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A DESCRIPTIVE STUDY OF DIFFERENCES
IN OLDER WOMEN'S PERCEPTIONS
OF TWO TYPES OF
SOCIAL SUPPORT
presented by

Laurie Sefton Cojocel

has been accepted towards fulfillment
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A DESCRIPTIVE STUDY OF DIFFERENCES
IN OLDER WOMEN'S PERCEPTIONS
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SOCIAL SUPPORT

By

Laurie Sefton Cojocel

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE
IN NURSING

College of Nursing
1984



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ABSTRACT

A DESCRIPTIVE STUDY OF DIFFERENCES IN OLDER WOMEN'S PERCEPTIONS OF TWO TYPES OF SOCIAL SUPPORT

By

Laurie Sefton Cojocel

Elderly persons are often viewed as a homogenous group, with little effort made to identify differences. Recent interest in adult development focused attention on diversity among aged persons. A descriptive study was proposed to explore whether older women perceived social support received, in emotional form, differently from tangible aid available.

Age differences in perception of support were examined between two age groups of women, 65 to 74 ($n = 36$) and 75 to 89 ($n = 24$). Data from a larger study, Active Participation: Health Care for the Elderly (Given, 1983), were analyzed using descriptive statistics and t tests.

A significant difference was found within both age groups when mean perceived emotional support was compared with mean tangible aid. Subjects perceived less tangible support available than emotional. Between the two groups a significant difference was found on tangible aid perceived to be available with the older group perceiving less. These findings contribute to Nursing assessment of social support available to older women.



To Constantin, Mom and Dad

ACKNOWLEDGMENTS

I would like to thank my committee members, Barbara Given, Rita Gallin, Bill Given, and Carol Garlinghouse, for their expertise and guidance. I am grateful for their contributions to this study. Special thanks to my committee chairperson, Barbara Given, for her guidance over this summer and for the opportunity to use data from her study, Active Participation: Health Care for the Elderly. I would like to express my heartfelt gratitude to Dorothea Milbrandt, R.N., M.S.N., for her mentorship over many years of growth in the profession. Without her support, encouragement and steadfast belief in my ability to succeed, completion of this Master's program in Nursing would have remained a dream.

Special thanks to my long time friend, colleague and thesis partner, Carolyn Smith Adams, for her support (both emotional and tangible) over this difficult time. Through this thesis experience we learned collaboration, not just the skill, but the essence.

A note of appreciation is extended to Brian Coyle for his invaluable assistance in the data analysis, and for taking the time to help me understand statistics. Margaret McNivin's support and assistance with Chapter 5 is gratefully acknowledged.

Sincere thanks to Jackie Bruinsma who patiently transformed this thesis from handwritten scribbles to right and left justified copy. Jackie's patience with me, tolerance for difficult deadlines,

enthusiasm for a perfect copy and expert typing skills were much appreciated.

There are many people whose direct or indirect assistance this summer assured completion of this project. The core of this group, and of my support network, is my family.

My ongoing thanks and love to my parents, Beth and Bill Sefton. They have provided a strong base of family love and support, instilling in their children a deep sense of commitment to growth and joy in achievement. Their special understanding and help have lightened this summer's tasks with humor, creating treasured moments in the process.

To all of my brothers and sisters, your sharing of life's changes and growth helped me maintain my perspective. Special thanks to Kathy and Sarah for their support and direct assistance this summer and to Amy for her help with library research.

Most of all I thank my husband, Constantin. Without his love and encouragement, this project would not have been completed. Constantin's commitment to research, has provided a model for academic excellence. His support and pride in my endeavors have sustained me. With all my love I acknowledge my gratitude for his sacrifice and faith in me this summer.

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CHAPTER I
THE PROBLEM
INTRODUCTION

The Clinical Nurse Specialist working with elderly individuals is aware that the perceptions of persons in their sixties differ from those of persons in their eighties. Identifying and describing perceptual, or other, age differences among the elderly, however, is complicated by little documentation in the literature, few empirical studies about age differences and developmental norms in older age groups, and by the pervasive ageism which is prevalent in our society. The term ageism was coined to explain the negative bias against people of advanced chronological age (Butler 1969). Ageism supports myths that most old persons are "all alike," a homogenous population, and are socially isolated.

Martha Rogers' Theory of Unitary Human Beings (1980) provides the Clinical Nurse Specialist with a conceptual basis for viewing clients as unique individuals who become increasingly more complex as they age and interact with their environment. With this conceptual base of continuous development toward increasing complexity one would expect to identify age differences within and among aging persons.

Just as an individual is ever changing in his/her personal evolution, so is the individual's environment. This study concerns part of the social environment of elderly subjects, i.e., those persons identified by the individuals as supportive. With aging, losses in role and interaction often lead to decreased opportunities for social support, as well as the loss of support network members (spouse, siblings,

friends, co-workers) through death, relocation or retirement. How such losses affect an elderly person's capacity to cope is unclear, but there does appear to be evidence that social support functions to buffer or protect persons from the effects of many kinds of life stressors (Cassel, 1976; Cobb, 1976; Kaplan, Cassel and Gore, 1977; Dean and Lin, 1977; Lowenthal and Haven, 1968, Wallston et al. 1983; Schaefer et al. 1981). Factors related to the availability of support are often not included in the nursing assessment of the elderly, even though they may be particularly at risk for deficits in support systems.

Age is one factor that influences the amount and type of social support required for optimal functioning (Norbeck, 1981). The importance of study in the area of age differences and perceptions concerning different types of social support is ultimately related to nursing intervention. A model, developed by Norbeck (1981), which shows the elements and relationships that must be studied to incorporate social support into nursing practice, will be used as a framework for this study.

The focus of this study will be on elderly women's perceptions of two types of social support: emotional and tangible. The theoretical framework will be based in Rogers' (1980) theory of unitary man which emphasizes differences and uniqueness of individuals. The clinical model for research and application of social support, developed by Norbeck will provide an operational framework for this study.

Included in this chapter are the background of the problem, purpose of this study, research questions, definitions of the concepts, assumptions, and scope and limitations of the study. Data utilized in this study were collected as part of a funded research project, Active

Participation: Health Care for the Elderly (1982), directed by B. Given. Additionally, a portion of this research was conducted in collaboration with Smith Adams (1984).

Background

As of July, 1982, the number of persons in the United States over 65 years of age was 26,824,000, or 11.6% of the total resident population of all ages. This age group has increased by 15% since 1970, compared to only 6% growth for the population as a whole. During this time the number of elderly women has increased more rapidly than men. In 1900, the total population of women aged 65 or older was 1.5 million, or two percent of the U.S. population. By 1982 the number of older women had reached 16 million, or 6.9 percent of the total U.S. population. For 1982, males over 65 numbered 10.7 million, or 4.6 percent of the total U.S. population. Since life expectancy is higher for women than men (in 1982, 78.2 years for women versus 70.8 years for men), a ratio of 70 males for every 100 females is reached by age 65. This ratio increases by age 85 to 50 males for every 100 females (U.S. Bureau of Census 1980 and 1976; Uhlenberg, 1979).

Given the greater longevity of women, health care providers and researchers are only beginning to focus on the need for resources that promote the health of older women. Yet most of the literature tends to focus on disease processes in aging females, rather than on factors that promote health or delineate normal aging processes (Geleyn, 1980). Awareness of pathology and effective treatment is important to both physicians and nurses, but as Clinical Nurse Specialists, we need additional knowledge about factors that promote health.



One such factor, present since the beginning of human existence, but only recently identified and examined as a mechanism that promotes health, is social support. For this study, the complex variable of social support is examined by comparing perceptions about the availability of two types of social support: emotional and tangible. Women, ages 65 to 74, were chosen as study subjects because of their predominance in the population of older people and because there is some evidence that females may use social support differently than males (Lowenthal and Haven, 1968). In collaboration with Smith Adams (1984), perceptions of the availability of emotional support and tangible aid are compared, to identify differences between two age groups of women (65 to 74 and 75 to 89).

Purpose

The purpose of this study, therefore, is to compare older women's perceptions of two types of social support, emotional and tangible, and, to identify differences in perception of the availability of emotional support and tangible aid between two age groups of elderly women. For the Clinical Specialist in advanced nursing practice with elderly clients, information of this type is essential for comprehensive assessment.

Research Questions

1. Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women ages 65 to 75? (Sefton Cojocel, 1984)

2. Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women ages 75 to 89? (Smith Adams, 1984)
3. Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available between two female groups, women age 65 to 74 and women age 75 to 89? (In collaboration with Smith Adams.)

Definitions of the Concepts

The study variables are age and perception of the availability of two types of social support: emotional support and tangible aid.

Age

For the purposes of this study, age will be defined by needs and age norms, the basis of a sociocultural approach used by Neugarten (1981), to dichotomize older Americans into the young-old (65 to 75) and the old-old (75 years and older). The following are examples of the needs and age norms of each group of aging people.

It is the young-old who now comprise the large majority of persons over 65. This trend is expected to continue. They are, for the most part, healthy and competent men and women, many of whom have retired or reduced their time in homemaking and/or in work outside the home, but remain integrated members of their families and communities. Whether they are working or retired, they play active roles in their churches, clubs, and organizations, and an increasingly large number perform volunteer roles.

The old-old (75 years and older) are those persons who are likely to have undergone major physical and mental changes. While the members

of this group are increasing as the population of older persons increases, they will likely remain a small proportion of aged Americans due to mortality. Nevertheless, this group, while frail, will expect to maintain independent lives as long as possible (Neugarten, 1981).

Neugarten's sociocultural age groupings of young-old (65 to 74), (Sefton Cojocel), and old-old (75+), (Smith Adams), will be utilized in this study. It might be expected that such a dichotomy will provide for similar needs and norms among the women in each age group, and that the perceptions and social support needs will be quite different between the two age groups (Smith Adams, 1984).

Social Support

Social Support is recognized as a multidimensional construct and has been described in various ways (Cobb, 1976; Caplan, 1974; Mitchell, 1969; Dean and Lin, 1977; Weiss, 1974). The conceptual definition used in this study was developed by Kahn (1979). He defines social support as "interpersonal transactions that include one or more of the following: the expression of positive affect of one person toward another; the affirmation or endorsement of another person's behaviors, perceptions, or expressed views; the giving of symbolic or material aid to another" (p. 85).

Kahn's definition was chosen because it emphasizes three aspects of social support; affect, affirmation, and aid. Norbeck's Social Support Questionnaire, the data collection instrument used in this study, is based on the concepts in Kahn's definition. Analysis of data from the use of this instrument allows one to operationalize social support into two variables; emotional support and tangible aid

(see Chapter IV). The ideas expressed in Kahn's definition of social support and Norbeck's Social Support Questionnaire (NSSQ) were used to develop the conceptual definitions of emotional support and tangible aid for this study.

Emotional Support

Emotional support is defined as a sense of warmth, of caring, and of concern expressed by significant others. The individuals know that others believe in them, love and respect them, and there is feedback which encourages self esteem. Emotional support implies the ability to confide.

Tangible Aid

Tangible aid is defined as material or behavioral assistance, provided by significant others. An individual may receive tangible aid in the form of money, services such as transportation and shopping, or actual assistance with the tasks of daily living.

Perception

Perception is defined as simply an individual's interpretation of reality. For the purpose of this study, the individual's subjective interpretation of two types of social support, received or available from significant others, was obtained.

Significant Others

Although this is not a study variable, significant others are an important part of the concept of social support and will be defined in this study as: those individuals "who help to mobilize psychological resources and master emotional burdens; share tasks; and provide extra

supplies of money, materials, tools, skills, and cognitive guidance to improve handling of a situation" (Caplan, 1974, p. 6).

Significant others for elderly persons are, very often, primarily family members. Shanas (1973) demonstrated that the majority of older persons live with or within 10 minutes of one of their children. From 70% to 80% of the elderly studied by Shanas had personal contact with at least one of their children within the previous week. A study completed by Sussman (1979) demonstrated that the family of urban America is still an extended family with grandparents and often great-grandparents.

Summarizing two points from the conceptual definitions demonstrates the focus of this study. 1). Social support is a multidimensional construct which has been defined and studied in various ways. By employing two distinct kinds of social support in this study, emotional and tangible, older women's perceptions of these types of social support may contribute to clarifying the concept. 2) Aging is seen as an everchanging process that results in increasing diversity among the elderly. Perceptions of social support might be expected to reflect this diversity as age increases. For example, the old-old may have more need for, and therefore, experience with tangible aid, or the young-old might view tangible support as less available because their significant others may still view them as active, healthy, and involved people, i.e., not in particular need of increased support. In this study, perceptions of two types of social support, emotional support and tangible aid, are compared within a group of older women (65 to 74 years of age). Then, comparison of the same perceptions will be made

between two groups of women of different ages. The study is based on the following assumptions and subject to the limitations presented in the next section.

Theoretical and Conceptual Assumptions

1. Unitary Man is a four-dimensional, negentropic energy field identified by pattern and organization and manifesting characteristics and behaviors that are different from those of the parts and which cannot be predicted from knowledge of the parts (Rogers, 1980, p. 332).
2. Environment is a four-dimensional, negentropic energy field identified by pattern and organization and encompassing all that is outside any given human field.
3. Unitary man and his environment are in continuous, mutual, simultaneous interaction, evolving toward increased differentiation and diversity of field pattern and organization (Rogers, 1980, p. 333).
4. Change is always innovative. There is no going back, no repetition.
5. The complexity and heterogeneity of man as he ages becomes more evident when he is viewed as an open system. He is greater than the sum of his parts.
6. Man's interaction with his social environment has both direct and indirect effects on his behavior and his health.
7. Social Support has a mediating or buffering affect that stimulates the development of coping strategies or provides direct aid. Lack of support can lead to decreased ability to cope and result in ill health.

8. Human beings need social support and receiving support contributes to their well being and ability to withstand stress.
9. The need for social support persists throughout life.
10. As people age, they lose significant others through death, relocation, or retirement. These major losses can result in an inadequate support situation for older adults.
11. Man's perceptions depend on the conceptual model he holds of the world. His representation of reality is influenced by his past experiences and how he defines his situation.

Methodological Assumptions

12. Persons participating in this study will respond honestly according to their perceptions and understanding of the questions being asked.
13. In the older age group studied, individuals may have more actual experience with receipt of tangible aid. Therefore, response of those in the older age group may be based on actual tangible aid received rather than hypothetical aid available.

Scope and Limitations

The scope of this study extends only to the sample that was studied. The sample was obtained from participants to a larger, preliminary study of the elderly's active participation in health care. The following are limitations of this study.

1. No attempt was made in the original study to obtain a random sample or typical group of elderly individuals.

2. This study uses secondary data obtained from the pre-test of instruments for the larger study. Therefore other pertinent data for this study are not available.
3. Individuals who agreed to participate in the larger study may be different from those who refused and, therefore, the research findings may not be representative of all elderly women.
4. Long-lived persons represent a select group. The well elderly, particularly those above age 75, could be considered elite survivors. Therefore, generalization of findings will be limited.
5. Various cohorts will have different historical and environmental exposures. A longitudinal study would be necessary to establish how perceptions within a cohort actually change over time. Rather than age changes, this cross sectional study will attempt to measure age differences.
6. Individual perceptions of the meanings assigned to answer choices (represented in a Likert scale) may have differed, creating a problem in comparison of responses within the study group.
7. The data were collected at one point in time. Several measurements over a period of time may have been more useful in representing the perception of individuals.
8. The sample sizes were small, 36 women aged 65 to 75, and 24 women aged 75 to 89. The small numbers may have been too limited to reflect true differences in perceptions of social support.
9. The population studied is from one geographical area in Michigan and, therefore, may not be typical of the elderly in the United States.

Overview of Chapters

This thesis will be organized and presented in six chapters. The introduction, problem statement, purpose, research questions, definitions of the variables, assumptions and limitations of the study have been presented in Chapter I. In Chapter II, which was written in collaboration with Smith Adams, a more detailed discussion of the variables is presented. Martha Roger's theory of Unitary Human Beings is presented as an overall philosophy, and the relationship between the concepts and the nursing process are shown with a model developed by Norbeck (1981). The third chapter, also co-authored with Smith Adams, contains a review of the literature. In this chapter, both classical research in the area of social support and more recent studies with social support as a health conditioning variable are presented. Literature and research on the aged American female and aging and individual differences are also reviewed. Limitations of currently available literature are also discussed in this chapter.

In Chapter IV, methodology and procedure will be presented, including population, subjects, operational definitions, Norbeck's Social Support Questionnaire, data collection procedures, and scoring measures. Data and analysis are discussed in Chapter V. First the data specific to this study are examined. Then, data from the study by Smith Adams are summarized, and the results compared to answer the collaborative question of whether age differences in perceptions of emotional support and tangible aid are evident between the two study populations.

In Chapter VI, implications of the findings for Nursing Research, Education, and Practice are discussed and recommendations are presented.

CHAPTER II
CONCEPTUAL FRAMEWORK

Introduction

In this chapter, concepts of aging and the aging female will be related to dimensions of the complex variable of social support. Advanced nursing practice, directed toward health promotion for the elderly, provides the overall orientation for this thesis.

The discussion will begin with a general nursing theory proposed by Martha Rogers' (1971). Within Rogers' framework, broader concepts of holistic man, environment, and pattern and organization of human behaviors, will be presented as they relate to older women and the diversity and complexity of aging phenomena. A discussion of social support will follow, including related concepts from the literature on social networks. For this study, two dimensions of social support will be conceptualized, and operationally defined (Chapter IV): emotional support and tangible aid.

In this thesis elderly women's perception of the emotional and tangible dimensions of social support are examined by analysis of five items on Norbeck's Social Support Questionnaire. A model developed by Norbeck (1981) to incorporate social support into nursing practice will be presented in this chapter.

We have chosen to utilize Norbeck's model because it provides the critical link between the complex concept of social support and the actual nursing process in clinical practice. We will now discuss the central nursing theory on which this study is based, incorporating age, social support, and Norbeck's model into Rogerian dimensions. This chapter was written in collaboration with Smith Adams (1984).

Rogers' Conceptual System for Nursing

Rogers uses a dialectic method of reasoning in which nursing is explained in reference to broader principles that explain man. Man, in turn, is explained according to principles that, Rogers asserts, characterize the universe. The concept of evolution is central to Rogers' theory. The evolution of scientific thinking, the environment, and man as a species are presented in her discussion, as background information for describing the nature of development in the life process of individual man. Rogers states that the science of nursing is directed toward describing the life process of unitary man, and toward explaining and predicting the nature and direction of man's development (1981). The term "development" will be used as it focuses on an individual's evolution. Research in nursing, then, is the study of unitary man, while the practice of nursing is the use of this body of knowledge in service to people (Rogers, 1980).

Four basic assumptions about human beings are proposed by Rogers.

- 1) Man is a unified whole and his oneness can be visualized as observable phenomenon in the pattern and organization of unique energy fields. Man and environment do not have energy fields; they are energy fields.
- 2) Man and environmental fields are continuously exchanging matter and energy with one another and this interchange is the basis of man's growth and behavior.
- 3) The life process of humans evolves unidirectionally along a space-time continuum, thus involving continuous development of the individual and environment.
- 4) Man is characterized by the capacity for abstraction and imagery, language, thought, sensation and emotion.

Within this framework of man and environment, Rogers proposes three broad principles that postulate the nature and direction of unitary human development: Integrality, Resonancy, and Helicy. Definitions of these principles will be presented first, and then the concepts will be discussed as they relate to elderly women.

The Principle of Integrality

(formerly titled the Principle of Complimentarity)

The interaction between human and environmental fields is continuous, mutual and simultaneous. Man and environment are inseparable; they change together.

The Principle of Resonancy

The relationship between human and environmental fields is one of constant interaction and mutual change. The change of the pattern and organization in the fields of man and environment takes place by means of wave phenomena. The principle of resonancy proposes the nature of the change in stating that wave pattern and organization continually move from lower frequency, longer wave patterns, to higher frequency, shorter wave patterns. This principle provides the basis for explaining the creative unidirectional evolution of life, and implies predictability in some parameters where appropriate tools to measure wave frequency can be developed.

The Principle of Helicy

The nature and direction of human and environmental development is continuously innovative, probablistic, and characterized by increasing diversity of the pattern and organization of human and environmental fields. This increasing diversity in man and environment is manifested in what Rogers terms "non-repeating rhythmicities." The principle of helicy, stated more simply, describes development as a constant, dynamic process which occurs through the continuous mutual interaction of man and environment. This interaction and repatterning is unique in time and therefore ever different. You can never be less than you are now, therefore, the life process is seen as a constantly evolving series of changes in which past experiences are incorporated and new patterns emerge.

Rogers' Principles and Aging Phenomena

The principle of helicy is a key frame of reference for viewing the elderly. In the past we have tried to place all older people into a group termed "the aged," making generalizations and predictions about the group on that basis (Katch, 1983). Rogers' theory rejects that approach as implausible. Human development becomes more, not less, differentiated (Murray, 1979). As Neugarten (1979) states, "with the passage of time, life becomes more, not less, complex; it becomes enriched, not impoverished."

According to Rogers, integrality, resonancy, and helicy have validity only within the context of the conceptual system of unitary man. Man must be viewed as a whole, greater than the sum of the parts. The relationship within this conceptual system of unitary man

interacting with his environment, is very much in keeping with the ideas of several authors who have conducted research with aged populations (Neugarten, 1974; Troll, 1977; Lawton, 1977). Aging is a continuous process from birth to death. In Rogers' conceptual system, aging is considered a developmental process in which humans grow in diversity and complexity; biologically, socially, mentally, and spiritually. Rogers does not support a "running down" theory of aging. Her theory of increasing complexity and unidirectionality is evidenced in her statements about changing sleep patterns, taste patterns, and color preferences. Aging persons require less sleep per rest period, and the patterned frequencies of sleep and wakefulness are more diverse. Preference in taste is for sharp, distinct flavors, which implies appreciation of the complexities of the range of taste phenomena, rather than the often held premise of deteriorating taste buds. Color preference changes in the direction of higher wave frequencies with age.

Conceptual Framework and Definitions

Utilizing the conceptual framework proposed by Rogers, it is assumed that women become more diverse and complex each day they live, and that differences among age levels may be evident in their perceptions of emotional support received and tangible support available from their social environments. This study will be based on three concepts from Rogers' conceptual system: 1) wholeness of unitary man/person as reflected in differences and uniqueness of individuals; 2) helicy, as reflected in changing social support patterns occurring as the

result of change in man/person and environment over time; and 3) integrality, the continuous interaction between and among individuals and their environment (in this case the social environment). These concepts provide the background for the following discussion of age and aging women's perceptions of social support.

Age

Roger's theoretical base provides an optimistic view of aging but raises methodological problems in classifying age as a variable. Clearly, to lump everyone over 65 into a group is inappropriate as it denies the heterogeneity of the elderly. Norbeck (1981), states that age influences the amount and type of support required for optimal functioning. In examining elderly women's perceptions of social support therefore, age is a critical variable. Appropriate and meaningful age categories that acknowledge the increasing complexity of older women must be determined.

A review of the literature shows that four methods are currently used to classify age. The simple, objective way is to use chronological criterion, such as ages, 60, 65, 70. This criterion is used most often for administrative purposes, i.e. insurance programs and social security, etc.

Gerontologists often use functional criteria rather than chronological age for classifying the older population. This method has been criticized as a minority position because it is representative of only portions of the elderly population, usually the dysfunctional (Troll, 1982). Functional assessment is usually done to determine

necessary treatment or staffing needs for those individuals unable to care for themselves. Although the concept of functional assessment for the well elderly and their environment is certainly appropriate, it is seldom used routinely with this population.

A third method of classifying age is by cohorts. A cohort is a group of persons who share the common experience of the same historical events influencing them at similar ages. Troll (1982), defines the elderly cohorts as 80 to 90 year olds, 70 to 80 year olds, and 60 to 70 year olds, although these categories are not seen as mutually exclusive. Differences between cohorts may be seen in the following examples.

The 80 to 90 year olds can be viewed as one cohort because time perception was less rapid in their youth, due to the relative simplicity of society. For example, they grew up in rural surroundings. The world had narrower geographic boundaries, but individuals tended to know more about the space within their environments, i.e., neighborhood, town. Their youth was a time of close knit families and neighborhoods. This cohort might be expected to optimistically view social support in old age as a function of family members, however, they may be frustrated by their distance from family members at a time when support is needed.

The 70 to 80 year olds were significantly influenced by two major historical events, the enormous immigration of Eastern Europeans after WWI, and the Great Depression. They were more pessimistic and more future-oriented. For example, these cohorts probably prepared financially for their security in old age because they saw their parents or grandparents immigrate to the U.S. with hopes for a secure future,

only to suffer through the Depression. Today they are typified by retirees anxious for the pleasures of life. Their wary, more pessimistic viewpoint may influence their perception of social support.

The 60 to 70 year old cohort, born around 1915, also were affected by the Great Depression which hit when they were in their adolescence. Many postponed marriage and children due to poverty. Both men and women in this cohort were actively involved in World War II efforts, either in industry or in the armed forces. This is the cohort that moved in masses to the suburbs following the war, bringing about a trend toward nuclear, rather than extended, (i.e., multiple generations dwelling together) family units. Today this group is facing retirement as they move from middle to old age (Troll, 1982). The change from close knit families and neighborhoods to the relative isolation of the suburbs, and the movement of women into the work force, may have influenced this cohort to be more self reliant and more skilled at extending their support network outside the family.

Classifying age by cohorts acknowledges the interaction of man and environment in time, and the influence that historical events have on life-span development. Historical influences also play a part in the schema developed by Baltes, Cornelius, and Nesselroade (1980). They identify three influences on development: normative age-graded influences, normative history-graded (evolutionary) influences, and non-normative life events.

Normative age-graded differences are the biological and environmental determinants of development that have a fairly strong relationship with chronological age. Examples are biological maturation and age-graded socialization events (Danish, 1980). These influences would support the classification of age by simple numerical ordering.

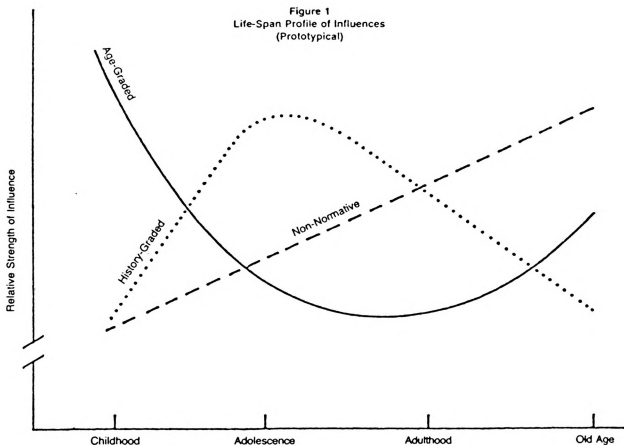


Normative history-graded influences are the biological and environmental determinants associated with historical time (Neugarten and Datan, 1973). They are normative if they occur to most members of a given cohort (generation) in similar ways. Examples of normative history-graded influences are economic depressions, wars, major epidemics, and changes in the demographic and occupational structure of a given society (Danish, 1980). These influences would support classification of age by simple cohorts.

Non-normative life events are biological and environmental determinants that do not occur in any normative age-graded or history-graded manner for most individuals, such as divorce, heart attack, or other "stressful life events." Holmes and Rahe (1961); Danish, Smyer and Nowak, (1980); and Schlossberg, (1982), are among the number of authors who have discussed the role of such non-normative life events in life span development. Danish (1980), states that the joint impact of these three types of influences (normative age-graded, normative history-graded, and non-normative), mediated through the developing individual, account for the nature of life span development. In attempting to determine an appropriate, meaningful method of age classification, it is helpful to look at a prototypical profile, postulated by Baltes, Reese and Lipsitt (1980), of the interaction among these three classes of influences. (See figure 1.)

According to this figure, the effects of age-graded influences seem to be most prominent during childhood; the effects of history-graded seem strongest in adolescence and early adulthood; and the non-normative events seem to increase in importance throughout the

life span (Danish, 1980). An interesting observation of this prototypical profile is that both age-graded and history-graded influences have decreased impact in old age. One could speculate that the individual has integrated the personal impact of those influences into his/her unique pattern and organization and, in continuing his/her evolution innovatively, has diluted the effects of those events. Because of the increasing dilution of effect, Baltes, Reese, and Lipsitt's (1980) profile would appear to support the argument against using chronological age or cohorts for classification in elderly populations.





For the purposes of this study, age will be defined by needs and age norms, the basis of a sociocultural approach used by Neugarten (1981), to dichotomize older Americans into the young-old (65 to 74) and the old-old (75 years and older). In using "needs" to group individuals, Neugarten tries to distinguish what types of assistance are required at various ages. For example, Branch and Jette (1983), have clearly demonstrated that the risk of unmet needs for assistance with activities of daily living increases with age. An example of a "norm" that would help to distinguish similar groups within the elderly population is the culturally based age of retirement which falls within the young-old classification. The following are examples of some needs and age norms characteristic of each group of aging people.

It is the young-old who now comprise the large majority of persons over 65. This trend is expected to continue. They are, for the most part, healthy and competent men and women, many of whom have retired or reduced their time in homemaking and/or in work outside the home, but remain integrated members of their families and communities. Whether they are working or retired, they play active roles in their churches, clubs, and organizations, and an increasingly large number perform volunteer roles.

The old-old (75 years and older) are those persons who are likely to have undergone major physical and mental changes. While the members of this group are increasing as the population of older persons increases, they will likely remain a small proportion of aged Americans due to mortality. Nevertheless, this group, while frail, will expect to maintain independent lives as long as possible.

Neugarten's sociocultural age groupings of young-old (65 to 74), (Sefton Cojocel), and old-old (75+), (Smith Adams), have been selected to define the study population for this thesis because the dichotomy acknowledges the heterogeneity of the elderly while providing a clear, logical method for delineating the study populations. It might be expected that such a dichotomy will provide similar groupings of needs and norms among the women in each age group, and that the perceptions and social support needs will be quite different between the two age groups (Smith Adams, 1984). While age classification by cohort or functional ability recognizes the heterogeneity of the elderly, the degree of overlap and somewhat arbitrary delineation in the case of the cohort classification, and the lack of established use with healthy elderly in the case of functional classification, make those methods less useful for this study.

In summary, there are several means of classifying age as a study variable, but all present unique problems in addition to those caused by lack of research on real age differences. Chronological ordering is arbitrary. Because it fails to recognize the heterogeneity of the elderly and timing of aging phenomena, it defines the population either too narrowly or too broadly for meaningful results. The use of functional criteria for classification has been established mainly with the disabled elderly. Cohort classification is appropriate with all elderly, because it recognizes heterogeneity while emphasizing the influence of historical events. Delineation of cohorts, however, is arbitrary. Additionally, at least one group of authors proposes that historical events are less influential to the elderly (Baltes, Reese and Lipsitt, 1980), and therefore may be unsuitable criteria for division.

Neugarten's categories for age classification within the elderly are also somewhat arbitrary, but seem to be the most logical grouping for this thesis because they provide clear, logical delineation of subjects while being consistent with the concept of increasing diversity in the elderly.

Regardless of the method of grouping, age has been identified as important variable in determining the amount and type of social support needed for optimal functioning (Norbeck, 1981; Branch and Jette, 1983). We now turn to a general discussion of social support and related concepts.

Social Support

Beginning with a general definition of social support such as helpful attitudes or acts communicated within a relationship, emphasizes that the idea of social support is certainly not new. Indeed, it has been included in nursing care planning and intervention for some time. What is new about social support is that researchers are beginning to accumulate an impressive amount of evidence documenting the beneficial effects of social support (Cassel, 1976; Cobb, 1976; Kaplan, Cassel and Gore, 1977; Dean and Lin, 1977; Lowenthal and Haven, 1968; Wallston et al., 1983; Israel, 1982). Unfortunately, social support has been defined in so many ways that comparison of studies is difficult and no one, clear definition seems possible. The following discussion is intended to present the variable of social support, emphasizing the complexity and difficulty in seeking one definition.

An in-depth review of the literature on social support makes it is evident that this concept is complex and multidimensional (Cassel, 1976; Nuckolls, Cassel, and Kaplan, 1972; Cobb, 1976). Generation of explicit and appropriate definitions of social support and translation of these definitions into operational measures for research, evaluation and practice are just beginning (House, 1981).

Social support is generally understood to imply a helping relationship. The word "support" is defined in Webster's New World Dictionary (1968) as:

1. To carry the weight of; keep from falling, slipping, or sinking; keep in position.
2. To give courage, faith, or confidence; to help, comfort or strengthen.
3. To give approval to, be in favor of, subscribe to, strengthen, uphold.
4. To maintain or provide for (a person, institution, etc.) with money or subsistence.

It becomes evident that, even in this generally understood sense, support implies both emotional caring and tangible assistance.

Dimond and Jones (1983), summarized and organized the literature on social support into four major definitional categories: support as relational provisions; support as information; support as structure; and support as interaction. A presentation of the range of definitional categories within the domain of social support is useful for understanding the many, sometimes minute, distinctions within the concept.

Support as Relational Provisions

Weiss (1974) conceptually defined social support as six types of assistance which can be individually associated with a particular type of relationship. These he defined as attachment, social integration, opportunity for nurturance, reassurance of worth, sense of reliable alliance, and the obtaining of guidance.

1. Attachment, a sense of security and place: provided by dyadic relationships of an intimate nature.
2. Social integration, provided by less intense, less intimate sharing; found in group relationships.
3. Opportunity for nurturance; provided by relationships in which an adult takes responsibility for the well being of a child.
4. Reassurance of worth; a sense that one is competent in a social role is provided by co-worker-type relationships.
5. Sense of reliable alliance; usually provided by kin relations in which continuing assistance is expected.
6. The obtaining of guidance, access to a trustworthy, authoritarian figure who can assist with strategies of action in time of crisis; found in relationships with professionals.

Defining social support in terms of types of assistance which can be found in different types of relationships, has particular pertinence for elderly women. With aging comes a natural attrition of significant others from the elderly woman's support network. This attrition occurs through death, relocation, or increasing disability. Roles and relationships change, leaving members of this population at risk for problems with relational provisions. Long established attachments are

lost; isolation from members of the younger generation may reduce the opportunity to provide nurturance; and reduction in supportive others may lead to decreased self esteem. Kin relationships are more heavily depended upon for reliable alliance, and guidance may increasingly be sought from health professionals.

Support as Information

Social support has also been conceptualized as information, (Cobb, 1976). Information provides the supported person with feedback that he is esteemed, cared for, and a participant in a mutually obligated network. Cobb delineates information into three classes:

1. Information that the individual is loved and cared for, similar to Weiss' "attachment" dimension.
2. Information that creates the perception that the individual is esteemed and valued, similar to Weiss' "reassurance of worth" dimension.
3. Information that the individual is a participant in a mutually obligated network, as in Weiss' "social integration and reliable alliance" dimensions.

By defining social support as information, Cobb focuses on the supported person's perception of the information he/she is receiving. One problem in using this definition is that it allows one only to measure social support from the supported person's subjective perspective, i.e., information the individual received. Another problem unique to this definition is that tangible assistance is only included in the concept of social support in a peripheral way, i.e., by the act of



providing tangible assistance, you are giving the person information that you are supportive. Tangible aid, therefore, is not information.

For the elderly, receiving supportive feedback is critical. Information that they are loved and respected assists the older person to cope with the multiple role changes and losses associated with aging. Information on assistive devices, safety measures, and home health services may be essential in maintaining independence. Additional examples of informational support that may be important for the elderly, include health teaching, feedback on self management of chronic disease treatment regimens, and encouragement in activating the support network.

It is important to note that the elderly may have difficulty in receiving informational support, due to sensory deficits. Creative approaches in giving support as information may be essential, such as large print on health teaching resources, controlling the level of extraneous room noise when talking with elderly persons and speaking distinctly, at a moderate pace, when hearing is decreased.

Defining social support as information focuses on yet another dimension of the concept and identifies particular problems, both for the researcher, in measurement, and for the elderly, in the potential for missing informational support as a result of sensory deficits. Information from the three areas described by Cobb; that one is loved and cared for, esteemed and valued, and is a participant in a mutually obligated network, is critical to an elderly woman's morale, confidence, and independence.

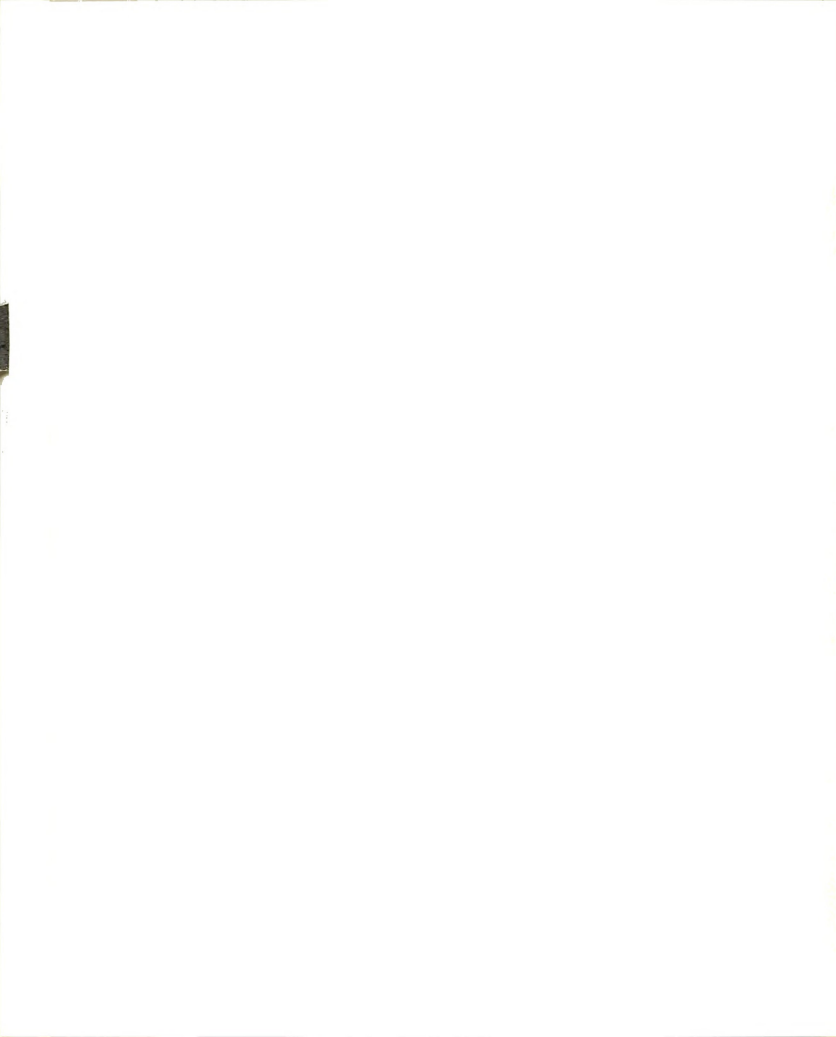
Support as Structure

A third conceptualization of social support has been offered by J. Mitchell (1969), who views the social network as an indicator of the potentiality of support, i.e., the available social support opportunities. Four structural characteristics of social support networks, identified by Walker et al. (1977), are relevant to the provision of social support.

1. Size: The number of people with whom the individual maintains some social contact, including those contacts that are renewable in case of need.
2. Density: The extent to which members of one's social network know and contact one another independently of the individual.
3. Homogeneity of membership: The extent of mutual sharing of social attributes between network members.
4. Dispersion of membership: The ease with which members of a network make face-to-face contact.

The four structural characteristics of social support networks all concern one central idea; that people in a network must be available and in communication in order to provide social support. Robert Kahn's (1977) view of social networks as a "convoy" for the provision of social support is in keeping with this concept.

In assessing an elderly woman's available support opportunities, one might ask questions related to each of the structural characteristics listed. For example: With how many people does the elderly person maintain contact? Are there others who could be called upon?



If one person, identified by the elderly person, was contacted, would he/she easily be able to notify others in the network? How alike are the network members, i.e., do they have similar interests or attributes? How quickly or easily could members of the network respond to a call by the elderly person?

Questions such as those presented above are important tools in seeking assessment data about an elderly woman's potential opportunity for social support. The clinical specialist in advanced nursing practice with the elderly recognizes that, because of normal attrition from an individual's network with aging, support network assessment is critical to the client's data base. The assessment process itself may be an intervention in reactivating the network, by prompting the initiation of contact with dormant members. The structural properties of social networks, therefore, are important as indicators of the potentiality of support for the elderly. Structural properties, however, do not speak to the quality of relationships. As Mitchell (1969), has pointed out, it is the interactional characteristics which measure the quality of the relationship.

Support as Interaction

Mitchell (1969), summarized three aspects of interaction found within social networks.

1. Content: The meaning individuals give to their relationship.
2. Directedness: The amount of mutual sharing or reciprocity.
3. Intensity: The strength of the bond between two persons.

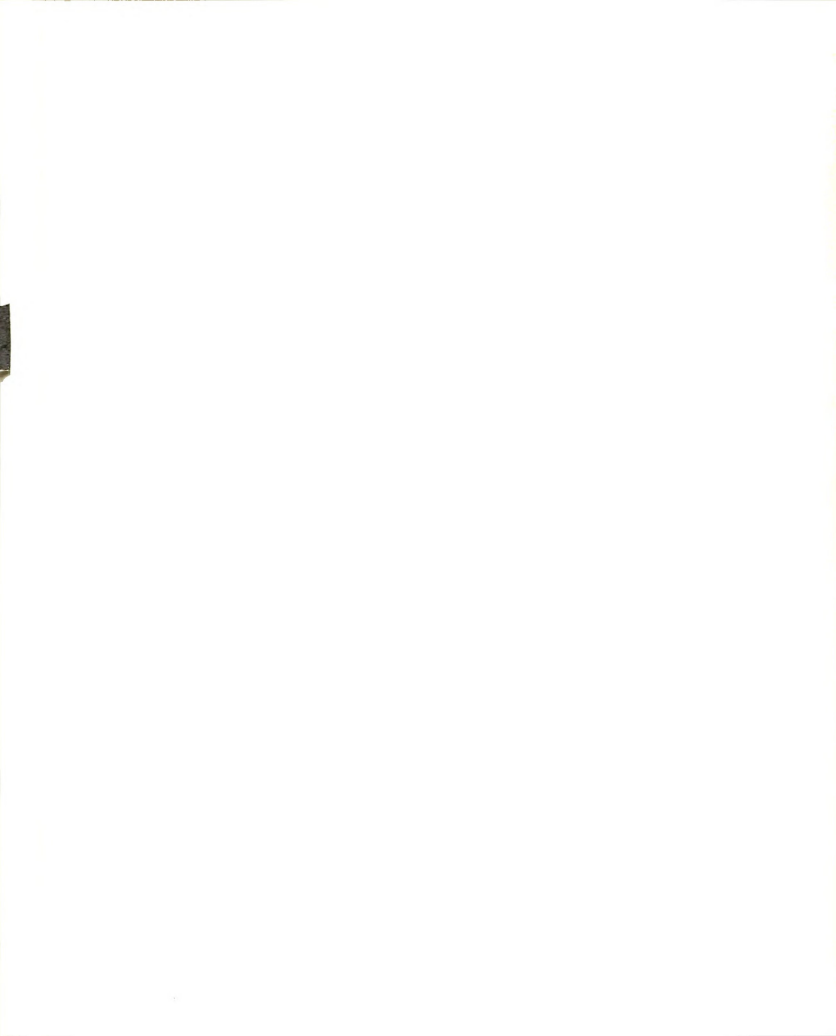


Defining social support as interaction is in keeping with Roger's theory of unitary man, when interaction is defined as the mutual exchange of energy and matter occurring between man and environmental fields. This broad definition of interaction would imply that social support as interaction includes: the intuitive sense of meaning that each individual (field) places on the interaction (content); the amount of energy exchanged, perhaps measured in time spent between individuals and types of support given, emotional and tangible (directedness); and the strength of the interaction, i.e., the interface of boundaries indicating the depth of involvement between individuals (intensity).

Problems arise with this definition of support as interaction, however. Although Mitchell separates content, directedness and intensity, and examples of each may be given, it is obvious that the distinction between each aspect of interaction is not clear. For example, directedness and intensity, as defined by Mitchell, are certainly overlapping concepts.

While Mitchell's definitions overlap too much to be practical for this thesis, it does bring up an important point for the elderly. While attrition has been recognized in previous categories of social support, as risk factors for elderly individuals, support as interaction implies that a single relationship bond may be as important in the provision of social support as multiple network links (Dimond 1979, Hirsch 1979).

Robert Kahn's definition of social support allows for the importance of both single relationships and multiple network links. This definition, which we will utilize in this thesis, states that social support includes "interpersonal transactions that include one or more



of the following: the expression of positive affect of one person toward another; the affirmation or endorsement of another person's behaviors, perceptions, or expressed views; and the giving of symbolic or material aid to another" (1979). In addition to being consistent with Rogers' idea of interacting energy fields (interpersonal transactions), this definition emphasizes the two types of support studied, emotional (affect and affirmation) and tangible aid. Norbeck's Social Support Questionnaire, the data collection instrument for this thesis, includes the concepts of affect, affirmation and aid in items.

Kahn's definition was chosen over the related, more comprehensive definition of social support provided by Robert Caplan (1979) because Caplan's definition is difficult to apply in all cases as it dictates the data collection procedure, i.e., it depends upon both the perceptions of the elderly and of an "objective" observer.

Caplan has specified two dimensions of social support, objective-subjective and emotional-tangible. Objective tangible support is "behavior directed toward providing the individual with tangible resources that are hypothesized to benefit his/her mental or physical well-being" (1979). Objective emotional support is "behavior directed toward providing the person with cognitions (values, attitudes, beliefs and perceptions) and toward inducing effective states that are hypothesized to promote well-being" (1979; p. 85). Objective support, tangible and emotional, are measured by an outside observer. Subjective tangible support and subjective emotional support are similar but are based on the individual's perception of the degree to which support is offered (Caplan, 1979).

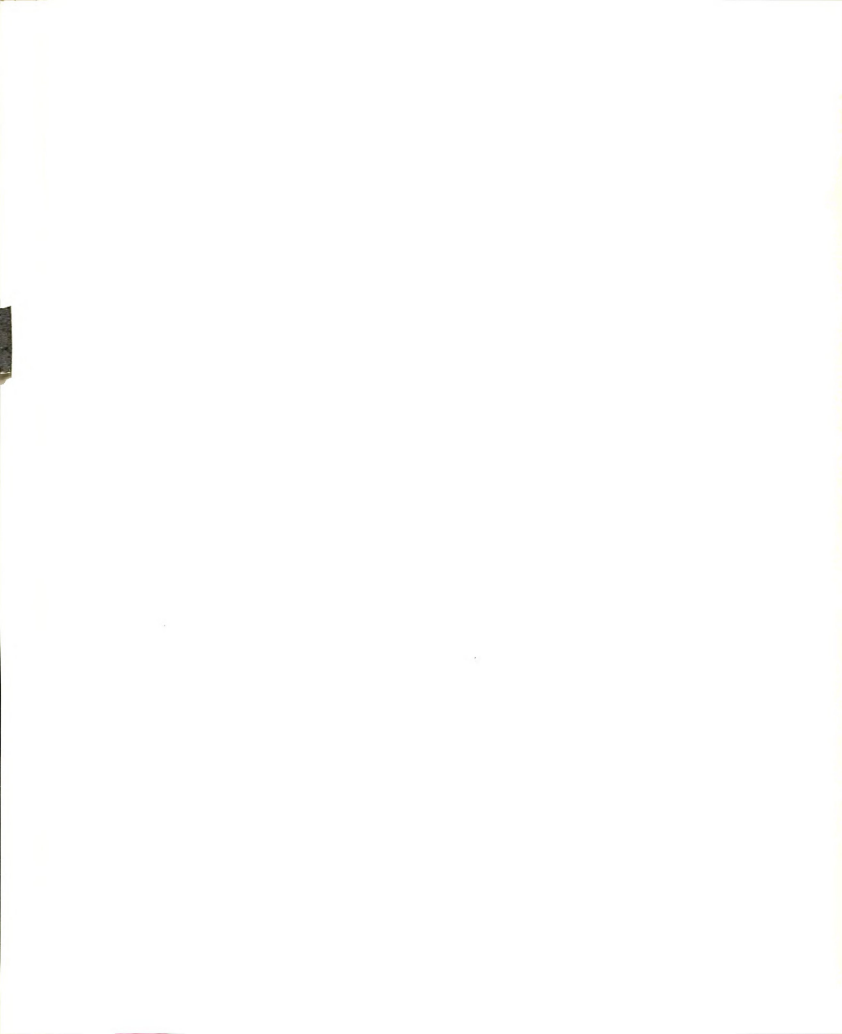


Perception, the Subjective Approach to Social Support

While objective assessment of social support is less prone to self reporting bias than subjective report, and would provide a more standard comparison across individuals (DiMatteo and Hayes, 1981), social support is so embedded in an individual's perception that objective measurement may be inadequate. For example, witnessing an interchange between a health provider and an elderly client, one might objectively determine that the interaction provided social support. If the elderly person did not adequately hear or understand the message, however, has support really been received?

The subjective approach is valuable (Donald, et al., 1978; Kivity and Moss, 1974; Lipowski, 1969). Donald (1978; p.5) states "in favor of the more subjective approach is the argument that individuals have different needs and tastes; therefore, the nature and number of interpersonal contacts with friends, relatives, and others necessary to achieve social health vary greatly. These differences may not be adequately reflected in measures of objective social health constructs." Similarly, Kivity and Moss (1974, p.109) have suggested that "the most efficient predictor of a person's physiological behavior in a given environment may consist of how he perceives that environment." The subjective approach has also been supported with the argument that "what an individual experiences is directly known to him, and we may learn about it by obtaining his introspective reports" (Lipowski, 1969; p. 1198).

In summary, the preceding sections have focused on defining social support and delineating its many aspects. The definition, formulated



by Kahn (1979), which emphasizes two consistent aspects of social support, emotional support, and tangible aid is used in this study. A discussion on the objective/subjective dimensions of social support emphasized the importance of perception i.e. subjective measurement of the variable. We now turn to a discussion of the function of social support.

The Function of Social Support

While social scientists do not agree on one single definition, there is general agreement that social support functions to buffer stress and/or directly affect health (Kasl, 1978; McLean, 1979; House and Jackson, 1979; Thoits, 1982). House (1981, p.31), suggests that support can modify or counteract the effect of stress in three ways. First, social support can directly enhance health and well-being because it meets important human needs for security, social contact, approval, belonging, and affection (see arrow c of Fig. 2). That is, positive effects of social support appear to offset or counterbalance negative effects of stress.

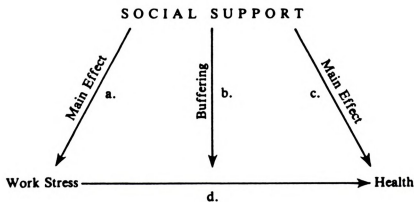
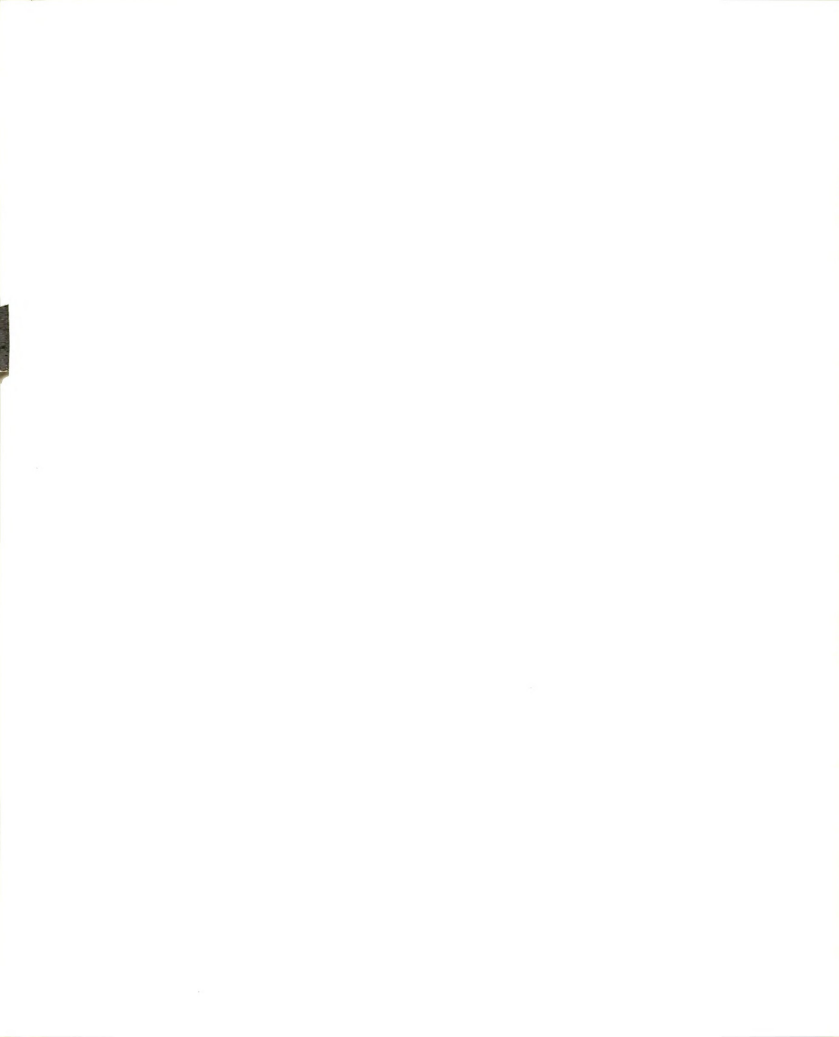


Figure 2. Potential effects of social support on stress and health (from House, 1981).



Second, social support may directly reduce levels of stress in several ways (arrow a), and therefore, indirectly improve health (via arrow d). The repatterning necessary after retirement is one example in which a supportive spouse, friends, or relatives may help reduce personal pressure and tensions by providing support that encourages self esteem.

These two effects of social support are referred to as main or additive affects (House, 1981). A third type of effect has more recently been described as interactive or buffering (arrow b on Fig. 2). In this effect social support does not directly affect either stress or health, but rather modifies the relation between them.

Despite the prominence of the buffering effect of social support, considerable confusion exists about what constitutes evidence of buffering versus main effects. According to House (1981), "The need to distinguish main versus buffering effects arises when considering how stress and social support may combine to effect health." Figure 3 (House, 1981) illustrates three possible ways in which the main and buffering effects of support may jointly effect health. Each graph depicts the linear relationship between stress and health for three different levels of social support: low (...), medium (---), and high (___). Graph a illustrates a pure buffering effect. Here social support has no beneficial effect on health among individuals with little stress, but the beneficial effects become increasingly apparent as stress increases. Graph b illustrates the main effect social support has on health. The slope of the relationship between stress and health is unaffected by levels of support, indicating no buffering.

Finally, Graph c illustrates the case where support has both main and buffering effects. The three lines are not parallel, indicative of a buffering effect, but when stress is low individuals with high levels of social support are healthier, indicating a main effect of support on health. Often these effects are not quite so clear, leading to much confusion in empirical testing.

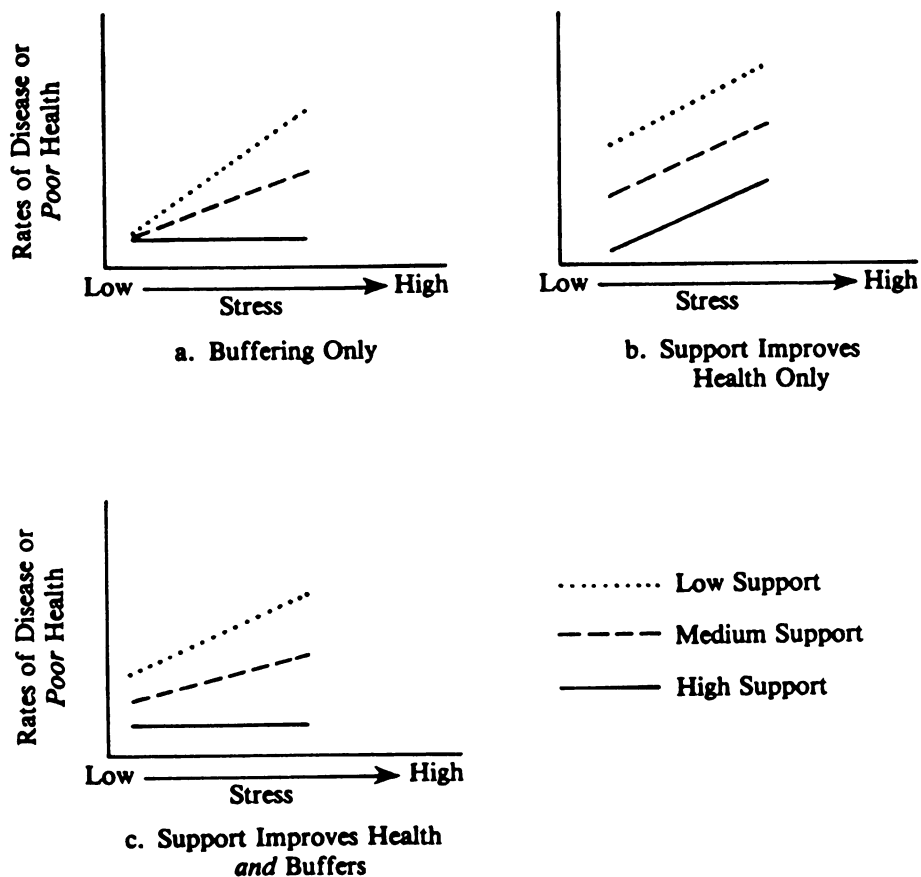


Figure 3. Buffering versus Main Effects of Social Support (from House, (1981)).

For the purposes of this study, however, the distinction between the main effects, buffering effects or effects of both is academic. Enough evidence has been accumulated to demonstrate the association of social support with health (Cassel, 1976; Cobb, 1976; Kaplan, Cassel and Gore, 1977), and with positive outcomes for the elderly (Fuller and Larson, 1980; Lindsey and Hughes, 1981; Lowenthal and Haven, 1968). It will be the task of research to determine how social support exerts its effects and what dimensions of support are most helpful.

Types of Social Support

To suggest that one kind of support is appropriate in all stressful situations is to ignore the diversity of the needs that individuals can experience under stress (Walker, et al., 1977). Three factors influence the kind of support that is appropriate during periods of crisis: the nature of the stressful situation; the timing and the crisis period in which the support is provided; and the resources of the individual (Weiss, 1976).

Nature of the Situation

Discontinuity with the past is a common occurrence during stressful periods. A high degree of ambiguity is usually present for the individual and there is need for feedback from supportive persons that one's behavior is appropriate. Weiss (1976) identifies three forms of situational types of social support.

1. A crisis is a severe, upsetting situation of limited duration in which individual resources are quickly summoned to cope with emotional, social or physical instability. For older persons, this

might be death of spouse or close friend. It is likely that emotional support (empathy, understanding) would be the most useful type of support during a crisis.

2. A transitions is a period of relational and personal change. Parkes (1971; p. 103) defines transitions as "major changes in life space which are lasting in their effects, which take place over a relatively short period of time and which affect large areas of the assumptive world." The key features of transitions are that they have lasting effects and involve major changes. For older persons, a move from their home to a retirement village or Senior Apartment Complex, bereavement or retirement from a life-long occupation can represent a major transition. It is likely during transitions that informational and tangible assistance would be appropriate types of social support. Weiss seems to imply that because of the intensity of the transition state, i.e., relatively short duration with major changes that must be dealt with, more action oriented types of support are needed. Therefore, in a transition emotional support could be less helpful than direct tangible aid.
3. A deficit situations is a state in which relational provisions, important to well being, are unobtainable (Dimond and Jones, 1983). An example of a deficit situation is a widow who becomes involved with family and church activities but remains profoundly lonely. Emotional support from a confidant would most likely be appropriate in deficit situations.

While there are other types of stressful situations, Weiss (1976) suggests crisis, transition and deficit situations are particularly important, as they represent loss. Crisis occurs on first awareness of loss; transition in which major changes take place follows, if the loss is unavoidable; and transition may lead to new ways of living that create deficit situations.

Timing

The needs of people are likely to change over time, particularly older persons and those experiencing distress. Timing is the second factor to be considered in determining the type of social support most appropriate in a situation. Support that provides relief and comfort initially in a situation may not be appropriate at later stages in the adjustment process. For example, emotional support that may "cushion" an individual in a crisis state may inappropriately shelter an individual in transition, stifling more productive endeavors towards change.

Personal Resources

A third factor determining the most appropriate type of support involves the individual's resources. Social support should "fit" the situation. Thus, a spouse or confidant can provide opportunities for intimacy and sharing; family and friends can provide assistance and a sense of security; professionals can provide information via education and counseling. Careful assessment of existing resources for social support will help to determine the appropriate kinds of interventions that may be necessary for a particular situation.

In summary, social support functions to buffer and protect persons in different situations. The extent to which this function occurs is likely to be based on the type of social support provided. It has been suggested that the kind of support appropriate to a particular situation is based on the type of stressful situation, the timing of support, and the resources available to the affected individual. In the next section, a model developed by Norbeck (1981) will be presented to show the elements and relationships of persons, environment and social support within nursing practice.

The Norbeck Model

The link between social support and various outcomes has been established (Cassel, 1976; Cobb, 1976; Heller, 1979) but it needs to be refined, replicated and studied before it can be used to guide clinical applications. Norbeck (1981; p. 46-47) states, "the bulk of the social support research has explored relations between social support and health.... Although these relations imply that interventions for persons with inadequate social support might reduce their risk for certain negative outcomes, serious gaps in knowledge exist that must be studied to provide a scientific basis for intervention." Norbeck proposed a model, therefore, to show the elements and relationships that must be studied to incorporate social support into nursing practice. While the model was designed to guide research, it serves as a useful framework for incorporating the nursing concepts of person, environment, and nursing process, as it relates to outcome determination. The Norbeck Model is presented in Figure 4.

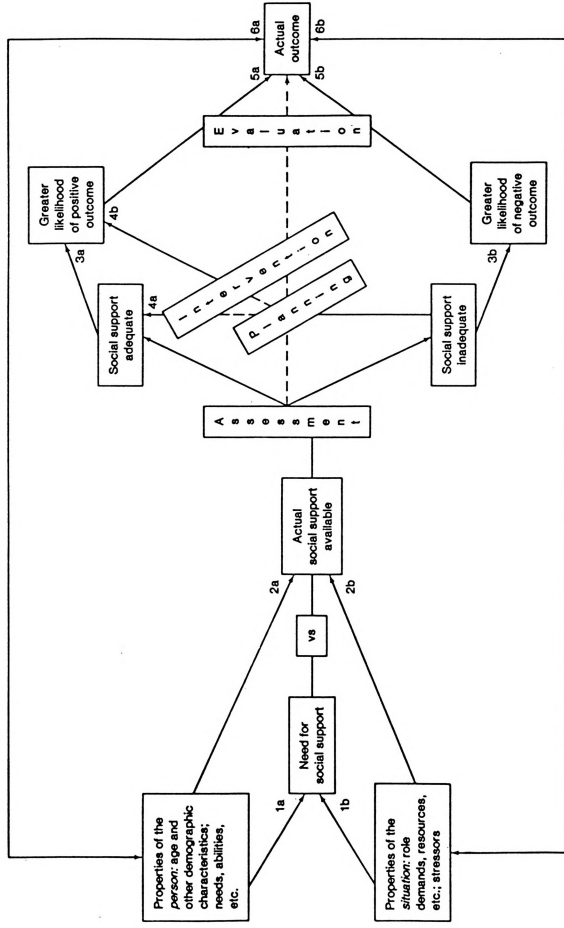


Fig 4. Framework for guiding research for incorporating social support into clinical practice. (Norbeck, 1981).

Within the model, two major concepts, properties of individuals and properties of environmental situation are shown to jointly determine the need for social support (arrows 1a, 1b, and 2b). The overarching conceptual system proposed by Rogers supports this mutual interaction of person and environment in determining the patterns of need for social support.

Nursing assessment is then necessary to determine both the need for social support and the actual support available. Comparison of this information allows the nurse to determine if the level of support is adequate. If the support level is inadequate, the assessment provides a basis for planning. Because of individual variances, Norbeck describes outcomes in terms of greater likelihood or decreased likelihood of positive or negative outcomes (arrows 3a and 3b). The actual outcome is determined through evaluation (arrows 5a and 5b). Persons without adequate support or without effective intervention may have a greater likelihood of a negative outcome (arrow 3b).

To summarize, a pervasive fact of life for aging women is the progressive loss of relationships with spouse and friends through death, or colleagues through retirement. Additionally, the nature of their relationships change as they age so the functions and the relationships held originally probably also change. Norbeck uses the example of the parent-child relationship. While the child is dependent on his mother in early life, a stage is reached where the relationship is more or less mutual, followed by the possibility of a stage in late adulthood when the parent needs more assistance from the child.

To add to the complexity, the aging process may lead to change within the individual which may alter his/her relationship needs. The types of relationships that met earlier needs may no longer meet altered needs in old age. Cumming and Henry (1961), for example, postulate in the Disengagement theory that in old age there is a desire for less demanding relationships. Indeed, the major element of disengagement is parting from the diffuse affective and obligatory relationships of middle age. In this regard, Dean (1962) reports data that indicate there is a decline in affect with age.

Since the pattern and organization of behaviors are evolving amidst this constant change for individuals and the social environment, characteristics of the individual will reflect differences and uniqueness. Continuous interaction between and among individuals (integrality) will also reflect changes in social support patterns over time (helicy). Norbeck's model draws together all the concepts within the process and practice of nursing. In using this model, the nurse in advanced practice can formulate goals and use interventions that assist individuals in repatterning. Research on aging women and their perceptions of types of social support can add important pieces of information which are needed for more accurate, comprehensive assessment of client needs.

Integration and Summary

The integration of the Norbeck Model into Rogers' Theory of Unitary Man focuses this study holistically on man and environmental exchange in the process of determining perceptions of social support.

It is evident, with the multiple losses of aging, that social support is a critical concept for practitioners working with older adults. Knowledge of these losses of aging, particularly attrition from the support network, focuses the clinical nurse specialist in advanced practice on assessment of the elderly person's available support. Rogerian theory assists in this assessment by emphasizing the unique interaction between person and environment (social support environment).

Rogerian theory provides an excellent basis for the clinical nurse specialist working with the elderly, because it emphasizes increasing complexity in developmental growth, and the essential nature of the mutual impact of person and environment. The influence of the environment on an elderly person is a critical variable in the maintenance of independence. In visualizing social support for older persons, one is most apt to think of the elderly individual interacting with supportive family members. Rogers' theory and Norbeck's model together focus attention on the nurse client interaction, as well as the social support environment.

Each interaction between nurse and client is an energy exchange. The energy fields, together, are more than the sum of the the two individual fields. This synergistic relationship between nurse and client dispels the view of the client as a passive entity who is acted upon by the professional. The nurse is educated and/or socialized to use a process that facilitates active participation of the client. The assessment phase of the nursing process is the foundation for building active participation. Research contributing to accuracy of assessment is the mortar in the foundation.

We recognize the cyclical nature of the nursing process, whereby feedback from evaluation of outcomes leads to reassessment and revision of planning and intervention. This cycle is illustrated in Norbeck's model by feedback arrows, linking evaluation of outcomes to assessment.

As this process of interaction between the nurse and client occurs, the energy exchange between fields (nurse and client in active participation), propels each individual along his/her unidirectional development toward increasing complexity. The nurse, in using the scientific approach, i.e. the nursing process, is adding the dimension of predictability to this development.

Restated, the nursing process is purposeful interaction, based on principles of the scientific method. In using this process, the nurse in advanced practice formulates goals toward designing interventions that assist the individual in continual repatterning. Both successful and unsuccessful interactions involve energy exchange and will contribute to each individual's development. Research aimed at increasing the accuracy of assessment through identification of patterns, such as age differences in perception of social support, adds to the predictive value of the process. In the next chapter, a review of literature pertinent to the research question for this thesis is presented.

CHAPTER III

LITERATURE REVIEW

Introduction

The literature reviewed in this chapter focuses on the major variables utilized in this study: age, and perception of two types of social support; emotional support and tangible aid. Literature concerning the study population, elderly females, and age differences will be included in the discussion. This chapter was written in collaboration with Smith Adams (1984).

Age and Individual Differences

The relationship between age and individual differences is important for understanding the later years of life and for development of methodologies appropriate for investigating the life span. Human development literature suggests repeatedly that there is increasing differentiation with age (Neugarten, 1973; Levinson, 1978; Troll, 1982).

More specifically, literature reviewed from the life-span perspective leads to claims that individual differences in life style and intellectual functioning that are observed in the middle years are accentuated in late life (Bromley, 1966; Havighurst, 1957; Riegel, 1971; Riegel, Riegel, and Meyer, 1967). Neugarten (1964) has argued that "within the social and cultural realms, we expect differences between individuals to be accentuated with time, as education, vocational, and social events accumulate, one after another, to create more and more differentiated sets of experiences from one person to the next."



Life span studies that have focused on comparative analysis of cohorts support this hypothesis of increasing differentiation with age, (Hill, 1970; Uhlenberg, 1974). As Hill (1970, p. 322) has stated, "each generational cohort encounters a unique set of historical constraints and incentives which influence the timing of its crucial life decisions, making for marked generational dissimilarities in life-cycle patterns."

In Hill's three-generation study of couples in the Minneapolis-St. Paul area, the middle generation offers striking documentation of this thesis. Couples in this middle "parent generation" (N = 95) actually represented two cohorts, who were defined by marriage in the 1920's and in the 1930's. These two cohorts were found to be sufficiently different in life course. For example, the pre-depression era couples produced larger numbers of children (mean = 4.1 versus 3.21 for couples who married after the depression) and had more diverse patterns in careers, childbearing and childrearing than the younger group. The heterogeneity of the older cohort is a dominant feature of Hill's analysis. Important insights were gained from this comparative data in terms of identifying how historical and cultural events result in different patterning of behaviors and life outcomes.

In keeping with ideas on differences in life course across cohorts, Uhlenberg (1974, 1969) conducted comparative studies on female cohorts. This classic research on life patterns of American women, white and non-white, was conducted with five birth cohorts from the years 1890-1894 to 1930-1934. Normative data, obtained from these

women, were their expectations of 1) becoming a wife, 2) bearing children, and 3) achieving a stable or intact marriage. This study made two significant contributions to the study of women and life course of cohorts. First, the study included mortality data. Since early death has declined during this century, a complete picture of cohort change, including mortality, was documented in the life patterns of these women. Second, a characterization of life course evolved that provided a description of relative prevalence of life paths followed by women across successive cohorts.

Studies such as Uhlenberg's provide a life span perspective on age differentiation which is expressed in the sequence of roles and events, social transitions, and turning points that depict the life course. From further study utilizing U.S. Census Bureau Statistics, Uhlenberg (1979) was able to provide a statistical profile of older women in 1970, with projections for the years 1980, 1990, and 2000 (see Table 1). Uhlenberg projects continued growth in the numbers of elderly women (over 19 million for the year 2000) and that older women will be increasingly better educated, have higher incomes, be native born and will not be living with a spouse. The importance of this statistical profile to the present study is that it, again 1) emphasizes the importance of focusing research on older females, because of their predominance in the old age groups, and 2) provides demographic evidence of differences within the older population.



Table 1. Profile of Older Women in the USA: 1970, 1980, 1990, 2000.

Characteristic	Year			
	1970	1980	1990	2000
Number (in thousands)				
65+	11,665	14,819	17,824	19,103
65-74	7,005	8,871	10,052	9,762
75+	4,660	6,038	7,772	9,341
Marital Status (percentages)				
65+ Married, spouse present	33.9	37.0 ^a	35.1	NA
Widowed, Divorced,	58.4	56.6	58.6	
Separated, Single	7.7	6.4	6.3	
65-74 Married, spouse present	43.5	47.3 ^a	46.1	
Widowed, Divorced,	48.7	46.6	47.1	
Separated, Single	7.8	6.3	6.8	
75+ Married, spouse present	19.1	20.3 ^a	20.2	NA
Widowed, Divorced,	73.4	73.1	74.2	
Separated, Single	7.5	6.6	5.7	
Educational Attainment				
65+ Median school yrs. completed	8.8	9.9	12.0	12.3
% high school graduates	30.1	38.9	49.9	56.9
Nativity Status (% dist.)				
65+ Foreign born	14.3	10.3	7.4	7.5
Native born	85.7	89.7	92.6	92.5
Income (% dist.)				
65+ Below poverty line	28.5	18.1 ^b	NA	NA
Employment (% dist.)				
65+ In labor force	9.7	8.1	7.6	NA
Mobility Limitations (% dist.)				
65+ No limitation	81.4 ^c	NA	NA	NA
Some limitations, not confined	13.3			
confined to house	5.3			

^aData refer to 1977.^bAssuming no change between 1975 and 1980^cDate refer to 1972

Sources: Derived from U.S. Census of Population, 1970, Characteristics of the Population; Current Population Reports: Series P-20 No. 323; Series P-23, No. 57 and No. 59 (Rev.); Series P-25, No. 704; Series P-60, No. 106, from Uhlenberg (1979), pg. 237.

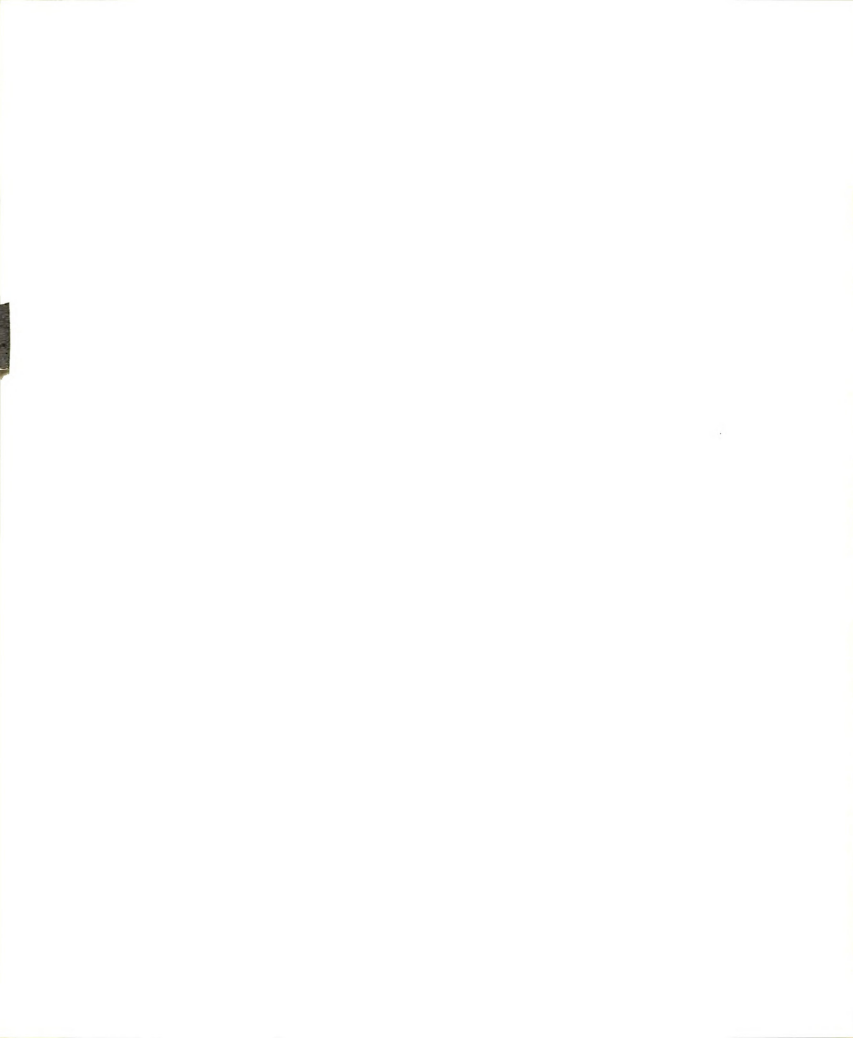
The impact of historical events, trends in life span patterns, and demographic statistics concerning cohorts are interesting ways to look at age differences, but, cohorts are somewhat arbitrarily defined and differences within traditional cohort categories have been demonstrated. In a discussion of individual differences in old age, Neugarten (1973) drew on sets of empirical studies she and her associates had conducted on large samples (no N reported) of middle-aged and older men and women living in two metropolitan areas of Kansas City or Chicago. In these studies differences in roles and activities, inner feelings and self concepts, and life satisfaction were examined. In addition to finding important sex differences with aging, i.e., men seem to become more receptive to affiliative and nurturant promptings; women more responsive to and less guilty about aggressive and egocentric impulses, Neugarten describes differences found within the cohort aged 70-79.

First, the majority of the cohort aged 70-79 were described by Neugarten as well functioning persons with intact cognitive abilities who were flexible, open to new stimuli, mellow and mature. The majority of this cohort reported high life satisfaction ratings. Differences within the 70-79 cohort emerged in role activity. One group was engaged in a wide variety of activities, substituting new activities for lost ones, e.g., giving time to community affairs, church or other associations when they retired from work. A second group within the cohort showed medium levels of activity. They had become more selective in their activities and devoted energy to one or two role areas. A third group demonstrated low activity. These were persons who voluntarily moved away from role commitments, not

in response to external losses or physical deficits, but out of personal preference. They were self-directed persons with interests in the world, but interests that were not embedded in a network of social interactions. Therefore, within this cohort, three subgroups were identified as having very different role activity levels. As activity levels and relationships certainly affect social support (or vice versa), one can see that using cohorts to define elderly age categories may not provide adequate delineation of age.

A second major category of personality type was differentiated within the 70-79 cohort. Individuals in this group were described by Neugarten (1973) as striving, ambitious, achievement oriented persons, with high defenses against anxiety and a need to maintain tight control over their lives. This group demonstrated two patterns of aging. The first subgroup was composed of people who felt aging as a threat and responded by trying to maintain patterns of middle-age. They were successful in their attempts and reported high life satisfaction with medium or high activity levels. The second subgroup noted, was composed of people busily defending themselves against aging, preoccupied with losses and deficits and thus decreasing their social interactions and energy by closing themselves off from others.

Finally, a group of unintegrated persons emerged, within this 70-79 cohort, who showed a disorganized pattern of aging. They had psychological deficits, loss of control over emotions, and deterioration in thought processes. They were maintaining themselves in the community but had both low role activity and life satisfaction. In



summary, from Neugarten's description of these studies, the diversity and variation among seventy-year olds, at least in role activity, and patterns of aging, is impressive and lends support to further study of aging and individual differences.

Maddox and Douglass (1974), state that the literature reflects uncertainty on the issue of differentiation. The uncertainty persists because substantive differences in theory exist about human development and change, as well as lack of reliable data to adequately test the competing hypothesis of de-differentiation in later life. Literature on psychological functioning in late life, however, suggests that individual differences increase (Botwinick & Thompson, 1969; Comfort, 1969; Orbrist, 1953). Dispersion of scores on a variety of psychological indicators increases over time for cohorts of older persons, apparently because some persons have maintained their earlier performance level while others have declined because of decremental aging effects.

In the study done by Botwinick & Thompson (1968) individual differences in reaction time, in relation to age, were examined using data from a previous study ($N = 88$). Forty-four men and women aged 18 to 35 years, and an equal number of men and women aged 60 to 87 years were analyzed for auditory reaction time at preparatory intervals varying from one to two seconds. Trials were run as regular and irregular series. The preparatory interval was defined as that interval of time between an alerting, warning signal and a stimulus response. With regular series and within irregular series, reaction time variances, associated with each of the four preparatory

tory interval conditions, were computed for the elderly and younger persons. In addition, these variances were computed for the four age and sex subgroups. The F-ratios associated with age (larger variances divided by smaller variances) were computed and examined for statistical significance, using the one-tailed probability levels given in the F-distribution tables. In all instances the variance of the older groups were larger than corresponding variances of the younger groups, and in all but one instance the F-ratios were statistically significant. These overall results demonstrated that the generalization regarding increased individual differences with increased age holds for reaction times. One particular problem with the Botwinick & Thompson study is that conclusions of increased personal, as well as group, variability in auditory reaction time were based on cross-sectional data. As Maddox and Douglass (1974) have pointed out, cross-sectional data may not make a clear distinction between age differences and age changes. Therefore, the precise effect of such intra-individual variability on the assessment of individual differences within a group is unknown because relevant data are lacking.

Maddox and Douglas (1974), delineated several methodological problems that have potentiated lack of resolve on the issue of aging and individual differences. These methodological problems will be discussed here:

1. Cross-sectional data sets. Most of the studies on aging and individuals have used cross-sectional data and have not made a clear distinction between age differences and age changes.

Longitudinal examinations of individual differences are needed to determine age changes. Optimal, definitive tests of the hypotheses regarding variability in older persons will require both cross-sectional and longitudinal studies.

2. Selective survival. Selective mortality confounds tests of variability over time. The effects of death and subject loss on the composition of a panel must be considered and taken into account when studying relationships between aging and individual differences.
3. Sampling bias. Less able persons in a population often refuse re-testing, as well as initial testing. This is particularly true among the elderly population. Such bias can produce artifactual differences in observed variability (Riegel et al., 1967).
4. Terminal drop or rapid change. A phenomena of rapid change has been noted in social, psychological, and physiological functioning just prior to death and this could account for individual differences. In studying elderly persons across a wide age range, the sample is likely to include both elite survivors and an undetermined number of persons who may be experiencing this rapid change before death. Both could affect variability, although Maddox and Douglass state this is a matter of conjecture.
5. Sex differences. There has been much debate in the literature about whether differentiation by sex increases with age (Cameron, 1968; Neugarten, 1965; Palmore, 1968). Sex differences need to be studied more and research on variability should be designed

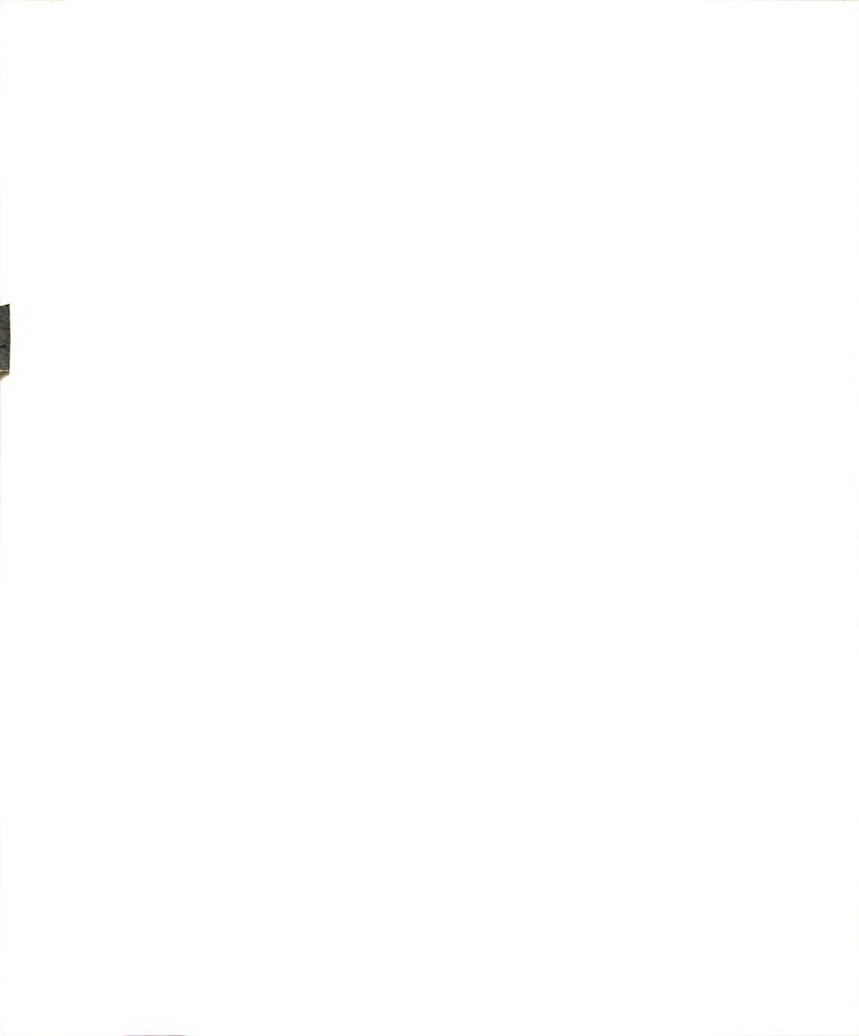
to anticipate the dissimilar patterns that males and females may exhibit.

Another consideration in age differences, proposed by Maddox and Douglas, is that distinction should be made between the young-old, and the old-old, as variability and dissimilar patterns may be expected. Concerning the issue of age differentiation, a classical study was proposed by Maddox and Douglas (1974) in which two hypothesis were tested. 1) Individual differences do not decrease with age, i.e., variability on a variety of indicators is at least maintained, if not increased, in late life, and 2) Individuals tend to maintain the same rank on a variety of indicators, in relation to age peers, throughout the later years of life.

Maddox and Douglass (1974) employed data from a continuing longitudinal investigation of human functioning at Duke University to examine age differences in social, psychological, and physiological parameters. From the broader study, specific indicators of variability in individual differences were chosen for study. The sample (N = 106) was composed of current survivors from an original sample of 271 persons which initially ranged from 60 to 94 years of age (mean age = 70). Six different sets of data from 13 years of observation were used to measure and compare the variability observed among non-survivors, as well as survivors, from the original sample of 271 persons. The first hypothesis was tested using Pitman's (1939) test for correlated variances and the second hypothesis was

tested by the Spearman rank order correlation. Nineteen social, psychological and physiological measures were considered in this study, from a battery of hundreds of measures covering a wide range of interdisciplinary variables, utilized in the original study. The researchers were able to conclude that when mortality and other losses within the sample were controlled, the observed variability of all measures tended to remain stable through time. In some instances there were significant increases in individual differences. Increased individual differences in variability were shown not to be the result of increased personal variability or stability, confirming the first hypothesis. Second, the range of observed individual differences was maintained and, within the rank ordering, the range of differences remained relatively constant confirming the second hypothesis.

The strength of the Maddox and Douglass study is in the methodology. First, the design was longitudinal and thus more likely to make a clearer distinction between age differences and age changes. Second, the study dealt with selective survival, and by means of statistical analysis the authors were able to infer that the reported decrease in variance with age is usually an artifact of sampling. Third, an attempt was made to distinguish between variability in individual differences, and personal variability. Fourth, analysis was made of the data separately for males and females, young-old, and old-old individuals. In this sample there was no variability on the 19 variables for either sex or age differences.



In evaluating age as a variable, Seelbach and Hansen (1980), report significant differences between the young-old, and the old-old, on satisfaction with various aspects of family relations. They examined the responses of 160 institutionalized, and 207 community dwelling elderly to 6 survey statements regarding satisfaction with family relations and cross tabulated results with age (young-old defined for their study as less than or equal to 80 years, old-old greater than or = 81 years of age) as well as marital status, health, living arrangements and gender. Although the study design could be criticized on a number of points (severe restriction of range, lack of reported r values and the validity of the instrument) the consistent finding of significant differences within an elderly group supports the concept of heterogeneity among the elderly and demonstrates age differences in variables closely related to a social support (i.e., family relations, marital status, etc.).

The studies selected for this discussion on age and individual differences were well-designed with generally large samples to support the findings. With the exception of the Maddox and Douglass study, however, all had a common limitation in the analysis, i.e., none of the authors reported that the confounding factors of selective survival and sampling bias had been controlled. Although none of the studies were designed to evaluate age differences and social support, the findings in the literature presented certainly support the concept of increasing diversity with age.

In summary, there is a lack of recent research and comparative data to formulate conclusions about age differences in general, and

specifically about differences that are unique to aging individuals. From the literature presented here, however, there appears to be considerable rationale for expecting age differences, and ample need for investigation in this area. Factors leading one to expect age differences include: the impact of historical events on individuals (cohort groups), life span patterns changing over time; demographic shifts, population trends, and the social psychological and physiological changes with aging. The need for continued research in this area is widely acknowledged. Although age stratification is not at issue in the present study, one need not dismiss the writings of more recent authors in age stratification theory (Atchley, 1980; Decker, 1980; Cockerham et al., 1983), who recognize that age-specific behavior must be more fully understood and that relationships among members of the same age group and between age groups must be studied. Differences in perception of two types of social support within and between two groups of elderly women is the focus of this study. The literature on the variable of social support will now be reviewed.

Social Support

The review of the literature on social support will begin with a discussion of problems in conceptualizing and operationalizing this complex variable. Then, two classical reviews by John Cassel and Gerald Caplan will be presented, as their research gave impetus to current inquiries on the nature of social support. Then the rationale for examining two aspects of social support, emotional support and tangible aid will be reviewed and the literature on those variables examined.

Problems in Conceptualization and Operationalization

A number of studies have examined the role of support in buffering or mediating the physical or psychological impacts of life events (Cobb and Kasl, 1977; Dean et al., 1980; Gore, 1978; Nuckolls et al., 1972; Walker et al., 1977). Although the results of these studies are generally consistent with the buffering hypothesis, there have been few attempts to formulate precise conceptual definitions of social support. Without consistent and precise definitions of the concept, even the impressive amount of evidence that is accumulating to support the hypothesized relationship between social support and the buffering of stressful life events, is called into question. For example, Schaefer et al. (1981) emphasize that there may be a confounding of variables in using life events to measure stress as it relates to social support. Many of the heavily weighted items on life event lists have to do with probable loss of social support, i.e., death, divorce, loss of job, etc., and as a result, what may be seen as low support may actually be the effects of loss.

The above example of confounding is but one area of uncertainty in evaluating studies on social support. Indeed, some of the most frequently cited studies treat social network, psychosocial assets, and perceived social support as interchangeable concepts, which suggests even a more basic confusion about the nature of social support (Schaefer, et al, 1981). Schaefer et al. emphasize the distinction that must be made between the number of relationships a person has (social network) and the person's perception of the supportive value of social interaction (perceived social support).

According to Schaefer and her colleagues, two questionable assumptions are made when social network size is used to indicate the benefits of social relationships. The first is that any benefits are directly proportional to the size and range of the network and, the second is that having a relationship is equivalent to getting support.

Schaefer and her colleagues emphasize that there must be clear conceptual delineation of what social support is, and, reliable and valid ways to measure it which are consistent with the definition of the concept. Few researchers have attempted to develop valid or reliable indicators of the concept of social support (Thoits, 1982). Operationalization of the concept depends on measures which can distinguish between the dimensions, or types of support.

Cobb (1976) for example, suggests that support be defined as information leading the subject to believe that (1) he/she is cared for and loved, (2) he/she is esteemed and valued, and (3) he/she belongs to a network of communication and mutual obligation. This definition appears to be limited only to emotional support and neglects the concept of tangible aid obtained from others. Although the definition has implications for operationalization, it does not adequately delineate the concept. Kaplan et al. (1977) proposed a general statement: Support is the degree to which an individual's needs for affection, approval, belonging, and security are met by significant others. While this definition could be operationalized, its value in research would depend on development of measureable indicators of the concepts: affection, approval, belonging and security (Thoits, 1982).



The conceptual problem in defining social support ultimately relates to the multidimensional aspects of the concept. Several researchers assert that support is multidimensional (Dean and Lin, 1977; Hammer, 1981; House, 1981; Walker et al., 1977), however, few studies have operationally distinguished the dimensions of support measured. A related problem is the lack of consistency in specific measures used, that make it difficult to compare results across studies or to resolve conflicting findings. The problems in conceptualization and operationalization outlined in this section influence the conclusions that can be drawn from studies and must be considered in the following section.

Development of the Concept of Social Support

In the early 1970's John Cassel, an epidemiologist, and Gerald Caplan, a social psychiatrist, contributed seminal papers on the nature and public health implications of social support (Cassel, 1974; Caplan, 1974). Cassel's early thinking about the relationship between "psychosocial processes" and stress was presented in a paper devoted to discussion of the contradictory research findings on the health consequences of urban life (Cassel, 1974). Cassel's fundamental area of concern was how environmental conditions such as crowding, inadequate housing, and deteriorating neighborhoods exercised ill effects on people. These effects had been demonstrated by a series of studies which linked environmental conditions to higher infant mortality rates, and higher incidents of tuberculosis and gastrointestinal disease. Cassel posed the question of why some persons

fall victim to environmental conditions while others are unaffected. He hypothesized that changes in the immediate social environment are capable of altering people's resistance to disease. Cassel was able to identify a general category of psychosocial processes which he designated as health-protective. He loosely referred to these processes as involving "the strength of the social supports provided by the primary groups of most importance to the individual (Cassel, 1974, p. 478). It can be noted here that Cassel did not operationalize the social support construct, but instead cited a diverse series of studies to illustrate his meaning. To summarize, Cassel's main legacy rests on two lines of ecological inquiry, 1) inquiries devoted to analyzing how people's interactions with the social environment change their vulnerability to illness, and 2) how social forces can be mobilized in these situations for the sake of health protection.

Caplan, led by Cassel's theoretical formulations, developed an elaborate scheme for classifying types of social support systems. He outlined a variety of activities that community mental health workers could pursue, both to initiate and to stimulate the development of supportive attachments in their local areas. In an often cited quotation Caplan identified three major contributions of significant others to a person's well-being; "The significant others help the individual mobilize his/her psychological resources and master his/her emotional burdens; they share his/her tasks; and they supply him/her with extra supplies of money, materials, tools, skills, and cognitive guidance to improve the handling of his/her situation" (Caplan, 1974. p.6). Again, Caplan did not operationalize the

dimensions of the concept but began to focus on types of support. Inherent in Caplan's writings on the contributions of significant others, are two types of social support; emotional support and tangible aid. Wallston et al. (1983), in reviewing studies concerning social support and physical health, emphasize the dichotomous nature of support.

Wallston states that most conceptualizations of social support can be placed along two primary dimensions; 1) quantitative versus qualitative and 2) instrumental versus expressive support. Quantitative refers to support operationalized in terms of amount measures, such as frequency of contacts or number of people an individual interacts with. Qualitative refers to support operationalized as "goodness" measures such as perceptions about the adequacy of support received (Donald et al., 1978). Qualitative measures and Wallston's second dimension of social support conceptualization, instrumental versus expressive support, was of major importance to operationalizing social support for this study. Instrumental support refers to the provision of material aid and information, what we label tangible aid. Expressive support includes serving as a confidant and providing acceptance and understanding (Lin, Dean, and Ensel, 1981), or what we label "emotional support."

Another dimension of support is delineated by Pinneau's (1975) definition of social support as the provision of assistance, information, or emotional support. Identifying information as separate from emotional support or tangible aid may be "splitting hairs." As Schaefer et al. (1981) found, indices of emotional and informational



support were highly correlated, whereas their measure of tangible support was quite distinct. This finding would suggest that the indices of emotional and informational support were measuring the same construct.

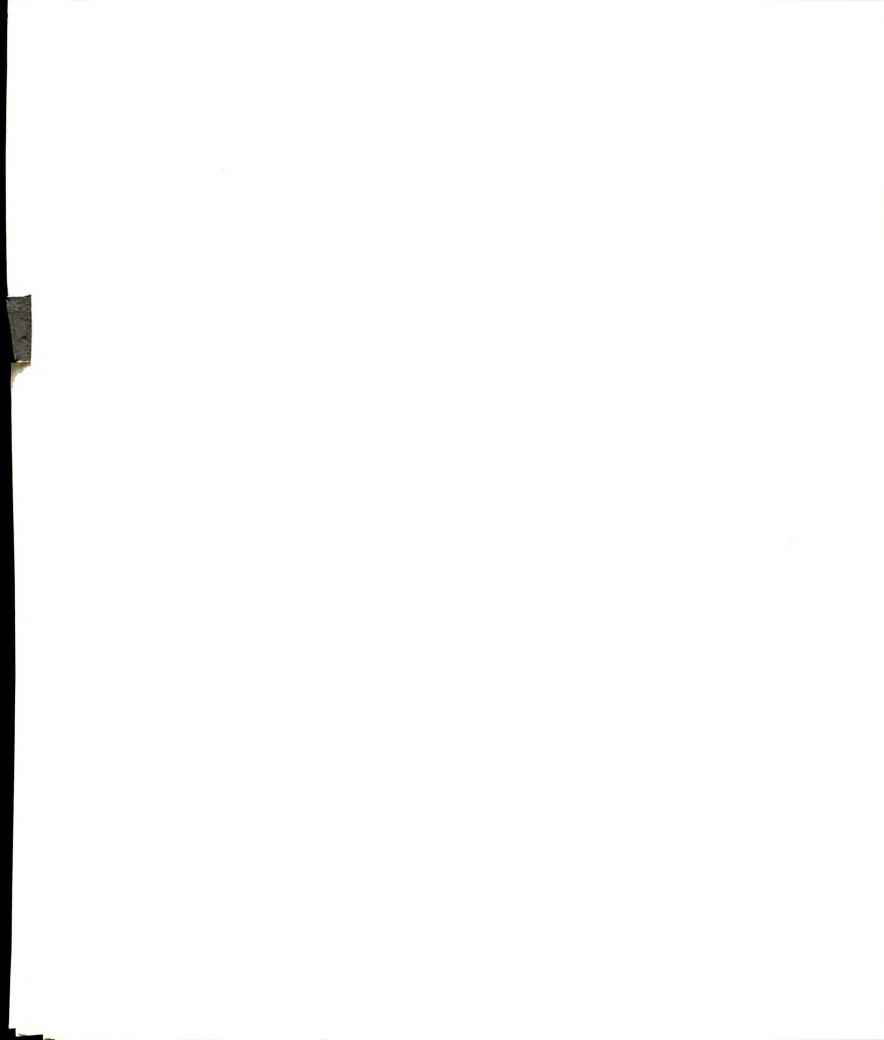
Although the dichotomy of social support as emotional support and tangible aid is not routinely delineated in research studies, categorizing support into these two variables provides a logical method for studying support, and reviewing the related literature. While one must recognize that the concepts of emotional support and tangible aid may overlap (for example, tangible aid may be emotionally supportive if it is seen as a caring act, rather than an obligation), it should be obvious that both types of support are essential to elderly persons. The next two sections will be organized according to emotional support and tangible aid and studies with elderly populations will be examined closely.

Perceived Emotional Support

Comparison of studies which attempt to measure some aspect of emotional support demonstrate the problems in conceptualizing and measuring social support. Lowenthal and Haven (1968) studied 280 sample survivors from a panel study of elderly community residents to evaluate intimacy as a critical variable in interaction and adaptation among the aged. The parent sample consisted of 600 persons aged 60 and older, drawn on a stratified-random basis from 18 census tracts in San Francisco. The analysis of intimacy rested largely on responses to the question: "Is there anyone in particular you confide in or

talk to about yourself or your problems?" Therefore, the variable under study, intimacy, was measured by the presence or absence of a confidant (in the present study, one component of emotional support is the ability/opportunity to confide). In Lowenthal & Haven's study, psychiatric status, role status, social interaction, opinion of own age and morale were used as indicators of adaptation. With data collected over three interviews at approximately annual intervals, Lowenthal and Haven demonstrated that maintenance of a stable intimate relationship is more closely associated with good mental health and high morale than is high social interaction and role status, or stability in interaction and role. The loss of a confidant had a more deleterious effect on morale, though not on mental health status, than a reduction in either role status or social interaction. Lowenthal and Haven also observed that in the youngest age group (60 to 64 years), nearly half again as many women as men reported an intimate companion. Although Lowenthal and Haven's study could be criticized on the lack of any qualitative measure for assessing the confidant relationship, and on minor points like not reporting the exact intervals at which data were collected, overall, the study was well-designed and an important initial step in describing aspects of social support.

From Lowenthal and Haven's classical research study, selected findings are pertinent to the present study in two ways. First, in demonstrating that the presence of an intimate relationship serves as a buffer both against gradual social losses in role and interaction and against the more traumatic losses accompanying widowhood and retirement, Lowenthal and Haven show the important role of emotional



support in the lives of older people. In our study, emotional support implies the ability to confide, so to examine the concept of intimacy as an indicator of emotional support is not inconsistent. Second, the findings related to sex differences, with women more likely to report close confidant relationships, support the rationale for gender separation to reduce confounding variables in studying aspects of emotional support.

Fuller and Larson (1980) studied a sample of 50 older community residents who seemed likely to have experienced recent life changes as evidenced by relocation to a newly constructed senior high rise apartment building in a small Western Illinois city. The sample was drawn randomly from 100 residents, but under the constraint of maintaining a representative proportion of men (7 men, 43 women). The ages of study subjects ranged from 51 to 89 years, with a mean age of 69.4 years. Fuller and Larson employed multiple-regression/correlation analyses, using a hierarchical model, to examine the effects of life events, emotional support, interaction of life events and emotional support, and age, on the variables of functional health, distress resulting from chronic health problems, three dimensions of morale (agitation, attitude toward own aging, and lonely dissatisfaction), and the combined morale index.

In Fuller and Larson's study, emotional support was measured on a 10 point scale which was developed by empirically selecting responses by graduate students in nursing and people in non-health related professions to the question: "What kinds of things do people do to show another person emotional support?" "Listen to you," "spend time with

you," and "try to lift your spirits," are examples of resulting items that were then embedded in questions such as: "During the past year, how common has it been for other people, like friends or relatives, to show their interest in you?"

Although emotional support was found to have a positive effect on morale on the lonely dissatisfaction dimension, Fuller and Larson state that "the results clearly indicate that no general statement about the effects of life events and emotional support on the physical and psychological health of older people in the study would be appropriate." Fuller and Larson's study can be criticized on utilizing a "shotgun" approach to evaluating the relationship to life events, emotional support and a number of health variables. In other words it would appear that Fuller and Larson took a number of variables, without exploring all the confounding factors, employed a sophisticated multiple regression analyses and hoped that relationships would be demonstrated. Whereas this type of study would be useful after the concept of social support is delineated more clearly and studies on specific aspects are completed, for the present study, the inconclusive results from Fuller and Larson's elaborate analysis serve only to demonstrate the complexity and problems of measuring emotional support.

In a relatively simple, but logical, methodology, Babchuk (1978-79) investigated primary relations among his sample of 800 non-institutionalized adults (45 years of age and older), residing in Lincoln and Omaha, Nebraska. Based on his previous work, Babchuk chose to seek a complete enumeration of all primary ties in an aging population. To accomplish this, Babchuk examined two networks which he asserts

incorporate all primary resources: the network of very close kinsmen and very close friends. The primary ties in these networks were of four types: primary relative, confidant relative, primary friend, and confidant friend. Respondents were asked to name all their relatives and then to identify those who were very close (emotionally close); these were designated as primary relatives. Among these primary relatives subjects were asked to identify those who served as confidants; these were labeled confidant relatives. A parallel procedure was completed for the friendship network of individuals in the sample.

The opportunity to confide is a component of emotional support, by examining selected results of the Babchuk study, we can obtain a profile of resources for emotional support in an aging sample. The results support a view of older Americans as not isolated from family. Only 30 of the 800 respondents were isolated from kinsmen; most of the remaining 770 identified several primary relatives (mean number 5.6, mode 4.0). In comparison, 117 of the 800 respondents lacked primary ties with friends (mean number 4.2, mode 2.0).

Significant differences were found between younger (under 55) and older (above 55) respondents having relatives as confidants. Fewer of the younger individuals lacked at least one confidant relative and a greater percentage functioned on a confidant basis with six or more relatives. Age was significant in considering primary and confidant friends, with age 70 appearing as a turning point, i.e., more than one in five persons above age 70 were without a primary friend, as compared to about half that below age 70. Considering confidant friends, a

turning point in the sample appeared at age 65. These results showed clearly that those who were older had fewer resources than those who were younger.

There were significant sex differences found in the number of confidant relatives. A greater proportion of men in the sample (25.1%) than women (11.6%) listed only one individual as a confidant relative and a substantially greater proportion of women (20.4%) as compared to men (1.5%) listed six or more relatives as confidants. In examining Babchuk's study as a study of social support, it could be criticized on making the assumption that number of relationships equal support. For the factors Babchuk set out to examine (age and primary relations) however, the study was well-designed and serves an important role in beginning to define factors in social support for the elderly that must be evaluated further.

Findings from the Babchuk study on age and sex differences in an aging population have implications for the present study. First, these results support the idea of expected age differences in perceived emotional support and second, the significant findings in sex differences provide rationale for restricting the study population by gender.

In examining the impact of late-life depression on the social network, Blazer (1983) studied an initial sample of 331 persons 65 years of age and over who were assessed for the presence of symptoms of a major depressive disorder and the availability of adequate social support. Thirty months later a subset of that sample ($n = 275$) was contacted by telephone for follow-up. Social support was reassessed at that time.

Blazer's findings indicated that older adults with symptoms of depression are more likely to be members of a non-supportive social network at a given point in time. Data from the follow-up, however, suggest that these individuals do not suffer a relative decrease in social support over time, when compared to the nondepressed. Blazer states, in fact, that the likelihood of demonstrating improvement in social support was 2.62 times greater for the depressed than the non-depressed, although both groups showed improvement at follow-up. Blazer measured support from the subject's perspective and greater emphasis was placed on the quantitative aspects of support. Blazer did not clearly identify the questions he used in data collection and, again, the conceptual and methodological problems in measuring support make it difficult to compare studies.

Schafer et al. (1981), studied 100 persons 45 to 64 years of age to examine the health-related functions of social support. The study sample was drawn from participants in a previous population survey of Alameda County, California, by the California State Health Department. Schaefer compared social network size and three types of perceived social support; tangible, emotional, and informational, in relation to stressful life events, psychological symptoms and morale. Among other results, Schaefer was able to demonstrate that low, tangible support and emotional support were independently related to depression and negative morale. This study is notable because of the delineation of social support into components; tangible, emotional and informational support.

Although the study populations utilized by Gore (1978) and Nuckolls et al. (1972) were not elderly, this work deserves brief review in this section. Both studies were well-designed. For example, Gore maximized a unique opportunity to study unemployed subjects and included objective measures of health, i.e., blood tests. Nuckolls et al. also included objective outcome measures to demonstrate the relationship between support and health outcomes.

In her study, Gore examined data from a population of 100 men who were involuntarily unemployed as a result of a plant shut down to determine differences between those with high social support from spouse, family and friends and those with low support. Results showed that, while unemployed, the unsupported evidenced significantly higher elevations and more changes in measures of cholesterol, illness symptoms and effective response than did the supported.

Nuckolls et al. examined data obtained from 170 primiparous women, to determine the role of psychosocial assets and life changes on the outcome of pregnancy. The measure of psychosocial assets contained elements of emotional support, so the findings; that 91 percent of the women with high life change scores but low asset scores had one or more complications, whereas only 33 percent of women with an equally high life change score but with a high asset score had any complications, are pertinent to illustrate the health protective effect that social support is thought to provide.

The studies by Gore & Nuckolls serve to point out that empirical evidence on the important role of social support is available, and, that well-designed studies such as these, need to be completed on

elderly samples. In this section literature on one dimension of social support, i.e., perceived emotional support, has been reviewed. The following section examines the literature relating to perceived tangible aid.

Perceived Tangible Aid

Branch and Jette (1983), examined data from a unique survivor sample of very old (71 to 97 years of age) people living in a community in Massachusetts. The data came from the third wave of the Massachusetts Health Care Panel Study (Branch, 1977), a longitudinal investigation of the health and social needs of the non-institutionalized elderly. Through personal interviews with 825 survivors of the original panel of 1,625, non-institutionalized elders, Branch and Jette investigated the extent to which subjects used long term care (LTC) assistance to help maintain themselves in the community. The informal support network of subjects was studied as a source of LTC assistance.

The use of LTC assistance, both formal (from governmental, voluntary service agencies or health care providers) and informal (from family, friends or neighbors), was examined in 11 different activities of daily living (ADL). These ADL were divided into two categories: basic ADL - assistance in walking, transfer, dressing, bathing, eating, and grooming; and instrumental ADL - assistance in housekeeping, transportation, food preparation, grocery shopping and personal business affairs. Branch and Jette found that over 80% of the sample were entirely self-sufficient in performing basic ADL, but that 82% of the sample used some form of LTC assistance to perform instrumental ADL.

Women were more likely than men to use help for basic ADL. Men used more LTC assistance than women in instrumental areas. The proportion using assistance in ADL increased with age. The overwhelming majority (68%) of elders using assistance with instrumental ADL relied only on informal sources, (Branch and Jette, 1983).

The importance of Branch and Jette's study to this work is that it emphasizes the important role of the tangible aid dimension of social support in the daily lives of non-institutionalized elderly. Branch and Jette also demonstrate that the need for tangible aid, or rather, the use of tangible aid to perform ADL increases with age, and that the women in the sample used this type of support differently than the men. Two additional studies by Branch and Jette support these findings.

In the first of these studies, 2,654 individuals, aged 55 to 84 years, from the original Framingham cohort (94% of the potential participant pool), were interviewed in person or by telephone to evaluate physical disability among the non-institutionalized elderly (Jette and Branch, 1981). The Framingham Disability Study (FDS) is a recent component of the well respected Heart Disease Epidemiological Study in Framingham, Massachusetts. Prevalence of physical disability among the study subjects was evaluated, first by the respondent's ability to independently perform 6 activities of daily living (ADL). Gender, age and age specific gender comparisons were reported and statistical significance was tested by chi-square. The six ADL were grooming, bathing, walking across a small room, transfer from bed to chair, dressing, and eating. Almost all of the study subjects were able to perform these 6 ADL without assistance. For all activities except

eating, the 75-84 year old group was significantly more likely to use help in doing the activity, compared to their younger counterparts. Nevertheless, over 90 percent of the 75-84 year old group was still independent in these six ADLs.

The ability to perform three gross mobility activities - heavy housework, walking 1/2 mile, and climbing stairs - was found to be significantly related to age. Only half of those individuals aged 75 to 84 years were able to perform heavy household work, compared to 79% of those individuals aged 55 to 64 years. In the 75 to 84 year old group, 77% were able to walk a half mile, compared to 96% of the youngest age group (55 to 64). Eighty-five percent of individuals 75 to 84 years of age reported that they could climb stairs, compared to 96% of those 55 to 64 years of age. With few exceptions, these data reveal a consistent increase in physical disability with advancing age. The data also support an observation that women appear to be more disabled than men, although in basic ADL's, i.e, grooming, bathing, transferring, etc., women are no more likely than men to report functional limitations. Most gender differences were significant within each age cohort.

Recognizing the unique character of this Framingham cohort, Jette and Branch compared point estimates of physical disability obtained from the Framingham group to Branch's (1976) Massachusetts Health Care Panel Study participants. The two study populations were found to be quite similar in reported level of physical disability. The few differences that emerged suggested that the Framingham cohort was somewhat less disabled than the Massachusetts sample, a finding which

Branch and Jette attribute to the unique character of the Framingham cohort and the effect of ongoing health research for that sample.

In another part of the FDS, using the same sample as described for physical disability, Branch and Jette (1981) report on social disability among the aging. Social disability was defined for the study as limitation in performing, or inability to perform, social roles or obligations. The data on social disability prevalence depict the FDS cohort of aging adults as adequately performing five essential social tasks: housekeeping, transportation, social interaction, food preparation, and grocery shopping. Only 6% of the cohort have unmet needs in one or more of these areas. One-fourth, however, is at high risk for developing an unmet social need in one or more areas.

The data from Branch & Jette's social disability study support two observations. First, it reveals the well known increase in percentages of people needing, or at risk of needing assistance to perform their social roles as a function of increasing age. Housekeeping was the area shown to have the largest age-related increase in unmet need. Twenty-five percent of the 75 to 84 year old cohort, compared with 15% of the 55 to 64 year old cohort, were at risk of or had an unmet housekeeping need. The second observation is that women had more unmet housekeeping and transportation needs and were at greater risk for developing unmet needs in these areas than men. This significant gender difference was found within each age cohort, and is not unexpected as it is logical that men are unlikely to be involved in housework.



Results of the FDS on physical and social disabilities are relevant to this study in three ways. First, in depicting the prevalence of disability among non-institutionalized elderly, the role of tangible support in maintaining independence becomes clear. Certainly the findings support a view of the elderly sample as adequately meeting the demands of living independently but, one cannot ignore the many avenues open to provision of tangible support in ADL. The second point, that with increasing age more people have unmet support needs or are at increased risk of developing them, lends support to the need for more research on age differences. The third point, the observation that women are more likely to have unmet needs or at greater risk of developing them, supports the need to focus research on the aging female.

The three studies reported above were all well-designed works with large study samples to support the conclusions. All three employed a survey approach to data collection. The next study, by Wentowski, employed in-depth interviews and participant observation to study aspects of support networks in an elderly sample.

The presence or absence of an informal support network has been recognized as a crucial predictor of the well-being and autonomy of older people (Brody et al., 1978). From a study population composed of 50 older Americans (age range 55 to 83; mean age 71 years) who lived in 3 Southern, urban communities, Wentowski (1981), describes the "helping out" function of informal support networks among the elderly.

For all but a few of the older people observed, the networks are a major source of reliable help. Support in these networks revolves around the provision of goods and services that contribute to the daily management of households. People share all kinds of routine daily tasks and problems, such as cleaning house, preparing meals, making repairs, doing yard work, and providing transportation to and from needed services. Swapping and sharing makes households interdependent. The networks distribute goods and services between households, according to need. The networks also provide social and emotional support; a number of customs such as daily telephone calls, let members know that they are cared for by others and provide a continual monitoring of physical and emotional state. Times of crisis or special stress, such as death of a loved one or an illness, bring intensified support from the network (pg. 601).

Wentowski's description of informal support networks clearly emphasizes the component of tangible aid in supportive relationships. In her preliminary fieldwork, Wentowski also discovered an exchange system of great complexity. The exchanges of supportive assistance were directed by cultural rules. Cultural rules are a set of shared instructions for putting together elements of behavior (Spradley, 1972). Wentowski's examination of the use of cultural rules governing reciprocity to build exchange networks among elderly persons, provides a fascinating perspective on supportive relationships in general.

In describing important supportive relationships outside of the family system, Wentowski emphasizes that regular exchange is particularly important in defining the responsibility of non-kin for one another. Eighty-two percent of persons in Wentowski's study population reported having "good" friends outside the neighborhood. Sixty percent had "close" and "best" friends, who are involved in a number of functions important to daily living. A majority had helpful contacts with neighbors; 64% reported having "friends in the neighborhood," and 56% reported having "speaking neighbors" with whom they swap and



exchange. Neighbors are especially responsive in situations involving daily observation, such as checking up on a sick person; because of their proximity (Wentowski, 1981).

Wentowski's study is notable in several ways. First, the anthropologic method used, i.e., preliminary fieldwork in establishing trusting relationships to allow for formal fieldwork, (combining in-depth interviewing and participant observation), yielded a rich, in-depth perspective on supportive relationships among the elderly. This in-depth examination included descriptions of the specific exchange mechanisms through which support is elicited by older people, and how this support is developed over time. Wentowski's observations also highlighted the importance of reciprocity as essential to the self esteem and pride of elderly people. Second, the crucial role of tangible aid was demonstrated in observations of daily life patterns among the elderly. And finally, the importance of the non-kin network in the provision of tangible aid was demonstrated. The points on Wentowski's methodology and the reciprocal nature of exchanges, indicate the need to recognize the superficiality of studying support by a survey instrument. Certainly valuable information can be obtained by the method as well, but one must see implications in studying only one side of support relationships, at one point in time. Implications include issues such as whether the richness in human relationships can be adequately assessed by survey, and whether support measured at only one point in time can provide a true picture of available support. Use of survey instruments, without additional measures to validate responses of subjects, only measure one side of a reciprocal relationship.

In summary, tangible aid, as perceived by elderly subjects in a number of studies, was shown to have daily importance in maintenance of independence and ongoing relationships. Tangible aid clearly plays a crucial role in the lives of older people. In both of the preceding sections studies were presented that generally were well designed, with few limitations in methodology. A major overall problem in the literature on social support is that there is a lack of consistency in definitions of social support, which makes it difficult to compare results. The diversity of variables related to social support, methods used to study concepts and interpretation of findings should be evident from this review.

Summary

In this chapter, literature relating to the study variables: age and age differences, perceived emotional support, and perceived tangible aid has been reviewed. Particularly in the studies which examined some aspect of social support, lack of agreement on conceptual definitions and measurement strategies made it difficult to compare the literature. Individually, authors of the studies cited, were consistent in attempting to measure their concept of social support. Taken as a whole, however, studies in the literature on social support demonstrate clearly that the "state-of-the-art" in the field of social support research is still far from providing consistent, comparable results. A major factor in this lack of consistency appears to be the lack of agreement on what dimensions of social support are important. In this chapter evidence has been presented which supports the idea of

the elderly as a group to whom social support (of two types: emotional and tangible) is crucial in daily living. For this chapter, an extensive computer search of psychology, sociology, and the family resources database was completed. It is our belief that the literature cited is representative of the material available on social support, age differences and elderly females. The next chapter will contain a description of the methodology employed in this study, and literature supporting the use of the data collection instrument.

CHAPTER IV

METHODOLOGY AND PROCEDURE

Introduction

In this chapter the methodology for this study, research questions, operational definitions, data collection instrument, procedures and data analysis design will be presented. The chapter will begin with a discussion of the methodology for the larger study from which the data for this thesis were obtained. After a discussion of the Norbeck Social Support Questionnaire (NSSQ), procedures specific to the sample selection and data collection for this study are presented.

Design

This section describes the research design for a preliminary test of seven instruments utilized in a larger general study, (Active Participation: Health Care for the Elderly), directed by B. Given and funded through a university supported research grant. The purpose of the original study was to evaluate the quality of psychosocial measures when applied to an elderly population and to test the reliability and validity of measures of social support, self-esteem, and social stress upon active participation of the elderly in the management of their chronic disease. The seven instruments used in this study measured active participation, health habits, life events, self-esteem, medicine usage, social abilities, and social interaction. A socio-demographic questionnaire was also administered.

A survey approach was used to pretest the seven instruments on a volunteer sample of elderly persons. The last instrument completed

by elderly subjects was the Norbeck Social Support Questionnaire (NSSQ). From the data collected in response to five items on the NSSQ, two theses are proposed to study differences in the mean values of perceived emotional support received, and tangible aid perceived to be available within a group of women aged 65 to 74 (Sefton Cojocel), and within a group of women aged 75 to 89 (Smith Adams). The methodology used in both studies is identical but data will be analyzed separately for each age group. In collaboration with Smith Adams, (1984), a joint analysis will be undertaken of age as a mediating variable in perceived emotional support received and tangible aid perceived to be available between the two groups of older women 65 to 74 and 75 to 89.

Also presented in this chapter are the research questions, operational definitions of the study variables, data collection procedures, discussion of the Norbeck Social Support Questionnaire, and human subject protection standards.

Research Questions

1. Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women aged 65 to 74? (Sefton Cojocel)
2. Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women aged 75 to 89? (Smith Adams)

3. Is there a difference in the mean values of perceived emotional support received and tangible aid perceived to be available between two groups of women aged 65 to 74 and 74 to 89? (In collaboration with Smith Adams.)

Independent/Dependent Variables

The independent variable in this study is age. The dependent variables are perception of emotional support received and tangible aid perceived to be available.

Operational Definitions

The variables under study are operationalized in the following manner:

Age is classified according to Neugarten's categories of young-old (65 to 74), and old-old (75 to 89).

Significant Others is operationally defined as the first three individuals a subject listed in response to instructions on the Norbeck Social Support Questionnaire (NSSQ). Only the first three individuals the respondent listed were selected for this study to narrow the focus from a possible twenty names requested on the NSSQ. The rationale for using only the first three of the selected twenty support persons was both theoretical and pragmatic. First, respondents were most likely to list their closest relationships first and, from a pragmatic standpoint, non-response rates rose rapidly after the third significant other named.

In utilizing the first three individuals named (people who are apt to be highly emotionally and tangibly supportive because of their close relationship), an inherent problem may be a halo effect. A halo effect in this instance refers to the range restriction that occurs when a limited range of responses out of five possible response options are utilized. In other words, analyzing responses concerning the most supportive significant others (presumably the first few individuals listed) logically restricts the choice of responses to descriptors such as "a great deal" and "quite a bit," rather than "not at all" or "a little," when describing how supportive those individuals are.

Perceived Emotional Support is operationalized using three items on the Norbeck scale:

1. How much does this individual make you feel liked or loved?
2. How much does this individual make you feel respected or admired?
3. How much can you confide in this person?

Responses to these items, which the subjects made on a 5-point Likert scale, indicate the individual's perception of actual support received. The choices on each item were: "1) Not at all; 2) A little; 3) Moderately; 4) Quite a bit; 5) A great deal."

Perceived Tangible Aid is operationalized using two items on the Norbeck scale:

1. If you needed to borrow \$10, a ride to the doctor, or some immediate help, how much could this person usually help?
2. If you were confined to bed for several weeks, how much could this person help?

Both items are worded hypothetically, and responses indicate tangible aid perceived to be available. On both emotional support and tangible aid items, subjects were asked to respond on the 5-point Likert scale with descriptors "not at all," and "a great deal" as anchors.

Norbeck Social Support Questionnaire

The Norbeck Social Support Questionnaire (NSSQ) was used in this study as one of the seven instruments in the larger study Active Participation: Health Care for the Elderly, (1983). The NSSQ is a self-report questionnaire which is designed to measure multiple dimensions of social support. Kahn's (1979) definition of social support was utilized to develop the questionnaire, i.e., the dimensions of social support measured are affect (liked or loved), affirmation (respected or admired), and aid (borrow \$10, help when sick). Kahn's concept of social networks as a "convoy" is measured by assessing the number of the network, duration of relationships, and frequency of contact with network members. Change in an individual's convoy over time, a subject of secondary interest in the study of social support, is measured by questions regarding recent losses of network members (Norbeck, 1983). Of the items on the NSSQ, only questions 1, 2, 4, 5, and 6 (affect, affirmation and aid items) were used for this study. See Appendix A.

Description of the Instrument

The NSSQ consists of a series of half pages with two questions and number spaces for ratings that visually align with a full page, wherein the respondents list their personal network. After listing up

to twenty network members and their relationship to each (for instance, spouse or partner; family or relatives; friends; neighbors; health care providers; etc.), respondents are directed to turn the first half page and answer the questions. In each question, the respondent is asked to rate each of their network members on the Likert scale previously described.

Administration and Scoring

The NSSQ can be self-administered, to live groups or through mailings. The stated average length of time for completion is 10 minutes (range: 5-20 minutes). Modifications in administration for the study, Active Participation, will be presented in a later section on data collection procedures.

Pretest of the Instrument

To evaluate test-retest reliability for the Norbeck instrument, Norbeck (1981) administered the questionnaire to 75 graduate students in two grade levels; entering students and senior graduate students. Subjects were recruited in the classroom, and no class instructors were involved in the research or allowed to learn which students were participating. The first group of first-year graduate students numbered 75 (one male and 74 females), with a mean age of 30.3 years. These students were tested during their second week on campus, prior to developing extensive relationships with other peers. Group two was composed of 60 senior graduate students (six male and 54 female); mean age 27.3. The students had known each other for the past year.

The NSSQ was administered to all subjects, as well as several instruments to various subsets, i.e., the Marlowe-Crowne Social Desirability Scale, The Social Support Questionnaire developed by Cohen and Lazarus, The Profile of Mood States and the Life Experiences Survey. Following the initial testing, a second testing was completed with sixty-seven of the subjects one week later (Norbeck, 1981).

In this initial testing, a normative base was established for this population of nursing students. In a later phase of testing, a middle-aged group was used to evaluate the instrument with a working population. The NSSQ had not been tested, or utilized with a study population of aged Americans.

Reliability and Validity

In Norbeck's first phase of testing, means, standard deviations, range of scores, and test-retest Pearson correlations were completed on all items on the NSSQ. The mean scores represent the ratings on each item for the entire network list. The average ratings for the individual network members were calculated by dividing the mean scores by the number in the network. These average ratings were; affect, 4.14; affirmation, 3.81; aid, 3.07. Duration of the relationships were 4.30; and frequency of contact, 3.29. Each of the functional items and network items had a high degree of test-retest reliability (range .85 to .92). A Kendal Tau B correlation coefficients for test-retest scores on the number of categories of persons lost was .93 ($p < .0001$) and for the amount of support lost, .71 ($p < .0001$).

Internal consistency was tested through intercorrelating all items. The correlation between the two affirmation items was .97 and between the two aid items, .89. The affect and affirmation items were also highly correlated (range: .95 to .98), suggesting, according to the author, that these two dimensions are not distinct.

In evaluating validity, response bias was ruled out by comparison with the short form of the Marlowe-Crowne test, administered to all 76 subjects. None of the items of the NSSQ were significantly related to this social desirability measure, suggesting that responses to the NSSQ are relatively free from the influence of social desirability response bias. Concurrent validity was evaluated by testing with a similar questionnaire (Cohen and Lazarus, in press). Concurrent validity was demonstrated through moderately high correlations.

Construct validity was tested initially by correlating the relationship between the NSSQ and the theoretically relevant variable, i.e., social support to psychiatric symptomatology (Lin, et al. 1979; Schaefer, et al. in press). The Profile of Mood States was administered to 75 of the subjects. A weak relationship was found raising questions of whether the Profile of Mood States was sensitive enough for the population it was used with.

A second testing phase was completed using the NSSQ with 500 staff employees at a large university medical center. Mailings were sent to a final sample of 136 (47 males, 89 females). The mean age was 35.8 years, 42% were married, and the mean number of years of education was 15.9 years. Final testing lent support to the earlier findings. A



small normative data base was established from males and females functioning in work roles. This provided a basis for comparison for the amount and type of support available between the two sample populations. Construct validity was supported by significant correlations between the NSSQ and two similar interpersonal constructs (need for inclusion and need for affection). Concurrent validity was tested again by correlating the PRQ instrument and was found to be significant. Evidence for predictive validity was found, reflecting the stress-buffering role hypothesized for social support.

In Norbeck's follow-up study of the first sample of graduate students, the stability of the instrument over a seven-month period was found to be high, but lower than the test-retest results from the one-week interval. The functional support did not change over the seven-month period (Norbeck, 1983).

Sample

The sample in this study was selected by using all women between the ages of 65 and 89 from within the larger study Active Participation: Health Care for the Elderly. In the original study, a convenience sample was selected for the pretest from groups of elderly individuals residing in or around two midwestern cities (Grand Rapids and Lansing, Michigan), during March, April, and May, 1983. There were 101 subjects, ages 59 to 95, (15 males and 86 females) in the original sample. Because the sample was voluntary and not randomly selected, the results of this study can be generalized only to elderly women with characteristics similar to those of the sample.

Data Collection Procedure

The Norbeck Social Support Questionnaire, described in the previous section, was one of seven instruments utilized in the preliminary study of Active Participation: Health Care for the Elderly (B. Given). Data for this pretest were collected and coded by four research assistants (graduate students in Nursing). Sites selected were based on the contacts these four individuals had in the community. This section describes the sites used for procuring the data, the method in which the data were collected, and procedure followed by interviewers.

Sites

Subjects were obtained primarily from senior nutrition sites, resident centers and activity programs, in and around Lansing and Grand Rapids, Michigan. No attempt was made to randomize or obtain a typical group of older Americans.

Approximately 1/4 of the study population (N=101) were volunteers from senior nutrition sites. Research assistants had visited these sites, requesting volunteers, and estimated that 16% of persons in attendance at 3 sites responded. No examination of the characteristics of those refusing to participate was attempted. Approximately 1/2 of the volunteers were solicited from various groups organized through both rural and urban senior citizen centers. The remainder of the volunteers were obtained through contacts with a local health department, senior residence center, and the research assistant's personal contacts with individuals in the community at large.

Criteria for inclusion in the pretest were based on age alone. Any individual over 59 years of age and willing to complete the questionnaire was accepted into the study group. Sub samples for the present study were taken from the original study and were based on sex and age.

Collection of Data

A training session was held for each research assistant in which the procedure for administration of the questionnaire packet was emphasized. The following protocol was the basis for the training procedure:

1. Interviewers contacted respondents by telephone to explain the research and make an appointment to administer the questionnaire. During the telephone interview (phone numbers obtained through personal contact at senior activity sites), the interviewer introduced herself and explained that she was a research assistant within the MSU College of Nursing. A brief explanation was given concerning the nature of the research and the purpose. Respondents were told that participation would require them to complete written questionnaires involving some personal opinion items, and would require about one hour of their time. Interviewers assured respondents that answers would be confidential and their names would not be on the questionnaire. Respondents were then asked if they had any chronic diseases. Potential subjects were then given the opportunity to ask questions, and appointments were made to administer the questionnaires.

2. Interviewers were told to meet the respondents promptly and to supply pencils. Respondents were asked if they had any questions or concerns before testing began. Interviewers responded to questions or concerns and told the respondents to open the packet and proceed. In the event that potential respondents decided not to participate, the interviewer was instructed to assure them of their right to decline and to thank them for their time and consideration. For those participating, the packet of questionnaires was administered in various settings, i.e., individually in homes, individually in senior activity sites and in small groups at activity sites. The time required to complete the packet of questionnaires varied, ranging from 25 minutes to over two hours (the average time was estimated between 45 minutes to 1 hour.

- A. Consent Form: This was reviewed with the respondent and he/she was assured that the questionnaires would be kept anonymous and consent forms would not be kept with questionnaires. Interviewer collected consent forms before proceeding.
- B. Socio-demographic: Interviewers reviewed the basic directions with the respondents. When the respondent finished, the interviewer provided the following questionnaires: Health Habits; How I Feel About Myself; Involvement in Health Care; Life Events; Social Ability; Medicine Survey; and Social Interaction.

The "social interaction" survey, Norbeck's Social Support Questionnaire, was the data collection instrument used for this study. Instructions for its administration are reviewed here.

First the respondent is asked to "list each significant person in your life on the right. Consider all the persons who provide personal support for you or who are important to you now." In listing these network members, the respondent uses only first names or initials. There is a space for the respondent to specify the category of relationship for each person from a list of categories presented in the instructions, including spouse or partner; family or relatives; friends; work or school associates; neighbors; health care providers; counselor or therapist; minister/priest/rabbi; and others. An example of a network list is provided in the instructions.

After listing up to 20 network members, respondents are directed to turn the first half-page. On that and each succeeding half-page, two questions are presented and numbered spaces for ratings correspond horizontally with the entries on the network list ... in each question, the respondent is asked to rate each of their network members on a Likert scale (Norbeck, 1981, pg. 265).

With this study population of elderly individuals, the procedure described above was modified in the following ways. The interviewers reviewed directions and assured respondents that their answers were confidential. In some cases the interviewer guided the respondent through the questions and entered their response. Respondents were given a 3 x 5 card with the response scale to refer to while answering questions. Questionnaires were administered both individually, and in a small group settings.

3. Completion/Debriefing

The interviewer was instructed to ask for and answer any questions or concerns that the respondents might have. The respondent was then thanked for his/her time and assured that their efforts would be of great value to this research project.

Human Subject Protection

Specific procedures were employed to ensure the rights of the study sample participants. The right of the participants were protected by following the standards from the University Committee on Research Involving Human Subjects (UCRIHS). A consent form was signed by each respondent (see Appendix B). Assurance of anonymity and confidentiality were provided as part of the data collection procedure.

Statistical Analysis of Data

Descriptive statistics were used to analyze sociodemographic data. The range, mean and percentage, along with tables summarizing distribution and percentages of subjects by demographic variables are presented in Chapter V. Five items from the Norbeck Social Support Questionnaire (three affect/affirmation items and two aid items) were used in this study. Correlations were done using the Pearson Product Moment coefficient. The values of the correlation range from -1.00 for a perfect negative correlation, through 0.0 for no relationship, to +1.00 for a perfect positive relationship. Correlations were significant between all three affect/affirmations questions at the $p = .001$ level, and between the two aid related questions at the $p = .001$ level providing statistical rationale for combining items into one emotional support score and one tangible aid score.

Responses to these five items were made on a 5-point Likert scale ranging from "not at all" to "a great deal." The responses were combined and a mean value for perceived emotional support received and perceived tangible aid available was calculated.

Inferential statistics, i.e., Student's t-test, were utilized to answer the research question: Is there a difference between perception of emotional support received and perceived tangible aid available within each group of women?

An additional t-test was computed for the mean values of perceived emotional support received and tangible aid perceived to be available between two groups of women aged 65 to 74 and 75 to 89. To provide a clearer picture of a possible relationship between age and perceived emotional support received and tangible aid perceived to be available, two sociodemographic variables, income and education, were evaluated for possible use as covariates. Analysis of co-variance controlling these two variables did not provide useful information to clarify the relationship between perceived emotional support received and tangible aid perceived to be available.

Summary

In this section the methodology for a preliminary survey data collection as part of Active Participation: Health care for the Elderly, and for use of a subset of this data to answer three research questions was presented. Data collection protocol and the Norbeck Social Support Questionnaire were discussed. Proposed data analysis procedures were outlined, and operational definitions presented. Chapter V contains the actual data analysis presentation.

CHAPTER V

DATA PRESENTATION

Introduction

In this chapter the demographic characteristics of the study sample are described, the analysis of data is presented, and the results are discussed. Demographic information on two groups of aged women is presented first. A brief explanation of the statistical analysis utilized to obtain data for the research questions follows. Then data are analyzed to answer the question: "Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women aged 65 to 74?" Data from a parallel study by Smith Adams (1984), are then summarized, and finally, the analysis of both data is presented to answer the question: "Is there a difference in the mean values of perceived emotional support received and tangible aid perceived to be available between two groups of women aged 65 to 74 and 75 to 89?"

Description of the Study Sample

The sample, selected from participants in the larger study Active Participation: Health Care for the Elderly, was composed of all women age 65 and over, who gave complete responses to the emotional support (affect and affirmation) and tangible aid (functional support) items on the Norbeck Social Support Questionnaire (NSSQ). From the total number of female participants over 65 (72 individuals), 12 were not included in the analysis because of missing data. The resultant sample (N = 60), was divided into two subsets, according to Neugarten's age

classification dichotomy of young-old (65 to 74), and old-old (75 and older). These subsets, "younger" (N = 36) and "older" (N = 24), were used as the study samples for two separate theses; the present study, and a parallel study by Smith Adams (1984), respectively. Data from the two groups are compared to answer a collaborative question concerning age differences in perceived support.

Demographic Characteristics of Group I (Younger)

The demographic variables utilized in the present study were age, marital status, ethnic background, employment status, head of household status, income and education. For this group of 36 women these variables are reported below. The frequency distributions and percent of the subjects in Group I responding to selected variables is presented in Table 2. All demographic data were obtained by self report.

Age:

The age of the younger participants ranged from 65 to 74 years. The mean age was 69.5 and the median age was 69.

Marital Status:

The majority of the younger sample, 20 individuals (56%), were widowed. Twenty-five percent (n = 9) were married, and 17% (n = 6) were divorced. One individual was single. The United States female population aged 65 to 74, in comparison, is 5.3% single, 51.3% married, 38.3% widowed and 5.1% divorced.

Table 2:

Number and Percent of Females 65 to 74 Years of Age by Selected Demographic Variables (N = 36)

<u>Variable</u>	<u>Number of Respondents</u>	<u>Percent</u>
<u>Marital Status</u>		
Married	9	25
Separated	0	0
Divorced	6	17
Single	1	3
Widowed	20	56
<u>Ethnic Background</u>		
White	34	94
Black	2	6
Mexican American	0	0
Indian	0	0
Oriental	0	0
Other	0	0
<u>Employment Status</u>		
Retired	32	91
Unemployed	1	3
Employed	2	6
<u>Head of Household Status</u>		
No	9	25
Yes	27	75
<u>Income Level (in dollars):</u>		
0 - 4,999	5	15
5,000 - 9,999	10	29
10,000 - 14,999	5	15
15,000 - 19,999	5	15
20,000 - 24,999	7	21
25,000 - 29,999	1	3
30,000 - 34,999	1	3
35,000 and above	0	0
Missing Data	2	--

Table 2 (continued)

Variable	Number of Respondents	Percent
<u>Education:</u>		
College graduate with professional training	4	11
College graduate	2	6
At least one year of college	8	22
High School graduate	16	44
Completed years 10-11 high school	3	8
Completed 7-9 years of school	3	8
Completed less than 7 years of school	0	0

NOTE: Percentages may not total to 100 due to rounding.

Ethnic Background:

In the younger group, 94% (34 individuals) were Caucasian. Six percent (2 individuals) were Black.

Employment Status:

Only two women (6%) were employed. Ninety-one percent (n = 32) were retired and one individual listed herself as unemployed. For the U.S. female population over 65, 7.6% list themselves as employed, 0.3% as unemployed and 92.1% as not in the labor force.

Head of Household Status:

Seventy-five percent (n = 27) of the women in Group I listed themselves as head of the household. This characteristic is consistent with the response to the marital status item; i.e., 25% (n = 9) described their status as married, and not surprising, considering the sites from which volunteers were drawn; i.e., senior residence centers, and senior center programs catering to the elderly living alone. U.S. census data (1984) indicates that 42.4% of females over age 65 are "non-family householders."

Income:

The frequency distribution of the women in Group I, by level of income, is included in Table 2. The incomes varied among the women in this group, with the largest percentage (29%, or 10 individuals), listing their income between \$5,000 and \$9,999. Comparison of the women in Group I with U.S. income averages for the age 65 and older female population, reveals that the study sample has a higher mean income ($x = 3.176$ or between \$10,000 and \$14,999) than the national mean ($x = 5.798$).

The medians for both the sample and the U.S. female population over age 65 were somewhat lower 2.900 (or between \$5,000 and \$9,999) and \$4,226 respectively. On the income variable then, it appears that the younger sample is atypical for this age group. Nevertheless, because the U.S. statistics include all female individuals over age 65, and therefore include persons older than those in the sample, this atypical income finding may be explained by other dissimilarities in the two groups.

Education:

The frequency distribution of highest educational level attained for the women in Group I is included in Table 2. Eighty-three percent ($n = 30$), of the younger group report high school or greater educational levels. In comparing Group I to the U.S. female population over age 65 by highest educational level attained (see Table 3), again, there is evidence that this sample is atypical for this age group. In the national statistics one finds only 44.7 percent among over age 65 females reported high school or more education (compared to 83% of

Group I individuals). Again, the fact that U.S. statistics include individuals above age 75 as well, may explain some of this variance. Also, the U.S. census data collection was done with a slightly different categorization to measure educational level, e.g., 8 years or less versus 7 years or less as the lowest education response available.

Table 3:

Comparison of the Group I (Younger) Educational Level Variable to Percent Distribution of Females Age 65 and Older in U.S. by Education (from Statistical Abstracts of U.S., 1984).

Education	Percent Group I	Percent U.S. Female Over Age 65 Population by Education
Four or more years of college	17	7.4
One to three years of college	22	9.1
Four years high school	44	28.2
One to three years high school	8	17.0
Eight years or less	8	38.3

NOTE: Percentages may not total to 100 due to rounding.

In summary, demographic information describing the younger age group, Group I, reveals that of the 36 women, 94% were caucasian, 25% were married, 91% were retired and 75% listed themselves as head of the household. Comparison of income and educational levels of the sample with those of the U.S. female over age 65 population revealed that the sample may be atypical for that age group. There was, however,

some difficulty in comparing the two and this may account for the differences found. Differences may also be an artifact of the preponderance of Caucasians in the samples, or type of community from which the sample was obtained.

Demographic Characteristics of Group II (Older)

The second subset of the study sample was composed of women aged 75 to 89 ($n = 24$). The demographic variables utilized in the study (age, marital status, ethnic background, employment status, head of household, income and education) reveal the characteristics of the older group to be as follows. Frequency distributions and percentage of subjects in Group II on selected variables are presented in Table 4. All demographic data were obtained through self report.

Age:

The age of the older participants ranged from 75 to 89 years. The mean age was 79 and the median age was 77.5.

Marital Status:

Sixty-seven percent ($n = 16$) of the older group were widowed. Seventeen percent (4 individuals) were married. Three individuals (13%) listed themselves as single and one person was divorced.

Ethnic Background:

The women in the older group (Group II) were all Caucasian.

Employment Status:

Ninety-six percent (n = 23), of the older women were retired. Only one individual listed herself as unemployed. For the U.S. Female population over age 65, 7.6% list themselves as employed, 0.3% as unemployed and 92.1% as not in the labor force.

Table 4:

Selected Demographic Variables Concerning Group II Respondents (n = 24) (marital status, ethnic background, employment status, head of household, income and education)

<u>Variable</u>	<u>Number of Respondents</u>	<u>Percent</u>
<u>Marital Status:</u>		
Married	4	17
Separated	0	0
Divorced	1	4
Single	3	13
Widowed	16	67
<u>Ethnic Background:</u>		
White	24	100
Black	0	0
Mexican American	0	0
Indian	0	0
Oriental	0	0
Other	0	0
<u>Employment Status Status:</u>		
Retired	23	96
Unemployed	1	4
Employed	0	0
<u>Head of Household Status:</u>		
No	4	17
Yes	20	83

Table 4 (continued)

<u>Variable</u>	<u>Number of Respondents</u>	<u>Percent</u>
<u>Income Level (in dollars):</u>		
0 - 4,999	0	0
5,000 - 9,999	12	57
10,000 - 14,999	3	14
15,000 - 19,999	2	10
20,000 - 24,999	2	10
25,000 - 29,999	2	10
30,000 - 34,999	0	0
35,000 and above	0	0
Missing Data	3	--
<u>Education:</u>		
College graduate with Professional training	3	13
College graduate	4	17
At least one year of college	7	29
High School graduate	4	17
Completed years 10-11 high school	1	4
Completed 7-9 years of school	4	17
Completed less than 7 years of school	1	4

Note: Percentages may not total to 100 due to rounding.

Head of Household Status:

Eighty-three percent (20 individuals) of the older group described themselves as head of the household. The percentage of persons (17%) not listing themselves as the head of household corresponds perfectly with the marital status item. Again, this high percentage of persons listing themselves as head of household was not unexpected because the population was drawn from independent living centers, or programs catering to elderly persons living alone.

Income:

The frequency distribution and percentage of the older group population in Group II, by income, is included in Table 4. The majority of respondents (12 individuals or 57%) listed their income as between \$5,000 and \$10,000. The mean response on the income variable of this older age group was 3.190, or between \$10,800 and \$15,000. The median was 2.375, or between \$5,000 and \$10,000. Comparing these Group II values to the national income statistics on females over age 65 (mean income = \$5,798; median = \$4,226) reveals, again, that individuals in the study sample are atypical for their age group.

Education:

The frequency distribution of highest educational level attained for Group II is included in Table 4. The largest percentage of persons in this group (29%, or 7 individuals) reported at least one year of college. Indeed, 76% (18 individuals) reported having a high school education or better. According to national statistics on women over age 65, only 44.7% of women report high school or better education (see Table 5). Therefore, on the variable of education, individuals in Group II are also atypical for their age group.

Table 5:

Comparison of the Group II (Older) Educational Level Variable to Percent Distribution of Females Age 65 and Older in U.S. by Education (from Statistical Abstracts of U.S., 1984)

Education	Percent Group I	Percent U.S. Female Over Age 65 Population by Education
Four or more years of college	30	7.4
One to three years of college	29	9.1
Four years high school	17	28.2
One to three years high school	4	17.0
Eight years or less	21	38.3

Note: Percentages may not total to 100 due to rounding.

In summary, a demographic description of Group II, composed of 24 older women, reveals that all were Caucasian, 17% married, 96% were retired and 83% listed themselves as head of household. The income and educational levels of the sample were higher than the national averages for women over age 65. Again, methodological problems in comparing Group II responses to the national statistics make conclusions difficult, but it would appear that Group II does not represent a typical older American group.

Use of the NSSQ on a Sample of Women Aged 65 - 89

Reliability of Norbeck's Social Support Questionnaire has been established in two sample populations: nursing students and working adults (Norbeck 1981, 1982). To establish its use with an elderly study population, the internal consistency of emotional and tangible support items on NSSQ was evaluated using Cronbach's alpha. The Cronbach's alpha is a measure of the extent to which all items contribute to a single common dimension or factor. It is used to indicate the reliability or uniformity of scale items by comparing the obtained values with each item successively deleted. The data used to calculate Cronbach's alpha were obtained using Pearson Product Moment Correlations between 3 emotional items for 3 significant others and 2 tangible aid items for 3 significant others. These Pearson Correlation Coefficients are presented in Tables 6 and 7. The Cronbach alpha analysis of 3 emotional support (affect and affirmation) items for 3 significant others yielded a high reliability coefficient for the nine items ($\alpha = .87$). The range of alpha values (.83 to .87) demonstrates consistently high correlation among the emotional items. Two important points are raised by this finding: 1) The items that Norbeck has developed to measure the conceptually distinct constructs of affect and affirmation appear not to distinguish between the items. It would appear that Kahn's definition may be "splitting hairs" by distinguishing between affect and affirmation, and 2) That the results of the Cronbach's alpha for the emotional support related items provided mathematical evidence in support of combining affect and affirmation items into one more robust emotional score.

Analysis of 2 tangible aid (functional support) items for 3 significant others yielded a reliability coefficient for the 6 items of .79 (range .73 to .79). This finding shows the consistency between the two items and provides the rationale for combining the tangible aid item responses into one more robust tangible aid score.

In summary, evaluation of the NSSQ emotional support and tangible aid items by Cronbach's alpha provided statistical support for combining items into one score for each type of support. The major contribution of these findings, however is in the confirmation of internal consistency with an elderly sample. Previously, Norbeck had only determined reliability with two younger populations. The following section describes the process for combining items to get a mean emotional support score and a mean tangible aid score.

TABLE 6:

Pearson Correlation Coefficients for 3 Emotional Items on NSSQ.
Data from responses about 3 Significant Others (N = 60 in all correlations)

EMOTIONAL 1 (Loved)	EMOTIONAL 1 (Loved)		EMOTIONAL 2 (Respected)		EMOTIONAL 3 (Confide)	
	S.O.1	S.O.2	S.O.1	S.O.2	S.O.1	S.O.2
S.O.1	1.000 p=***					
S.O.2	.6011 p= .001	1.000 p=***				
S.O.3	.6924 p= .001	.5514 p= .001	1.000 p=***			
EMOTIONAL 2 (Respected)	S.O.1	.7646 p= .001	.5231 p= .001	.3812 p= .001	1.000 p=***	
S.O.2	.6600 p= .001	.7506 p= .001	.5416 p= .001	.6356 p= .001	1.000 p=***	
S.O.3	.5124 p= .001	.6502 p= .001	.7068 p= .001	.5286 p= .001	.5449 p= .001	1.000 p=***
EMOTIONAL 3 (Confide)	S.O.1	.7168 p= .001	.6340 p= .001	.3604 p= .002	.6733 p= .001	.4724 p= .001
S.O.2	.1831 p= .081	.2169 p= .048	.3545 p= .003	.1424 p= .139	.23676 p= .002	.2587 p= .023
S.O.3	.2006 p= .062	.1616 p= .109	.4128 p= .001	.0792 p= .274	.2459 p= .029	.3945 p= .001
					.3471 p= .003	.5277 p= .001
						1.000 p=***

TABLE 7:

Pearson Correlation Coefficients for 2 Tangible Aid Items on NSSQ.
Data from responses about 3 Significant Others (S.O.) (N = 60 in all correlations)

	TANGIBLE AID 1 (Tangible Help)			TANGIBLE AID 2 (Help When Sick)		
	S.O.1	S.O.2	S.O.3	S.O.1	S.O.2	S.O.3
TANGIBLE AID 1 (Tangible Help)						
	S.O.1					
	1.000 P=***					
S.O.2	.3589 P=.002	1.000 P=***				
S.O.3	.3968 P=.001	.5431 P=.001	1.000 P=***			
TANGIBLE AID 2 (Help When Sick)						
	S.O.1					
	.3644 P=.002	.1481 P=.129	.3700 P=.002	1.000 P=***		
S.O.2	.1278 P=.165	.5987 P=.001	.4041 P=.001	.5052 P=.001	1.000 P=***	
S.O.3	.2236 P=.043	.3398 P=.004	.4023 P=.001	.4244 P=.001	.5393 P=.001	1.000 P=***



Description of Dependent Variable Creation

An averaging process was used to compute one mean value of perceived emotional support and one mean value of perceived tangible aid, for each individual in the study sample. These values would indicate the amount of support each individual perceived from her three closest significant others. As explained in Chapter IV, the first three significant others were chosen for analysis to examine perceived support from those likely to be the closest members of the network, and, because the non-response rate on items after the third significant other rose rapidly. From study subject's responses to 3 emotional and 2 tangible items concerning their first 3 significant others a mean value of perceived emotional support and a mean value of perceived tangible aid for each individual subject was derived by the following process.

Each subject's emotional score was the mean over three items for the first three significant others listed. Similarly, a tangible aid score was computed over two items for the first three network members.

Presentation of Findings

Differences in perception of emotional support received and tangible aid available in a group of women aged 65 to 74.

The research question for the present study: "Is there a difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women aged 65 to 74" was examined by t-test comparison of composite means for each subject in the younger group ($n = 36$). The results of the t-test are presented in Table 8.

Table 8:

Comparison of Composite Means for Emotional Support and Tangible Aid in Women Aged 65 - 74

Variable	N of Cases	Mean	SD	SE	Difference (Means)	T Value	Degrees Freedom
Emotional	36	4.5617	.544	.091			
					.6034	3.68	35
Tangible		3.9583	.988	.165		P = .001	

In this group of young-old women (n = 36) the mean perception of tangible support available (x = 3.95) was .6 less than the mean perception of emotional support received (x = 4.56). This trend toward lower tangible aid perceived represents a significant difference $p = .001$). The difference in standard deviations (emotional = .544 and tangible = .998), almost .5 difference as well, also indicates that there is less variance in responses on the emotional variable.

Differences in perception of emotional support received and tangible aid available in a group of women aged 75 to 89.

Data from a parallel study by Smith Adams (1984), in which a possible difference in the mean value of perceived emotional support received and tangible aid perceived to be available among women aged 75 to 89 was examined, is summarized in Table 9.

Table 9:

Comparison of Composite Means for Emotional Support and Tangible Aid in Women Aged 75 to 89

Variable	N of Cases	Mean	SD	SE	Difference (Means)	T Value	Degrees Freedom
Emotional		4.4120	.522	.106			
	24				1.0995	5.08	23
Tangible		3.3125	1.213	.248		P = < .001	

In this group of old-old women ($n = 24$), a large difference (1.09) in the mean for perceived emotional support received ($x = 4.41$) and perceived tangible aid available ($x = 3.31$), was found. In other words, there is a very clear difference in the mean value of emotional support perceived by study subjects as compared to the mean value of tangible aid perceived as available, and, less than one in a thousand ($p < .001$) chance that this difference would have occurred randomly. Thus, the older women perceived that they got more emotional support than tangible aid.

Differences in perception of emotional support received and tangible aid available between two groups of elderly women.

In collaboration with Smith Adams, data from both groups of elderly women were compared to answer the question: "Is there a difference in the mean values of perceived emotional support received and tangible aid perceived to be available between two groups of women aged 65 to 74 and 74 to 89?" Data comparing emotional support means and tangible aid means between the younger and older groups of women are presented in Table 10.

Table 10:

Comparison of Composite Means for Emotional Support and Tangible Aid Between Two Age Groups of Women

Variable	Group	# of Cases	Mean	SD	SE	Difference (Means)	T Value	Degrees of Freedom	2-Tail Probability
Perceived Emotional Support	Group I	36	4.56	.544	.091				
	Younger 65 - 74								
	Group II	24	4.41	.522	.106	.1497	1.06	58	.293
	Older 75 - 89								
Perceived Tangible Aid	Group I	36	3.95	.988	.165				
	Younger 65 - 74								
	Group II	24	3.31	1.213	.248	.6458	2.26	58	.027
	Older 75 - 89								

Looking first at the comparison between age groups on perceived emotional support, little difference (.15) is noted between the mean of perceived emotional support in the younger group ($x = 4.5$) and that of the older group ($x = 4.41$). The t -test shows this difference to be valid about 7 out of 10 times ($p = .293$) or 3 times out of 10 the difference could occur by chance. Therefore, this trend toward the older group perceiving lower emotional support (i.e., having a lower mean value for perceived emotional support received) was found not to be significant at conventional probability levels.

Comparing the composite means for tangible aid perceived to be available between the groups, however, shows a large difference between the means (.64) and much greater standard deviations (younger $SD = 9.8$; older $SD = 1.2$) than noted in the emotional support comparison. The 2-tail probability shows this difference in means to be valid about 97% of the time ($p = .027$). In other words, the magnitude of the difference found between means would be due to chance only 3 out of 100 times. Therefore it would appear that subjects in the two groups really do perceive tangible aid differently, with the older women perceiving significantly less tangible support.

Correlations between the mean emotional and mean tangible scores were .283 in the younger group, and .489 in the older group. The difference in these correlations indicates that the older group was more likely to score their first 3 significant others similarly on both tangible and emotional related items. This may be an indication of the decrease in network size with age, i.e., those closest support members must be relied upon for both emotional and tangible support.

Another explanation may be that the older group does not distinguish between emotional support and tangible aid as clearly as in the younger group. Therefore, the halo effect of viewing these first 3 significant others as globally supportive is more evident in the older group.

Discussion

Three cautions must be considered in examining these results. The first is that a distinction must be made between age differences and age changes. Age differences simply implies that there are differences between two age groups. Age changes implies that a developmental change within individuals over time is being described. With this cross sectional study, only statements regarding age differences are valid.

The second point for caution in interpreting results is that the study was drawn from a convenience sample of volunteers obtained for a larger study. Both groups of older women were found to be atypical, based on national comparisons, for their age group at least on income and highest educational level obtained. Findings from this study then can only be generalized to women having the same characteristics as the study population.

The last caution in interpreting results has to do with the halo effect mentioned in Chapter IV. This range restriction caused by analyzing data only from the closest significant others (i.e., the first 3 named) in fact occurred. In other words on a five point Likert scale, responses 3, 4 and 5 ("Moderately," "quite a bit," and "a great

deal") were chosen most frequently to describe significant others. The three significant others from whom data were analyzed were seen to be globally supportive, leaving one with the essential question, in practical use, of how significant is a difference in support perceived from overall supportive persons. No measure was undertaken of how adequate the subjects support was, or what actual support was needed. Further research including and clarifying these salient issues is needed.

Summary

In summary, the data analysis for this study revealed three major findings: 1) The reliability (internal consistency) of emotional support-related and tangible aid-related items on Norbeck's Social Support Questionnaire Instrument were confirmed with an elderly study population. 2) Significant differences were found within each age group between the mean of perceived emotional support received and the mean of tangible aid perceived to be available. 3) A significant difference was found between the younger and older group of women on the mean of tangible aid perceived to be available.

In the next chapter interpretations of these findings and a discussion of the contribution of these results to 3 areas of Nursing will be presented. The study will be summarized and recommendations for changes in research design will be discussed.

Chapter VI

SUMMARY AND CONCLUSIONS

Introduction

This chapter contains a brief review of previous chapters, a discussion of the study results and the relevance of the findings to Nursing, as well as recommendations for methodological changes for future researchers. In a final section, ideas for dissemination of research results are presented.

Review of Chapters

Chapter I contained an introduction to the problem and relevant background information for the study. Population trends in the United States indicate that the proportion of elderly is increasing rapidly, due to high birth rates in the late 19th and 20th centuries, high immigration rates prior to World War II, and dramatic increases in life expectancy in the United States (1984 United States Census Data).

The number of persons in the U.S. over age 65, as of July, 1982, was 26,824,000, or 11.6% of the total resident population of all ages. In 1900, the total population of women aged 65 or older was 1.5 million, or 2% of the U.S. population. By 1982 the number of older women had reached 16 million or 6.9% of the total U.S. population. This trend toward increasing proportions of older women in the population is expected to continue.

These population trends have implications for the Clinical Nurse Specialist. The elderly are a high risk population requiring a vast amount of health care resources and a specialized knowledge base, both

for treatment of health problems and for health promotion. This knowledge base must be increased through research studies that dispel myths of aging, emphasize the heterogeneity of the elderly, and open avenues for the development of strategies to promote health. One area where research has already shown impressive preliminary evidence of health benefits is in the area of social support. That is, social support has been linked to various positive health related outcomes (House, 1981; Nuckolls et al., 1971; Gore, 1978). The study of social support and related concepts such as social networks, using elderly populations, is still in its infancy. In addition, the dearth of research in the area of age differences within the elderly population points clearly to the need for beginning level studies about aging persons, differences within cohorts, sex differences and actual and perceived social support needs and resources. In this study an attempt has been made to conceptualize social support, study the perception of two types of support in an elderly female sample and begin to describe age differences in the perception of these types of social support between two elderly age groups.

In Chapter II, the theoretical basis for the study (i.e., Martha Rogers' Theory of Unitary Man), was presented and integrated with concepts from Norbeck's Model of Social Support and Nursing Process. Roger's theory describes the overall evolution of man over time. Both as a species, and as individuals, man evolves unidirectionally toward increasing complexity. This evolutionary developmental perspective provides the rationale for expected age differences. Within this framework, conceptual definitions for the study variables were developed.

In Chapter III, a review of relevant literature was presented that emphasized: various methods of categorizing age groups within the elderly population; difficulties in conceptualizing, defining, and measuring social support; the importance of two types of support (emotional support and tangible aid); and the lack of solid empirical studies on age differences within an older population. Problems with existent definitions of social support and lack of research studies to clarify the concept present a confusing picture of the aspects of social support. The review of the literature presented indicates the important contribution beginning level studies can make to clarify the concept of social support.

Chapter IV contained the methods used in a larger study, Active Participation: Health Care for the Elderly. Data collected in the pretest of instruments were used for this study and in a parallel study by Smith Adams, (1984). Literature supporting the use of one instrument, the Norbeck Social Support Questionnaire, was presented, because responses to five selected items on this instrument were analyzed to answer the research questions.

The original impetus for this study stemmed from observations in a health maintenance clinic setting with well elderly clients. The research questions (presented in Chapters I and IV), evolved from a desire to empirically describe some of the age differences observed. The area of perception of two types of social support, emotional support and tangible aid, was chosen for examination, as these types of support seem to significantly affect the elderly's ability to maintain their independence.

For this study older women's (65 to 74 years old) perceptions of two types of social support, emotional support and tangible aid, were examined using items from Norbeck's Social Support Questionnaire. Composite mean values of responses to emotional support-related items and tangible aid-related items were compared, using Students t tests. In a parallel study, Smith Adams examined the same variables in an older (75 to 89 year old) group of women. Data were then analyzed collaboratively to investigate possible age differences in perceptions of emotional support and tangible aid between the two groups.

Chapter V contained the data analysis and presentation of results. Briefly stated, the results indicated that the women in both groups perceived the emotional support they received significantly differently from the tangible aid they perceived to be available to them. Their mean responses indicated a trend toward viewing a higher level of perceived emotional support received than tangible aid perceived to be available. Analysis of the combined data from both groups demonstrated a significant difference in tangible aid perceived to be available between the two age groups, with the older group (75 to 89) reporting less tangible aid available than the younger group (65 to 74). Additionally, the reliability (internal consistency) of five items (three emotional and two tangible), on Norbeck's Social Support Questionnaire was established with a gerontological sample of women. Interpretation of these findings and this study's relevance to Nursing research, education and practice will be discussed in the following sections.

Interpretation of Findings

Descriptive Findings of the Study Sample

In interpreting results of this study, the characteristics of the study sample must first be considered. Population statistics from the U.S. Census Bureau were presented in the first chapter, supporting the need for research on aging females. The study sample of females ($n = 60$) with subsets 65 to 74 years of age ($n = 36$) and 75 to 89 years of age, ($n = 24$) was found to be atypical for their age group when compared to the U.S. female population over age 65. More specifically, the females in the study sample reported higher levels of income and education than their counterparts in the U.S. These sociodemographic findings, in addition to the volunteer convenience sample from which participants in this study were drawn, clearly indicate that no generalization of findings to other populations is appropriate. Possible reasons for the atypical levels of income and education include the preponderance of Caucasians in the study sample and the limited geographical area from which participants were drawn.

Descriptive Findings Related to Research Questions 1 and 2

The finding in both age groups that less tangible aid was perceived to be available than emotional support preceived to be received, demonstrates that both samples distinguished between these conceptually distinct dimensions of social support. Possible explanations for the direction of these results (less tangible aid) include first, that indeed, in both subsamples, subjects perceived a lower level of tangible aid available than the level of emotional support they reported they

received. For example, study subjects may have perceived emotional support as easier to obtain than tangible aid, i.e., emotional support may be given over the phone, as a gesture or through actions requiring little time or cost. In any event, the study subjects certainly viewed emotional support and tangible aid as two separate types of support, i.e., their responses supported the idea that social support is not one global concept.

A second explanation for the significant difference found between the mean for perceived emotional support received and tangible aid perceived to be available in both groups, is that the results may reflect differences in the wording of the questions. For instance, questions about emotional support asked the subject to indicate "how much" the significant other made her feel loved/respected, or, "how much" she was able to confide in this person (significant other). In other words, the questions asked an individual to respond on the basis of experience. The tangible aid questions, in contrast, asked the subjects to respond to two hypothetical situations; e.g., "If you needed \$10, or a ride to the doctor ... how much could this person help?" Therefore, the subjects may have responded with more certainty in describing their perceptions of the emotional support they had received and with less confidence about hypothetical (untested) situations.

In considering this explanation with the older group, however, one must be aware of studies that indicate that with increasing age more people have unmet support needs or are at greater risk of developing them (Branch and Jette, 1983; Jette and Branch, 1981; and Branch and Jette, 1981). Therefore, in the older sample of women, more of the

subjects may have had experience in the types of hypothetical situations described in the tangible aid items and may have answered based on their experiences for both items. Without further data, unavailable in this study, no further clarification can be made; i.e., clarification of these possible explanations could only be made after validation of findings in different populations and, perhaps with a change in the item wording to achieve consistency. At this point, it is only appropriate to say that there is a significant difference between the mean for perceived emotional support received and perceived tangible aid available in this study population of women aged 75 to 89, and that this great a difference would have occurred by chance only one time in one thousand.

Descriptive Findings Related to research Question 3

The second major finding of this study was that a significant difference ($p < .001$) in the mean value of tangible aid perceived to be available was demonstrated between the young-old and the old-old groups of women. Overall, the comparison of both emotional and tangible means between the two age groups shows a trend toward consistently lower scores by the older aged group of women. One explanation for this trend could be that opportunities available for receiving support decrease with increasing age; i.e., there is increasing loss of support network members with advancing age. Such an explanation implies that older women have more unmet support needs, (a view which is supported by Branch & Jette, 1983 & 1981) and therefore have had more actual experience in not receiving tangible aid when it was needed.

These older women may have answered, therefore, a bit more conservatively, having had experience in needing more support; whereas the younger group may have responded optimistically, a view that may have been untested by experience.

A third explanation for both the trend toward lower scores in the older group, and the significant finding of lower perceived tangible aid in the older group can be attributed to cohort effect. As the women in these two age groups belonged to different cohorts; findings could be attributed to the effect of different historical experiences (Troll, 1982; Baltes et al., 1980; and Danish, 1980).

Again, although the finding of significant age differences cannot be generalized, two important points are made. The first is that it logically follows previous findings (Branch and Jette, 1981 and 1983) that the need for tangible support increases with age. The decrease in support persons through natural attrition with aging suggests that fewer support network members would be available to provide help. Therefore, it follows that older persons might perceive less tangible aid available. The second point is that by dichotomizing elderly women into two age groups according to Neugarten's concept of young-old and old-old, significant age differences were found in perception of tangible aid available. Therefore it is concluded that this finding supports Neugarten's dichotomy as a meaningful way to categorize age within this elderly sample. Certainly, there are other methods (such as cohort groupings) that could be used to categorize age, which would recognize the heterogeneity of the elderly, as well, but use of Neugarten's dichotomy in this study supports consideration of the method for future research.

Findings Related to the Definition of the Concept of Social Support

Although findings of this study cannot be generalized because of the atypical sample, they do tend to provide support for dichotomizing social support into types, emotional and tangible. Literature on social support emphasizes the need for clear conceptual definitions, and consistent instruments to measure them (Thoits, 1982; Schaefer et al., 1981). In this study, the NSSQ was utilized for data collection. This instrument is consistent with the conceptual definition of social support developed by Robert Kahn which emphasizes affect, affirmation, and aid. Statistical support for combining affect and affirmation into one construct (emotional support) was demonstrated in this study by the use of Cronbach's alpha. In beginning attempts to delineate clearly all of the complex constructs involved in social support, it is certainly appropriate to define each theoretical construct narrowly. If, however, strong correlations between supposedly distinct constructs continue to be demonstrated with many study populations, operational definitions of social support that combine related concepts (such as affect and affirmation), into a more encompassing constructs will evolve. In other words, theoretical distinctions of subtle dimensions of social support are appropriate at this stage in examining social support. As evidence accumulates, however, combinations of related concepts may provide better operational definitions for social support dimensions.

The conceptualization of social support into two types, emotional support and tangible aid, is supported by various research studies that emphasize the importance of both types of support in the lives of older

people. In particular, the studies by Branch and Jette (1981 and 1983), and the study by Lowenthal and Haven (1968) demonstrate this point.

Branch and Jette (1981 and 1983) measured disability in older populations and the use of informal support systems to provide long term care assistance. Their findings clearly demonstrate that the need for tangible support increases with age. In Lowenthal and Haven's classical work (1968), intimacy (ability to confide in someone) was evaluated as a variable in interaction and adaptation among an elderly sample. Their results showed intimate relationships to be more closely associated with good mental health and high morale than high social interaction or role status. Therefore, Lowenthal and Haven's findings would support the importance of emotional support in the daily lives of the elderly.

In summary, although specific findings, such as the direction of the trend in different perceptions of emotional support and tangible aid cannot be generalized, a contribution is made by this study, in attempting to delineate the important aspects of the overall construct of social support. The conclusion which may be drawn is that measuring perceptions of two types of social support, emotional support and tangible aid, provides meaningful delineation of aspects of social support that are critical to the elderly. As empirical evidence accumulates, through replication of studies which correlate dimensions of social support to determine appropriate distinctions of the construct, better, more consistent definitions of social support will evolve.

Additional Findings

The final contribution of this study is in validation of the reliability (internal consistency) of the NSSQ with a sample of elderly women. Research instruments must be tested with varied populations to determine the universality of their application. Norbeck (1981 and 1983) had previously tested her instrument with a sample of graduate and undergraduate nursing students and with a working population. Validation of one aspect of the NSSQ's reliability in an elderly population is a contribution to the ongoing development of this instrument.

In summary, two conclusions can be drawn from this study:

- 1) The significant finding of differences in perception of available tangible aid between two age groups supports the conclusion that Neugarten's dichotomy of young-old and old-old is a meaningful way to categorize age within this elderly sample.
- 2) Measuring perceptions of two types of social support, emotional and tangible, provides meaningful delineation of aspects of support that are critical to the elderly.

Discussion of the study's contributions and relevance to three areas of Nursing; research, education, and practice, will follow a review of Norbeck's Model for guiding research and incorporating social support into clinical nursing practice.



Norbeck's Model of Social Support and Nursing Practice

A model, developed by Norbeck (1981) for the purpose of incorporating the concept of social support into nursing practice was presented in Chapter II. A brief review of this model (see Figure 4, page 42) shows that properties of the person and of the situation jointly determine the need for social support. The need for social support and the actual support available must be compared during the assessment phase of the nursing process. If social support is adequate there is a greater likelihood of positive health outcome for the client. If social support is inadequate, planning and intervention are aimed toward increasing support. Evaluation of the actual outcome may indicate a need for reassessment and so the nursing process is cyclical in nature.

Although Norbeck implies the importance of perception in her properties of the person, it is not clearly illustrated in her model. A revised model, with greater emphasis on perception, is presented in Figure 5. This adaptation of Norbeck's Model provides a clearer picture of the focus of this study. The client's perception of the need for social support should be compared with an objective assessment of the need for support and the actual support available in the assessment phase of the process. The Family Clinical Nurse Specialist working with elderly clients uses the assessment phase of the nursing process to develop a comprehensive database. At this level of advanced practice, accuracy and efficiency in assessment is recognized as critical to the success of planning and intervention.

This study contributes to accuracy and efficiency in the assessment phase of the nursing process by providing evidence to suggest that an appropriate way to assess social support, particularly among the elderly, is to look at two types of support; emotional support and tangible aid. The findings of the study, with support from the literature, suggest that needs for support may be different with increasing age. Information such as this, although a minute part of a comprehensive assessment, could be important in the outcome of the nursing process for an elderly individual because deficits in either area of social support may be problematic. Superficial assessment of support, without delineating the concept for elderly clients may result in missing important information for planning. Therefore planning and implementation (intervention) are dependent on the assessment information.

The type of social support deficit determined through assessment with a client, has implications for planning and intervention. For example, the CNS who determines an unmet need for tangible aid in an elderly client has many avenues for planning and intervention. These avenues include referral of the client to such services as a home care type of agency, meals on wheels, or a senior center which may provide transportation. Another option in intervention to correct a tangible support type deficit would be to explore options for receipt of tangible aid from available or potential support network members.

An identified deficit in emotional social support, however, requires different planning and intervention strategies. Possible

strategies include working with the client to identify "dormant" support network members who may provide emotional support or assisting the client with interpersonal relationship skills that will help her to elicit emotional support from existing or potential network members. The study by Wentowski (1981) described elderly person's use of an exchange system to build supportive networks. Raising an elderly person's awareness of this type of reciprocal system of help could influence the individual to use such skills to increase ties with emotionally supportive network members. Another option for intervention in the area of an emotional support deficit is for the CNS to become an emotionally supportive member of the client's network. This option for planning must be considered carefully as it may foster client dependency rather than assisting the individual to develop skills which will help increase independence. The type of setting and practice will also determine the feasibility, and desirability of this strategy to augment an elderly client's support resources. To some degree, a CNS will develop a supportive relationship with clients who are seen over time. A distinction is made, however, in being emotionally supportive within the boundaries of a client/practitioner interaction and becoming a mutually obligated member of a client's support network.

Use of Norbeck's Model to demonstrate the focus of this study in the overall nursing process provides an important contribution in conceptualizing the links that must be maintained between research, education and practice in Nursing. The nursing process is usually discussed in terms of dyadic interactions between nurse and client. The same

systematic process of assessment, planning, implementation and evaluation, however, can be used to demonstrate the link between research, education, and practice. The interaction between these areas of nursing guides the progression of nursing science.

Research is the assessment phase for the nursing profession. Here nurse researchers test observations, searching for empirical evidence of observed phenomena. Establishment of a body of knowledge for nursing is, therefore, analogous to the assessment phase of gathering a database for a client. Results of research must then be disseminated for planning and implementation. Education is our planning for the future. Socialization of students into theory and research based practice, with clear articulation of the realities of the health care climate and current trends, should be the primary focus of undergraduate education. Graduate education in nursing prepares leaders, who through their commitment to advanced practice, will guide the development of the profession. Through practice, nurses have the opportunity to implement the results of research. The quality of their socialization in part determines nursing's commitment to continuing the use of research to propel the development of the profession. Feedback from service and education, in part, dictates the evaluation and focus of further research, demonstrating the cyclical nature of the continuing process. With the analogy of the nursing process in mind, the relevance of the role of this study to the three areas of Nursing will now be discussed.

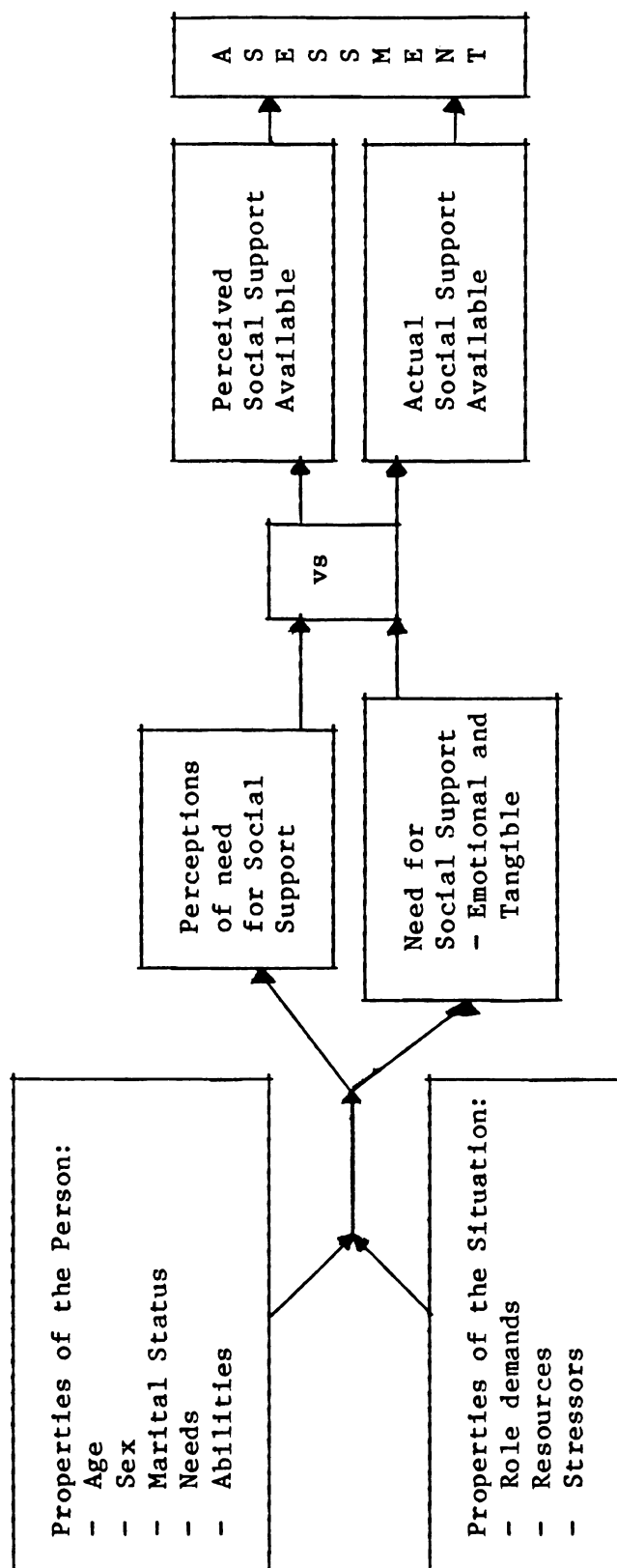


Figure 5. Adaptation of Norbeck's Model for Guiding Research and incorporating Social Support into Clinical Practice - Adapted from Norbeck.

Implications for Nursing Research and Recommendations

The results of this study and the limitations of the methodology used have many implications for nurses in research. Three significant findings were reported. The first, validation of reliability (internal consistency) of 3 affect/affirmation items and two tangible aid related items on the NSSQ, with an elderly sample, is an important contribution. The continued development of research instruments, such as the NSSQ, depends on the use of the instrument with many different samples. It is only through continued study that instruments can be refined and reliability supported with data from other populations. For nurse researchers the task is clear; reliable and valid instruments for measuring social support must be developed that are consistent with the conceptual definition of social support. These instruments must be refined through use with various samples with widely different characteristics. The Norbeck Social Support Questionnaire was developed from the conceptual definition by Robert Kahn (1979) which emphasized affect, affirmation and aid as components of social support. Items on the NSSQ are consistent with that definition. As discussed in Chapter IV, the reliability and validity of the NSSQ had previously been established only in a sample of graduate students, senior undergraduate nursing students, and working persons. The results of the data analysis (Cronbach's alpha) in this study with elderly women supported the finding of internal consistency of five items on the scale. Further, work on the NSSQ and other instruments must be done.

Another contribution of the study, which can be used to demonstrate yet another area of need for nursing research, is in the conceptualization of affect and affirmation as one construct i.e., emotional support. The particularly strong correlation between affect and affirmation items, on the Cronbach alpha, raised the question of whether items intended to measure those dimensions were truly not measuring the same construct, emotional support. This question, as well as the obvious lack of consensus on one definition of social support (Cassel, 1976; Cobb, 1976; Kahn and Antonucci, 1981; Lin, Simeone, Ensel, Kuo, 1979), indicates a critical need for empirical studies to clarify the concept of social support. In conceptualizing social support by types, emotional and tangible, the results of this study would indicate that this dichotomy seemed to encompass important aspects of support for the elderly population. For nurse researchers, there is an obvious need for further work to systematically define the concept of social support. This can be accomplished by using instruments to measure social support as defined by various authors. By correlating items which measure similar dimensions of social support, those subtle distinctions in concept could be identified as part of an overall construct. If this process were completed for various definitions (e.g., relational provisions, information, etc.) of social support, a more consistent definition could evolve. A more consistent definition of social support, or at least a clearer idea of what dimensions of social support are important in the evolution of the construct, is critical information for the knowledge base of nursing practice. Nurses in research, therefore, can play a

crucial role in developing this knowledge base. The significant findings within each sample (i.e., each group of women perceived it received more emotional support than tangible aid), should guide researchers to investigate further questions related to adequacy of support, both emotional and tangible, and the amount of emotional support and tangible aid necessary for satisfactory functioning. Nurse researchers, then, should focus their efforts on determining not only how much support is available, but its adequacy. For example, this study described differences in perceptions of two types of social support in a sample of older women. In addition to replicating results with a representative random sample, measures that were not included in this study, such as determining actual need, actual adequacy of support available, etc., should be undertaken. Ultimately, research efforts must be focused on intervention studies. Because of their specialized knowledge of the elderly, and unique preparation for promoting health with elderly clients, nurses in advanced practice (FCNS, GCNS), must be leaders in designing and implementing intervention studies. Norbeck's Model to incorporate social support into practice (Figure 2) and the revised preassessment section of Norbeck's model (Figure 5) could be useful in designing such intervention studies.

The finding for the two age groups of women, (i.e., tangible aid perceived to be available was significantly lower in the older age group [75 to 89] than in the younger age group [65 to 74]), has implications for researchers as well. Efforts should be continued to distinguish age differences, age changes, and cohort variability. Age differences within the population of older adults is a clearly neglected area of research.

Methodological problems in data collection with an elderly sample must be addressed, and the design planned must be consistent with the variable being examined. Maddox and Douglass (1974) include problems with cross sectional studies, selective survival, sampling bias (i.e., frail elderly less likely to participate in research), and sex differences as methodological stumbling blocks in working with the elderly. For example, cross sectional studies are intended to measure age differences. Longitudinal studies attempt measurement of age changes over time in the same individuals. Time lag research (where persons of a certain age are studied and after a specified interval a different group of individuals at the same age of the first group when studied, are tested), is designed to distinguish change in behavior due to cohort effect (David, 1981). All of these designs have value, the problem is in determining the appropriate design for the variable being measured, e.g., you cannot measure age changes unless you use a longitudinal design. More complex research designs, involving combinations of cross sectional, longitudinal and time lag approaches, may be employed to reduce the limitations of a single method.

Other methodological problems in the research reported here also have implications for nurse researchers. A convenience sample was used in this study. The study should be replicated, using a stratified sample, i.e., truly representative of the older population on such parameters as sex, income, education, and race. The use of secondary data was limiting in that pertinent data, such as measurements of actual support were unavailable.

In general, the use of secondary data is convenient, expedient, and economical. The disadvantages, however, include restrictions in research questions because of lack of pertinent data, lack of control over the process used to select the sample and administer questionnaires and lack of information about modifications in the data collection procedures.

Recommendations for future research to correct these methodological problems include:

1. Utilizing a stratified random sample representative of the elderly population.
2. Evaluating the effect of wording differences in Norbeck's Social Support Questionnaire, i.e., some ask for responses from actual experience, others use hypothetical situations. This could be accomplished by changing emotional-related items to hypothetical situations and evaluating differences in response.
3. Employing a longitudinal design to evaluate age changes.
4. Including men in sample to examine sex differences in perception of social support.
5. Controlling for selective survival, was done in the Maddox and Douglass (1974) study.
6. Evaluating sampling bias by attempting to determine characteristics of persons refusing to participate.
7. Including a greater number of significant others in the analysis to reduce the halo effect which may occur when using the first (closest) significant others listed.

8. Including a measure of adequacy of social support perceived to be available.
9. Including a measure for external validation of perceived social support needs, i.e., survey significant others as well.

In summary, it should be evident that specific results of this study are not generalizable and therefore implications for future researchers include replication and refinement in methodology. These researchers play a critical role in the development of a sound knowledge base for the nursing profession. The results of this study, if confirmed on replication with a representative sample, can contribute to the knowledge base for nursing. The role of researchers in developing this scientific base for nursing has been discussed. The next section will contain a discussion of the role of nursing education in linking three areas of nursing, research, education and practice. Although specific results of this study can not be generalized for use in education, implications of the conceptual framework used and perspective of viewing social support by types, emotional and tangible, will be discussed.

Implications for Nursing Education

Nursing educators have the critical responsibility to socialize students to theory and research based practice. To effectively accomplish this objective, theory and research must be integrated into all student experiences. As this type of integration is most appropriately carried out at the BSN level of preparation, the discussion will be directed to that educational level.

The conceptual framework of Rogers (1980), is an important aid in providing students with a perspective for viewing clients holistically and individually. This holistic approach implies careful assessment of the client's interaction with her environment and recognition of the increasing complexity of individuals with aging. Results of this study indicate age differences exist between two groups of older women in perception of the tangible aid available to them, thereby emphasizing the heterogeneity of the elderly while focusing assessment on the critical area of support resources available.

Practice with a gerontological population of patients is a routine part of the experience of all nursing students. The care of elderly clients provides an excellent springboard for discussion of topics such as Rogerian concepts of increased complexity with aging, the client's interaction (energy exchange) with her environment, and the nurse's role in assessment of social support for elderly persons. Along with this theoretical background and physiological and psychological changes of normal aging, content areas for students should emphasize differences in perception of support, support resources, and needs over time. These content areas could be incorporated into the larger areas of family theory, social support, and interdisciplinary team support resources available.

The clinical instructor acts as a role model by integrating results of research into practice through use of the nursing process. The present study contributes to the knowledge base of nursing by conceptualizing support by types, emotional and tangible. This method of viewing social support adds to the accuracy of the assessment phase of the nursing process. By emphasizing assessment of older clients' needs

in the areas of emotional support and tangible aid, the clinical instructor assists students in assessing critical areas of potential support deficit. By focusing on the results of studies to provide information, such as what areas of support to assess, the clinical instructor assists students to develop commitment to research based practice.

Through their own involvement in research, educators bring the research process into sharp focus for students. Ideally educators have contact, either directly or indirectly as consultants, with both research and service. In reality, educators are often unable to maintain practice links and therefore, the connection between research, service, and education is not clear to new members of the profession.

Implications for Nursing Service

Nurses in the field of direct service to clients comprise the largest proportion of workers in the profession. Among these professionals, those working in acute care settings are most numerous. Results of this research have general and specific implications for nurses in this setting.

In general, results of this research, which support the concept of differences between two age groups of women, emphasize heterogeneity of the elderly and point to unsolved problems in traditional service settings. Adequate time for assessment is essential in working with older people. In-depth assessment of the individual with 80 years of history, development and complexity must logically take longer and possibly require more creativity to obtain a meaningful database. For

example, when the client is hard of hearing, sensitivity and creativity in providing quiet, uninterrupted time for assessment is essential. In point of fact, little administrative support is provided for increasing professional nursing time with the elderly. Considering the traditional length of time for the work of admission assessment, the fatigability of an older individual under stress, and the confusing stimuli in the acute care setting, it is probable that accuracy of assessment suffers. Nurses in this setting, then, are apt to have a limited perspective on the older individual and her environment, including her support network. Yet, these nurses are strategically involved in discharge planning, where total assessment of the client, including emotional and tangible support resources is critical. Results of this study then, which indicate a trend toward a lower level of tangible aid perceived, particularly in the older age group, have implications for the process of discharge planning.

Specifically, nurses in service should routinely assess the availability of support resources and what opportunities the client has had to confirm the resources he/she perceives to be available (i.e., how likely are these support people to provide actual support). The actual items from Norbeck's Social Support Instrument could provide a method of asking the client about support available. Because of the high correlations (Cronbach's alpha) among the items, use of one item for emotional and one for tangible could be justified. Of course, validation of actual support available would be essential in a service setting because discharge planning depends on such availability.

The value of research findings are perceived differently by individual nurses. Those socialized into research based practice, it is hoped, will seek out research information and incorporate it into their practice independently. This socialization is most likely to occur at the BSN level of preparation. In reality, nurses practicing in acute care settings have multiple levels of education. It is the role of Nursing administration to assist in bridging the gap between the various educational levels of nurses.

Therefore, the general implications of research results for administrators in nursing service include the need to assist in the dissemination of findings that will improve the care of the elderly. In service education based on research results is one way to provide pertinent information to all levels of nurses involved in direct care. Commitment to facilitate development of formal links to those in education and research for consultation and collaboration must also come from administration. Creating or developing the role of a Gerontological Clinical Nurse Specialist in an acute care center can provide this critical link and assist in bridging the gap in educational levels of nurses.

Administrators in nursing service have additional concerns related to care of the elderly client, i.e., discharge planning and assessment of support options. With pressure from federal legislation (TEFRA Act of 1983), involving a change to a prospective reimbursement system, the national trend toward shorter hospital stays will surely escalate. The elderly are at high risk to be caught in the triple vise of decreased

length of stay in acute care settings, lack of community facilities appropriate for post hospital stays, and lack of social support to maintain independence while recuperating at home. While it is beyond the scope of this thesis to discuss all the limitations and opportunities possible within the new system, it is evident that resources for the elderly, and documentation of nursing time and effort in assessment and planning for these clients, are important parameters that administrators will watch closely. Therefore, in acute care settings administrators must provide time for professionals to complete an in-depth assessment of elderly clients and their support resources. Administrators must also make the commitment to provide in-service opportunities that disseminate research based information to help bridge the gap between the different educational preparation of nurses in their institutions. Additionally, they must formulate strategies to provide linkages with education and research, and establish communication with community facilities to assist in continuity of care. Development of the role of the Clinical Nurse Specialist (GCNS, FCNS) in acute care settings has been mentioned as a way to begin to meet these commitments. In any event it should be evident that documentation of the important role of nursing is crucial in this time of shrinking resources.

The Clinical Nurse Specialist must assume a leadership role. She is committed to the larger view -- the development of the profession. Collaboration, role modeling, and consultation are methods of disseminating results of research and assisting in integration of results into practice. Visibility of the Gerontological Clinical Nurse Specialist

in education, service, and research is essential. This provider must also be visible in the community, for example, by University Outreach programs or classes for support system members. Involvement of this type is another way of disseminating results and assuring that information is available for those who need it (i.e., the families and significant others of the elderly).

Dissemination of Results

The preceding recommendations for nurses and others in the area of education, service, and research serve as a guide to address the issue of dissemination of results. From the above discussion it is evident that there should be much more communication between nurses working in the different areas. A summary of the connection between these areas outlines the responsibility of each division.

The researcher's ultimate responsibility is to disseminate research findings in ways that make them available and understandable to other members of the profession. The responsibility of nursing educators is to socialize students to base practice on theory and research. Nurse educators have responsibility as well to maintain ties with those involved in research and service. The responsibility of nurses in service is to implement research findings into practice and create a climate in which the socialization of students can occur. Through communication links, service and education provide feedback to research for direction in the research process.

It is evident that a free flow of communication, consultation, and collaboration must exist between nurses in practice, education and research. Results of research must be available to others. Publication in journals that appeal to nurses in each area is essential. The jargon of theory and research must be reduced in recognition of the differences in educational preparation of nurses. Clarity, communication and a bridge between nurses with various levels of educational preparation should be the goal in disseminating results.

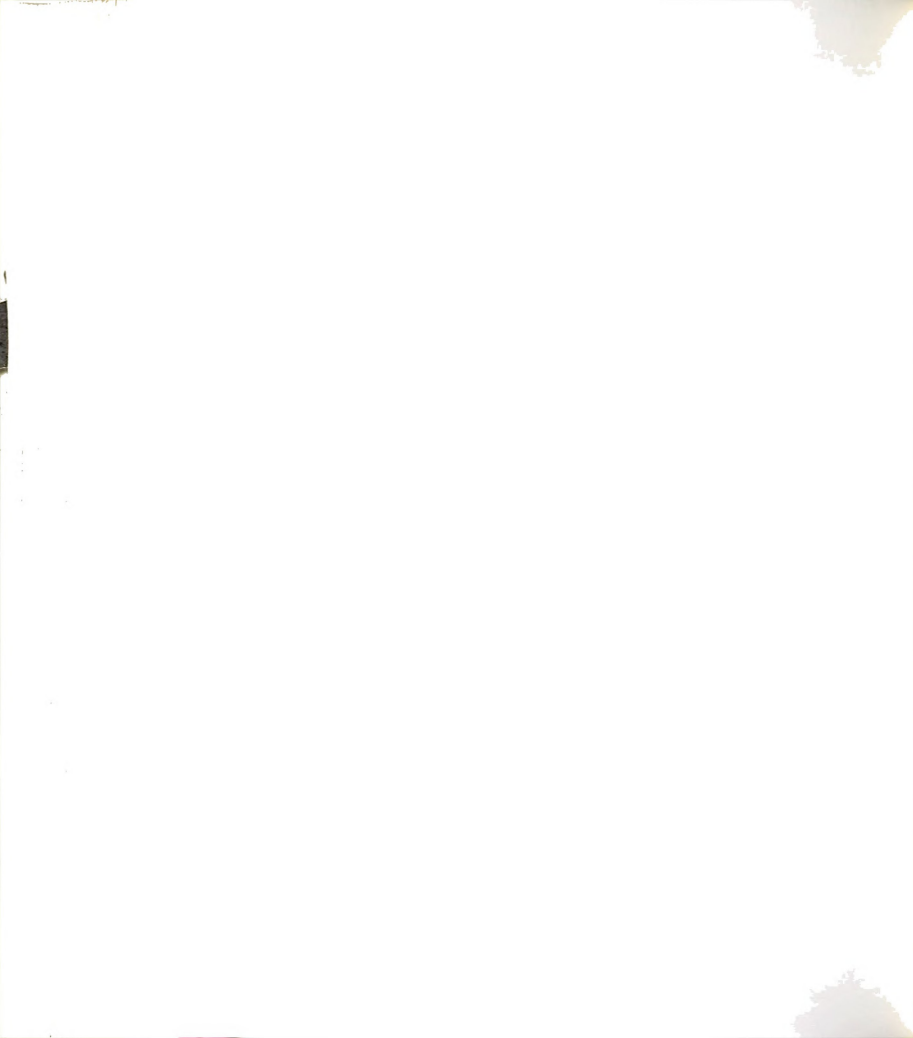
The educational preparation of Clinical Nurse Specialists provides the basis for individuals at this level to take leadership roles in the nursing profession. Family and Gerontological Clinical Nurse Specialists must facilitate communication among professionals involved in research, education and practice in nursing. One way to accomplish this is to incorporate research findings into practice thereby serving as a role model to others. For example, by assessing for social support deficits in two areas, emotional and tangible, the Clinical Nurse Specialist (CNS) provides an example of the use of research results. By influencing others to recognize the heterogeneity of the elderly, the CNS helps to bridge the gap in educational preparation of nurses. Assisting other nurses to see that the needs of the elderly may differ depending on their age, decreases the impact of myths and ageism.

Regardless of the type of setting (primary care, acute care or other), the Clinical Nurse Specialist can use the information and concepts presented in this thesis in practice with elderly clients. Nursing practice based on Roger's Theory of Unitary Man focuses the



CNS to approach each interaction with a client as a unique opportunity to influence, and be influenced in, the process of growth toward increasing complexity. Interaction with a client regarding social support needs can be guided by the components of Norbeck's model for incorporating social support into clinical practice (Figure 2). With this framework as a base, the CNS uses the nursing process to direct the exchange of energy towards greater likelihood of a positive health outcome. In beginning the assessment phase, then, the CNS considers the factors which she must explore with the client in developing an accurate comprehensive assessment of social support needs and resources. Assessing potential support deficits by exploring two types of social support, emotional and tangible, may increase the accuracy of the assessment and decrease the potential for missing critical areas of support deficit.

In summary, the focus of this study has been on differences in perceptions of two types of support, emotional and tangible, among elderly women. One area of age difference (tangible aid perceived to be available) was described. Use of these findings will contribute to the accuracy of the assessment of elderly clients. The collaborators in this study also recognize the vital part this beginning research plays in the overall development of a knowledge base for nursing and the link it can provide to nurses in education, research and service.



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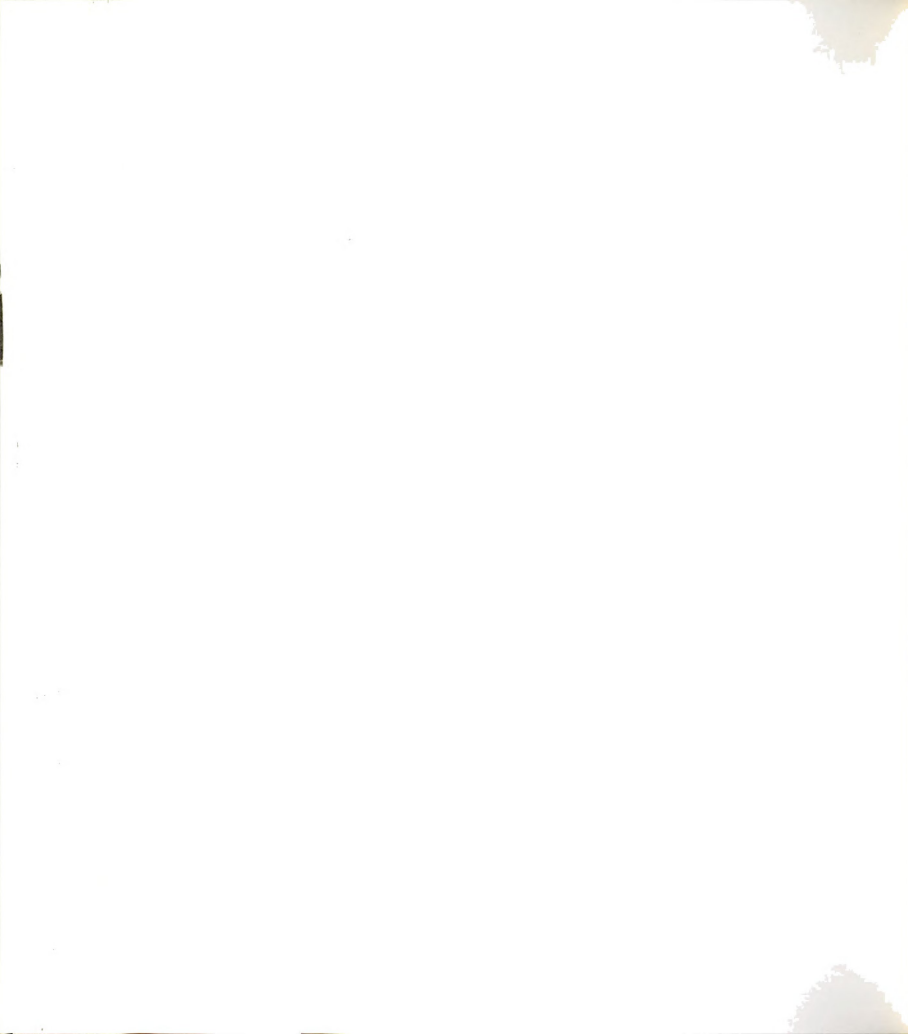
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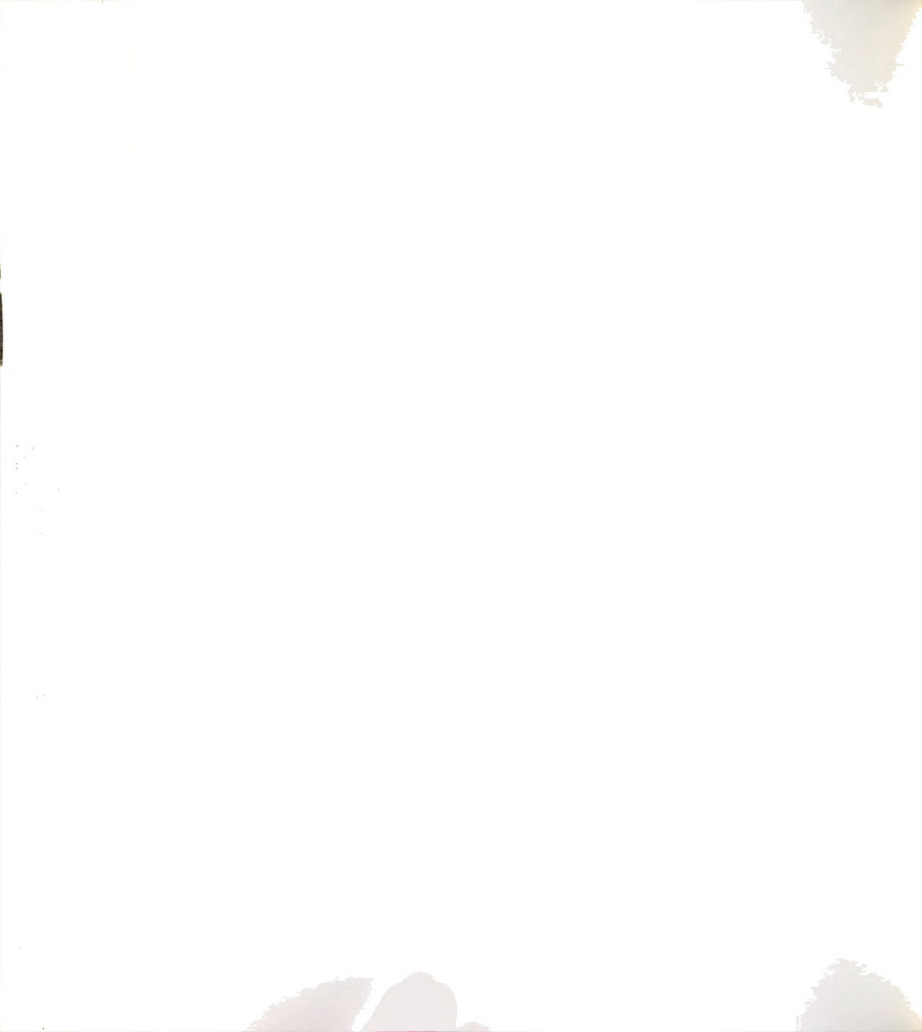
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APPENDIX A

The Norbeck Social Support Questionnaire

Please list each significant person in your life on the LEFT. List their relationship to you on the RIGHT from the groups in the directions.

FIRST NAME OR INITIALS	RELATIONSHIP
1. _____	1. _____ (16)
2. _____	2. _____ (17)
3. _____	3. _____ (18)
4. _____	4. _____ (19)
5. _____	5. _____ (20)
6. _____	6. _____ (21)
7. _____	7. _____ (22)
8. _____	8. _____ (23)
9. _____	9. _____ (24)
10. _____	10. _____ (25)
11. _____	11. _____ (26)
12. _____	12. _____ (27)
13. _____	13. _____ (28)
14. _____	14. _____ (29)
15. _____	15. _____ (30)
16. _____	16. _____ (31)
17. _____	17. _____ (32)
18. _____	18. _____ (33)
19. _____	19. _____ (34)
20. _____	20. _____ (35)



DO NOT OPEN UNTIL PAGE
ON THE RIGHT IS COMPLETED.

When the right page is completed, please open this booklet and match the lines on the right and left pages that are numbered 1-20.

The questions you will answer on the left are about the people you listed on the right.

Be very careful that the numbers of the lines match on both pages. Check them occasionally as you are completing the questions.

PLEASE TURN THE PAGE AND BEGIN
BY ANSWERING QUESTION 1.



For each person you listed, please answer the following questions by writing in the number that applies.

- 1 = Not at all
 2 = A little
 3 = Moderately
 4 = Quite a bit
 5 = A great deal

Question 1:

How much does this person make you feel liked or loved?

1. _____ (36)
2. _____ (37)
3. _____ (38)
4. _____ (39)
5. _____ (40)
6. _____ (41)
7. _____ (42)
8. _____ (43)
9. _____ (44)
10. _____ (45)
11. _____ (46)
12. _____ (47)
13. _____ (48)
14. _____ (49)
15. _____ (50)
16. _____ (51)
17. _____ (52)
18. _____ (53)
19. _____ (54)
20. _____ (55)

Question 2:

How much does this person make you feel respected or admired?

1. _____ (56)
2. _____ (57)
3. _____ (58)
4. _____ (59)
5. _____ (60)
6. _____ (61)
7. _____ (62)
8. _____ (63)
9. _____ (64)
10. _____ (65)
11. _____ (66)
12. _____ (67)
13. _____ (68)
14. _____ (69)
15. _____ (70)
16. _____ (71)
17. _____ (72)
18. _____ (73)
19. _____ (74)
20. _____ (75)

For each person you listed, please answer the following questions by writing in the number that applies.

- 1 = Not at all
 2 = A little
 3 = Moderately
 4 = Quite a bit
 5 = A great deal

Question 3:

How much can you confide in this person?

1. _____ (16)
2. _____ (17)
3. _____ (18)
4. _____ (19)
5. _____ (20)
6. _____ (21)
7. _____ (22)
8. _____ (23)
9. _____ (24)
10. _____ (25)
11. _____ (26)
12. _____ (27)
13. _____ (28)
14. _____ (29)
15. _____ (30)
16. _____ (31)
17. _____ (32)
18. _____ (33)
19. _____ (34)
20. _____ (35)

Question 4:

How much does this person agree with or support your actions or thoughts?

1. _____ (36)
2. _____ (37)
3. _____ (38)
4. _____ (39)
5. _____ (40)
6. _____ (41)
7. _____ (42)
8. _____ (43)
9. _____ (44)
10. _____ (45)
11. _____ (46)
12. _____ (47)
13. _____ (48)
14. _____ (49)
15. _____ (50)
16. _____ (51)
17. _____ (52)
18. _____ (53)
19. _____ (54)
20. _____ (55)

For each person you listed, please answer the following questions by writing in the number that applies.

- 1 = Not at all
 2 = A little
 3 = Moderately
 4 = Quite a bit
 5 = A great deal

Question 5:

If you needed to borrow \$10, a ride to the doctor, or some other immediate help, how much could this person usually help?

Question 6:

If you were confined to bed for several weeks, how much could this person help you?

Repeat 1 - 15

1. _____ (56)
2. _____ (57)
3. _____ (58)
4. _____ (59)
5. _____ (60)
6. _____ (61)
7. _____ (62)
8. _____ (63)
9. _____ (64)
10. _____ (65)
11. _____ (66)
12. _____ (67)
13. _____ (68)
14. _____ (69)
15. _____ (70)
16. _____ (71)
17. _____ (72)
18. _____ (73)
19. _____ (74)
20. _____ (75)

1. _____ (16)
2. _____ (17)
3. _____ (18)
4. _____ (19)
5. _____ (20)
6. _____ (21)
7. _____ (22)
8. _____ (23)
9. _____ (24)
10. _____ (25)
11. _____ (26)
12. _____ (27)
13. _____ (28)
14. _____ (29)
15. _____ (30)
16. _____ (31)
17. _____ (32)
18. _____ (33)
19. _____ (34)
20. _____ (35)



For each person you listed, please answer the following questions by writing in the number that applies.

Question 7:

How long have you known this person?

- 1 = Less than 6 months
- 2 = 6 months - 1-1/2 years
- 3 = Between 1-1/2 years - 3 years
- 4 = Between 3 - 5 years
- 5 = 5 years or more

1. _____ (36)
2. _____ (37)
3. _____ (38)
4. _____ (39)
5. _____ (40)
6. _____ (41)
7. _____ (42)
8. _____ (43)
9. _____ (44)
10. _____ (45)
11. _____ (46)
12. _____ (47)
13. _____ (48)
14. _____ (49)
15. _____ (50)
16. _____ (51)
17. _____ (52)
18. _____ (53)
19. _____ (54)
20. _____ (55)

Question 8:

How frequently do you usually have contact with this person?
(phone calls, visits, or letters)

- 1 = Once a year or less
- 2 = Every 3 - 6 months
- 3 = Once a month
- 4 = Once a week
- 5 = Once a day

1. _____ (56)
2. _____ (57)
3. _____ (58)
4. _____ (59)
5. _____ (60)
6. _____ (61)
7. _____ (62)
8. _____ (63)
9. _____ (64)
10. _____ (65)
11. _____ (66)
12. _____ (67)
13. _____ (68)
14. _____ (69)
15. _____ (70)
16. _____ (71)
17. _____ (72)
18. _____ (73)
19. _____ (74)
20. _____ (75)



Question 9:

During the past year have you lost any important relationships due to moving, a job change, divorce or separation, death, or some other reason?
(PLEASE CHECK ONE)

_____ Yes

_____ NO

Repeat 1-15

If yes, specify _____.

9a.

If YES, indicate the category(ies) of persons no longer available to you.

- 1 = Spouse or partner
- 2 = Family or relative
- 3 = Friend
- 4 = Work or school associate
- 5 = Neighbor
- 6 = Health care provider
- 7 = Counselor or therapist
- 8 = Minister/priest/rabbi
- 9 = Other

9b.

If YES, indicate how much support this person (or persons) has provided in the past six months.

- 1 = Not at all
- 2 = A little
- 3 = Moderately
- 4 = Quite a bit
- 5 = A great deal

- 1. _____ (17)
- 2. _____ (18)
- 3. _____ (19)
- 4. _____ (20)
- 5. _____ (21)
- 6. _____ (22)
- 7. _____ (23)
- 8. _____ (24)
- 9. _____ (25)
- 10. _____ (26)

- 1. _____ (27)
- 2. _____ (28)
- 3. _____ (29)
- 4. _____ (30)
- 5. _____ (31)
- 6. _____ (32)
- 7. _____ (33)
- 8. _____ (34)
- 9. _____ (35)
- 10. _____ (36)

APPENDIX B

Consent Form

The Norbeck Social Support Questionnaire



CONSENT FORM

The study in which we are asking you to participate is designed to learn more about how older individuals' life situations and support affect their ability to actively participate in their health care. It will take about 45 minutes to complete. If you agree to participate, please sign the following statement.

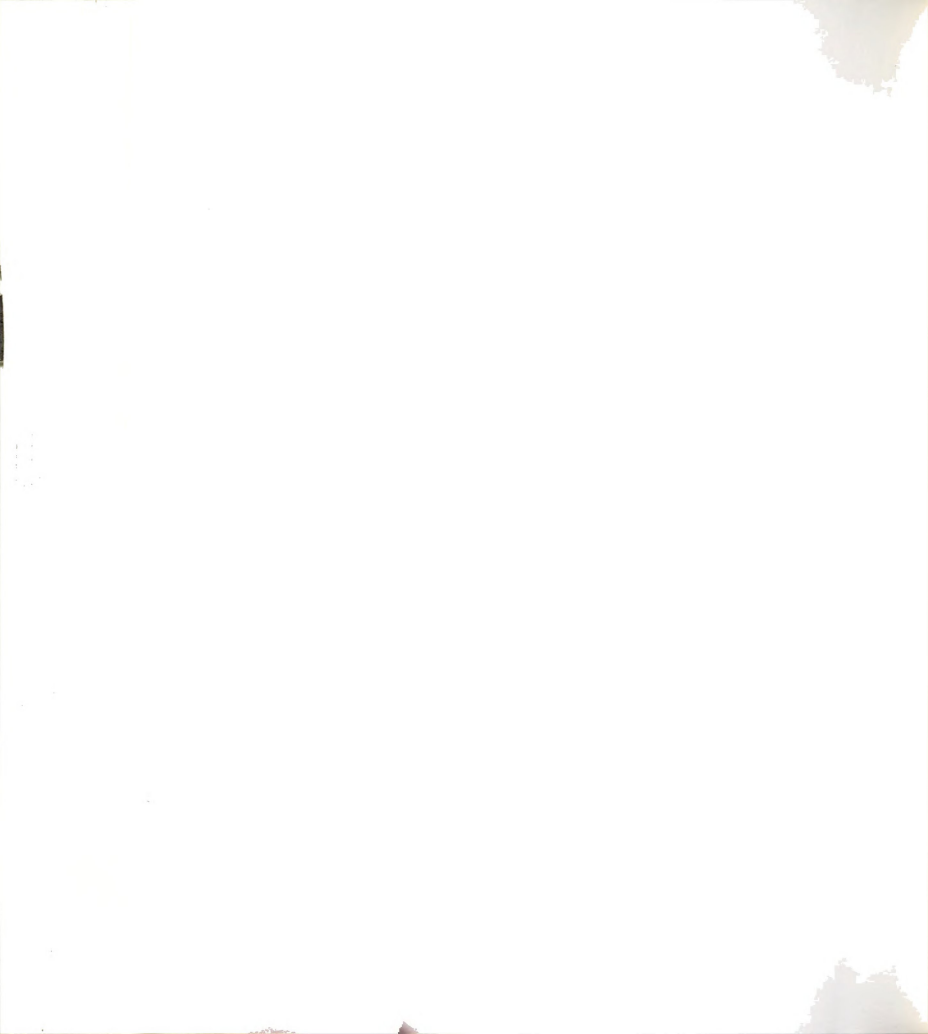
1. I have freely consented to take part in a study of patients being conducted by the College of Nursing at Michigan State University.
2. The study has been described and explained to me and I understand what my participation will involve.
3. I understand that if I withdraw from the study after originally agreeing to participate, the amount and quality of service provided me will not change. I understand that I can withdraw from participating at any time.
4. I understand that the results of the study will be treated in strict confidence and that should they be published, my name will remain anonymous. I understand that within these restrictions results can, upon request, be made available to me.

I, _____, state that I understand what
(Print Name)

is required of me as a participant and agree to take part in this study.

Signed _____
(Signature of Patient)

Date _____



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