

Appendix	Page
A. INSTRUMENTS . . . . .	121
B. CONSENT FORM . . . . .	139
C. LETTER FROM PHYSICIAN . . . . .	141
D. CALCULATION OF T-TEST FOR THE DIFFERENCE BETWEEN TWO CORRELATIONS . . . . .	143
E. RAW DATA . . . . .	145
F. CORRELATION COEFFICIENT FOR LIFE SATISFACTION AND MORALE AND INTER-ITEM RELIABILITY FOR LIFE SATISFACTION, PGC, AND CLOSENESS SCALES . . . . .	147

## CHAPTER I

### INTRODUCTION

#### Background of the Problem

The problems for elderly widows in this society are numerous, traumatic, and stress-producing (Berardo, 1968; Lopata, 1979; Marris, 1958). The trauma of becoming a widow has the potential of decreasing the life satisfaction and increasing the vulnerability of what previously might have been a stable, productive, functioning cohort within our society and within the framework of the family. The phenomenon of widowhood is a substantial and continually expanding one in our society. The number of aging widows is increasing more rapidly than the number of elderly widowers. However, the empirical studies on widows are almost nonexistent, and, consequently, little attention has been given to this important and growing group.

The elderly and their level of life satisfaction is a subject that has been the focus of many studies in the past two decades (George, 1978; Larson, 1978; Lawton, 1972; Neugarten, Tobin, & Havighurst, 1961). Morale and the elderly have been investigated also (Durkheim, 1951; Lawton, 1972; Lee, 1980; Markides & Martin, 1979; Medley, 1976; Morris & Sherwood, 1975). In a few studies of widowhood and the elderly, life satisfaction and morale have been explored (Liang, Dvorkin, Kahana, & Mazian, 1980; Lopata, 1973; Mancini, 1980).

However, few cross-sectional or longitudinal studies focusing on elderly widows with regard to life satisfaction and morale have been attempted (Fengler & Danigeles, 1982; Neale & Kahana, 1982).

The U.S. Census data indicate that in 1930 the number of widows began to increase and started to outdistance the number of widowers. By the 1940s, there were two times as many widows as widowers. By 1960, the ratio was 3.5:1, and by 1970 it was 4:1. According to the Statistical Abstracts of the U.S. 1982-83, the U.S. Census figures showed that there were 9.6 million widows 55 years of age and older but only 1.7 million widowers 55 years of age and older. Eighteen percent of women 55-64 years old were widows, and 4.1% of men those same ages were widowers. Forty percent of women 65-74 years old were widowed, and 8.2% of men 65-74 years old were widowed. For those individuals 75 years of age and older, 68.2% of the women and 22.1% of the men were widowed. Among the reasons for increasing numbers of widows as compared to widowers are:

1. Higher mortality rate among men (U.S. Census, 1982).
2. Women in our culture generally marry older men (Lopata, 1979).
3. Men tend to remarry more often than women (Lopata, 1979).

The problems, as noted in the literature, are numerous. The literature addressing the problem of bereavement states that the loss of a spouse is one of the most traumatic and stressful events in one's life. Along with the isolation and loneliness that occurs (Bowlby, 1972; Lindemann, 1961; Parkes, 1964; Schneider, in press), there arises a torrent of other problems that will likely decrease life satisfaction.

Financial problems, one of the variables most highly correlated with degree of social interaction and with life satisfaction, become more numerous (Atchley, 1971; Berardo, 1968; Hellebrandt, 1980; Liang et al., 1980). Although the number of elderly poor actually declined between 1959 and 1978, from 5.5 to 3.3 million people, elderly single women were more adversely affected than older couples or elderly single men. Twenty-one percent had incomes below the poverty level, and older people fared worse than the "younger" elderly (Fitz-Gerald, 1983). Strained financial circumstances often limit social interaction and decrease life satisfaction (Hellebrandt, 1980).

According to Berardo (1968), Lopata (1979), and Bowlby (1972), poor health is another problem for elderly widows because it, too, could lead to both decreased social interaction and degree of life satisfaction. A large proportion of the elderly widow's income that could be used for improving life satisfaction in a variety of ways is being used for medicine.

Emotional and psychological problems are also effects resulting from the death of a spouse. Early mortality, an increased incidence of mental problems, and greater numbers of suicide are found within the widowed population when measured against and compared to those still married (Bowlby, 1972; Parkes, 1964, 1972).

In the literature, one finds a number of factors that are associated with greater life satisfaction for elderly widows. In some of the literature concerning social interaction, relationships with children have been found to be the most important ones for increasing life satisfaction among the elderly (B. Adams, 1967; Atchley, 1971;

Brown, 1974; Sussman & Burchival, 1962; Troll, 1971). However, other authors (Arling, 1976; Blau, 1973; Lee, 1979) have noted that life satisfaction and morale are not correlated at all with child or sibling interaction. Only friend interaction was correlated with life satisfaction.

Social interaction has been found to be related to life satisfaction in some of the research, particularly those studies that discuss activity theory (Adams, 1969; Atchley, 1971; Cumming, 1961; Neale & Kahana, 1982; Neugarten et al., 1961). Importantly, social interaction of the elderly, as measured by the frequency of such contacts as phone calls, letters, and visits with children, siblings, and friends, has not been found to be as important as the quality of these relationships for life satisfaction (Edwards & Klemmack, 1973; Lee, 1979; Mancini, 1980; Rosow, 1965; Weishaus, 1979).

#### Statement of the Problem

There are large and increasing numbers of widows in our society, a multitude of problems associated with widowhood and aging, and a lack of research and attention paid to this cohort. This dissertation is a study of descriptive characteristics, sociophysical, and sociocultural dimensions of widowhood in which a sample of elderly widows was used. Because the rural widow has been studied even less than the urban widow (Berardo, 1968; Crossen, 1974; Lopata, 1979), this researcher included both rural and urban widows for a part of this study.

This researcher also included the study of support systems that are important to the elderly widow, specifically, children, siblings, and friends, and examined her satisfaction with those support systems. Emotional closeness, which was assumed to be an indicator of quality of relationship in this study, was also investigated. The closeness of widows with their children, siblings, and friends was compared.

Closeness, as measured by the Closeness Scale, and life satisfaction of elderly widows, as measured by the Life Satisfaction Index A (LSIA), were investigated to determine whether any relationship existed between the two factors. Those factors related to life satisfaction were studied to find important variables on which to focus for the purpose of increasing life satisfaction for elderly widows.

In this study, special emphasis was placed on elderly widows, a cohort that appears to be the focus of very few studies. The problems and traumas, noted in the literature, that widows experience were reviewed for the purpose of finding variables that would improve the life satisfaction and the day-to-day functioning level of elderly widows. Socio-demographic variables and psychosocial dimensions that might be related to life satisfaction were investigated within an ecological framework. Because the design for this study did not include random sampling, generalizability will not be considered. Achieving some greater understanding of elderly widows and adding to the theoretical base from which to study widowhood were goals of this research.

### Purpose

A human ecological framework was adopted for this study. Incorporated within it are the concepts necessary to understand the interactions and interdependencies of elderly widows with their many environments. This researcher:

1. provides a descriptive profile of elderly widows, using selected variables;
2. compares the life satisfaction of elderly rural and urban widows, using contextual variables of age, years of widowhood, church attendance, years of schooling, and income;
3. compares emotional closeness of elderly widows with their children, siblings, and friends;
4. investigates whether any relationship exists between emotional closeness and life satisfaction for elderly widows; and
5. investigates whether any relationship exists between life satisfaction and morale.

### Conceptual Framework

#### Introduction

An underlying assumption of a human ecological framework is that human beings function as organisms or as whole entities within their environment. In addition, the organism must interact with its environment as that environment changes over time. The elderly widow considered as an organism within an ecological framework is the subject of this dissertation.

Environments are many, and they are constantly changing in relation to time and structure. The organism is interdependent



with those environments. The organism, i.e., the wife (before death of spouse), functions in the role of wife interacting with her husband who constitutes a major part of her near environment. Suddenly that important part of her environment is altered dramatically. The organism, the elderly widow, that must evolve after such a trauma as the death of her spouse will be a new whole, a changed organism. She will have different interdependencies or interactions with already existing environments but also with such new environments as a widowed friend or a group of widowed friends. Interdependencies shift to other environments and relationships as new wholes or organisms form over time. Old environments appear to be new because of changes in interactions. Wholeness has an entirely new meaning for each organism. The relationships that human beings have with their environments are complex, dynamic, and reciprocating and are probably more comprehensively understood within a human ecological system.

#### A Human Ecological Framework

The basic concepts and assumptions of a human ecological framework are outlined and discussed in this section. This framework also incorporates concepts from general systems theory. These concepts are applied to a study of elderly widows.

In a paper entitled "An Ecological Approach to the Family," Andrews, Bubolz, and Paolucci (1980) described an ecological system using Sprout and Sprout's (1965) definition: "An ecological system has three organizing concepts, the envired unit, the environment,

and the patterning of transactions between them." In using this model, one assumed that the human organism, the envired unit, interacts with all environments, i.e., the physical, biological, psychological, social, and cultural environments, over space and time. In this study, several environments with which elderly widows interact were investigated.

Concepts that are important for understanding the human ecological framework will follow. They were adapted from general systems theory, human ecosystem theory, and, more specifically, from models developed by Bubolz, Eicher, and Sontag (1979) and Andrews, Bubolz, and Paolucci (1980).

#### Definitions of Ecosystems Concepts

A system is any set of interrelated or interacting components (Kuhn, 1975); a set of objects together with relationships between the objects and between their attributes (Hall, 1962); "a set of interrelated and interacting units or elements in which the action of one unit or part affects other parts" (Bubolz, 1976).

An ecosystem is the system comprised of living organisms interacting with their physical, biological, social, and psychological environments. Ecosystems are sets of components bound together as functioning wholes in dynamic interaction with the environment.

A human ecosystem comprises human beings interacting with their total environment. Andrews et al. (1980) noted that it has three organizing concepts: the envired unit, the environment, and the patterning of interactions and transactions between them.

The human enviroined unit (HEU) includes (a) a single individual with biophysical, psychological, and social dimensions and (b) a group of individuals who have some feelings of unity; share some common resource goals, values, and interests; and have some sense of identity. The HEU is located in a particular space in time. In this study, the HEU is also referred to as an organism or a whole.

An environment is the sum total of the physical, biological, social, economic, political, aesthetic, and structural surroundings for organisms. In the Bubolz et al. (1979) model, the environment was conceptualized to include the natural, the human-constructed, and the human-behavioral environments:

1. The natural environment (NE) is formed by nature with spatio-temporal, physical, and biological components. The natural environment supports human life in that it provides energy and materials on which all life depends.

2. The human-constructed environment (HCE) is an environment altered or created by human beings. It includes modification made by human beings of the natural environment's physical and biological components and other social and cultural constructions. The human-constructed environment is a product of man's intellectual and social capacities and his adaptation to the natural environment in order to meet physical, biological, social, and psychological needs.

3. The human behavioral environment (HBE) is the environment of human beings and their biophysical, psychological, and social behaviors. From this perspective, human beings can constitute environments for each other. The human-behavioral environment is

essential for meeting biological and physical needs for love, relationships and communications, and knowledge and self-fulfillment. These are necessary for a level of existence beyond survival.

Interdependence refers to the relatedness and reciprocity between the components of an ecosystem.

Wholeness refers to the organization of a system and its identity. A system is more than the sum of parts. It includes the parts and the interrelatedness of the parts.

Energy in the form of goods, fuels, or work and information, while being transformed by systems, organizes systems and allows for their movement through space and time.

Feedback is the process by which the effects of the actions of the system or one part of a system are "fed back" to the system.

Equilibrium is a relative state of integration and balance within a system or a group of systems.

Boundaries are areas between systems that separate the systems from one another. They may be physical, material, or symbolic.

An interface is the place where two systems come together and have a common boundary.

Homeostasis is a state of balance within a system, which is important for survival of the system.

Adaptation is the ability to use energy to reorganize a system to a state of equilibrium after change or trauma or some new input has occurred.

The Application of an Ecosystem  
Framework to a Study of  
Elderly Widows

In the application of the Ecosystem Framework to a study of elderly widows, this investigator adapted the following concepts and assumptions used by Andrews (1977). (See Figure 1 for adapted model.)

1. "All systems exist in environments including levels of abstractedness from concrete physical objects to symbolic behavior as values" (Andrews, 1977, p. 4).

The elderly widow is the system or organism of focus in this study who, before widowhood, was functioning within a certain family environment. After the death of her husband, one of the most severe stressors in life (Bowlby, 1972; Holmes & Rahe, 1967; Parkes, 1972; Schneider, in press), her perceptions of herself and such near environments as her family have the potential for changing dramatically.

2. "Human beings create and recreate much of their near and more distant environments. How this relates back to satisfying needs and back to the larger environment in costs or assets is in itself an area of inquiry" (Andrews, 1977, p. 4). "How relationships change over time or are influenced differentially at critical periods of time is an important dimension of ecological research" (Andrews, 1977, p. 5).

The fulfillment of certain needs takes on different processes and modes after a woman is widowed, e.g., adaptation. Some characteristics of widows' self-perceptions before and after widowhood were examined in this study and are described in relation to adaptation and equilibrium, although this was not the central focus of this research. Some of the types of relationships and environments that

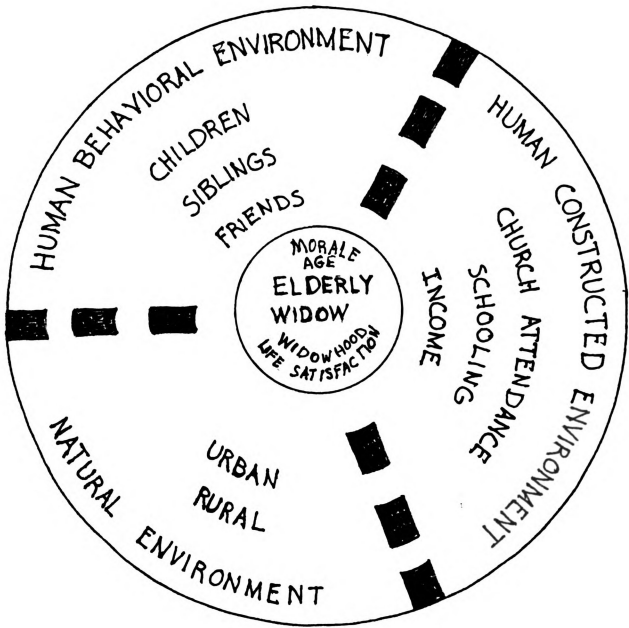


Figure 1.1: A human ecosystem model adapted from Bubolz et al. (1979), illustrating the natural environment, the human behavioral environment, and the human constructed environment of elderly widows.

are most satisfying to the new organisms, i.e., elderly widows, from a psychosocial perspective, were the focus of this study.

3. "A critical feature of an ecological perspective is recognition of the interrelatedness or interdependence of O-O and O-E" (Andrews, 1977, p. 4).

Examined in this study were the elderly widows' interdependencies with various organisms and environments, i.e., children, siblings, and friends, to find which relationships appear to fulfill needs and, therefore, to be most satisfying.

Two types of near environments--(a) the psychosocial, namely, children, siblings, and friends; and (b) the sociophysical environment, i.e., rural and urban--were studied using the sociocultural factors of education, income, age, years of widowhood, and church attendance.

4. "Energy is the lifeblood of the system organizing and relating parts to wholes and providing impetus for change and adaptation" (Andrews, 1977, p. 4).

The elderly widow uses the energy in the ecosystem, which, in this instance, is information, to adapt and reorganize. Having had one self-concept of herself in reference to wholeness or to a system as wife, and acquiring a different self-concept of herself in reference to wholeness as a widow, requires reorganization and therefore the use of energy, e.g., information. In this study, questions were asked that assumed that adaptation had taken place, e.g., the ability to move across the life cycle, deal with death and grief, and give direction and advice to other widows. This investigator assumed that

much energy was transformed in the processing of information. "The flow of energy through the system serves an organizing function, relating parts to wholes and systems to environment" (Andrews, Bubolz, & Paolucci, 1980).

5. "Feedback is a necessary process for goal-directed adaptive functioning of systems" (Andrews, 1977, p. 4).

The elderly widows in this study were asked if they had had some changes in perception of self after being widowed, e.g., from more dependent to more independent. For one to have had such a serious loss as the death of a spouse and to have been able once again to function as a new whole or system interdependent with the same environment or with new environments causes one to assume that feedback, adaptation, and a state of equilibrium have occurred.

The elderly widow was the envired unit, the human system, with which this study was concerned. The fact of the death of a spouse was the input, the event, and the information that was processed and caused reorganization of the system. That organism, or system, the elderly widow, became a new whole. The concepts of herself as a total being, as a wife, and as a member of a family changed because her interdependencies and interactions must necessarily have changed when her environments changed. The ecosystem of the widow must be studied to gain a more comprehensive view and a better understanding of environments that are important to the elderly widow, and of adaptations made by the widow in her changed situation. This new whole or envired unit interacting with its environments was the system this researcher studied for the purpose of understanding the



relationship between environments and life satisfaction for elderly widows. The information gathered will be useful for further research with elderly widows and in providing new insights and applications for theoretical models.

### Definitions

Several definitions that are germane to this study are found in the discussion of the conceptual framework (Chapter I). Definitions other than those are found in this section. The following terms are defined in the context in which they are used in this dissertation.

Elderly widow: An elderly widow is a woman who is over 55 years of age, was married, and lost her spouse sometime after she reached the age of 50.

Rural widow: A rural widow is defined in this study as a widow who is living on a farm or in a farming community at the present time and who has been a farm wife for most of her married life.

Urban widow: An urban widow is a widow who is living in a city or town with a population of 15,000-250,000 and who has never been a farm wife.

Closeness: Closeness incorporates within it the concept of emotional and psychological interdependency, interaction, and mutual support.

Closeness Scale: The Closeness Scale is a self-report instrument consisting of nine items designed to measure emotional closeness of elderly widows with their children, siblings, and friends. Each item is answered with one of the following responses: "child," "sibling,"

"friend," "memory of husband," or "no one." A scale score was computed for each widow on closeness to children, siblings, and friends.

Morale: Adams (1971) defined morale theoretically as a continuum of responses to life and living problems that reflect the presence or absence of satisfaction, optimism, and expanding life perspectives. Morale was defined operationally in terms of agitation, attitude toward own aging, and lonely dissatisfaction, as measured by the revised version of the Philadelphia Geriatric Center Morale Scale (PGC) (Lawton, 1972, 1975; Morris & Sherwood, 1975).

Life satisfaction: Life satisfaction is a concept that includes the principle of affirmation of life and contentment with situations one cannot change. It also includes the principle that if one has the desire and ability to change a situation with which one is not content and the potential for change is there, the individual will initiate that change. Life satisfaction was defined operationally in terms of (a) zest versus apathy, (b) fortitude versus resignation, (c) congruence between desired and achieved goals, (d) positive self-concept, and (e) mood tone as positive, as measured by the Life Satisfaction Index A instrument (Neugarten et al., 1961).

Support systems: "Support systems fill three needs: socialization, carrying out tasks of daily living, and assisting in times of illness or crisis" (Cantor, 1979, p. 437). Support systems include formal organizations, such as community services and senior citizens centers and clubs, and informal groups, such as persons within one's social network: children, relatives, friends, and neighbors.

Friend: A friend is a person whom the elderly widow knows well and interacts with in one or more instrumental and expressive ways.

Age: In this study, age refers to chronological age.

Years of widowhood: Years of widowhood is the number of years that have passed since the respondent's spouse has died.

Church attendance: Church attendance is the number of times a respondent attended a church or synagogue within a year.

Years of schooling: Years of schooling refers to the number of years one attended formal school.

Income: Income is the number of dollars received from all sources in one year.

### Assumptions

The following assumptions underlie this study:

1. Life satisfaction, morale, and closeness can be measured.
2. Life satisfaction, morale, and closeness can be measured by instruments used in this study for the purpose of measuring such variables.
3. Changes can occur within human ecosystems that affect the closeness, life satisfaction, and morale of elderly widows.
4. The elderly widow has the ability to change some of her environments.
5. The support system of the elderly widow can affect her life satisfaction, morale, and feelings of closeness.

### Research Questions and Hypotheses

Research Question 1: Is life satisfaction of elderly widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

Research Question 2a: Is life satisfaction of elderly urban widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

Research Question 2b: Is life satisfaction of elderly rural widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

Research Question 3: Will elderly widows' feelings of emotional closeness differ for children, siblings, and friends?

No hypotheses were stated for Research Questions 1, 2, and 3.

Research Question 4: Will life satisfaction of elderly widows be correlated with closeness with children, siblings, and friends?

Hypothesis 1: Closeness of elderly widows with their children will be positively correlated with life satisfaction.

Hypothesis 2: Closeness of elderly widows with their siblings will be negatively correlated with life satisfaction.

Hypothesis 3: Closeness of elderly widows with their friends will be positively correlated with life satisfaction.

Research Question 5: Will life satisfaction of elderly widows be more highly correlated with emotional closeness of widows with their children, siblings, or friends?

Hypothesis 4: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of siblings, as measured by the Closeness Scale.

Hypothesis 5: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of friends, as measured by the Closeness Scale.

Hypothesis 6: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of friends than with closeness of siblings, as measured by the Closeness Scale.

Research Question 6: In the study of elderly widows, will life satisfaction and morale be correlated?

Hypothesis 7: Life satisfaction of elderly widows, as measured by the LSIA, will be correlated with morale of elderly widows, as measured by a self-report instrument, the PGC.

### Limitations

1. Because of nonrandom sampling, generalizability is limited.
2. The sample size was small, particularly when the sample was divided into rural and urban groups.
3. The sample was limited in the sense that this group of elderly widows was very similar on several factors--for example, socioeconomic variables.
4. The Closeness Scale had only nine items. Increasing the number of items might improve the scale.
5. The instrument was structured with no open-ended questions. Therefore, the sample was limited in types of responses.

### Overview

In Chapter I, the topic of interactions and interdependencies of elderly widows with their many environments was introduced. A historical background of the problem was given, and a purpose for the study, a conceptual framework, and related definitions were provided. An application of the conceptual framework was outlined, and research questions, hypotheses, assumptions, and limitations were defined. In Chapter II, the appropriate literature is reviewed, including that on contextual variables and interaction of elderly widows with children, siblings, and friends. The LSIA instrument and the PGC scale are also

reviewed. Chapter III includes the methodology. The sample, research design, and instrument are discussed. The interview procedure, data preparation, and techniques for analysis are also presented in this chapter. In Chapter IV, the findings from the analyses are reported, and discussion of the research questions and the hypotheses is presented. Chapter V includes the summary, the conclusions, and the recommendations based on the research findings.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

For this dissertation, a human ecological framework was chosen for the study of elderly widows. The human ecological framework was considered important because it is comprehensive enough to include the organism to be studied, in this case the elderly widow, and all of her environments. A study of elderly widows interacting with their environments was judged important for the purpose of gathering information that might be helpful in comprehending the situation of elderly widows, a little-studied but fast-growing cohort in our society. This writer also deemed the study important for the purpose of adding information that would be useful in building a more fully developed conceptual framework within which elderly widows interacting with their various environments could be studied.

In the review of the literature, environments, as conceptualized within an ecological framework, that have been found or been hypothesized to have some association with life satisfaction for elderly widows are discussed. The contextual variables selected for analysis included age, years of widowhood, church attendance, years of schooling, and income. Some psychosocial environments were also examined to determine whether there is any relationship between them and life satisfaction for elderly widows. Differences between urban and rural

widows and between widows and widowers are summarized. In the final section of the literature review, instruments used in this study are discussed.

### Contextual Variables

#### Age

Chronological age, the first variable examined in this study, reflects the effect of a multitude of variables that are associated with it, and one or a combination of these variables could cause a positive, a negative, or no relationship between age and life satisfaction to be manifested (Herzog & Rodgers, 1981). These authors also noted that a major distinction to be made in examining aging and life satisfaction is the distinction between aging effects and cohort effects. Aging effects are relative to length of time since birth, including social, psychological, and biological changes. Cohort effects are associated with a particular age at a particular time in history. The fact that a variety of findings concerning life satisfaction and aging have been found in the literature is possibly due, in part, to the factors cited above.

Larson (1978), in attempting to find whether growing older tends to make people more satisfied with life, less satisfied, or has no overall effect, examined 18 surveys that had been conducted in the United States. One-third of these studies reported fairly positive relationships between older age and higher life satisfaction, one-third found negative relationships, and the other third found little or no relationship. The latest Council on Aging survey found little difference between life satisfaction scores for younger and older



cohorts (Harris, 1981). The Duke Longitudinal Study found little or no change in life satisfaction among either middle-aged or elderly participants (Palmore, 1981). A longitudinal analysis of public opinion polls in the United States found increases in the happiness since 1957 in the oldest cohort, decreases in the youngest cohort, and little change in the middle (Herzog & Rodgers, 1981).

Neugarten et al. (1961) noted that age and life satisfaction were not correlated. Edwards and Klemmack (1973) found no relationship between life satisfaction and aging when socioeconomic status was held constant. Palmore (1983), in his cross-cultural study, found that there was little or no association between life satisfaction and aging.

Aging and life satisfaction are considered to be positively correlated by some researchers because major stressors are reduced in number. Holmes and Rahe (1967) considered all change to be stressful. Herzog and Rodgers (1981) noted that there are few major events and fewer changes in later life; therefore, it may be viewed as less trying than the earlier years with its many major events, such as marriage, birth of children, and job and residence changes.

One of the most controversial questions in gerontology still remains: Does growing older tend to make people more satisfied with life, less satisfied, or does it have no overall effect? "It appears that life satisfaction is a highly variable phenomenon depending on a particular cohort's experience in a particular historical and cultural setting and that there is no general or universal effect on life satisfaction" (Palmore, 1983, pp. 50-51).

### Years of Widowhood

Although the literature on life satisfaction and years of widowhood was sparse, the few studies that do exist showed little consensus on whether years of widowhood and life satisfaction are positively, negatively, or not at all correlated. Dunn and Ryff (1982) found that life satisfaction was positively correlated with length of widowhood. Time for the grief process (Kübler Ross, 1969) to have been completed and adjustment to all of the changes that widowhood can cause would imply that length of widowhood would be associated with life satisfaction.

Some studies have found that the longer a person is widowed the more disengagement that takes place and also the greater the loneliness (Cumming & Henry, 1961). Also, the longer one is widowed the greater the potential for those factors that have a negative correlation with life satisfaction to have an effect on the aging widow, e.g., emotional and psychological factors (Bowlby, 1972), health problems (Edwards & Klemmack, 1973), and economic problems (Edwards & Klemmack, 1973; Ferraro & Barresi, 1982; Neugarten et al., 1961). Parkes (1964) found that psychosomatic symptoms were higher in later years of widowhood than in early years. Life satisfaction was negatively correlated with years of widowhood. There appeared to be little agreement in the literature on the relationship between life satisfaction and years of widowhood.

### Church Attendance

Some studies have shown church attendance and religiosity to be positively correlated with life satisfaction; others have shown a

negative correlation, or no correlation at all. Nottingham (1954) found religion, both importance of and active participation in, to be positively correlated with life satisfaction. Berardo (1968) found that religious activity and life satisfaction were more highly correlated for widows than for widowers. Edwards and Klemmack (1973) reported church-related activities to be correlated positively with life satisfaction. Herzog and Rodgers (1981) found that older people tended to be more religious, which included attending church more often, and that factor was related to higher life satisfaction.

Some studies reported negative or no correlations between life satisfaction and church attendance (Palmore, 1983). These findings were from a survey of 16,671 persons 60 and over in 16 areas of 11 countries. However, within this study the data from the United States showed little or no disengagement from formal activities, including attending church services. Therefore, life satisfaction remained high for this group of elderly persons.

### Years of Schooling

Years of schooling was another variable examined in this study. In the literature, years of schooling, sometimes reported as the socioeconomic variable education, has been found to be positively correlated with life satisfaction (Adams, 1969; Berardo, 1968; Fenger & Danigelis, 1982; George, 1978; Glenn & McLanahan, 1981; Herzog & Rodgers, 1981; Liang et al., 1980; Lopata, 1970, 1973, 1979; Neugarten et al., 1961).

Years of schooling has been found to be positively associated with higher levels of social interaction, particularly formal activities such as volunteer work and club membership. Palmore (1983) found involvement with formal activities continued throughout the life cycle until very late in life. Years of schooling appears to be a factor associated with continuing social participation and continuing interest in new ideas and may therefore be positively associated with life satisfaction because less disengagement takes place.

### Income

Income, the final contextual variable examined in this study, also appears to have been strongly positively correlated in the literature (Adams, 1969; Berardo, 1968; Chatfield, 1977; Fenger & Danigelis, 1982; George, 1978; Glenn & McLanahan, 1981; Herzog & Rodgers, 1981; Levin & Levin, 1981; Liang et al., 1980; Lopata, 1970, 1973, 1979; Neugarten et al., 1961). Higher income allows for greater social participation, better physical and mental health care, and greater status--variables positively correlated with life satisfaction. High income also has been found to be associated with willingness of younger people to associate with the elderly (Levin & Levin, 1981).

These contextual variables were examined in this study and are discussed in the findings.

### Differences Between Rural and Urban Elderly Widows

There are few studies concerning the rural elderly in general and even less research concerning elderly rural widows. Youmans (1977) noted that sociologists were "urban dwellers" and were inclined to study urban populations. The studies that are available report inconsistencies in their findings.

Youmans discussed what sociologists describe as the folk society or the "gemeinschaft" (Loomis & Beegle, 1950). The characteristics of the folk society and the culture associated with rural society included:

1. strong emphasis on conventional behavior
2. conformity and tradition in customs and values
3. strong adherence to kinship control of behavior
4. few interpersonal contacts
5. contacts that tend to be primary in nature, of long duration, and limited to small-group areas
6. sacred and religious beliefs that play important roles in orientation of people in folk types of societies

Urban societies, on the other hand, were found to have these characteristics:

1. They demonstrate more individualistic behavior
2. They reject customs and traditions
3. They have weakened kinship control
4. They have many social contacts of a secondary nature and of short duration

5. They show strong adherence to secular values and beliefs
6. They reject sacred and religious orientations

In the past, these differences were prominent and contributed to greater variability between urban and rural elderly. However, rural communities have undergone changes recently from exhibiting older folkways to demonstrating more modern and technologically advanced life styles. Modernization, greater productivity, more complex social organizations, e.g., schools, churches, and business enterprises; improved transportation and communication facilities; and greater mobility of rural people from place to place have caused changes and the conflicts that accompany them. It has been suggested that conflict that exists between those born before 1910 and after 1950 is associated with these changes (Youmans, 1977).

Some of the findings from studies reporting differences and similarities between urban and rural elderly follow. Youmans (1977) reported that his rural sample had substantially lower incomes, was restricted in mobility, recorded poorer physical health, and portrayed a more negative outlook on life. Youmans felt that industrialization of rural communities had had a negative influence on rural elderly.

Important to well being and life satisfaction is the freedom and opportunity to interact with persons of one's choice. Youmans noted that older rural respondents were limited in such interaction due to transportation problems, particularly for elderly widows, lower socioeconomic levels, and lower levels of education. Also, the generation being studied grew to maturity when family was the center of

social life, and now the social function of the family has almost disappeared in many rural areas and there is little satisfaction in relation to family interreaction.

In Youmans' study, yearly incomes were reported for 1959 and 1969:

	<u>1959</u>	<u>1969</u>
Urban males--65 years +	\$1,961	\$3,188
Rural farm males--65 years +	1,417	2,514
Urban females--65 years +	844	1,562
Rural farm females--65 years +	632	887

FitzGerald (1983) reported that although incomes had increased substantially, elderly rural widows were in the lowest economic groups in the society in 1980. Twenty-one percent had incomes below the poverty level.

Health records, as reported by Youmans (1971), demonstrated twice as much cardiovascular and respiratory disease for rural as compared to urban elderly. Greater incidences of sense-organ, endocrine, urinary, and psychiatric problems were reported also. Youmans' conclusion was that poorer economic and educational levels are contributing factors preventing or inhibiting use of health care programs. Also, distribution of health care services is better for urban than rural residents. Youmans also found that rural environments have less potential for producing a favorable mental outlook. Rural residents are more authoritarian, more fundamentalistic in religious outlook, less motivated toward achievement, show greater dependency on government, and demonstrate more hopelessness and despair, according to findings from his attitudinal survey of 803

persons. Out of 24 scales, mean scores on 17 yielded statistically significant differences between older rural and urban persons. The urban respondents scored more favorably on 12 and rural on 5 of the scales.

The findings of the study indicated that the rural elderly, compared with the urban aged, worried more about their financial conditions, revealed less satisfaction with their housing, and maintained they had greater need for more money; revealed a more negative view of themselves and a poorer self-evaluation of their health; found their lives more dreary and were more concerned about their inability to lead useful lives; rated their communities less favorably in terms of visiting patterns, neighborliness, and general benefits; and reported greater alienation and more worry.

In contrast, the rural aged, compared with the urban aged, revealed a greater sense of general happiness, greater family pride, stronger family support, and stronger feelings of personal gratification, as well as giving more favorable ratings to their neighborhoods as places in which to live. (p. 90)

In contrast to Youmans' findings, Fengler and Danigelis (1982) found, in their study of 1,400 systematically selected elderly, that rural and urban widows are almost equally disadvantaged in objective ways. Subjectively, urban widows perceive themselves to be more disadvantaged than rural widows. These authors noted that few studies have been attempted on rural and urban widows, in spite of the fact that 50% of urban elderly and 40% of rural elderly are widowed (U.S. Bureau of the Census, 1971). Of 11 comparisons of urban and rural differences, only three showed urban more "objectively" advantaged than the rural elderly. There was no difference reported on income, incapacity, and participation. Subjectively, however, the rural elderly perceive their condition more positively on all indicators which show nonnegligible differences between rural and urban



elderly. The rural elderly are more likely to feel that they have someone to care for them, that their incomes are sufficient to meet their needs, and that they have few transportation difficulties. Their health, they report, is as good as that of their peers. In terms of financial position, home satisfaction, and isolation, there are no significant differences. Four comparisons of subjective variables favor rural elderly, three show no difference, and none favor urban elderly. Life satisfaction was also higher for rural than urban residents, even though there were fewer objective and subjective factors that correlated with life satisfaction for rural widows. Rural widows continued to show higher life satisfaction than urban widows with a variety of objective and subjective conditions controlled.

These authors suggested that friendship relationships, neighborhood sociability, and family ties, as well as lessened fear of crime, may be forces that favor rural respondents in relation to life satisfaction.

Lee and Cassidy (1981) reviewed ten studies of relationships between kinship interaction and residence. Seven studies reported that kinship interaction is greater among rural than urban populations. Two studies reported opposite findings, i.e., that urban elderly interact more frequently with kin than do rural residents. One study reported a nonsignificant curvilinear relationship. Even those studies that agreed in their findings submitted different reasons for those same findings. For example, proximity was given

as a reason for the greater amount of interaction, but Youmans (1977) found that urban respondents interacted more in spite of disadvantages in reference to proximity. Berardo (1967) found that a rural background, indicating strong traditional familistic ties, was related to kinship interaction, whereas other studies have found that factor to be irrelevant.

Lee and Cassidy (1981) stated that "literally, all findings of rural and urban differences in kinship interaction are susceptible to multiple interpretations" (p. 59). Factors such as regional variations, migration, differential proximity to kin, and socioeconomic status are often correlated with residence. If these variables are not controlled, rural widows' differences in kinship interaction cannot be attributed to residence per se. Therefore, "empirical studies to date do not justify the conclusion that urban residence destroys or decreases viability of kinship networks. Conversely, rural residents are not particularly 'advantaged' in this regard" (p. 67). Reported rural-urban differences in kinship interaction are uniformly small, inconsistent, and often can be attributed to factors other than residence.

### Interaction and Life Satisfaction

One of the main purposes of this study was to determine whether the interaction of elderly widows with some psychosocial environments, namely, their children, siblings, and friends, was associated with life satisfaction. A large body of literature was examined, in which

the interactions of the elderly with their children, siblings, and friends were investigated. Few such studies, however, have been conducted using samples of elderly widows. From the research on the elderly as a group, and also from the few studies on elderly widows, conclusions were drawn concerning the life satisfaction of elderly widows.

### Interaction With Children

In the first section of the review of literature on interactions, parent/children relationships are examined. Lee (1979) noted that many studies have recorded the presence of "strong" social relationships between aging parents and their adult children in the United States (B. Adams, 1967; Arling, 1976; Atchley, Pignottiello, & Shaw, 1979; Brown, 1974; Bultena, 1969; Shanas, 1973; Troll, 1971). These relationships are considered to be strong because they involve frequent interaction (allowed by proximity) and because they are characterized by "positive concern" (Adams, 1968) and exchange of mutual assistance (Lee, 1979). Children are therefore judged to be an important part of the emotional-support system of older parents (Rosenmayer, 1968; Shanas, 1973). Shanas (1973) concluded that the family and kin networks remain the major social and psychological support of the American elderly.

Chappell (1983) noted in her study that the maintenance of close ties with relatives and friends is said to maximize adjustment to old age, to increase overall well-being, and to mediate stress (Choler & Lieberman, 1980; Kozma & Stone, 1978).

Cumming and Henry (1961) observed that "while aging people interact less and in fewer roles . . . ties to kindred become more salient" (p. 9). Rosow (1965) found that although the social world of the elderly contracts, their association with children does not.

Although the frequency of contact and interaction of the elderly with their children appears to be high, little is known about the quality and meaning of interaction of the elderly with their offspring. Ward (1978) stated, "Existing patterns of interaction do not necessarily imply emotional closeness or warmth, and contact may be largely ritualistic" (p. 43).

Larson (1978) concluded that types of social interactions, and with whom, are not clearly defined in the literature. In noting the literature discussed to this point, logically, one would expect a positive relationship between life satisfaction, morale, or sense of well-being of elderly parents and contact with their children.

Research findings have been universally contrary to this expectation. Almost no studies reported any positive correlation between frequency of contact with children and life satisfaction of elderly parents (Adams, 1971; Arling, 1976; Blau, 1973; Campbell, Converse, & Rodgers, 1976; Chatfield, 1977; Connors, Powers, & Bultena, 1979; Edwards & Klemmack, 1973; Kutner, Fanshel, Tago, & Langner, 1956; Pihlblad & Adams, 1972; Spreitzer & Snyder, 1974; Wood & Robertson, 1978). Data from six U.S. National Surveys conducted from 1973

through 1978 were used to estimate effects of having children on global happiness and five dimensions of life satisfaction. All effects were either negligible or negative.

Rosow (1965) took a stand against assuming that frequency of interaction meant strong emotional ties. Rosow concluded that "while sentiment wanes with low contact, high interaction is a necessary, but not sufficient, condition for emotional closeness" (p. 373). "Because there is considerable intergeneration contact, we tend to conclude that this necessarily signifies emotional warmth and closeness between the actors. But the evidence for such emotional warmth is inconclusive" (p. 374).

Shanas & Streib (1965) found that 70% of adult children and 74% of parents reported frequent visits; 75% of parents felt they were a close family group with their children, whereas 60% of adult children reported feeling this way. Many more parents stated they would like to be in contact more often.

Brown (1969) found that two-thirds of the sample of aged parents visited frequently with their children, but less than 20% indicated close affectional ties. Blau (1973) referred to her 1957 research findings and pointed out that "although many kinship and intergenerational studies discuss 'affectional bonds' which are assumed to keep the child and parent in frequent contact, in actuality there is often an estrangement that is 'carefully hidden on both sides'" (p. 41). Children feel an "irredeemable obligation." This obligation clashes with other

priorities such as friends and spouses and leads to conflict. "As a result love and positive emotional involvement on the part of adult children decline, and the sense of obligation remains or even increases" (Weishaus, 1979, p. 162). Blau recommended that there is a need on the part of both parent and child to "preserve the fiction of intimacy and hide the marginality of the parent" (p. 941).

Evidence indicates that frequent contact does not imply affectional solidarity but may reflect feelings of responsibility and obligation on the part of adult children, as well as conscious or unconscious awareness of their parent's emotional needs. The myth of neglect has been eliminated (Shanas, 1979), but the assumption of a close, affectionate, easy relationship is questioned. Many studies showed that parents rated their relationship with their children higher than children rated their relationship with their parents (Johnson & Bursk, 1977; Rosow, 1965; Shanas & Streib, 1965).

Morale is a concept with dimensions similar to life satisfaction. Morale was examined in this study to find if it correlates with life satisfaction. From findings of studies using social-network and social-interaction theories, one might expect that frequency of interaction between elderly parents and adult children is related to high morale for elderly parents. In most studies on morale, opposite findings have been recorded. Riley (1968) noted that in his study of persons over 60 years of age, the morale of those who saw their children infrequently was higher than among those who saw them often. Blau

(1973) found no relationship between frequency of interaction and morale with her sample of widowed and retired people.

Kerckhoff (1966) examined residential closeness and "mutual support" levels in relation to morale of older parents and found a negative association. He took the analysis one step further and studied parental expectations and morale and found low expectations of affection and mutual aid from children were positively associated with high morale of elderly parents.

Arling (1976) investigated morale for widows between 65 and 85 years of age. This research was undertaken to determine whether contact with children, friends, or neighbors was more closely associated with morale for widows. Closeness with family members, particularly children, showed no correlation with measures of morale.

Goldfarb (1965), a psychiatrist, validated the research findings up to that time. He observed that older people who saw their children often had lower morale and more symptoms of depression.

Much of the research appeared to be unanimous in showing that frequency of interaction with adult children is unrelated to the morale or the life satisfaction of the elderly. Possible explanations for the findings that indicated negative or no associations between frequency of contact of the elderly with their children and life satisfaction, morale, or well-being are discussed in Chapter IV, discussion of the findings, and in Chapter V, conclusions.

### Interaction With Siblings

About 80% of older people have living brothers and sisters (Weishaus, 1979). Clark and Anderson (1967) found the most common kinship role to be that of sibling. They are kin of the same generation, and these authors found that there was a tendency to pick up early relationships, especially those of the same generation. There was more effort to visit siblings in old age than in middle age. The narrower a person's world was, the more likely he/she was to turn to siblings, even where there were old broken relationships and where old conflicts persisted. Butler and Lewis (1977) noted: "Such relationships usually have as much emotional content as more directly active ones or even more" (p. 373). In old age, there is a tendency to mend fences broken earlier.

After spouses have died, the widowed individuals often want to turn to children but hesitate to do so because of the cultural norms of independence and the reluctance to impose on children's lives. Although one might expect logically to find that interaction of the elderly with their siblings correlates positively with life satisfaction and morale, almost no studies supported that expectation. Lee and Tallman (1980), using bivariate analysis and controls for marital status, parental status, affection for siblings, and health, found no circumstance under which morale of the elderly was positively related to frequency of interaction with siblings. Interaction of siblings seemed to be relatively unimportant for the emotional well-being of older people. Neither variation in interaction nor presence/absence of siblings was related in any systematic way.



B. Adams (1968) found that siblings were seldom chosen for social companions. Shanas (1973) stated that marital status is the most significant variable influencing interaction of elderly people with their siblings. Siblings fulfill the emotional and social needs for elderly who lack other close ties. Therefore, interaction among siblings is probably greater for those with no children.

Lopata (1973) found that siblings play a very small role in the support systems of widows. Eighty percent of the widows had siblings, but only 46 mentioned siblings as support systems. Lopata found that siblings were not supportive nor contributive to the development and the maintenance of self-feelings such as being respected, self-sufficient, useful, and independent. Bock and Webber (1971) and Pihlblad and Adams (1972) also found in their studies that there was less interaction between siblings and other family members after widowhood.

One of the reasons given for lack of correlation between life satisfaction and interaction of elderly and children was intergenerational differences. However, the frequency of interaction with any kin does not appear to influence life satisfaction or morale of elderly people, regardless of whether kinship relations in question are intergenerational or intragenerational.

Although interaction of the elderly with their siblings, as with their children, is not positively correlated with life satisfaction or morale of older people, this does not mean that kinship relations

are irrelevant or unimportant to older people. Siblings provide services to older people and contribute to attitude states other than moral, such as feelings of security.

### Interaction With Friends

Research on nonfamilial relationships was summarized by Peters (1978) as "scattered, frequently lacking a rigorously developed conceptual framework, and often only an adjunctive consideration to more central interest of researchers" (p. 221). Chappell (1983) concluded that friendship, because of its voluntary nature, may result in greater communication and intimacy than child or sibling interaction. Friendship rests on mutual choices and needs. It sustains a person's sense of usefulness and self-esteem more effectively than family relationships, with their obligatory character.

According to Hess (1972), "the voluntary nature of friend relations allows for the maximization of beneficial associations and the minimization of undesirable ones. Unlike family relations which are frequently obligatory, friendship is volitional" (p. 229; cited in Ferrano & Barresi, 1982).

The similarity of experiences, values, and characteristics of friends allows for the possibility of equal exchange between elderly individuals (Blau, 1973; Homans, 1974). Many gerontologists have concluded that friendship is an important factor in the adjustment of older people (Atchley, 1971; Butler & Lewis, 1977; Hendricks & Hendricks, 1977). The friend network provides continuity with the past and facilitates a sense of integration with the large social group.

Mancini (1980) found a marginal positive relationship between morale and the amount of personal contact with friends. The qualitative aspects, he found, were more important, and he noted that little research has focused on those dimensions. He found that role competence was more important than friend contact for the purpose of understanding the older adult's morale or life satisfaction level. These studies were controlled for health and socioeconomic status.

Chappell (1983) found that friends tend to be age peers as opposed to intergenerational persons. In considering frequency of contact and satisfaction with that relationship, most widows expressed satisfaction with their relationship with various groups, which included primarily friends rather than relatives. In terms of specific recreational activities for most of the elderly, the greatest satisfaction was expressed for those participating with nonfamily peers (peer friends) for all activities.

Friendship, because of its voluntary nature, may result in greater communication and intimacy. The interaction of the elderly with their friends may demonstrate higher life satisfaction than interaction with children or siblings because of mutual choices and needs and also because of common situations, problems, and similar cohort experiences. The elderly hold in common physical limitations, age segregation, similar roles (e.g., retirement and widowhood), and the need to adjust to impending death (Marshall, 1955). Thus, they may have a great sense of empathy and satisfaction with their friends.

### Widows and Widowers

Widowhood presents special problems for women, which appear to be different than for men. Many of these problems are those associated with being elderly, but they are even more complex and acute for elderly women. Adult dependency, poverty, unemployment, mental and physical illness, and an insecure work and social status are particularly critical. Berardo (1967) discussed widowhood as a crisis situation involving increasing numbers of people sociologically.

Elderly widows in the United States have been found to be disadvantaged on some dimensions compared to elderly widowers and/or married couples. (See Chapter I; Berardo, 1967; Fengler & Danigelis, 1982). Fengler and Danigelis (1982) found the older female widows to be a vulnerable subpopulation. They were less healthy than other cohorts in their age group, economically poorer, often alone, and more vulnerable to environmental factors.

However, in Berardo's (1967) study, widows were the most active group compared to marrieds, and widowers were reported to be the least active. Widowers, he found, were the most isolated group. Widows reported most assistance from children, whereas widowers were least likely to report help from children. The largest proportion of church members were widows, and the greatest proportion of nonmembers in Berardo's study were widowers. He found that widowers had a poorer health-status rating than widows both 5 years and 10 years after widowhood.

Powers, Keith, and Goudy (1981) noted that widowhood is a more isolating experience for males than for females. In a study of 1,500

rural elderly (Pihlblod & Adams, 1972), most men and women continued to live alone, maintained independence, and kept contact with children and other relatives. For a number of men, however, after the initial period of grief and adjustment to the loss of a spouse, a significant decline took place in contact with children and other relatives, in formal organizations, and in religious-group memberships.

Berardo's 1967 study reported similar findings. Widows were twice as likely, and widowers four times as likely, as married persons to be isolated. Pihlblod and Adams (1972) also found that men were more likely than women to turn to others for housekeeping services and transportation. Adjustment in social contacts and household activities took place, but they were less extreme and more gradual for widows than for widowers.

Widowhood presents a number of factors and problems that differ for widows and widowers. In the literature several differences are discussed, but researchers have not come to a consensus as to what those differences are.

### Instruments

#### Life Satisfaction Index A

In 1949, Cavan, Burgess, Havighurst, and Goldhammer introduced their attitude scale of 56 items as a measure of adjustment to aging. Since then, many scales have been developed in gerontology.

In 1961, Neugarten et al. developed an instrument, the Life Satisfaction Index A (LSIA). This instrument evolved from an extensive 5-year study of a Kansas City sample of urban middle-class,

relatively healthy persons. "An attitude scale of 20 items was selected from existing scales, or invented to get four or five items representing each of the five components associated with life satisfaction" (Havighurst, 1963).

The original Life Satisfaction Rating, from which the shorter instrument, the LSIA, was developed, consisted of five components. The components were maintained for the shorter LSIA. They are zest for life as opposed to apathy; fortitude; congruence between desired and achieved goals; high physical, psychological, and social self-concept; and a happy, optimistic mood tone.

Great effort was made to refine the instrument. A second study of the instrument by Wood, Wylie, and Sheafor (1966) produced almost the same results as those found in the Kansas City study. Wood et al., however, used a rural sample and suggested that the 20 items be reduced to 13. The new scale was called Life Satisfaction Index Z. In 1967, B. Adams used a new sample of 1,716 persons drawn from towns and cities in Missouri with populations ranging from 2,500 to 5,000 to retest the LSIA. Responses of the sample to the LSIA were analyzed to determine (a) reliability of the index items, (b) the number of factors measured by the index, and (c) the number of components represented in the index.

Reliability. Reliability of the LSIA items was assessed. To evaluate reliability, two types of analyses were used. The first is a discrimination value based on the difference in percentage of affirmative response to each item of the low- and high-score groups.

The second is a biserial correlation between the mean of the affirmative-response group of each item and the LSIA mean score for the whole sample.

Discrimination value (D-value) should ideally range from 20 to 80% and have a mean value of 50% (Adams, 1969). The D-value for the items in the LSIA ranged from 16 to 63% and showed a mean of 42%.

For the biserial correlation and for the D-value, in reference to reliability, Item T--"I feel my age, but it does not bother me"--and Item S--"Compared to other people my age, I have made a lot of foolish decisions"--had the lowest correlation with the LSIA. They appeared to perform quite poorly in contributing to the total LSIA score, one because of its dual nature and the other because of its poor discriminating ability (D. Adams, 1969). Cronbach's alpha will be noted for these items on the LSIA in the study of elderly widows. The items were considered for rejection in the final analyses of the study.

In the factor analyses, these two items performed poorly again, and it was decided that they should be eliminated. An LSIA inter-correlation check was done to note the possibility that five theoretical components that were built into the index are measured independently and do not combine into a single measure of life satisfaction. The values suggest one major factor associated with the LSIA.

This sample received a mean scale LSIA score of 12.5 with a standard deviation of 3.6, compared with 12.4 and 4.4 for the Kansas City sample and a mean of 11.6 for the rural Kansas sample (D. Adams, 1969, p. 470).

Neugarten et al. (1961) felt, even after refining the instrument, that the index was only useful for certain groups of persons over 65 years of age. (See LSIA instrument, Appendix A.) D. Adams (1969) noted that the LSIA provided a fair estimate of life satisfaction for small-town as well as rural and urban samples. He found that Items S and T should be omitted.

Some question has been raised concerning the representation of the five theoretical components said to provide the basis for the scale, and it might be suggested that further research along this line be directed at finding new items for the index which will fill out the theoretical design or which will provide better indicators of life satisfaction than those presently in the scale. (D. Adams, 1969, p. 473)

#### Philadelphia Geriatric Center Morale Scale

Morale, life satisfaction, and attitudinal scales have been used to measure the inner states of older people for some time (Burgess, Cavan, & Havighurst, 1949; Kutner et al., 1956; Neugarten et al., 1961). There has been much discussion within the literature on how one should operationalize morale. Lawton (1972) concluded that morale was multidimensional and needed easier response formats and wording. Consequently, the scale that he developed consisted of 22 items that yielded six factors: Attitude Toward Own Aging, Agitation, Lonely Dissatisfaction, Acceptance of Status Quo, Optimism, and Surgency.

In 1975, Morris and Sherwood performed a series of component analyses. A six-factor solution of the 22-item matrix reproduced factors identifiable as Attitude Toward Own Aging, Agitation, and Lonely Dissatisfaction but not the other three (Lawton, 1975). The



three factors, Attitude Toward Own Aging (six items), Agitation (six items), and Lonely Dissatisfaction (five items), were reproduced. The PGC scale was the only morale scale, to that time, that had included "social relationships" among its pool for factoring.

### Summary

Literature that was reviewed in this chapter included discussions about the contextual variables in this study. They were age, years of widowhood, church attendance, years of schooling, and income. Also included were environments with which elderly widows interacted: children, siblings, and friends. Differences between urban and rural elderly widows and between elderly widows and widowers were summarized. A review of the instrument used in the study also was presented.

## CHAPTER III

### METHODOLOGY

#### Introduction

This study was designed as a part of a larger pilot project developed by Lawrence B. Schiamberg, Department of Family and Child Ecology in the College of Human Ecology of Michigan State University. The larger study, "The Support Systems of Aging Widows: Urban and Rural Comparisons," had as its main objectives to:

1. delineate and compare major support systems that operate in the lives of urban and rural aging widows.
2. make a preliminary determination of any unique constellation or arrangement of the features of the above support systems that apply to minority-group widows (e.g., blacks and Spanish Americans).
3. identify preliminary recommendations for improving or changing current support systems.

Funding for the pilot study, extending from January 1, 1981, to December 31, 1981, was received from the Michigan State University Foundation.

This investigator was the research assistant for the project during the spring, summer, and fall terms of 1981 and the winter term 1981-82, during which time she assisted in the development of the

instrument, interviewed all subjects for this phase of the research, developed the codebook, and did a first-stage analysis of the data.

In this chapter, procedures used in a study of elderly widows are presented. The sample, the sources from which the sample was drawn, and the selection procedures constitute the first section of the chapter. The second major division includes the research design, instrument selection, instrument development and description, and the interview process. The third section comprises the coding procedures, data collection, data preparation, and the techniques used for analysis.

#### Protection of Human Subjects

The application made to Michigan State University Committee on Research Involving Human Subjects (UCRIHS) for the purpose of engaging in this research project was approved in January 1981. The committee noted that proper responsibility had been taken for the protection of the rights and welfare of human subjects.

#### Sample

The population for this study included widows 55 years of age and older who were widowed after 50 years of age. Younger widows were not included because that cohort, and especially those with younger children at home, has different problems and therefore different attitudes and feelings about widowhood than older widows have. The widows in this sample were selected from rural and urban areas in Ottawa, Kent, and Ingham Counties. They were healthy, mobile persons living independently in their own homes or apartments.

### Sources From Which the Sample Was Drawn

The sources from which the sample for this study was chosen included the East Lansing Older People's Program, the Gorsline-Runciman Funeral Home Program for Widowed Persons, the clients of a Grand Rapids physician, and senior citizens' programs. The East Lansing Older People's Program is funded by the city and the school system under the School-City Activity Program. The membership comprises active older adults who volunteer their services. The services include classes, health clinics, business consulting, tax services, and an information and referral program that disseminates information for and about older adults. Many, but not all, of the members in this program are widowed. A second source for names of widows was the Gorsline-Runciman Funeral Home in Lansing, Michigan. A program was initiated by the directors of this funeral home for persons who lose a spouse and who are served by this funeral home at the time of the death of that spouse. This program offers support, visits, and education at the time of the loss of a spouse. This researcher received a list of names from the director of that program.

The third source of names of widows came from a Grand Rapids internist who supplied a list of relatively well patients, i.e., persons who were mobile, cared for themselves, and maintained an independent life style. Another source from which a sample of widows was drawn for this study was through informal contacts within churches and senior citizens' programs.

The sample of urban widows was chosen primarily from the East Lansing Older People's Program, the Gorsline-Runciman Funeral Home Program, and the physician's list. A small number of names in the urban sample was obtained from churches and senior citizens' groups. The majority of widows' names for the rural sample was drawn from the churches and senior citizens' groups within Ottawa and Ingham Counties. A few names in the rural sample were obtained from the physician's list and the funeral home program. None was obtained from the East Lansing Older People's Program.

#### Procedure for Contacting Sources

The procedure for contacting each source or organization to obtain names of widows for this sample varied according to the source. This investigator contacted the director of the East Lansing Older People's Program by telephone and requested a list of names of widows who were 55 years of age or older. There was no information in that office about years of widowhood. Because this information was needed for the selection of widows for this study, a telephone call was made to each widow on the list to obtain that information and to verify her age.

The director of the widows' program at the Gorsline-Runciman Funeral Home was contacted by this investigator for the second list of widows' names. A meeting was held with the director of the program, at which time the research project and the goals for the project were discussed. A list of names of widows, including their ages and years of widowhood, was obtained from the director of the program.

This researcher made a personal visit to the Grand Rapids physician to discuss the project and to obtain a list of widows' names for the study. The age of the client, approximate years of widowhood, and the addresses were supplied by this third source.

The fourth list was obtained through informal contacts. Widows who were already in this study supplied names of friends and acquaintances in the community or within their churches or senior citizens' groups. Ages and approximate years of widowhood also were included.

#### Process for Access

The procedure for access to and entry into each widow's home varied slightly according to the source from which the sample was gathered. From the original list of names of widows in the East Lansing Older People's Program, several widows were chosen for contact. A telephone call was made by this investigator to each widow chosen, giving the source from which her name was obtained and asking for verification of her age and years of widowhood. An explanation of the research and a date for the interview was made. If a specific date for interviewing could not be made at that time, the widow was told that a second call would follow in approximately 2 months. Most of the interviewing for this part of the sample was done in the fall and winter of 1981.

Every widow whose name was contributed by the director of the funeral home program was contacted. Before the initial phone calls were made by this investigator, the director of the funeral home program contacted each of her clients and gave them a brief explanation

about the project and informed them that a researcher would be contacting them by phone. The initial phone call by this investigator served the purpose of verifying the age of each widow and the years of widowhood. The project and the method of interviewing also were discussed, and a date for the interview was arranged. This first call took place in June 1981. If a date for interviewing could not be arranged at that time, a second call was to be made within the following 2 months. The interviews for this group took place in the fall and winter of 1981.

The Grand Rapids physician sent a letter of information and introduction to each of the widows whom he had selected for the third list. At the time of the initial phone contact by this investigator, age and years of widowhood were verified, information concerning the project was given, and a time for interview was arranged. These interviews took place in the summer and fall of 1981.

There were basically two methods of access to the informal contact group. In the majority of cases, a prospective respondent was first contacted by her friend or acquaintance already in the study, who informed the prospective respondent that a researcher would be calling her. In the second method, this investigator made the initial phone call to the prospective respondent. This respondent was told that her name had been referred by a specific friend or acquaintance already interviewed in this study. A brief explanation of the research and the interview process was given, and a date for an interview was set. Most of the interviews for this group took place in the summer, fall, and winter of 1981. A few were completed in January 1982.

Because of the difficulty of identifying elderly widows within our society, random sampling was not attempted. Therefore, this was a convenience sample. One of the factors that made it difficult to obtain the names of elderly widows was the fact that area agencies on aging, e.g., the Tri-County Office on Aging, Meals-on-Wheels, and other social service agencies on aging, would not divulge information about widows. These agencies considered this principle to be a protection factor for persons whose names were included in their files. Another reason was that Social Security records and insurance agency records were not broken down into widowed and divorced persons by age and by residence. The Polk directory was also of little assistance as it lists persons living alone but gives no information as to whether those persons are widowed, divorced, or never married. Furthermore, age is also not recorded.

An attempt was made to collect names of elderly Spanish-American widows from a Hispanic agency. This agency would not divulge such information. The difficulties noted in obtaining prospective respondents from the above-mentioned sources do not totally eliminate the possibilities of samples being drawn from them. However, the time and expense necessary for doing so in this pilot study did not allow for such procedures to be carried out.

#### The Response Rate

The response rate for widows asked to participate in this study was very high. Because the number of crimes committed against the elderly is high and is perceived by them to be even higher (Lebowitz,



1975), one might expect the elderly widow to be hesitant and fearful about allowing a stranger into her home. The low refusal rate was likely due to the fact that a trusted referral agent was cited, that a letter of introduction had been sent to them from a professional person trusted by the respondent, or that an initial contact had been made by a friend or an acquaintance already interviewed in the study. Naming the director of the East Lansing Older People's Program as the referring agent for some widows' names, citing the director's name and having her make the initial contact with widows in the Gorsline-Runciman Funeral Home program, having a friend of the prospective respondent introduce the researcher for the informal contact group, and having a letter of introduction sent by the prospective respondent's physician to the widows in that group were probably factors that improved the response rate. Another factor that might have affected the response rate is the fact that many widows living alone are pleased to have someone show interest in their situation, which includes the many factors and stresses of widowhood (Kivett, 1978; Lopata, 1973).

From the program for widowed persons directed by the Gorsline-Runciman Funeral Home, all widows contacted for this research agreed to participate. Because a goal of this project was to have a proportion of widows in all cohorts, i.e., 60-69 years old, 70-79 years old, and 80 years and older, that was somewhat representative of the U.S. Census Bureau data, the persons chosen from the other three sources for obtaining the sample were chosen according to their ages in both urban and rural samples. One person contacted from the physician's list of widows refused to be interviewed. She had

difficulty understanding the complete process. Due to time constraints, one person from the East Lansing Older People's Program did not wish to spend the time. One person from the informal contact group became seriously ill the day of the interview. She had a cerebral hemorrhage and was not able to participate. The final selection included 3 persons from the East Lansing Older People's Program, 6 from the Gorsline-Runciman Funeral Home Program for Widowed Persons, 10 persons from the physician's practice, and 29 persons from the informal contact group.

#### The Research Design and the Instrument

The research design for this study consisted of a survey method using a questionnaire. This instrument was introduced and answers were recorded by this researcher.

In this study, the life satisfaction of elderly rural and urban widows was compared. Life satisfaction was measured by a self-report instrument, the Life Satisfaction Index A (LSIA) using the independent variables of age, years of widowhood, income, education, and church attendance. A self-report instrument, the Closeness Scale, was used to compare emotional closeness of elderly widows with their children, siblings, and friends. This researcher, using the Closeness Scale, also investigated whether emotional closeness of widows with their children, siblings, or friends was more highly associated with life satisfaction as measured by the LSIA. Finally, life satisfaction of elderly widows as measured by the LSIA was studied in relation to

morale as measured by another self-report instrument, the Philadelphia Geriatric Center Morale Scale (PGC).

An interview procedure was used rather than a self-report procedure because it was felt that the questionnaire was long and rather complex and that it might not easily be completed. Also, considering the ages of the respondents, certain limitations, such as poor eyesight, might have prevented some widows from being able to manage or finish the questionnaire.

Although the questionnaire was extensive, this researcher, having previously worked with elderly people as an ombudsman in nursing homes and as a student and a visitor interacting with and interviewing older people, felt that the length of the interview would not present a problem. Many widows are often alone and lonely and are more than pleased to have someone show an interest in them, visit, and allow them to express their views on the state of widowhood (Lopata, 1979).

This middle-aged researcher conducted the interviews. The rationale was that middle-aged interviewers might have more empathy concerning the aging process and be able to establish greater rapport than younger persons (Lopata, 1979). The fact that biases and procedures would be common for each interview was one of the reasons for this decision. This investigator, by being the only interviewer, was able to collect information not gathered specifically from the questionnaire itself; for example, attitudes and feelings about aging and widowhood that permeated discussions taking place at the time of the interview. It was thought that this additional information might

be valuable in interpreting the data collected. It might also be used in further study of elderly widows and widowers.

### Instrument for the Total Project

The questionnaire that was developed by the major researcher and this assistant for the total project, "The Support Systems of Aging Widows: Urban and Rural Comparisons," comprised a variety of types of questions and smaller instruments. Included were socio-demographic variables; questions about work for women before, during, and after marriage; and questions on living arrangements and transportation. There was a section that included a self-report on perceived health status, as well as a scale with questions about past relationships with husbands.

Sibling relationships were tested by using a part of an instrument developed by Borland et al. (1981). This instrument was then adapted by this researcher for use with children, friends, and neighbors. A section on types of interactions of widows with siblings, children, friends, and neighbors was also included, as well as a part on the degree of satisfaction with those relationships.

Another division in the questionnaire asked questions about membership in organizations and about use of support systems such as meals-on-wheels and senior citizens' groups. The final section consisted of questions about grief issues, problems specifically oriented to widows, and advice that widows would have for those newly widowed.

Some of the instruments incorporated into the larger questionnaire were well researched for reliability and validity, e.g., the

LSIA (Neugarten et al., 1961) and the PGC (Lawton, 1972, 1975).

Other instruments, scales, and indexes used were found in the literature but not discussed there in reference to reliability and validity, e.g., health scales and economic indexes (Berardo, 1972). Some ideas and questions from Lopata's (1972, 1979) studies on widows were also included after permission to do so was obtained from her.

#### Instrument Used for This Study

For this study on "Life Satisfaction Among Urban and Rural Elderly Widows," this investigator chose questions from the larger instrument that included variables that were thought to have some relationship to life satisfaction for elderly widows. Some of these variables had been discussed in the literature and were shown to be associated with life satisfaction. Others came from sections that this investigator hypothesized might have a relationship with life satisfaction. They were to be analyzed in this study. The parts of the total questionnaire used in this study are found in Appendix A.

In the literature, income, education, years of widowhood, age, and religious participation have been found to have some relationship with life satisfaction (Chatfield, 1977; Edwards & Klemmack, 1973) and were examined in this study by using questions selected from the larger instrument. Income was recorded in terms of \$5,000 increments. However, because the poverty level for widows is considered to be below \$5,000 for the American society, this researcher wished to know whether any subjects in this sample fell into that category and, if they did, how that might affect their life satisfaction score. For

this reason, there was a breakdown in the first income level to include the information about the poverty-level income. Questions were also asked about satisfaction with income. The education variable was originally broken down into eight categories ranging from "no formal schooling" to "doctoral level." For this study, the categories were reduced in number and therefore enlarged in size for purposes of analyses with a relatively small sample.

There were three types of questions on religion. The first included religious affiliation: Protestant, Catholic, or Jew. A second set of questions asked about church attendance: How often did the respondent attend church? The range included "never" to "more than once a week." However, it was theorized that church attendance did not necessarily relate to the importance of religion in one's life. For this reason, a third question asking about the importance of religion was also included in the questionnaire.

The LSIA (Neugarten et al., 1961) was used for measuring life satisfaction of elderly adults. It has been found to be more highly reliable (Cronbach's alpha) for use with elderly populations than for younger cohorts. This instrument was discussed above in the review of literature on instruments and is found in Appendix A. It was the primary instrument for measuring life satisfaction.

The Philadelphia Geriatric Center Morale Scale (PGC; Lawton, 1972, 1975) was also incorporated into the larger instrument and used for this study to find whether life satisfaction as measured by the LSIA and morale as measured by the PGC were correlated. This instrument was also discussed above in the review of literature on

instruments. It is found in Appendix A. Morale has been found conceptually to have factors and dimensions similar to life satisfaction (Adams, 1969). The term "morale" may also include some dimensions that give a more comprehensive definition to the concept of life satisfaction (Adams, 1969).

A number of questions were chosen for the purpose of constructing an emotional closeness scale. Emotional closeness of widows with their siblings, children, and friends was compared. Emotional closeness was measured by a self-report instrument, a nine-point emotional closeness scale. The nine questions were:

1. Which person is closest to you?
2. Which person do you most enjoy being with?
3. To which person do you tell your problems?
4. Which person comforts you when you are depressed?
5. Which person makes you feel important?
6. To whom do you turn in a time of crisis?
7. Which person makes you feel useful?
8. Which person makes you feel accepted?
9. Which person makes you feel secure?

The response for each question was given as "child," "sibling," "friend," "husband," or "other." The frequency of responses "child," "sibling," and "friend" given by the total group of widows to the nine questions was used to answer Research Question 3. Closeness scores, based on the number of times each response was given, were computed for each widow. Those scores were used for analyses of Research Questions 4 and 5 and Hypotheses 1, 2, 3, 4, and 5. The response

"husband" or "other" was computed but discussed only in the descriptive section of the findings and was not used for the final analyses in relationship to the research hypotheses.

Emotional closeness was assumed by this investigator to be an indicator of quality of relationship. Certain researchers (e.g., Edwards & Klemmack, 1973; Lee, 1979; Mancini, 1980; Rosow, 1965; Weishaus, 1979) have found that quality of relationship was more closely related to life satisfaction than numbers of social interactions and frequency of contact.

In the final section of the questionnaire used for this study (Appendix A), respondents were given a list of problems. The respondents were asked to number the five most important problems for them as widows in their order of importance. Number one was to be the greatest problem--for example, 1. loneliness. Questions were also included that asked about changes that had occurred for the respondent, as a person, after the death of a spouse--for example, "Did you become more or less dependent?" A list of types of advice that widows might give to persons who were newly widowed was also incorporated into this part of the questionnaire. Each respondent was asked to rank the list according to which types she considered to be first, second, third, fourth, and fifth most important.

The responses to the questions found in the final section of the questionnaire are discussed in the findings (Chapter IV) under the subject of descriptive material. These data were not used in testing research hypotheses, but in giving a broader understanding to the phenomenon of widowhood.



### Interview Procedure

The interview procedure basically consisted of three steps. In the first step, information was given directly to this investigator, or initial contact was made with each widow by a director or major referral person from the four sources used to obtain the sample for this study. This step was discussed in detail in the previous section. The second step included the initial contact made by this investigator with each widow, at which time the research project was explained and the rationale for conducting such an interview was given. The approximate amount of time that the interview would require was stated. A date for the interview was usually made at the time of this call.

Each widow was told that all information that she contributed to the research project would be confidential. She was informed that she would be asked to sign a consent form for her own protection and for that of the university. She was also informed that she was not required to answer any questions that she did not wish to answer.

The request for the interview was made 1 week to 2 months before the date of interview. A second call was made the day before the date of the interview as a reminder and confirmation of the exact time.

Upon arrival at the home of each widow, this interviewer introduced herself and mentioned the connection with the person or organization (e.g., Gorsline-Runciman Funeral Home Program for the Widowed) that contributed that widow's name. The interviewer also carried a Michigan State University clipboard and her student identification

card in case a widow would be hesitant to allow a stranger into her home. This was never the case, and all respondents were enthusiastic and gracious both at the time of the initial telephone contact and at the time of the interview. None appeared in the least fearful. Their enthusiasm was also apparent, as noted in the amount of time spent in the interviewing process. The average time for the interview was approximately 120 minutes, and the range 80 to 240 minutes. A few minutes' break for relaxation was suggested about half way through the interview, depending on the respondent's schedule. The atmosphere was usually comfortable and not strained. Most questions were answered readily even if they were of a more personal nature, e.g., those concerning a husband. Only two respondents were not willing to divulge yearly incomes. No recompense was given to the respondents. Each, however, was willing to contribute her time and information, and many said that they hoped they could be of help again. Many widows indicated an interest in the final findings of the research.

A consent form, found in Appendix B, was read and signed by each respondent. Any questions about the implications or meaning of the form were discussed before it was signed.

After each interview, this investigator wrote a memo card on each widow interviewed. This was for the purpose of noting any additional information or comment that might be appropriate or helpful in interpreting data gathered and also useful in further study of elderly widows or widowers.

Each widow was thanked for her assistance. A letter of thanks will be sent when the research is completed.

The interviewing process was completed in approximately 7 months from June 1981 to January 1982. The amount of time that elderly widows were willing to contribute for the interview confirmed the assumption that this researcher had made that elderly widows would be willing and able to manage such an extensive interview.

### Data Preparation

Preparing the data for processing and analyses involved a number of steps. A codebook was first constructed by this investigator for use in the larger research project from which this study was designed. The codebook included the 750 variables that were in the original study.

A new coding sheet, a second set of cards, and a new editor work file were then created by this investigator for the purpose of computing and analyzing only the data related to this study concerning "Life Satisfaction Among Urban and Rural Elderly Widows." A new data file was prepared. The original codebook was used, however, and the variables for this study were given the same variable number as they originally had so that if one desired to check back with the original data and findings, it might be easier to do so.

After collection of the data was completed, the data were prepared for key punching by checking all instruments for legibility, completion, and accuracy, and by computing a life satisfaction score (Neugarten et al., 1961) for each widow. Two assistants were hired by this researcher to recheck such details. Each instrument had

also been examined by this investigator for accuracy immediately after each interview was completed.

The instruments were so arranged that persons doing the key punching could key punch directly from the instrument. The cards were rechecked by a verification process to correct errors. The director of the key punch department examined the instrument. She assured these researchers that key punching could be accomplished with accuracy by key punching directly from the instrument. Although this saved time because one does not have to prepare coding sheets, the errors that showed up on the lists and later on the print-out might cause one to doubt that claim. Because the instrument was complex and very long, it might prove more efficient to use opscan sheets for coding or perhaps revise some section of the questionnaire for clarity in reading column numbers.

### Techniques for Analyses

#### Descriptive Statistics

Descriptive statistics used in this study included frequencies, means, modes, median, range, standard deviation, and variance. Information, taken from these statistics, that was important in providing a base for characterizing or developing a profile of urban and rural elderly widows was collected and examined.

#### Spearman Rank-Order Correlation and Point-Biserial Correlation

A Spearman correlation coefficient was computed for the purpose of answering Research Questions 1 and 2. A nonparametric statistic

was considered necessary for this part of the study because this part included ordinal data. The Spearman rank-order correlation does not depend on a "normal distribution or the metric quality of interval scales. It does, however, request that variables be ordinal in scale and numeric in type (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1970, p. 288).

A point-biserial correlation was used to examine the relationship between life satisfaction and church attendance in Research Questions 1 and 2. The values for the responses were collapsed from seven to two (see Appendix A), thereby making a dichotomous variable which is a requirement for a point-biserial correlation. The values "never/seldom" and "frequently" were more meaningful in interpreting the data and had the potential of showing a stronger relationship.

#### Frequencies and Percentages

For Research Question 3, the responses to the items in the Closeness Scales were computed and compared. Because the nature of the measure did not allow independence, it was not possible to use statistical tests of difference.

#### Pearson Product-Moment Correlation

Pearson correlation coefficients were computed for Hypotheses 1, 2, 3, and 7 to determine whether a relationship did exist between the variables examined in these hypotheses and, if so, how strong that relationship was. The data for these hypotheses were interval, which is a requirement for the computation of a Pearson correlation coefficient.

Pearson correlation coefficient  $r$  measures the strength of relationship between two continuous variables. The correlation coefficient  $r$  provides the strength and direction of the linear relationship. If the value of  $r$  is 0 or close to 0, it is assumed that little or no linear relationship exists between the variables; if the value is +1 or -1 or approaches either, then it may be assumed there is a strong linear relationship (Blalock, 1972; Nie et al., 1975).

#### T-Test for the Difference Between Two Correlations

For Hypotheses 4, 5, and 6, this investigator wanted to find whether one correlation was significantly higher than another. A  $t$ -test for differences between two correlations using one sample was employed. The  $t$ -score was calculated using the formula

$$t = (r_{xy} - r_{zy}) \sqrt{\frac{(N - 3) (1 + r_{xz})}{2(1 - r_{xy}^2 - r_{xz}^2 - r_{zy}^2 + 2r_{xy}r_{xz}r_{zy})}}$$

from Blalock (1972).

A summary of the research questions, hypotheses, and statistics used in the analysis is found in Table 3.1. A probability level of  $p < .05$  was chosen for this study.

#### Summary

The sample for this study comprised 49 widows who had not been widowed before 50 years of age. The sources from which the sample was drawn included the East Lansing Older People's Program, the Gorsline-Runciman Funeral Home's Program for Widowed Persons,

Purpose of Analysis	Data Used in Analyses	Statistic
Research Questions 1 & 2	Contextual variables	--Frequencies --Measures of central tendency --Spearman correlation coefficient --Point-biserial correlation coefficient
Research Question 3	Closeness Scale items Closeness I (Children) Closeness II (Siblings) Closeness III (Friends)	--Frequencies and percentages
Test of Hypotheses 1, 2, 3	Closeness scores (I, II, III) Life Satisfaction scores	Pearson correlation coefficients
Test of Hypotheses 4, 5, 6	Correlation coefficients and <u>N</u> of study	T-test for differences between two correlations using one sample
Test of Hypothesis 7	LSIA and PGC scale scores	Pearson correlation coefficients

Figure 3.1: Methods used for analyses of data.

clients of a Grand Rapids physician, and senior citizens' programs. The areas in the state of Michigan from which the sample was selected were Kent, Ingham, and Ottawa Counties. The sample included both rural and urban widows. Procedures for contacting the sources were described.

The research design consisted of a survey method. A questionnaire was administered by one interviewer. A codebook was developed, and the data were prepared for analysis. Descriptive statistics, Spearman rank-order correlations, Pearson product-moment correlations, a point-biserial correlation, and a t-test to test the difference between two correlations with one sample were techniques used in the analysis of the data.



## CHAPTER IV

### FINDINGS

Chapter IV is divided into four sections. The first section is the introduction. In the second section, descriptive data are reported for a selected group of variables. These variables were judged to be important for the purpose of gaining a greater understanding of elderly widows and for conducting further research with this cohort. In the third section, the research questions are answered and the results of hypothesis testing are given. Discussion of the findings constitutes the last section.

#### Introduction

The research design for this study called for a survey of a sample of elderly widows 55 years of age or older and not widowed before 50 years old. For reasons stated in Chapter III, a random sample was not used, and therefore generalizing to a larger population is not possible. However, the information collected in this study may be a base for further questioning and generating of new hypotheses that would lead to further development of a conceptual framework. A greater comprehension of the elderly widow interacting with her environment was also expected.

One of the purposes for this research was to determine whether, in this study of elderly widows, certain variables correlated with life satisfaction. The sample was also divided into rural and urban groups to determine whether life satisfaction was more highly correlated with these same variables for rural or urban widows. For the second part of the study, a Closeness Scale was constructed by this researcher to analyze whether emotional closeness of elderly widows is greater with children, siblings, or friends. Life satisfaction, as measured by the LSIA, and closeness of elderly widows with their children, siblings, and friends, as measured by the Closeness Scale, were analyzed to determine whether life satisfaction was more highly correlated with closeness of widows to children, siblings, or friends. Finally, an analysis was conducted to determine whether life satisfaction, as measured by the LSIA, and morale, as measured by the PGC, were correlated.

### Descriptive Characteristics

The data revealed several characteristics of the widows participating in this study. This sample of the widowed population comprised 26 urban and 23 rural elderly widows. One rural widow became seriously ill the last day of the interview and was therefore not able to participate in the project.

### Contextual Variables

The ages of the widows in this study ranged from 55 years to 90 years. The range of years of widowhood was 33 years. Women in

this sample had been widowed from 1 to 34 years. The mean number of years of widowhood was 9.91 years, and the mode was 5 years (Tables 4.1 and 4.2).

This sample of elderly widows had high scores on perceived health on a 10-point scale (10 interpreted as the highest score). The mean score was 8.6, the mode was 10, and the median was 9.5. Seventy-three percent (36) of the widows reported that they had no major health problems at present.

Ninety-eight percent (48) of the widows were white, and 2% (1) were black. The sample comprised 89.8% (44) Protestant, 8.2% (4) Catholic, and 2% (1) Jewish widows. Eighty-eight percent (43) of the widows attended some church or synagogue during the year. Seventy-seven percent (38) attended services at least once a week. About 31% (15) attended church more than once a week (for services or mass). Twelve percent (6) of the widows never attended church (Table 4.3). It was found that all of the widows interviewed considered religion important, whether or not they attended church.

The range for years of formal schooling was from 3 years to the number of years needed to complete a doctoral degree. The average number of years of schooling was 12 and this usually meant that a high school diploma had been obtained (Table 4.4).

Yearly income levels were from \$3,000 per year to \$35,000 and above (Table 4.5). The average income fell in the category \$10,000-\$15,000; the median income was \$7,500.

Women in this sample lived in dwellings that included mobile homes, single-family homes, duplexes, apartments, and condominiums.

Table 4.1: Age of Widows in Sample

Age	<u>N</u>	<u>%</u>
53-69	11	22.4
70-79	22	44.9
80+	16	32.7

Table 4.2: Years of Widowhood

Years of Widowhood	<u>N</u>	<u>%</u>
1-5	18	36.7
6-10	14	28.7
11-15	9	18.4
16-20	5	10.1
21-25	0	0
26-30	2	4.0
31-35	1	2.0

Mean = 9.918

Mode = 4.000

Median 8.625

Table 4.3: Church Attendance

Frequency	<u>N</u>	<u>%</u>
Never	6	12.2
Less than once a month	3	6.1
2-3 times a month	2	4.1
Once a week	23	46.9
More than once a week	15	30.6

Mean = 4.592 = 2-3 times/month  
1 time/week

Mode = 5 = 1 time/week  
Median = 5.087

Table 4.4: Schooling Completed

Schooling Completed	<u>N</u>	<u>%</u>
1-6 years	1	2.0
7-9 years	8	16.3
Some high school	8	16.3
High school diploma	9	16.4
Some college	12	24.5
B.S.	9	18.4
M.S.	1	2.0
Ph.D.	1	2.0

Mean = 5.204 = 12 years

Mode = 6.00 = 13-16 years

Median = 5.3 = 12 years

Table 4.5: Total Income Per Year From All Sources

Income	<u>N</u>	<u>%</u>
\$3,000	1	2.0
\$3,000- \$4,999	6	16.3
\$5,000- \$9,999	16	32.7
\$10,000-\$14,999	9	18.4
\$15,000-\$19,999	2	4.1
\$20,000-\$24,999	6	12.2
\$25,000-\$29,999	2	4.1
\$30,000-\$34,999	3	6.4
\$35,000+	3	6.4

Mean = \$10,000-\$14,999

Mode = \$5,000-\$9,999

Median = \$7,500

No widows living in nursing homes were included in this study because that group has many different characteristics than widows who are living more independently. Homes were owned by 73.5% (36) of the widows in the sample, and 79.6% (39) of the widows owned and drove their own cars.

Seventy-seven percent (38) of the widows had worked before marriage. Fifty-nine percent (29) had worked outside the home at some time during their marriage, and 30% (15) of the widows had worked at some time after their spouses had died, either for economic reasons, or because they enjoyed their work, or both. Sixty-five percent (32) of the widows continued to contribute volunteer work hours after becoming a widow, and those hours ranged from 1 hour 1 day a week to several hours every day of the week.

### Support Systems

Use of support systems within the community that were available for older women was minimal. Those support systems included such groups as nutrition centers, health-maintenance programs, and homemaker aids. Two exceptions, where available services were used, were senior citizens' centers and libraries. Some use was also made of educational programs.

Most widows, 89.8% (44), belonged to some organization; the average number of organizations to which they belonged was 3.3. Most organizations were of a religious nature. Many of the widows, particularly those in very good health, appeared to be involved in many projects or organizational activities. Most of the widows considered

themselves to be in very good health, according to perceived health scores. Butler and Lewis (1977) noted that self-perceived health is more important than actual health records for predicting life satisfaction.

Only 6.1% (3) of the widows did not have children, 6.1% (3) did not have grandchildren, and 12.2% (6) widows in the sample did not have any siblings. Questions concerning whether widows were satisfied with the amount of contact they had with their children, siblings, and friends elicited the following types of responses: Sixty-three percent (31) of the widows in the sample said that the amount of contact they had with their children was satisfactory, but 30.6% (15) said they would prefer more contact; 34.7% (17) said they were satisfied with the amount of contact they had with their siblings, but 36.7% (18) said they would prefer more. Eighty-two percent (40) of the widows said the amount of time spent with friends was sufficient, but 18.4% (9) would have preferred more contact.

Eighty-nine percent (44) of the widows noted that they had had some help during the grief period. Children had been the greatest source of assistance and comfort, according to 91.8% (45) of the widows who had had some assistance and support when their husbands died. Forty-nine percent (34) of the widows felt that siblings had been a support and a resource during the grief period, and 90% (44) said that friends had been helpful. The approximate amount of time that the grief period required, according to widows in this sample, was 1 to 7 years. The mode for this sample was 2 to 5 years, and the mean was 18 months to 2 years.

Information that widows in this sample would give to elderly women who were newly widowed included advising them to keep busy, encouraging them to make new friendships, and counseling them not to make major decisions too soon, such as selling one's home within the first year of widowhood.

### Perceived Changes

The widows in the sample noted that they had become more lonely but less isolated. The majority, 80% (39), had become more independent and felt more in control, and 63% (31) had a stronger sense of identity, but 44% (22) also felt that there was more stress in their lives. Seventy-eight percent (38) of the widows said they were satisfied with the changes, e.g., becoming more independent. All but one widow had considered her marriage to be above average. Although the widows in the sample reported having few problems, the greatest problem was loneliness.

### Findings Reported for the LSIA, PGC, and Closeness Scales

Life satisfaction. The mean of the life satisfaction scores for elderly widows was 15.22. The mean was 14.65 for urban widows and 15.87 for rural widows. The possible range of life satisfaction scores was 0 to 20.

PGC. The morale scores for elderly widows had a mean of 13.98. For urban widows the mean was 13.92, and for rural widows it was 14.04. The possible range of scores for the PGC was 0 to 17.



Closeness. Two measures of closeness were used in this study. The first was a frequency count of possible responses to the nine items in the Closeness Scale. Only the responses "child," "sibling," and "friend" were used in the analyses. These frequencies were used to answer Research Question 3. (See Tables 4.6 and 4.7.) Responses "memory of husband," "other," and "no one" were computed but were not used for analyses of research questions and hypotheses. The other measure was a closeness score for each widow for closeness with child, sibling, and friend. These scores were used in analyses of Research Questions 4 and 5 and Hypotheses 1, 2, 3, 4, 5, and 6. The range of possible scores was 0 to 9 for each person on any one of the scales.

### Analysis of Data

Research Question 1: Is life satisfaction of elderly widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

A Spearman rank-order correlation was used to answer this research question. A nonparametric test was chosen because ordinal data were analyzed. This statistical test was used to determine whether there was any correlation between life satisfaction and the contextual variables, age, years of widowhood, church attendance, years of schooling, and income, for the total sample of elderly widows. In addition, a point-biserial correlation was used to examine life satisfaction and church attendance also. The correlations are recorded in Table 4.8. There was no correlation that was statistically significant.

Table 4.6: Frequency of Responses to Items in the Closeness Scale  
for All Widows ( $N = 49$ )

	Child	Sibling	Friend	Memory of Husband	Other	No One
Person closest	40	4	4		1	
Most enjoy being with	34	3	11			
Tell problems to	30	4	9		2	4
Comforts you when depressed	22	4	10	2		10
Person who makes you feel important	26	2	6	10		4
Person you turn to in crisis	40	3	3		1	
Person who makes you feel useful	32	2	7	2		4
Person who makes you feel acceptable	26	2	16	1		3
Person who makes you feel secure	24	2	10	3		9
Total	274	26	72	18	4	34

Table 4.7: Frequency of Responses to Items in the Closeness Scale for Widows Who Have Both Children and Siblings (N = 38)

	Child	Sibling	Friend	Memory of Husband	Other	No One
Person closest	35	3	2		1	
Most enjoy being with	31	2	8			
Tell problems to	26	4	6		2	3
Comforts you when depressed	19	4	7	2		10
Person who makes you feel important	21	1	4	10		4
Person you turn to in crisis	36	2	1		1	
Person who makes you feel useful	28	2	4	2		4
Person who makes you feel acceptable	24	2	11	1		3
Person who makes you feel secure	22	2	6	3		8
Total	242	22	49	18	4	32

Table 4.8: Correlation of Contextual Variables With Life Satisfaction for Entire Sample

Variable Pair	<u>N</u>	Spearman Correlation Coefficient	Significance
Life satisfaction with age	49	-.11	.23
Life satisfaction with years of widowhood	49	.02	.44
Life satisfaction with church attendance	49	-.08	.29
Life satisfaction with years of schooling	49	.21	.08
Life satisfaction with income	49	.17	.12
		Point-Biserial Correlation Coefficient	
Life satisfaction with church attendance	49	.14	.16

Research Question 2a: Is life satisfaction of elderly urban widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

Research Question 2b: Is life satisfaction of elderly rural widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

The sample of elderly widows was divided into rural and urban groups. A Spearman rank-order correlation was used to find whether life satisfaction correlated with selected contextual variables for urban and rural widows. The correlation between life satisfaction and income (.44) of elderly urban widows was statistically significant at the  $p < .02$  level. The other correlations were not statistically significant for urban widows. A point-biserial correlation was used to examine life satisfaction and church attendance for rural and urban samples. The correlations were not statistically significant. The correlations between life satisfaction and the contextual variables were not statistically significant for rural widows. (See Tables 4.9 and 4.10.)

Research Question 3: Will elderly widows' feelings of emotional closeness differ for children, siblings, and friends?

Frequencies of responses on Closeness I (Children) were considerably higher than on Closeness II (Siblings) or Closeness III (Friends) (242, 22, and 49, respectively--see Tables 4.6 and 4.7).

Research Question 4: Will life satisfaction of elderly widows be correlated with closeness with children, siblings, and friends?

For Hypotheses 1, 2, and 3, a Pearson product-moment correlation was used to determine whether these hypotheses could be supported or rejected. This test is appropriate for use with these data, which were interval data.

Table 4.9: Correlation of Contextual Variables With Life Satisfaction for Urban Widows

Variable Pair	<u>N</u>	Spearman Correlation Coefficient	Significance
Life satisfaction with age	26	-.17	.21
Life satisfaction with years of widowhood	26	-.04	.42
Life satisfaction with church attendance	26	.17	.21
Life satisfaction with years of schooling	26	.24	.12
Life satisfaction with income	24	.44	.02
		Point-Biserial Correlation Coefficient	
Life satisfaction with church attendance	26	-.17	.02

Table 4.10: Correlation of Contextual Variables With Life Satisfaction for Rural Widows

Variable Pair	<u>N</u>	Spearman Correlation Coefficient	Significance
Life satisfaction with age	23	-.05	.41
Life satisfaction with years of widowhood	23	.15	.25
Life satisfaction with church attendance	23	-.15	.25
Life satisfaction with years of schooling	23	.21	.17
Life satisfaction with income	23	-.02	.46
		Point-Biserial Correlation Coefficient	
Life satisfaction with church attendance	23	-.13	.27

Hypothesis 1: Closeness of elderly widows with their children will be positively correlated with life satisfaction.

The findings suggested a positive correlation (.12), although the correlation was not found to be statistically significant ( $p < .47$ ). The hypothesis was not supported. (See Table 4.11.)

Hypothesis 2: Closeness of elderly widows with their siblings will be negatively correlated with life satisfaction.

The correlation was found to be negative (-.01,  $p < .99$ ) but was not statistically significant. Hypothesis 5 was not supported. (See Table 4.11.)

Table 4.11: Pearson Product-Moment Correlation: Life Satisfaction and Closeness of Elderly Widows With Children, Siblings, and Friends

	<u>r</u>	<u>p</u>
Closeness I (child) with life satisfaction	.12	$p < .47$
Closeness II (sibling) with life satisfaction	-.01	$p < .99$
Closeness III (friend) with life satisfaction	-.03	$p < .87$
Life satisfaction and morale	.62	$p < .01$

Hypothesis 3: Closeness of elderly widows with their friends will be positively correlated with life satisfaction.

There was a negative correlation (-.03,  $p < .87$ ). It was not found to be significantly different from zero. (See Table 4.11.) This hypothesis was not supported.



Research Question 5: Will life satisfaction of elderly widows be more highly correlated with emotional closeness of widows with children, siblings, or friends?

In testing for the difference between two correlations, a formula for a t-test specific for a single sample (Blalock, 1972) was used for Hypotheses 4, 5, and 6. (See calculations, Appendix D.)

$$\underline{t} = (r_{xy} - r_{zy}) \sqrt{\frac{(N - 3) (1 + r_{xz})}{2(1 - r_{xy}^2 - r_{xy}^2 - r_{zy}^2 + 2r_{xy}r_{xz}r_{zy})}}$$

Hypothesis 4: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of siblings, as measured by the Closeness Scale.

The t-value resulting from this calculation was .64, which was not statistically significant. (See Appendix D for calculations.) The t-value for 35 df is 1.69; p < .05. The hypothesis was not supported.

Hypothesis 5: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of friends, as measured by the Closeness Scale.

Because the greatest difference in correlations appeared to be between life satisfaction and closeness of elderly widows with siblings and life satisfaction and closeness of elderly widows with children and that difference was not found to be statistically significant, no further tests or calculations were considered necessary. However, a t-value was calculated for Hypothesis 5. The t-value resulting from this calculation was .16, which was not statistically significant. Hypothesis 5 was not supported.

Hypothesis 6: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of friends than with closeness of siblings, as measured by the Closeness Scale.

The t-value resulting from this calculation would not have been statistically significant, according to the finding for Hypotheses 4 and 5. The hypothesis was therefore not supported.

Research Question 6: In the study of elderly widows, will life satisfaction and morale be correlated?

Hypothesis 7: Life satisfaction of elderly widows, as measured by the LSIA, will be correlated with morale of elderly widows, as measured by a self-report instrument, the PGC.

A Pearson product-moment correlation was used because it was appropriate for use with interval data. The correlation between life satisfaction and morale was positive and statistically significant (.62,  $p < .01$ ). The hypothesis was supported. (See Table 4.11.)

### Discussion of Findings

A main focus of this study was the organism, the envired unit, which in this study was the elderly widow, who was interacting with her environments, i.e., the natural, the human constructed, and the human behavioral environments. (See Figure 1.1.) This investigator was interested in finding how selected environments and interaction of the envired unit with its environments influenced life satisfaction.

The widows in the sample had relatively high life satisfaction scores. The mean scores were high for the entire sample and for the urban and rural groups, as compared to life satisfaction scores reported for the original testing and retesting of the LSIA. (See Table 4.12.)

Table 4.12: Mean Scores and Standard Deviations on Life Satisfaction for Four Samples

	Walters		Kansas City		Kansas City Rural		Missouri Small Town	
	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>	Mean	<u>SD</u>
Entire sample	15.22		(12.4)	(4.4)	(11.6)	(..)	(12.5)	( 3.6)
Rural	15.87	2.87			11.6	..		
Urban	14.65	2.97	12.4	4.4				
Small town							12.5	3.6

In this study, it was hypothesized that widows' interactions with selected environments would be associated with life satisfaction.

### Age

It was noted, in examining the literature, that the first contextual variable, age, was influenced by many other variables correlated with age. Consequently, no consensus was found in the relationship between age and life satisfaction. For this sample of elderly widows, no correlation between age and life satisfaction was found to be significant for the entire sample or for the rural or urban groups, using a Spearman rank correlation coefficient.

Life satisfaction was negatively correlated for the entire sample ( $-.10, p < .23$ ); life satisfaction/age rural =  $-.05, p < .41$ ; life satisfaction/age urban =  $.17, p < .21$ . The correlations were so low that for all practical purposes one could say there was no correlation (Tables 4.8, 4.9, and 4.10). Other factors evidently influenced life satisfaction more than age, per se.

### Years of Widowhood

In the literature there was little consensus about life satisfaction and years of widowhood. The literature is sparse, and more research is needed. For this sample, years of widowhood and life satisfaction showed correlations of  $.02, p < .44$  for the entire sample,  $.15, p < .25$  for the rural sample, and  $-.04, p < .42$  for the urban sample. Although there is little correlation demonstrated, one notes that there is a positive correlation reported for years of widowhood and life satisfaction for rural widows and a negative one

reported for the urban sample. This slight trend may imply that there is a difference in adjustment to widowhood over the years for urban and rural widows. If, for example, one has a small supportive rural community, friendship with other widows may be encouraged more than in an urban community.

### Church Attendance

In examining the third contextual variable, church attendance, and life satisfaction, one found a correlation of  $-.08$ ,  $p < .29$  for the entire sample,  $-.15$ ,  $p < .25$  for the rural sample, and  $.17$ ,  $p < .21$  for the urban sample. All of the widows in the sample reported that religion was important or very important, whether or not they attended church. Noting this factor, observing the involvement that the sample of widows, particularly rural widows, had with church and church-related activities (77% attended church at least one time per week), and listening to widows' general conversations at the time of the interviews which focused on such participation, this investigator was surprised to find that church attendance and life satisfaction were not highly correlated. This finding could be due to a number of factors. Perhaps the answers given were socially acceptable in communities with strong religious commitments. Possibly there was much involvement with these environments, but other alternatives would have been preferred. Church attendance may say little about satisfaction with it. However, the instrument or the statistic used to determine the correlation may not have been the most appropriate for acquiring that information. For this reason, another

correlation, the point-biserial, was used, which is appropriate for dichotomous variables. In using this correlation, the categories available for responding to "How often do you attend church?" were collapsed into two values, i.e., those who "never or seldom attend church" and those who "attend frequently," which were meaningful categories considering the sample. The correlations were not statistically significant. The limited sample size and lack of variability may also have been factors influencing that finding.

#### Years of Schooling

Widows in the sample reported high levels of education compared to widows in Berardo's (1967) study. The range was from 5 years to the number of years needed to complete a doctorate. The average number of years of schooling for the widows in the sample was 12. The life satisfaction scores correlated positively with years of schooling. The correlation coefficient was .21,  $p < .08$ , for the entire sample. With this small sample, it might have been prudent to use a .10 probability level. In that case, the correlation would have been statistically significant. For the urban and rural samples, the correlations between life satisfaction and years of schooling were not significant (.24,  $p < .12$  and .21,  $p < .17$ , respectively). Education for this sample appears not to be a variable associated with high life satisfaction.

Other factors such as interaction with children, siblings, and friends may be more important variables for life satisfaction than education. However, in the literature, levels of education are

correlated with income, which is correlated with life satisfaction (Berardo, 1968; Edwards & Kleemack, 1973). Income will be the next contextual variable discussed.

### Income

The literature in which income and life satisfaction are discussed strongly suggests that income is a variable correlated with life satisfaction in a positive direction (B. Adams, 1968; Chatfield, 1977; Fenger & Danigelis, 1982; George, 1978; Herzog & Rodgers, 1981; Levin & Levin, 1981). In this study of elderly widows, the correlation coefficient was .17,  $p < .12$  for the entire sample;  $-.02$ ,  $p < .46$  for the rural sample; and  $.44$ ,  $p < .02$  for the urban sample.

The average income for this group of elderly widows fell in the category of \$10,000 to \$15,000, and the median income was \$7,500. The range was \$3,000 to \$35,000+. One also notes that the mean life satisfaction score for this sample was relatively high compared to earlier studies (15.22--entire sample, 14.65--urban, and 15.87--rural for this study; 12.4--urban and 11.6--rural for previous research) (Neugarten et al., 1961; Wood et al., 1966).

Berardo (1967, 1968) and Lopata (1975, 1979) found in their studies that the economic circumstances of elderly widows were usually below average. The census data used in Berardo's studies also indicated that widows have substantially lower incomes and assets than nonwidows in all age groups. The median income for widows in 1964 was \$2,000 (Institute of Life Insurance, 1964). Twenty-one percent of elderly widows in 1983 still had incomes below the poverty level (FitzGerald, 1983).

This sample of elderly widows had relatively high incomes (average income was \$10,000-\$15,000). This investigator expected to find that life satisfaction and income were correlated. The data for the urban sample did demonstrate a positive correlation between life satisfaction and income (.44,  $p < .02$ ) that was statistically significant. However, it was found that the relationship of income to life satisfaction for the rural sample had a negative correlation that was not statistically significant. The differences may be due to what Liang et al. (1980) found--that relationships between objective income and subjective financial well-being may be mediated by relative deprivation. The authors noted that the basic assumption that there is a relationship between objective economic status and subjective financial well-being is problematic.

Although life satisfaction is positively related to income, it is by no means determined by income alone (Hansen et al., 1965). Low income is not always associated with low life satisfaction, nor does high income guarantee satisfaction. For example, if a person with a low income believes that he/she is better off in reference to peers, he/she is likely to be satisfied. For a person with a high income, but one that is low relative to a peer's income, life satisfaction may be low.

Chatfield (1977) noted, however, that economic security may be more important in successful aging than previous research has indicated. He found that although income is important, data estimating wealth or net worth of older individuals must be rigorously measured.



Chatfield also found that income appeared to reduce the effect that health problems have on life satisfaction.

Fenger and Danigeles (1982) found that "subjectively, the rural elderly perceive their condition in a more positive way on all indicators which show nonnegligible differences between rural and urban elderly" (p. 118). The rural elderly are more likely to feel that they have someone available to care for them, that their income takes care of their needs, that they have few transportation difficulties, and that their health is at least as good as that of others their age. Comparative financial situation, home satisfaction, and isolation showed no significant differences between rural and urban widows. Comparisons of life satisfaction variances also showed no difference.

Fengler and Danigelis found that rural widows in some cases objectively, and to a large degree subjectively, are better off than urban widows in terms of life satisfaction. Predictors of life satisfaction appear to be different for urban and rural widows. The rural widow's life satisfaction depends primarily on actual health, perceptions of transportation, and availability of someone, whereas the urban widow's life satisfaction depends on many objective and subjective measures.

Life satisfaction for this sample of elderly widows was positively correlated with income for urban but not for rural samples, a finding that supports Fengler and Danigelis' research. It would be of value to look at a measure that, according to Fengler and Danigelis, is correlated with life satisfaction for rural widows.

That subject is "availability of someone else." Relationship of elderly widows with children, siblings, and friends is reviewed in the section following the discussion of perceived health.

### Health

The widows in the sample had received high scores on "perceived health," which was a score that indicated that they thought of themselves as relatively healthy, mobile, able to do what they wanted to do, able to work when they desired, and able to sleep and relax. The mean score for "perceived health" for this sample, on a 10-point scale, was 8.6, with the mode being 10. Seventy-three percent (36) of the widows reported no major health problems. This high score may have actually represented how this sample of elderly widows truly perceived themselves. It may, on the other hand, have indicated the desire for older persons to give socially acceptable answers on questionnaires or in interviews. This high perceived health score may, however, have been a factor in the relatively high level of life satisfaction demonstrated for the sample.

### Interaction With Children

In the majority of studies found in the literature, interaction of the elderly or elderly widows with their children demonstrated a negative correlation with life satisfaction and morale. (See Chapter IV, Interaction With Children.) In this study of elderly widows, a Pearson correlation coefficient was computed ( $r = .12$ ,  $p < .47$ ) to measure that relationship. The correlation was not statistically significant.

Frequency of interaction and several types of psychosocial interactions between elderly parents and their children have been found to be negatively correlated with life satisfaction and morale in much of the literature. However, a strong sense of attachment and a desire for more interaction with children on the part of elderly parents and elderly widows have also been reported. This investigator reviewed the literature and observed older people in relationships with their children in their own homes and in nursing homes. She came to the conclusion that a dimension of life satisfaction was not being measured in the relationship of elderly widows with their children.

This investigator, in attempting to discover that factor, developed a Closeness Scale to measure emotional closeness of elderly women with their children. The items in the Closeness Scale conceptually seemed to have incorporated within them emotional and psychological imperatives important for fulfilling needs of elderly widows. The inter-item reliability for the Closeness Scale was .80. If one examines the scale items, there appears to be another concept underlying many of the items in relation to the responses "friend," "child," and "sibling" particularly. That concept seems to incorporate the characteristics of a confidante rather than just a friend. Along with the dimensions of friendship--for example, mutual respect and mutual interests--are even stronger relationships that are implied. A confidante is someone who is extremely close, shares secrets, listens, makes one feel respected and important as well as useful, and is certainly there in time of crisis such as the death of a spouse.

Although the findings in this study implied little positive correlation between life satisfaction and elderly widows' closeness with their children, the high scores on the Closeness Scale I (Children) and the Life Satisfaction and Morale Scores for this sample made this investigator want to investigate these findings further. If one again examines the items in the Closeness Scale (Table 4.11), one notes that the items imply strong emotional and psychological relationships and interactions. Perhaps a child or a friend or even a sibling also could be a confidante, and that may be the answer that is really being given in this scale. For example, the "person closest to you" or the "one you most enjoy being with" may be answered "child" or "friend." The answer "child," however, may mean one looks at the child more as a confidante than as a child. Further research is necessary to investigate the findings in this study and the questions raised. The literature reported that child/parent relationships have a sense of obligation and concern about them and therefore correlate negatively with life satisfaction. The score for Closeness I (the Children score) would indicate that the parent/child relationship might be positively correlated with life satisfaction.

A cross-tab also was computed for scores on the Closeness Scale and widows' choice on the question, "With which relationship are you most satisfied: friend, child, or sibling?" About 32% answered "child" eight or nine times, and 35.5% of the widows answered "child" five to seven times. These additional data appear to strengthen the argument for importance and preference of parent/child relationships for this sample.

### Interaction With Siblings

The correlation between life satisfaction and closeness of elderly widows with siblings was not statistically significant. A negative correlation of life satisfaction and closeness of elderly widows with siblings was expected after reviewing the literature and observing the sample and the findings.

### Interaction With Friends

The correlation between life satisfaction and closeness of elderly widows with friends was not statistically significant. Much of the literature reported opposite findings.

### Life Satisfaction and Morale

The correlation between life satisfaction and morale was statistically significant ( $.62, p < .01$ ). Apparently these two scales measure some of the same dimensions. This finding also emphasizes the underlying competency of the widows in this sample.

### Summary

In the findings, descriptive statistics were reported, answers to research questions and hypothesis testing were recorded, and discussion of the findings was presented.

In this study of elderly widows, little relationship between selected contextual variables and life satisfaction was found. There appeared to be little relationship between life satisfaction and elderly widows' closeness with children, siblings, and friends. This investigator feels that sample size, nonrandom sampling, lack of variability, or instrument construction may have been the partial

cause of this outcome. However, life satisfaction and morale were correlated. Life Satisfaction and Morale Scale scores were high compared to previous findings using those scales, and Closeness I scores were also high.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

This chapter contains a summary of the purpose, methodology, findings, and data analyses. Conclusions and recommendations are discussed in relation to previous research. Other recommendations for future research are presented.

#### Summary

The focus of this study was rural and urban elderly widows in America. The study was designed to examine selected characteristics of elderly widows and to investigate several environments which which they interact. The purpose of this investigation was to explore factors associated with life satisfaction for elderly widows. By understanding those factors, one can gain a sense of direction for ideas and programs that could be developed to increase the life satisfaction of that cohort. Gaining a more comprehensive view of elderly widows interacting with their environments could also provide additional information with which to build a better conceptual framework for studying organisms interacting with their environments, in terms of a human ecological framework or model.

Although there are several studies found in the literature on aging and life satisfaction, there is little research focusing on

life satisfaction among elderly widows. One finds, in examining the 1981 U.S. Census, that 40% of women 65 to 74 years old are widows and that 68.2% of women 75 years and older are widowed. The number of elderly widows is greater and increasing more rapidly than the number of elderly widowers. There are 9.6 million widows compared to 1.7 million widowers 65 years and older. Problems noted in the literature for widows are numerous and more serious than those in the general population. They have more physical and psychological problems, lower levels of education and income, and less social participation (Fengler & Danigelis, 1982; Lopata, 1970, 1971, 1973, 1979).

In this study, a profile of elderly widows was drawn. Comparisons of life satisfaction for rural and urban widows were presented, using contextual variables of age, years of widowhood, church attendance, years of schooling, and income. Some human environments, for example, children, siblings, and friends, with which elderly widows interact were studied to find whether there was any correlation between life satisfaction of elderly widows and their interaction with such environments. The final purpose of this study was to find whether there was any relationship between life satisfaction and morale.

A human ecological framework was used to study the interaction of elderly widows with their environments. A model adapted from Bubolz et al. (1979) and Andrews et al. (1980) was used for the study. The three organizing concepts were the envired unit, the environments, and the patterning of transactions between them. In using this model, it was assumed that the human organism, the envired unit, is able to



interact with all environments, which include the biological, physical, psychological, social, and cultural environments.

For this study, a survey method was used. This researcher did the interviewing, which took place from June 1981 to January 1982. The sample comprised 49 widows, none of whom had been widowed before 50 years of age. Twenty-six were urban and 23 were rural widows. The sample was drawn from Kent, Ottawa, and Ingham Counties in the state of Michigan. This was a pilot study, in which the sample was a convenience sample. This was not a random sample; therefore, the findings are not generalizable to the general population of widows. However, findings may be similar for widows living in similar circumstances and environments. Names for the sample were selected from the East Lansing Older People's Program, Gorsline-Runciman Funeral Home's Program for Widowed Persons, clients of a physician, senior citizens centers, and churches.

The instrument for the study was composed of several smaller instruments that were chosen for the purpose of collecting descriptive information about elderly widows; to measure emotional closeness of elderly widows with their children, siblings, and friends; and to measure life satisfaction and morale. The Life Satisfaction Index A (LSIA) and the Philadelphia Geriatric Center Morale Scale (PGC) were included in the major instrument for the study. A Closeness Scale was developed to measure emotional closeness of elderly widows with children, siblings, and friends. Techniques for analyses included descriptive statistics, Spearman rank-order correlations, Pearson product-moment

correlations, point-biserial correlations, and a t-test used to measure differences in two correlations on one sample.

Ages of widows in the sample ranged from 55 to 90. The range of years of widowhood was 33. The sample had high scores on health status and high scores on life satisfaction and morale relative to previous studies.

The sample was primarily white (98%) and attended church often (for example, 38% attended church once a week, and another 31% attended church at least twice a week). The average number of years of schooling was 12. The average income fell in the category of \$10,000-\$15,000. About 74% of the widows owned their own homes, and 79.6% owned and drove their own cars.

Fifty-nine percent of the elderly widows had worked during their marriage, and 15% had worked some time after their spouses died. Sixty-five percent had done volunteer work.

The support systems of the elderly widows were many and varied for this sample. Although the widows did not use community services often, use of senior-citizen programs was the exception. Most widows were satisfied with the relationships with their children and friends, but 30.6% reported they would prefer more contact with children.

Elderly widows in this sample received support at the time of their husbands' deaths primarily from children and friends, and to a degree from siblings. A majority of the widows reported that they felt more in control, more independent, and had a greater sense of self-identity than they had before they had become widows.

The elderly widows had many characteristics that would appear to give them a high level of life satisfaction and morale. Life satisfaction and morale scores were high for this sample. However, life satisfaction and morale did not correlate with contextual variables except for income of urban widows. Correlations between life satisfaction and closeness of elderly widows with their children, siblings, and friends were not found to be significantly different from zero.

The research questions investigated and the findings reported for those questions were:

Research Question 1: Is life satisfaction of elderly widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

A Spearman rank-order correlation was used to answer this research question. There was no correlation that was significantly different from zero (Table 4.8).

Research Question 2a: Is life satisfaction of elderly urban widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

Research Question 2b: Is life satisfaction of elderly rural widows correlated with the variables age, years of widowhood, church attendance, years of schooling, and income?

A Spearman rank-order correlation was used to find whether life satisfaction correlated with selected contextual variables for urban and rural widows. The correlation between life satisfaction and income (.44) of elderly urban widows was statistically significant at the  $p < .02$  level. The other correlations were not statistically significant for urban widows. Correlations between life satisfaction and contextual variables were not statistically significant for rural

widows. (See Tables 4.9 and 4.10.) The correlations were not statistically significant, using a point-biserial procedure, for church attendance and life satisfaction for either urban or rural widows.

Research Question 3: Will elderly widows' feelings of emotional closeness differ for children, siblings, and friends?

Frequencies of responses on the Closeness Scale items were computed and compared. Because the nature of the measure did not allow for independence, it was not possible to use statistical tests of differences. Frequencies of responses, however, on Closeness I, i.e., emotional closeness of elderly widows with their children, were considerably higher than those recorded for Closeness II, i.e., closeness of elderly widows with their siblings, or for Closeness III, i.e., closeness of elderly widows with their friends. Frequencies of responses for Closeness III were higher than for Closeness II, also. The frequencies of responses of the Closeness Scale items were 21 times greater for Closeness I (Child) than for Closeness II (Sibling) and 4.3 times greater for Closeness I (Child) than for Closeness III (Friend). They were 4.8 times greater for Closeness III (Friend) than for Closeness II (Sibling).

No hypotheses were tested for Research Questions 1, 2, and 3. Research hypotheses were stated and tested for Research Questions 4, 5, and 6.

Research Question 4: Will life satisfaction of elderly widows be correlated with closeness with children, siblings, and friends?

For Hypotheses 1, 2, and 3, a Pearson product-moment correlation was used to determine whether these hypotheses could be supported or rejected.

Hypothesis 1: Closeness of elderly widows with their children will be positively correlated with life satisfaction.

The findings suggested a positive correlation (.12), although the correlation was not found to be statistically significant ( $p < .47$ ). The hypothesis was not supported. (See Table 4.11.)

Hypothesis 2: Closeness of elderly widows with their siblings will be negatively correlated with life satisfaction.

The correlation was found to be negative (-.01,  $p < .99$ ) but was not statistically significant. Hypothesis 2 was not supported. (See Table 4.11.)

Hypothesis 3: Closeness of elderly widows with their friends will be positively correlated with life satisfaction.

There was a negative correlation (-.03,  $p < .87$ ). It was not found to be significantly different from zero. (See Table 4.11.) This hypothesis was not supported.

Research Question 5: Will life satisfaction of elderly widows be more highly correlated with emotional closeness of widows with their children, siblings, or friends?

In testing for the difference between two correlations, a formula for a  $t$ -test specific for a single sample (Blalock, 1972) was used for Hypotheses 4, 5, and 6.

$$\underline{t} = (r_{xy} - r_{zy}) \sqrt{\frac{(N - 3) (1 + r_{xz})}{2(1 - r_{xy}^2 - r_{xz}^2 - r_{zy}^2 + 2r_{xy}r_{xz}r_{zy})}}$$

Hypothesis 4: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of siblings, as measured by the Closeness Scale.

The  $t$ -value resulting from this calculation was .64, which was not statistically significant. (See Appendix D for calculations.)

The t-value for 35 df is 1.69;  $p < .05$ . The hypothesis was not supported.

Hypothesis 5: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of children than with closeness of friends, as measured by the Closeness Scale.

Because the greatest differences in correlations appeared to be between the correlation of life satisfaction and closeness of elderly widows with siblings and the correlation of life satisfaction and closeness of elderly widows with children and that difference was not found to be statistically significant, no further tests or calculations were considered necessary. However, a t-value was calculated for Hypothesis 5. The t-value resulting from this calculation was .16, which was not statistically significant. Hypothesis 5 was not supported.

Hypothesis 6: Life satisfaction of elderly widows, as measured by the LSIA, will be more highly correlated with closeness of friends than with closeness of siblings, as measured by the Closeness Scale.

The t-value resulting from this calculation would not have been statistically significant, according to the findings for Hypotheses 4 and 5. The hypothesis was therefore not supported.

Research Question 6: In the study of elderly widows, will life satisfaction and morale be correlated?

Hypothesis 7: Life satisfaction of elderly widows, as measured by the LSIA, will be correlated with morale of elderly widows, as measured by a self-report instrument, the PGC.

A Pearson product-moment correlation was used because it was appropriate for use with interval data. The correlation between life satisfaction and morale was positive and statistically significant (.62,  $p < .01$ ). The hypothesis was supported. (See Table 4.11.)

Although there was little support for research questions and hypotheses, the descriptive findings, high life satisfaction and morale scale scores and high scores on Closeness I, i.e., closeness of elderly widows with their children, warranted further investigation into these relationships. Income was correlated with life satisfaction for elderly urban widows, and life satisfaction was correlated with morale. No other correlations were statistically significant.

### Conclusions and Recommendations

In this study, the investigator was interested in examining the situation of elderly widows and determining whether certain environments were more closely associated than other environments with life satisfaction for elderly widows.

An ecological framework was used, which was appropriate for studying a number of environments with which elderly widows interact. Environments to be investigated were placed in categories within the ecological framework. Those categories included the natural environments, the human constructed environments, and the human behavioral environments, as described in the model by Bubolz et al. (1979). (See Figure 1.1.)

The natural environments for this study included urban and rural residence factors. The human constructed environments comprised church attendance, years of schooling, and income. Within the concept of human behavioral environments, relationships between elderly widows and their children, siblings, and friends were investigated and compared. A number of descriptive characteristics were examined also to provide a more comprehensive profile of elderly widows.

The reasons for investigating those environments in relation to life satisfaction for elderly widows were:

1. to add to the limited research available concerning this large and increasing group who may exhibit some serious problems because of their condition of widowhood.
2. to add dimensions to the theoretical base from which elderly widows and widowhood itself could be studied more fully.
3. to develop and introduce programs to alleviate problems that elderly widows experience by gaining an awareness of those problems and by becoming familiar with a framework in which to place and study variables that are related to those problems.

In his book Conditions of Well-Being, Campbell (1981) stated that

We learn virtually nothing about why one person is satisfied with family life and another is not from a knowledge of his/her sex, race, income, education, religion, or place of residence. These aspects of life which have important implications for other domains have no influence on a person's satisfaction with life. (p. 104)

The findings for this study concerning elderly widows and life satisfaction confirmed those of Campbell. There were few correlations that were statistically significant between contextual variables, age, years of widowhood, church attendance, years of schooling, income, and life satisfaction for either elderly rural or urban widows.

Between the first contextual variable, age, and life satisfaction, there were small negative correlations which were not significantly different from zero. (See Tables 4.8, 4.9, and 4.10.) In the review of literature, Chapter II, one notes that there is little consensus



among researchers concerning growing older and life satisfaction. Larson (1978) examined 18 studies in the United States and found that one-third of the studies reported positive relationships between older age and life satisfaction, one-third reported negative relationships, and one-third found little or no relationship. Herzog and Rodgers (1981) noted that one should examine the differences, first of all, in aging effects and cohort effects. After examining the findings in this research, it would seem prudent to follow that suggestion and examine such differences. For example, Loomis and Beegle's work (1950) differentiated between rural and urban factors. In that discussion, however, one also noted strong cohort effects that could be examined. What were the values and characteristics of the era in which the widows in the study grew up for both rural and urban samples? Perhaps those values would tell one about the character of this sample of widows and her satisfaction with life today. Most of the widows in this study grew up in the era when the values and conditions enumerated for rural widows by Loomis and Beegle were predominant.

Other researchers have suggested that personality may be the most important variable for predicting life satisfaction in aging. George (1978) found personality factors to significantly predict psychological well-being. This researcher found the sample of elderly widows in this study to be one of high competency, a fact that was confirmed by examining the contextual variables. The descriptive material also revealed characteristics of independence and ability to handle problems. The life satisfaction and morale scale scores

found in this sample of elderly widows were high compared to those found in earlier studies (Table 4.12). Their high level of competency and independence may help account for this finding.

Cohort effects and personality factors could also be incorporated into the ecological framework to gain a more comprehensive theory and a better model for predicting life satisfaction in aging. These concepts might also be used in developing programs for elderly widows who do not demonstrate high life satisfaction and morale.

The correlations for the second contextual variable, years of widowhood, and life satisfaction were not statistically significant. (See Tables 4.8, 4.9, and 4.10.) In future research, it would be of value to examine several dimensions related to years of widowhood. For example, the grief period, which may or may not have been completed for the widows in this sample, would be an important aspect to examine in relation to life satisfaction. Researchers have reported a variety of findings concerning years of widowhood. Dunn and Ryff (1982) found that one gains greater life satisfaction the longer one is widowed. Adaptation and processing of grief are important factors for such gain. Parkes (1964) found that one becomes more dissatisfied the longer one is widowed because of health problems, disengagement, and loneliness. Factors such as completion of the grief process, loneliness, mental and physical health problems, gaining of independence and self-esteem as a widow, availability of friends, and ability to participate in social activities could be important variables affecting life satisfaction and years of widowhood. Personality and cohort effects may also be important factors associated with

predictability in such relationships and should perhaps be examined with the dimensions listed above.

The third contextual variable, church attendance, was found to be negatively correlated with life satisfaction for rural widows and positively correlated with life satisfaction for urban widows. No correlation was statistically different from zero. Church attendance was very high compared to earlier studies (Berardo, 1967). All widows in this study reported religion to be important or very important, whether or not they attended church. There are dimensions of religiosity and church attendance that one might want to explore in relation to life satisfaction. As was noted in the review of literature, church attendance might be an important factor for social acceptance in the communities from which this sample was drawn, and examining cohort effects might be valuable for interpreting the findings. Perhaps church attendance is important but has little to do with life satisfaction, or perhaps nonrandom sampling and little variability in the sample was the cause for such findings. Causal relationships could be examined by use of path analyses or a Lisrel program. The dimension of religiosity would be a total study in itself, in which one would want to examine practical and mystical or spiritual elements. Personality factors might also be important ones to examine in relation to religiosity and church attendance.

The fourth contextual variable, years of schooling, did show a higher positive correlation than other variables with life satisfaction, but at  $p < .05$  the correlations were not statistically significant. Years of schooling appears to be a factor associated with

continuing social participation and continuing interest in new ideas and therefore may be positively associated with life satisfaction because less disengagement and loneliness result. Personality and cohort effects may again be intervening variables that affect these relationships in a meaningful way. Among this group of widows, one found that education was not always available because of limited economic resources or because the attitudes of that day concerning women did not encourage such pursuits. In discussing education with the elderly widows in the sample, this researcher found that this was one of the few complaints, i.e., a desire for more education. The widows in the sample who had little opportunity for formal schooling did not report low levels of social participation nor little interest in new ideas. From a sample of elderly widows studied 10 or 20 years in the future, one might discover profoundly different findings due primarily to cohort effects.

Income, the fifth contextual variable, was positively correlated with life satisfaction for the urban widows. The correlation was statistically significant (.44,  $p < .02$ ). Income was negatively correlated but not significantly different from zero for rural widows. This finding supports that of Fengler and Danigelis (1982), in which those researchers found that fewer objective factors were associated with life satisfaction for rural widows than for urban widows. Rural widows' subjective evaluations and life satisfaction scores were higher in relation to objective variables such as income, which showed non-negligible differences. (See Chapter IV.) Liang et al. (1980)

concluded that objective income and subjective financial well-being may be mediated by relative deprivation. In the process of interviewing the elderly women, this researcher observed that rural widows who had low incomes relative to other respondents (for example, \$5,000 and less per year) showed great satisfaction and indicated verbally that they were "better off" now financially than they had ever been. They received social security, owned their own homes and often their own cars, had few medical bills now that their husbands who had often been ill were no longer living, had few stresses, and were not worried about finances even in today's world of inflation. They had few needs, faith in God, and had children available in times of crisis. Again, cohort effects, aspirations, expectations, and personality appear to be important factors to consider when investigating life satisfaction and income.

In examining the second set of environments with which elderly widows interact, this investigator assumed that interaction of elderly widows with their children, siblings, and friends would be associated with life satisfaction. The literature also indicated such findings. (See Chapters II and IV.) The correlations in this part of the study did not confirm that assumption. However, after examining frequencies of responses to items on the Closeness Scales, one would be inclined to examine the research further. Two hundred forty-two responses "child" were recorded for all widows (who had children and siblings) for items on the 9-point Closeness Scale I, i.e., emotional closeness of elderly widows with their children. Twenty-two responses "sibling" were recorded for Closeness II, which indicates emotional closeness of

elderly widows with their siblings, and 49 responses "friend" were reported for Closeness Scale III, i.e., emotional closeness of elderly widows with their friends. From the overwhelming number of responses "child" to items on the Closeness Scale, and from high life satisfaction scores reported, one might conclude that an important relationship existed between children and elderly widows, and further, life satisfaction and closeness might be related. A meaningful difference was also apparent between elderly widows' relationship with their children, their siblings, and their friends. Further study into the concepts composing "closeness," for example the idea of "confidante" (see Chapter IV), would be valuable for searching out causes of life satisfaction and finding variables associated with life satisfaction.

After observing the descriptive data, the life satisfaction and morale scale scores, and observing the number of responses of elderly widows on Closeness Scale I (Child), this investigator concluded that this research has information and ideas for new research that would be important to investigate further for the purposes of adding and testing dimensions within the theoretical framework. Personality factors, cohort effects, and new concepts in the human constructed domains of the model such as underlying values, and in the human behavioral area such as the introduction of the concept "confidante," would be variables one might want to examine. Programs could then be developed from such studies that would benefit those elderly widows not so privileged or competent as the sample in this study.

### Suggestions for Further Research

1. Design a similar study using different variables than were used in this study, e.g., cohort effects and personality factors, to discover whether life satisfaction correlates with other environments discussed in the literature.
2. Design a new study in which a random sample is used. A more representative sample and a larger sample would likely produce greater variability.
3. Increase the number of items in the Closeness Scale to improve the scale and increase variability.
4. Study, research, and revise the concepts that appear to make up the LSIA, PGC, and Closeness Scales. Adams (1969) and Neugarten et al. (1961) noted that the LSIA needed some revising.
5. Consider new concepts concerning interaction of elderly widows with their environments that would give even more importance to the use of the human ecological model in understanding the situation of the elderly widow. Further research in relation to the psychosocial environments and the concepts underlying those environments appears to be promising and beneficial for a more comprehensive understanding of life satisfaction for elderly widows.

### Suggestions for a Theoretical Model

This investigator proposes the development of a human ecological model for aging over the life span from birth to death which would include the concepts found in the Bubolz et al. (1979) model. Juxtaposed to that model or underlying it would be a grief model developed

by John Schneider (1983) in which the dimensions of the human condition, i.e., the behavioral, physical, emotional, cognitive, and spiritual, are considered from a perspective of gains and losses in each stage of life. The action, interaction, reaction that occurs because of expected and unexpected change could be viewed from the perspective of a model that incorporates ecology and psychology--an ecological psychology.

Much has been written in developmental psychology and much research has been conducted, but putting those concepts within a systems framework that deals with all of one's environments over time and throughout the life cycle has seldom been attempted.

Such structural descriptions could form the basis for analyses of function. The interaction of an organism with all of its environments over the entire life cycle could be comprehended more fully within such a framework. This understanding might better enable the organism to survive and play its part in the maintenance of an ecosystem as a whole with its limited resources.

#### Suggestions for Program Development

This sample of elderly widows indicated a desire for greater educational opportunities. Learning is an ever-continuing process for human beings. It has as its purposes the gaining of competency, independence, and freedom; the expanding of interests; and the improving of one's quality of life.

This researcher would suggest a program that connects a retirement center or housing for older persons with the facilities of a



formal college structure. A small college with departments already interested in the older generation and in intergenerational issues, and perhaps also having some philosophical connection with the older person's value system or religious orientation, appears to be an appropriate institution. There is the potential also of drawing older persons into living quarters within the college dormitory or apartment compound. Stimulation and unique learning opportunities could become available for both the older and the younger student. The total life experience of the older person could give breadth and direction within the educational process of the younger student. Both cohorts would benefit in a meaningful way, making the potential for greater quality of life a reality. Better use would be made of total college services, facilities, and faculties.

The college could open the doors not only of its classrooms, but also of its counseling services, health services, recreational and cultural facilities, and share the many opportunities of its facility with other cohorts. In the process, the quality of life would be heightened for all generations involved, and intergenerational communication might improve for all students.

It is certain that the true grievance, when there is one, lies in the man, and not in the age. . . .

Therefore cultivate, throughout your life, the virtues; and they will yield an astonishing harvest for your latest years, besides the pleasure of memory.

--Cicero  
Concerning Old Age

## APPENDICES

## APPENDIX A

## INSTRUMENTS

## L: IDENTIFICATION INFORMATION

- L. Month of interview
- L2. Day of interview
- L3. Year of interview (last 2 numbers only, ex. 80)
- L4. Total time (in minutes) for interview
- L5. Number of call-backs to complete interview
- L6. City/town: (name)\_\_\_\_\_ code: 4. Rural non-farm  
3. Rural-farm  
2. Urban  
1. Others
- L7. County: 1: Ingham  
2: Kent  
3: Ottawa  
4: Other
- L8. Identification number of interviewer (name \_\_\_\_\_)
- L9. Sex of interviewer 1. male 2. female
- L10. Age of interviewer in years

INTERVIEWER: CHECK BACK OVER THE INSTRUMENT TO SEE THAT ALL QUESTIONS  
HAVE BEEN CODED.

## N: LIFE SATISFACTION INDEX A

Here are some statements about life in general 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 "DIS-AGREE." If you are not sure one way or the other, put a check mark in the space under "DON'T KNOW." PLEASE BE SURE TO ANSWER EVERY QUESTION ON THE LIST.

(Key: Score 1 point for each response marked X.)

	1 AGREE	DIS- 2 AGREE	DON'T 3 KNOW
1. As I grow older, things seem better than I thought they would be.	a. _____	_____	_____
2. I have gotten more of the breaks in life than most of the people I know.	b. _____	_____	_____
3. This is the dreariest time of my life.	c. _____	_____	_____
4. I am just as happy as when I was younger.	d. _____	_____	_____
5. My life could be happier than it is now.	e. _____	_____	_____
6. These are the best years of my life.	f. _____	_____	_____
7. Most of the things I do are boring or monotonous.	h. _____	_____	_____
8. I expect some interesting and pleasant things to happen to me in the future.	i. _____	_____	_____
9. The things I do are as interesting to me as they ever were.	j. _____	_____	_____
10. I feel old and somewhat tired.	k. _____	_____	_____
11. I feel my age, but it does not bother me.	l. _____	_____	_____
12. As I look back on my life, I am fairly well satisfied.	m. _____	_____	_____

	1 AGREE	DIS- 2 AGREE	DON'T 3 KNOW
13. I would not change my past life even if I could.	n. _____	_____	_____
14. Compared to other people my age, I've made a lot of foolish decisions in my life.	o. _____	_____	_____
15. Compared to other people my age, I make a good appearance.	p. _____	_____	_____
16. I have made plans for things I'll be doing a month or a year from now.	q. _____	_____	_____
17. When I think back over my life, I didn't get most of the important things I wanted.	r. _____	_____	_____
18. Compared to other people, I get down in the dumps too often.	s. _____	_____	_____
19. I've gotten pretty much what I expected out of life.	t. _____	_____	_____
20. In spite of what people say, the lot of the average man is getting worse, not better.	u. _____	_____	_____

PGC S. MORALE SCALE (Write code no.--1 or 2--under "code no.")  
 \*Note the change.

## Factor I

- |  |        |       |
|--|--------|-------|
| 1. Little things bother me more this year.       | Yes__1 | No__2 |
| 2. I sometimes worry so much that I can't sleep. | Yes__1 | No__2 |
| 3. I am afraid of a lot of things.               | Yes__1 | No__2 |
| 4. I get mad more than I used to.                | Yes__1 | No__2 |
| 5. I take things hard.                           | Yes__1 | No__2 |
| 6. I get upset easily                            | Yes__1 | No__2 |

## Factor II

- |   |          |           |
|---|----------|-----------|
| 7. Things keep getting worse as I get older.                              | Yes__1   | No__2     |
| 8. I have as much pep as I had last year.                                 | No__1    | Yes__2 *  |
| 9. As you get older you are less useful.                                  | Yes__1   | No__2     |
| 10. As I get older, things are better/worse than I thought they would be. | Worse__1 | Better__2 |
| 11. I am as happy now as when I was younger.                              | No__1    | Yes__2 *  |

## Factor III

- |  |              |                 |
|--|--------------|-----------------|
| 12. How much do you feel lonely?                   | Much__1      | Not much__2     |
| 13. I see enough of my relatives.                  | No__1        | Yes__2 *        |
| 14. I sometimes feel that life isn't worth living. | Yes__1       | No__2           |
| 15. Life is hard for me much of the time.          | Yes__1       | No__2           |
| 16. How satisfied are you with your life?          | Satisfied__2 | Dissatisfied__1 |
| 17. I have a lot to be sad about.                  | Yes__1       | No__2           |

Total

\_\_\_\_\_

## CLOSENESS SCALE

## EMOTIONAL

Who/Whom

K35. Which person is closest to you?

\_\_\_\_\_

K36. Whom do you most enjoy being with?

\_\_\_\_\_

K37. To whom do you tell your problems?

\_\_\_\_\_

K38. Who comforts you when you are depressed?

\_\_\_\_\_

K39. What person makes you feel like an  
especially important person?

\_\_\_\_\_

K41. To whom do you turn in a crisis?

\_\_\_\_\_

Now I am going to read some "feeling states" which people think are  
important to a full life.

Is there any one person who makes you feel this way? (See question  
K-C code.)

K43. Useful

\_\_\_\_\_

K45. Independent

\_\_\_\_\_

K47. Secure

\_\_\_\_\_

## C. code:

Child.....1

Sibling.....2

Friend.....3

Neighbor....4

Agency.....5

Other.....6

No one.....7

Memory of husband...8

MD.....9



## A: SOCIODEMOGRAPHIC VARIABLES

We are pleased that you are willing to assist us in this research project. We hope that our study will add to the quality of life for you and other widows like yourself. We would like to begin with a few general questions such as those concerning your living arrangements, age, and education.

A1. How old are you?

0 \_\_\_\_ Years

998. Refused to answer, no answer, don't know

999. Missing data

A2. How long have you been widowed?

0 \_\_\_\_ Years

998. Refused to answer, no answer, don't know

999. MD

A3. What nationality or ethnic group do you consider yourself?

1. White

2. Black

3. Mexican American, Spanish American, Chicano

4. Oriental or Asian American

5. Other, Please specify \_\_\_\_\_

8. Refused to answer, no answer, don't know

9. MD

A4. What religion do you consider yourself?

1. Protestant

2. Roman Catholic

3. Jew

4. Moslem

5. Other, Please specify \_\_\_\_\_

6. None, no preference, agnostic

8. Refused to answer, no answer, don't know

9. MD

A5. How often do you usually go to church?

1. Never, not at all

2. Less than once a month

3. Once a month

4. Two or three times a month

5. Once a week

6. More than once a week

7. Daily

8. Refused to answer, no answer, don't know

9. MD

- A6. How often we attend church may not show how important religion is in our lives. Would you say that to you religion is:
1. Not important at all
  2. Not very important
  4. Important
  5. Very important
  7. Inappropriate
  8. Refused to answer, no answer, don't know
- A7. What was the highest grade in school which you completed?
01. No formal schooling completed
  02. 1-6 grades
  03. 7-9 grades
  04. Some high school
  05. High school diploma, non-college training, vocational training
  06. Some college, professional degree
  07. Bachelors degree
  08. Master's degree
  09. Doctorate
- A10. Did you ever work before you were married?
1. Yes
  2. No
  9. MD
- A11. During your marriage did you work all of the time, most of the time, or never?
1. All of the time
  2. Most of the time
  3. Some of the time
  4. Never
  9. MD
- A13. Have you worked since you became a widow?
1. Yes
  2. No
  9. MD
- A14. Not counting the time you spend doing things for your family, do you spend any of your time doing volunteer work?  
(If yes) Approximately how many hours per week do you give to volunteer work?
- \_\_\_\_ Yes \_\_\_\_ 1      No \_\_\_\_ 2  
\_\_\_\_ Indicate number of hours per week.  
9. MD

## ECONOMICS INDEX

A15. Now we would like to ask you a few questions as to how you feel about your financial condition.

\_\_\_a. How do you feel about your current financial condition?

- 4. Very comfortable
- 3. Comfortable
- 2. Rather restricted
- 1. Really restricted

\_\_\_b. How adequate is your current income compared to when you were 40 or 50 years old?

- 4. Very adequate
- 3. Almost as adequate
- 2. Not as adequate
- 1. Much less adequate

\_\_\_c. Do you feel that your present source of financial support gives you security?

- 4. Complete security
- 3. Some security
- 2. Very little security
- 1. No security

\_\_\_d. My current financial status has forced me to curtail activities that I enjoy.

- 4. Not at all
- 3. Very little
- 2. A great deal
- 1. Totally

\_\_\_e. My current financial status allows me to meet my basic needs.

- 4. Always
- 3. Sometimes
- 2. Rarely
- 1. Never

\_\_\_f. In the coming year would you say that your financial condition will

- 4. Improve
- 3. Stay same
- 2. Get worse
- 1. Become totally inadequate

A15 TOTAL SCORE \_\_\_\_\_

A16. Using these income categories, what approximately is your total yearly income from all sources?

INTERVIEWER: IF R GIVES MONTHLY OR WEEKLY INCOME, RECOMPUTE INTO A YEARLY INCOME.

- 00. Less than \$3,000
- 01. \$3,000-4,999
- 02. \$5,000-9,999
- 03. \$10,000-14,999
- 04. \$15,000-19,999
- 05. \$20,000-24,999
- 06. \$25,000-29,999
- 07. \$30,000-34,999
- 08. \$35,000 +
- 97. Refused to answer
- 98. Doesn't know
- 99. MD

## B: LIVING ARRANGEMENTS

INTERVIEWER: NOTE THE TYPE OF RESIDENCE IN WHICH RESPONDENT IS PRESENTLY LIVING.

- B1. 01. Single-family dwelling  
 02. Condominium  
 03. Duplex  
 04. Apartment  
 05. Mobile home  
 08. Other, please specify \_\_\_\_\_  
 98. Unable to determine  
 99. MD
- B3. Now I would like to ask you some questions about your home and community. How long have you lived in this community?
1. Less than 6 months  
 2. 6 months to almost 1 year  
 3. 1 to almost 3 years  
 4. 3 to almost 10 years  
 5. 10 to almost 20 years  
 6. Over 20 years  
 8. No answer  
 9. MD
- B4. Is this \_\_\_\_\_ (type of residence) owned by you, rented by you, or does it belong to a relative or other person?
1. Home owned by respondent  
 2. Home owned by relative, please specify \_\_\_\_\_  
 3. Home owned by a friend  
 4. Home owned by someone other than a relative or friend  
 8. Refused to answer, no answer, don't know  
 9. MD

## C HEALTH

We would like to ask you some questions about your health and how you feel about it.

C<sub>2</sub> PERCEIVED HEALTH

- |   |                                  |
|---|----------------------------------|
| a. The status of my health is very good.                    | very good, good ___1<br>poor___0 |
| b. How would you describe your health during your lifetime? | very good, good ___1<br>poor___0 |
| c. I have no major illnesses.                               | true___1 false___0               |

- d. I am able to go practically any place I want to. true\_\_1 false\_\_0
- e. There are no activities that I have to curtail because of my health. true\_\_1 false\_\_0
- f. I feel that my health allows me to get as much exercise as I want. true\_\_1 false\_\_0
- g. I get adequate sleep or rest. true\_\_1 false\_\_0
- h. My health allows me to visit with my friends as often as I wish. true\_\_1 false\_\_0
- i. My health allows me to do as much work as I want to do. true\_\_1 false\_\_0
- j. I have a good way to relax. true\_\_1 false\_\_0
- C2 TOTAL SCORE\_\_\_\_\_ 98. NA 99. MD

#### D TRANSPORTATION

It is often said that transportation is one of the major problems of the elderly. I'd like to ask you just a few questions about the ways you get to the places you need to go.

First of all,

D<sub>1</sub> Do you own a car? Y N MD

D<sub>2</sub> Do you have a driver's license? Y N MD

What form of transportation do you use most often to go places?  
What form is used next most often? Mark "1" for first and "2" for second and "3" for third.

- D3a \_\_\_\_\_ Drive yourself
- D4b \_\_\_\_\_ Driven by one of my children/grandchildren
- D5c \_\_\_\_\_ Driven by another relative (brother, sister, etc.)
- d \_\_\_\_\_ Driven by a friend or neighbor
- e \_\_\_\_\_ Hire someone
- f \_\_\_\_\_ Walk
- g \_\_\_\_\_ Public transportation
- h \_\_\_\_\_ Other (specify) \_\_\_\_\_

D<sub>6</sub> How satisfied are you with your transportation arrangements?

- 4 very satisfied                      3 satisfied
- 2 dissatisfied                        1 very dissatisfied

## I: SOCIAL ORGANIZATIONS

I<sub>1</sub> Do you belong to any social organizations or groups now? Yes\_\_1 No\_\_2

I<sub>2</sub> To how many organizations or groups do you belong? \_\_\_\_\_

I<sub>3</sub> I would like to know more about these organizations and groups. What are the names of these organizations and groups? (RECORD NAMES OF ALL ORGANIZATIONS AND GROUPS IN TABLE BELOW. THEN ASK Q.b THROUGH e FOR EACH RECORDED RESPONSE IN TABLE BELOW.)

b. What kind of organization is \_\_\_\_\_? Is it mainly

(READ CATEGORIES AND RECORD ANSWER CODE IN TABLE.)

Religious, church related.....	1
Ethnic.....	2
Political, charitable, community.....	3
Union, professional.....	4
Sports, cards, social.....	5
Auxiliary of man's.....	6
State or national organization for the elderly.....	7
Other (SPECIFY IN TABLE).....	8
MD.....	9

c. In what year did you join this organization? \_\_\_\_\_

d. Are you presently an office holder in \_\_\_\_\_?  
NAME

e. How often do you attend meetings? Would you say . . . READ  
CATEGORIES AND RECORD ANSWER CODE IN TABLE FOR EACH ORGANIZATION.)

Never.....	00
Daily.....	01
Several times a week (3-5 times)...	02
Once a week.....	03
Several times a month (2-3 times)...	04
Once a month.....	05
Several times a year (7-10 times)...	06
3-6 times a year.....	07
Once a year.....	08
Less than once a year.....	09
MD.....	99

	<u>Name</u>	<u>Category</u>	<u>Yes</u>	<u>No</u>	<u>Attending</u>
(1)	_____	_____	1	2	_____
(2)	_____	_____	1	2	_____
(3)	_____	_____	1	2	_____
(4)	_____	_____	1	2	_____
(5)	_____	_____	1	2	_____
(6)	_____	_____	1	2	_____

## J: COMMUNITY SERVICES

I'd like to ask you some questions about community services which are available in your community and whether you use them or not.

First of all, are any of the following services available in this community? IF SO, do you use them? What other services for the elderly are available in this community? Do you use them? If these were available, would you use them?

J <sub>1</sub>	J1			J2			J3	
	<u>Are Available</u>			<u>Are Used</u>			<u>Would Use</u>	
	<u>Don't</u>			<u>Not</u>			<u>If Available</u>	
	<u>Yes</u>	<u>No</u>	<u>Know</u>	<u>Yes</u>	<u>No</u>	<u>Apply</u>	<u>Yes</u>	<u>No</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>
a. Meals-on-wheels	_____	_____	_____	_____	_____	_____	_____	_____
b. Homemaker aid	_____	_____	_____	_____	_____	_____	_____	_____
c. Health aid	_____	_____	_____	_____	_____	_____	_____	_____
d. Extension nutrition aid	_____	_____	_____	_____	_____	_____	_____	_____
e. Grocery delivery	_____	_____	_____	_____	_____	_____	_____	_____
f. Library	_____	_____	_____	_____	_____	_____	_____	_____
g. Senior citizen center	_____	_____	_____	_____	_____	_____	_____	_____
h. Educational program	_____	_____	_____	_____	_____	_____	_____	_____
i. Other	_____	_____	_____	_____	_____	_____	_____	_____

J<sub>2</sub> How satisfied are you with your organizational involvement?

4 very satisfied	3 satisfied
2 dissatisfied	1 very dissatisfied



Do you have any grandchildren?

Yes 1      No 2

(Interviewer, all visits with all grandchildren)

\_\_\_\_\_

IF YES,

How many do you have? \_\_\_\_\_

How often do you see any of your grandchildren?

- 1 \_\_\_\_\_ Daily
- 2 \_\_\_\_\_ Times/week
- 3 \_\_\_\_\_ Times/month
- 4 \_\_\_\_\_ Times/year
- 5 \_\_\_\_\_ DA
- 9 \_\_\_\_\_ MD

## P: INTERACTION SATISFACTION SCALES

P<sub>1</sub> Would you say that since you were widowed the amount of contact that you have had with your \_\_\_\_\_ is \_\_\_\_\_?

4-Increasing    3-Same    2-Decreasing

- a. Children
- b. Siblings
- c. Friends
- d. Neighbors

P<sub>4</sub> Some widows say that they see others too often. Some widows say that they would like to see more of others. How do you feel? Do you feel it might be better if you had . . . ?

1-Less    About the    3-More  
contact    2-same amount    contact  
            of contact

WITH

- a. Children
- b. Siblings
- c. Friends
- d. Neighbors

P<sub>5</sub> Have you made any new personal friends since your husband died?  
Yes \_\_\_1\_\_\_ No \_\_\_1\_\_\_

P<sub>6</sub> If yes, how many? \_\_\_\_\_

P<sub>7</sub> With which relationship are you most satisfied?

- 1. Neighbor
- 2. Sibling
- 3. Children
- 4. Friend

P<sub>8</sub> With which relationship are you must satisfied?

- a. Siblings \_\_\_1\_\_\_ or children \_\_\_2\_\_\_
- b. Children \_\_\_1\_\_\_ or friends \_\_\_2\_\_\_
- c. Friends \_\_\_1\_\_\_ or siblings \_\_\_2\_\_\_

Z<sub>1</sub> After the period of initial grief, did anyone or any agency help you in establishing yourself in a new life?

Yes \_\_\_1 No \_\_\_2

Z<sub>2</sub> If the answer to question number one is "yes," how helpful were each of the following in helping you to establish yourself in a new life?

	<u>Generally Very Helpful</u>	<u>Helpful on Special Occasions</u>	<u>Rarely Helpful</u>	<u>Never Helpful</u>	<u>Not Approp- riate</u>
a. Children	4	3	2	1	0
b. Siblings	4	3	2	1	0
c. Friends	4	3	2	1	0
d. Neighbors	4	3	2	1	0
e. Agencies	4	3	2	1	0
f. Others	4	3	2	1	0

Z<sub>3</sub> How long a time did the grief process take, do you feel?

<u>Code</u>	<u>Code</u>
About 1 month ___01	19-24 months ___05
2- 6 months ___02	More than 24 months ___06
7-12 months ___03	2-5 years ___07
13-18 months ___04	6-10 years ___08
	Not appropriate ___98
	MD ___99

Z<sub>4</sub> What advice would you give a new widow (rank order)?

Keep busy	___1
Go out to work	___2
Don't try to make	
decisions too soon	___3
Other	___4
Encourage friendships	___5

Z<sub>5</sub> Many women tell us that they change after becoming widows. How do you think you have changed? Are you now (choose one answer code in each set) . . . ?

a. more independent.....2	a. more dependent.....1	same..0
b. more self-sufficient...2	b. less self-sufficient....1	same..0
c. less lonely.....2	c. more lonely.....1	same..0
d. less isolated.....2	d. more isolated.....1	same..0
e. having a better feeling of self-identity...2	e. losing your sense of self-identity.....1	same..0
f. having a feeling of less stress in your life....2	f. feeling of greater stress in your life.....1	same..0
g. more satisfied.....2	g. less satisfied.....1	same..0
h. less angry.....2	h. more angry.....1	same..0
i. more in control of areas of your life that can be controlled ..2	i. less in control of areas of your life that could be controlled.....1	same..0

Are you 4-very satisfied 3-satisfied 2-dissatisfied  
1-very dissatisfied with these changes?

Z<sub>6</sub> In thinking over all your experiences since you became a widow, what do you think is the most important problem of widowhood? Please place a "1" after the problem you consider to be most important, "2" after the problem you consider to be the second most important, and a "3" for the third most important, "4" fourth, and "5" fifth most important.

Problems:

- a. Loneliness
- b. Health
- c. Financial worries
- d. Help in emergencies
- e. Getting information to assist me in decision making, e.g., in legal, medical, financial matters or maintenance of home
- f. Finding someone to listen to and understand me
- g. Lack of education
- h. Transportation
- i. Crime
- j. Inadequate facilities in the community for social contact with peers and/or others
- k. Little contact with children
- l. Little contact with brothers and sisters

## APPENDIX B

### CONSENT FORM

## CONSENT STATEMENT

I would like your help in learning more about the nature of support systems which are important in the lives of older widows. I am asking you to give your permission to be interviewed in your home. Questions will be asked about such supports as economic assistance, social interaction with family and/or friends and individual abilities, assets and skills. During the interviews you are free to not answer any question, ask questions of the interviewer or to end the interview at any time. The information and/or feelings which you share with us during the interviews will be held in strictest confidence. All participants in this research project will be assigned identification numbers which will be written on the interview forms. This will ensure that your participation in this project will always remain anonymous.

PLEASE READ THE FOLLOWING  
STATEMENT AND SIGN BELOW:

I have read the above statement and completely understand what is being asked of me. I would like to participate in this project.

---

DATE

---

SIGNATURE

APPENDIX C

LETTER FROM PHYSICIAN

*Western Michigan Internal Medicine Associates, P.C.*

515 LAKESIDE DRIVE S.E.  
GRAND RAPIDS MICHIGAN 49506  
TELEPHONE 616-451-2933

INTERNAL MEDICINE

ROBERT M. PUITE, M.D.  
WILLIAM G. O'DRISCOLL, M.D.  
VINCENT J. TURCOTTE, JR., M.D.  
CALVIN J. DYKMAN, M.D.  
LARRY E. HAMSTRA, M.D.  
KENNETH A. STOLTENBOROUGH, M.D.  
ALBERT R. DUGAN, M.D.  
ROBERT F. JOHNSON, JR., M.D.  
ENRIQUE C. SOBONG, M.D.

CARDIOLOGY : DRs. PUITE & TURCOTTE  
GASTROINTESTINAL ENDOSCOPY  
DRs. O'DRISCOLL & HAMSTRA  
HEMATOLOGY : DR. STOLTENBOROUGH  
ONCOLOGY : DR. SOBONG  
RESPIRATORY DISEASE & BRONCHOSCOPY  
DRs. DUGAN & JOHNSON

August 20, 1981

The intent of this letter is to introduce Mrs. Judith Walters, my sister-in-law, who is presently in the process of completing requirements for a Ph.D. degree in Gerontology, the study of aging, at Michigan State University. Her doctoral thesis involves a study of the support systems in our society for widows. It is her hope to compare the various ways in urban and rural communities that widows can enrich the quality of their life by using available resources.

At her request, I have selected several patients from our office practice and she will be contacting you in the near future to see if you would be willing to be interviewed about your attitudes and feelings in this regard. The interview time would be approximately two hours. It would be done by Mrs. Walters or a trained interviewer in your home or apartment. Your decision, whether or not you choose to participate by being interviewed, is strictly voluntary and all the data that will be collected will be confidential. I am sure that if you are interested, Mrs. Walters will be pleased to discuss with you the results of her study upon its completion.

You can anticipate that Mrs. Walters will be contacting you in the near future. If you have any questions about this, please do not hesitate to contact our office.

Sincerely yours,

Calvin J. Dykman, M.D.

CJD/sw



## APPENDIX D

### CALCULATION OF I-TEST FOR THE DIFFERENCE BETWEEN TWO CORRELATIONS

Calculation of T-Test for the Difference Between Two Correlations (From Blalock, 1972)

$$\underline{t} = (r_{xy} - r_{zy}) \sqrt{\frac{(N - 3)(1 + r_{xz})}{2(1 - r_{xy}^2 - r_{xz}^2 - r_{zy}^2 + 2r_{xy}r_{xz}r_{zy})}}$$

$$.63532 = (.121 - .001) \sqrt{\frac{(38 - 3)(1 + .362)}{2(1 - .01464 - .31044 - .00001 + 2(.121 \times .362 \times .001))}}$$

$r_{xy}$  = children and life satisfaction = .121

$r_{zy}$  = siblings and life satisfaction = .001

$r_{xz}$  = children and siblings = .362

## APPENDIX E

### RAW DATA

Ages of Elderly Widows

	<u>Age</u>	<u>N</u>	<u>Age</u>	<u>N</u>	<u>Age</u>	<u>N</u>
Urban:	65	1	72	1	80	3
	66	1	73	1	81	1
	68	1	75	1	82	1
	69	3	76	3	87	1
	71	1	78	1	89	1
			79	2	90	1
Rural:	55	1	70	3	80	2
	60	1	72	2	84	1
	61	1	73	3	85	3
	66	1	74	2	87	1
			76	1	88	1

Contact After Death of Spouse

Children	22--same as before
	18--more than before
	6--less than before
Siblings	22--same as before
	11--more than before
	7--less than before
Friends	12--same as before
	29--more than before
	8--less than before

Desired Contact for Elderly Widows

Children	31--want same as they have
	15--want more
Siblings	17--want same as they have
	18--want more
Friends	40--want same as they have
	9--want more

Satisfied Most With

Siblings--1  
 Children--31  
 Friends --11

## APPENDIX F

CORRELATION COEFFICIENT FOR LIFE SATISFACTION AND MORALE  
AND INTER-ITEM RELIABILITY FOR LIFE SATISFACTION, PGC,  
AND CLOSENESS SCALES

Correlation Coefficient for Life Satisfaction and Morale

<u>Spearman Correlation Coefficient</u>	<u>Pearson Correlation Coefficient</u>
.5452 $p < .001$	.6071 $p < .001$

Inter-item Reliability

	<u>Cronbach's Alpha (Split Halves)</u>
PGC	.60797
LSIA	.67378
Closeness I	.80328
Closeness II	.85723
Closeness III	.81668

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