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A DESCRIPTIVE STUDY OF THE DIFFERENCES IN PERCEIVED EMOTIONAL SUPPORT RECEIVED AND PERCEIVED TANGIBLE AID AVAILABLE TO ELDERLY WOMEN IN TWO AGE GROUPS

By

Carolyn Smith-Adams

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ABSTRACT

A DESCRIPTIVE STUDY OF THE DIFFERENCES IN PERCEIVED EMOTIONAL SUPPORT RECEIVED AND PERCEIVED TANGIBLE AID AVAILABLE TO ELDERLY WOMEN IN TWO AGE GROUPS

By

Carolyn Smith-Adams

Elderly persons are often viewed as a homogeneous group, however as the life span increases there is likely to be greater differentiation in older people. Additionally, census data show more older persons are women, who are healthy and actively involved. Research is necessary to study factors that will promote and maintain a high level of health. This descriptive study based on data from a larger study was designed to explore whether women, aged 75 to 89, perceived differences in emotional support and tangible aid. Results were compared to a similar sample of women aged 65 to 74 years of age.

The sample was composed of 24 women who completed items on Norbeck's Social Support Questionnaire. Data were analyzed using descriptive statistics and t-tests. Significant differences were found ($p<.001$) when emotioanl and tangible aid responses were analyzed for the group aged 75 to 89 and tangible support was perceived to be less available. Data analysis of responses to tangible aid items between two age groups indicated a significant difference on the perception of tangible aid ($p<.05$). The older group of women viewed tangible aid less available than emotional support.

At the end of life we will not be judged by
how many diplomas we have received
how much money we have made
how many great things we have done.

We will be judged by
"I was hungry and you gave me to eat
I was naked and you clothed me
I was homeless and you took me in."

This is Christ in distressing disguise.
(Mother Teresa of Calcutta)

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CHAPTER I

THE PROBLEM

Introduction

Older women outnumber older men in the United States and, as the total elderly population increases, older women will require a greater share of the nation's health care resources. In 1900, only two percent of the population, or 1.5 million older women, comprised the total population. Where in 1977, 10 percent of the population was over 65, and a projected increase of 14 to 22 percent is expected by the year 2000. That is, one in every 14 people will be a women 65 years or older (Projection of Population, 1977-2050, 1976). Contributing to the increased number of women is the fact that life expectancy is greater for women. At birth there are 120 males to 94.8 females; however, by age 65 there are 68 males to 100 females and at age 85 there are 50 males to 100 females (U.S. Bureau of Census, 1984). Given the increasing numbers and greater longevity of females, health care providers and researchers are only beginning to recognize the need for determining the resources or factors that will promote the health of older women.

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To many the concept of health promotion and wellness have little application to an aging population. Old age is often characterized by illness and dependency. Health professionals, including nurses, frequently have negative attitudes toward aging persons. Gelein (1982) noted that although we all know someone who is elderly, female and healthy, we have given little thought to what factors or characteristics might contribute to this state. Gelein believes that several factors have formed our perceptions and attitudes toward the aged. First, the elderly are viewed stereotypically as a homogenous group on a declining path. The resulting assumption is that the majority of those in old age are sick and dependent and while there are a few notable exceptions they do not contradict the rule of terminal decline. In truth, statistics show that most older people live independently in the community and that 85 percent are healthy enough to carry on their normal life style (National Center for Health Statistics, 1976). Additionally, developmental and life-span researchers suggest that differentiation increases with age, with greater heterogeneity and variability as people advance in years (Havighurst, 1957; Maddox and Douglas, 1974; Neugarten, 1973; Riegel, 1971 Sarbin, 1954).

Second, health care providers are more likely to see and treat the ill and frail elderly leading to selective exposure to aging persons. The percentage of frail elderly

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has been estimated to be 15 percent of those over 65 years of age and only 5 percent are in institutions at any one time (Patrick, 1979). It is this small percentage that have become the focus of much of the research on aging persons. Third, social or psychological phenomena of aging has only recently attracted the interest of social scientists (Maddox, 1977).

This orientation toward the frail elderly has been the predominant focus of literature and research on aging that is, the absence of health, chronic disease and deterioration with age. Two literature reviews of gerontological nursing, covering approximately twenty-five years of nursing literature, reveal that information on health promotion is missing in publications on aging before 1977 (Basson, 1967; Gunter, 1977). Only recently have authors begun to challenge the assumptions and myths of aging and focus on normal physiologic age changes versus the pathology of age, and to relate the concept of wellness and factors that promote health to an elderly population (Gelein,1980, 1982; Hickey, 1980; Kee, 1984; Shanas, 1980). While the study of pathology, diagnosis and treatment of disease will remain important in the care of aging persons, the fact is that 80 percent of those individuals over 65 are well and maintaining themselves in some fashion in the community.

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Nurses in Advanced Practice and particularly the Clinical Nurse Specialist in Gerontology have a primary focus and area of accountability in providing health promotion and maintenance activities with older adults. The focus cannot be limited to illness and disease of old age but rather must seek to identify and understand the characteristics of health and factors that will enhance the health and quality of life with aging.

A number of psychosocial variables have been identified and studied as factors that promote health. Among these is the concept of social support. Social support is a term that is implicitly and explicitly central to clinical nursing. Often it has had different names: love, caring, friendship or social integration. Most nurses have an intuitive sense of what constitutes social support and the term shows up frequently in care plans. For some purposes, a general and intuitive understanding of social support may be sufficient. However, to develop a level of scientific knowledge adequate for clinical application, nurses and other health care providers must achieve greater precision in describing, defining, and measuring social support. Additionally, the literature and dictionary definition of social support suggests there are many different types or components of social support. What is not clear is what differences make a difference. In

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particular, what types or components of support have important effects on health?

While individuals differ in timing and rate, all older people face the stress of physical, social, and environmental changes, many of which challenge their ability to cope. Unique to old age are the series of stresses such as, loss of employment and work relationships, death of spouse/family members, and friends. All take place at a time when coping ability has begun to diminish and other physical and mental changes are occuring as a normal part of aging. How such losses affect elderly women's capacity to cope is unclear, but the existing evidence from research would indicate that social support does contribute to health outcomes (Caplan & Killilea, 1976; Cobb, 1976; House 1981; Kaplan, et. al., 1977; Kasl, 1978).

In summary, much of the past literature on aging women has focused on the absence of health or signs and symptoms of illness considered to be characteristic of aging. This orientation continues to be prevalent in health care today. However, women are living longer and growing in greater numbers. To promote health and quality of life for aging women nurses in advanced practice must refocus on "wellness" and identify the characteristics of older women and the environment that maintain or promote health states. Without research or publications on health promoting

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factors in aging women, myths and stereotypes about growing older are sustained. These stereotypes affect the attitudes of women about aging, as well as the beliefs of health care providers about the potential of elderly women.

Purpose

A large and growing body of research on the effects of social support on health exists, yet such knowledge is still often fragmented and unsystematic. The conceptual and operational definitions of support are often not comparable across studies, and the populations and study designs vary greatly (Israel, 1982; House, 1981; Norbeck, 1981). Since an aging population of largely women, are likely to have multiple losses physically, psychologically, and socially, the need exists to research demographic properties and situational/environmental properties that might influence social support needs. Perception of need as well as actual and available need for support may also be quite different. A descriptive study was proposed to examine the perceptions of a sample of elderly women.

The purpose of this study was to identify if there are statistical differences in the way older women perceive two types of social support, emotional and tangible aid. In collaboration with Sefton-Cojocel (1984), two samples of women were utilized to determine if there were differences in perceptions among a sample of old-old women or between a sample of young-old and old-old women.

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Statement of the Research Questions

Using two sets of data from a larger study, Active Participation: Health Care for the Elderly (Given, 1982) similar and inter-related questions were proposed. The data from the two studies, analyzed separately, provided a look at two elderly groups of women and the ways each perceived emotional support received and tangible aid available to them.

The question asked in this study is: Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 75-89? Sefton-Cojocel asked: Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 65 to 74? For comparison, the question was asked: Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available between two groups of women aged 65 to 74 and women aged 75 to 89?

These two theses have been written separately, with the exception of Chapter III, the Literature Review, and Chapter IV, the Methodology. It is proposed that the results of such a collaborative effort will provide additional scientific data about aging women and social support.

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Conceptual Definitions

Age

Differentiation in social, spiritual, psychological, and physiological functioning increases with age. The range of differences become greater, not narrower, as people move through the adult years (Maddox & Douglas, 1974). Given this diversity, it is useful to distinguish between the various aging groups, a distinction Neugarten (1981) has characterized as the young-old (65 to 74) and old-old (75 years and older). For purposes of this study the sociocultural approach which emphasizes the needs and age norms dichotomized by Neugarten will be utilized. The following are descriptions of the needs and age norms within each group of young-old, and old-old.

It is the young-old who are now, and will continue to comprise, the large majority of persons over 65. At present the young-old group numbers roughly 31 million people or 15% of the total population. Because mortality rates for women are lower, females outnumber males by a sizable proportion. The rates of widowhood are very different for the two sexes; about 7% of men, but over 30% of women, are widowed. The young-old are, for the most part, healthy and competent men and women, many of whom have retired or reduced their time in homemaking, but remain integrated members of their families and community. The young-old see their children frequently and often live near at least one

child. It is noteworthy that a large proportion of young-old have a living parent. The estimate is one of every three 60 year olds have a living parent in 1972 (Neugarten, 1974). This proportion has increased as the numbers of old-old have grown faster than the numbers of young-old. Whether they are working or retired, the young-old 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. Their needs for meaningful ways of spending time, for special housing, and for transportation will depend in part upon their health status. Probably an increasing number will remain active, productive and independent. Most, though, will need both supportive services and special assistive devices in the physical environment to enable them to function as fully as possible.

Neugarten's sociocultural age groupings based on needs and norms will be utilized in this study. It is expected that such a dichotomy, young-old and old-old, will provide the basis for identifying diversity among and between groups of women in each age group, and that the perceptions of social support need will be quite different between the two age groups.

Social Support

Social support is recognized as a multidimensional construct and has been defined several ways: support as

relational provisions, support as information, support as structure, and support as interaction (Cobb, 1976; Caplan, 1974; Mitchell, 1969; Weiss, 1974). For the purpose of this study, the definition proposed by Kahn (1979) will be used. That is, social support consists of "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 view; the giving of symbolic or material aid to another" (Kahn 1979,p.85)

Perceived Emotional Support

Perception is defined as an individuals interpretation of reality (Roger 1970). Perceived emotional support is defined as each individual's interpretation of the caring and concern expressed to them by others. Individuals will perceive that others believe in them, love and respect them. Emotional support implies the ability to confide.

Perceived Tangible Aid

Perceived tangible aid is defined as the individual's interpretation of support provided by others in the form of material resources, such as money, materials, tools and skills or services, such as transportation, shopping, assistance with tasks of daily living.

Assumptions

Theoretical

1. Unitary Man/person is a four-dimensional, negentropic energy field identified by pattern and organization and

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manifesting characteristics and behaviors that are different from those of the parts and which cannot be predicted from knowledge of the parts (Rogers, 1970).

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/person and the environment are in continuous, mutual, simultaneous interaction, evolving toward increased differentiation and diversity of field pattern and organization (Rogers, 1970).

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. Unitary Man/person'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.

7. Unitary Man/person's interaction with the social environment has both direct and indirect effects on his behavior and his health.

8. Social support has a mediating or buffering effect on individuals that stimulates the development of coping strategies or provides direct aid.

9. Lack of support may lead to decreased ability to cope and may result in ill health.

10. The need for social support persists throughout life.

11. As people age, they lose significant others through death. Major losses may result in an inadequate support situation for older adults.

Methodological Assumptions

1. Persons participating in this study will respond honestly according to their perceptions and understanding of the questions being asked.

2. In the older age group studied, individuals may have more actual experience with receipt of tangible support. Therefore, response of those in the older age group may be based on actual tangible support received rather than hypothetical support available.

Scope and Limitations

The scope of this study extends only to the sample that was studied as a part of the larger preliminary study of active participation in health care for the elderly. The following are limitations of this study:

1) No attempt was made in the original study to obtain a random sample, thereby proscribing the generalizability of the reseach findings beyond the study group.

2) This study uses secondary data obtained from the pretest of instruments for a larger study. Therefore, data

utilized was limited to data collected in the original study.

3) Individuals who agreed to participate in the larger, preliminary study may be different from those who refused. The research findings may not be representative of all elderly persons.

4) The data were collected at one point in time. Thus, they may not be representative of the usual perceptions of aging persons. Measurements of perceptions at various points in time may be more typical.

5) Long-lived persons represent a select group. The well elderly, particularly above age 75, could be considered elite survivors. Therefore, generalization of findings will be limited.

6) 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.

7) Different individual perceptions of the meanings of the answer choices (represented in a Likert Scale) may have affected individual responses.

8) The sample sizes were small (36 women, ages 65 to 74 and 24 women, ages 75 to 89). The numbers may

have been too small to represent true differences in perception of social support.

Overview of Chapters

This thesis is presented in six chapters. In the first chapter the problem was defined and background material, purpose, research questions and definitions of concepts were provided. The second chapter builds on the first chapter with more detailed discussion of concepts. In this chapter, concepts are placed within the context of Rogers theoretical basis of nursing and the relationships between concepts and the nursing process are shown within a model developed by Norbeck (1981).

The third chapter, co-authored with Sefton-Cojocel, 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 individual differences will also be presented. Limitations of currently available literature are also discussed in this chapter.

In Chapter IV, the research design is presented. In collaboration with Sefton-Cojocel this chapter contains a discussion of the sample, data collection procedures, instrumentation, operational definitions, human subjects and the statistical analysis utilized.

Data and analysis are presented in Chapter V. First the data specific to the study question are analyzed and presented. Then, data resulting from the Sefton-Cojocel study will be summarized, and the comparative results presented to answer the collaborative question of whether age differences in perception of emotional support and tangible aid will be evident between the two study populations.

The primary focus of Chapter VI is the implications for nursing and the presentation of conclusions. Research recommendations will also be presented in this chapter.

CHAPTER II

CONCEPTUAL FRAMEWORK

In this Chapter, concepts of age differences and the aging female will be related to social support as a factor to promote health. The concepts will be discussed within the context of the nursing theory proposed by Martha Rogers (1970). Within this theoretical framework, broader concepts of holistic man, environment, pattern and organization of human behaviors will be presented and then related to the diversity and complexity of aging behaviors. A presentation of the multidimensional concept of social support will follow. The dimensions of the construct, functional characteristics, interactional characteristics and structure of the network properties will be explored.

Finally, a model developed by Norbeck (1981) will be used to visualize the relationships and the elements of man, environment and social support to nursing process and outcome. Although nursing interventions are not a part of the present study, the conceptual framework will be used as the basis from which nursing interventions are derived for professional practice, education and research to be presented in Chapter VI.

Rogers Conceptual System for Nursing

Rogers uses a dialectic method of reasoning in which nursing is explained by reference to broader principles that explain man/human. Man, in turn, is explained by principles Rogers asserts characterize the universe. According to Rogers, the science of nursing is directed toward describing the life process of man, and toward explaining and predicting the nature and direction of man's development (1981). Historically, nursing has been used as a verb meaning "to do". When the term nursing is perceived as a science, the word becomes a noun signifying "to know". Research in nursing, then, is the study of Unitary Man/Person, while the practice of nursing is the use of this body of knowledge in service to people (Rogers,1980). The usefulness of Rogers' conceptual system lies in its scope and range of applicability to complex nursing problems. In the following sections, Rogers' basic assumptions about the nature of man/human and how these assumptions related to her Principles of Homeodynamics will be discussed.

Unitary Man/Person

Four basic assumptions about human beings are proposed by Rogers: 1) man/human is a unified whole and his oneness can be visualized as observable phenomenon of organization and patterns; 2) man/human and the enviroment are continuously exchanging matter and energy with one

another and this interchange is the basis of human growth and behavior; 3) the life process of humans evolves unidirectionally along a space time continuum, the result is the continuing evolution of the individual and the environment; 4) man/human is characterized by the capacity for abstraction and imagery, language, thought, sensation and emotion.

Building on the stated assumptions Rogers proposes three broad principles that postulate the nature and direction of unitary human development: helicy; resonancy; and integrality.

Principle of helicy: The nature and direction of human and environmental change is continuously innovative and probabilistic. This change is characterized by increasing diversity of human and environmental field pattern and organization because of continuous mutual, and simultaneous interaction between the human and environmental fields. Because no two interchanges between man and the environment can ever be exactly the same the evolution is postulated to be unidirectional. Within this principle, the life process is expressed as a dynamic and constantly evolving series of changes in which past experiences are incorporated and new patterns emerge. Therefore, helicy postulates the direction of the change occuring between human and environmental fields.

Principle of resonancy: The relationship between the human field is one of constant interaction and mutual change. The principle of resonancy proposes the nature of the change occuring between the human and environmental fields. The change in pattern and organization of both human and environmental fields occurs as a result of energy exchange in which energy waves move from lower frequency, longer waves to higher frequency, shorter waves. As a result of this exchange, there is continuous repatterning. This principle provides the basis for explaining the creativity of life.

Principle of integrality: The interaction between human and environmental fields is continuous, mutual, and simultaneous. This continuous, mutual and simultaneous interaction is a result of the inseparability of human beings and their environment.

Application of Rogers' Conceptual System To Aging Phenomena

Rogers' principles provides a scientific framework for understanding the aging process. According to Rogers helicy, resonancy and integrality only have validity within the context of the conceptual system of Unitary Man. The interaction that occurs between each individual and his/her environment leads to individuality and increased individual variability over time. Other scientists, particularly

gerontologists support the idea of age differences and increased variability as persons age (Lawton, 1977; Neugarten, 1974, 1981, 1982; Troll, 1977). Aging is a developmental and therefore continuous process occuring from birth to death. In the Rogers conceptual system, aging is considered a developmental process in which humans grow in diversity and complexity in all spheres, biologically, socially, mentally, and spiritually. Rogers does not support a "running down" theory of aging. Her support of increasing complexity and unidirectionally is evidenced by her statements relating to changing sleep and taste patterns. Aging persons require less sleep and the patterned frequencies of sleep and wakefulness are more diverse. Preference in taste is for sharp, distinct flavors, which imply an appreciation for a range of taste phenomena versus the often held premise of deteriorating taste buds (Rogers, 1980).

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

man/person and environment over time; and 3) complementarity, continuous interaction between and among individuals and their social environment. These concepts provide the background for the following theoretical discussion of age and aging women's perceptions of social support.

Age

In examining elderly women's perceptions of social support age will be an influencing variable. Norbeck (1981) argues that age influences the amount and type of support required for optimal functioning however, how it does so is unclear. Conceptually old age has a variety of meanings. If for example, one looks at the debate over policy for the elderly from the mid-1930's through 1960's, as well as the programs for the aging that emerged during that time, the impression is that old age is a time of economic dependency, physical and intellectual decline, and personal isolation. The transition to old age was set at age sixty-five. Chronologic age of 65 may have been an appropriate transition to old age in the nineteenth century when life expectancy for men was in the early sixties, however, it is presently a poor indicator since old age may span some 40 years.

Although age 65 remains the transition age guiding public policy, this definition has not been accepted by

older people themselves. When using the term "elderly" most individual older people regard themselves as exceptions. Indeed, much of what we know today about the aging process and the condition of America's older population suggests that, for most persons between the ages of 60 and 75, there are few age-determined characteristics to justify differentiating them from persons between the ages of 45 and 60.

A persistent theme in gerontological research is that chronological age is arbitrary and masks the incredible amount of variation which cannot be explained by age alone (Baltes and Goulet 1970; Looft 1973; Robin 1971; Wohlwill 1970). Conceptualizing age by chronology is not useful in this study because it denies the heterogeneity of aging persons.

Another method proposed by gerontologists, is to classify age by functional criteria. Functional assessment is holistic in that it encompasses psychologic and social factors in addition to physical factors. Age is determined by levels of performance rather than chronological age. According to this system of categorization, a 55 year old person with rheumatoid arthritis may have a much lower level of functioning than a 90 year old person. This method has been criticized as a minority position because it is representative of only the dysfuntional portion of the aging population.

Troll (1982), has suggested age may be better for research if classified into categories defined by cohort characteristics. She states that chronological age serves as a rough index of life stage and aging, while birth year or entry into a given system (e.g. age at first marriage, high school graduation) locates the individual in historical context as a member of a particular cohort. While classifying age into cohorts acknowledges the interaction of man and environment over time, and the influence of historical events on life-span development this method has been criticized on the basis that birth cohorts may vary greatly in age span according to data constraints and analytical requirements (Elder, 1975).

Finally, Neugarten (1981) has proposed that age be dicotomized by needs and norms of aging persons into groupings of young-old (65 to 74 years of age) and old-old (75 and above). This method provides a sociocultural approach and places emphasis on the social meaning of age norms and provides a useful means of defining age for this study. The sociocultural perspective gives emphasis to the social meaning of age and its contextural variations: birth, puberty, and death are biological facts in the life course, but their meanings in society are social facts, as seen in the variable formation of age categories, grades, and classes across societies (Eisenstadt 1956; Gulliver 1968). Neugarten suggests that differences exist between

the two categories of young-old and old-old in terms of needs and norms. Differences may exist in the areas of health, financial well-being, education, and political activity. Shanas and Maddox (1976) have demonstrated that the pattern of morbidity for the old-old is different from the young-old. Those in the old-old category manifest more dental, visual, and hearing problems and higher rates of chronic disease than those in the young-old categories (Ferraro, 1980). This approach recognizes the enormous diversity of life styles among aging persons but is limited in recognizing historical time and cultural dimensions of aging.

Both perspectives, cohort-historical and sociocultural are complimentary and have been directed to an understanding of age as an important aspect of social organization. Neugarten and Datan (1973), in clarifying this complimentary, have distinguished three dimensions of time: life time, social time, and historical time. Life time is a series of orderly changes that occur in the life cycle, of which chronological age is an index. Social time is the age-graded system of statuses and norms which underlie the major periods of life distinguished in a particular setting. Historical time refers to the social, political, and economic events which occur through time and have impact upon the lives of people within that system. Both perspectives consider aging and the life course as

developmental processes and obtain insight into sociological dimensions of aging but do not gain insight into the cultural dimensions (Fry, 1980).

In summary, age has been classified using four methods, chronological, functional, cohorts and by needs and norms. All four methods present unique problems in terms of conceptualizing and operationalizing this variable. The criterion of chronology is largely arbitrary and may define the population either too narrowly or too broadly for meaningful results. This criterion also fails to recognize the heterogeneity of aging individuals. A functional criterion measures performance and would appear more meaningful when used with the disabled elderly, but may be a less appropriate measure with the well-elderly. Using cohort as a criterion is appropriate for all elderly because it recognizes their heterogeneity while emphasizing the influence of historical events. Delineation by cohort while useful in longitudinal designs because it permit generational differences to emerge may be less useful in cross-sectional designs such as this study. Neugarten's criterion however, provides a meaningful division for this thesis because the groupings provide clear delineation of subjects based on their needs and norms while being consistent with the concept of increasing diversity and heterogenity of aging persons.

Age has also been identified as an important variable in determining the amount and type of social support needed for optimal health in aging women (Norbeck, 1981; Branch and Jette, 1983). In the following sections, a theoretical framework for social support and the relationship of social support to health will be discussed.

Social Support

Social support, a functional property of social networks, is a major variable in this study. In the last decade, the concept of social support gained recognition for its protective properties of physical and psychological well-being (Cobb, 1976; Gottlieb, 1981; Haggerty, 1980; Kaplan et. al.,1977). But much disagreement exists in the literature about the definition, role, and measurement of the concept of social support. For clarity, the relationship between social networks and social support will be conceptualized. A discussion of the role and function of social support will then follow, as well as, a discussion of the characteristics of individuals and environmental situation which jointly determine need for social support. Although role and function determine interventions, which are not the focus of this study, this information will be used to discuss nursing implications and interventions in Chapter VI.

Relationship of Social Networks and Social Support

Several authors have attempted to define social support (Caplan, 1974; Cobb, 1976; Kahn & Antonucci, 1980; Weiss, 1974). But operationalizations and conceptualizations of social support are frequently inadequate and there is often a failure to recognize that social support is a multidimensional construct (Tholts 1981). A related problem is the lack of consistency in the measurement that is used, making it difficult to compare results across studies or to resolve conflicting findings (Wallston, et. al.,1983).

As researchers attempted to find the link between social support and health, a broader framework based on social network analysis was proposed to develop valid and reliable quantitative measures of support. Network analysis was originally developed by social anthropologists (Barnes, 1954; Bott, 1955; Mitchell, 1969) to operationalize the notion of social structure. Barnes (1954) and Bott(1955) focused on structure of a network or those lines between a person and network members that connect. Mitchell (1969) argued that the structure and interactional characteristics of personal social networks influence the behavior of the individuals who are a part of those networks. For example, it is possible that different network structural characteristics (such as density, range, or multiplexity) may influence the nature of social support

More recent social scientists have delineated social networks among three dimensions, structural, interactional, and functional (Hamburg & Killilea, 1979; Kaplan et.al. 1977; McKinlay, 1980; Walker et.al.,1977). Mitchell defined the interactional characteristics by content, or the meanings individuals in a network give to their relationships. The disagreement appears to be centered on whether the content of interactional transactions is the role meanings individuals give their relationships or the type of resource provided, such as, affect, affirmation or material aid. In this study social support will be conceptually distinguished as the functional dimension of social network and relate to the type of social support provided.

Walker, McBride, and Vachon (1977) built on Mitchell's (1969) work to define five characteristics of the function of social networks most revelent to the provision of social support. Each of these areas of function, along with the structural and interactional characteristics can be seen in Table 1. Each will be discussed briefly to clarify the multidimentional nature of social support with emphasis on the functional properties of the social network which is the provision of emotional and tangible aid.

The Structural Characteristics

Four structural characteristics of social networks which are relevant to the provision of social support are: size, density, homogeneity of membership and dispersion of

Table 1

Characteristics of Social Networks

Structural Characteristics (Network Properties)
1. Size: The number of people with whom the individual maintains contact.
2. Strength of ties: A combination of that are likely to be intercorrelated, e.g., amount of time, emotional intensity, mutual confiding.
3. Density: The extent to which the members of an individual network know and contact one another independently of the individual.
4. Homogeneity of membership: the extent to which network members share social attributes, i.e., age, sex, ethnicity, social class, social values, and lifestyles.
5. Dispersion of membership: The ease with which network members can make face-to-face contact.
Interactional Characteristics (Network Properties)
1. Content: The meanings that people give to their relationships, feedback from others that encourage self-esteem, validating behaviors, and telling others their strengths. This dimension incorporates aspects of social support suggested by Weiss (1974), Cobb (1976), and Kahn (1978).
2. Directedness: The amount of reciprocity of supportive behavior between individuals. The implication of this dimension is that supportive interactions between individuals cannot long be sustained in which interaction is one way. The exchange of supportive behavior between individuals is described in Weiss's (1974) taxonomy as "reassurance of worth" and/or "opportunity for nuturance."
3. Intensity: The degree to which individuals are prepared to honor obligations or feel free to exercise the rights implied in their link to some other person.
Functional Characteristics
1. Affect: Love, respect, the expression of positive affect for another.
2. Affirmation: Acknowledgement of appropriateness of actions or statements or endorcement of another person's behaviors, perceptions, or expressed views.
3. Aid (functional support): The giving of symbolic or material aid to another; money, tangible items or information.

membership (Walker et.al., 1980). The network structure includes different levels of membership, size and quality of relationships. Ewing (1984) makes the following distinction between three levels of relationships. The primary level Ewing defines as the kinship network which includes nuclear and extended family members. Confidants or closely connected friends are also included in this level as there is an ongoing relationship and mutual exchange of support and concern.

The second level is described as the surrogate kin network and include friends and neighbors, in which individuals have frequent face to face contacts as a result of mutual interests and values.

The third level is the aquaintance network which includes relationships which are more superficial, infrequent, or formal. These relationships have no strong bond or sense of obligation to strengthen or nurture the relationship. The encounters may occur in business, clubs, health care agencies or other services. The number of members in each level may greatly influence elderly persons ability to obtain support, as might the quality of the existing relationships. The structural characteristics of an individual's social network then provide evidence of the potential availability of social support (Dimond & Jones, 1983).

The Interactional Characteristics

Mitchell (1969) suggests there are three dimensions of interaction within social networks: 1) content which refers to the meanings that individuals give to their relationships. For example, the content may be neighbor, kin, or friendship. Linkages containing only one content area are termed uniplex, and linkages containing more than one content area are termed multiplex; 2) directedness which is defined as the amount of mutual sharing or reciprocity between individuals; and 3) intensity which refers to the strength of the bond between two people and their willingness to forego other considerations in order to carry out the obligations of their relationship.

Functional Characteristics

The third component of social networks is the functional characteristics. Functional characteristics are: affective support, tangible aid, cognitive support, maintenance of social identity, and social out-reach. Although functional characteristics are usually defined in positive terms, their presence being associated with good health, the potential for network interactions to have a negative impact on well-being is an area in which little attention has been given (Israel, 1982).

Type of support is the central feature of social support that will be measured within and among the two groups of elderly women in this study. Emotional support is

defined as affect and affirmation. Affect and affirmation include expressions of liking, admiration, respect, love, esteem and agreement or acknowledgement of the appropriateness or rightness of some fact or statement of another person. Tangible support, in contrast, includes transactions in which aid or assistance is given, such as, loans or gifts of money and the provision of information and time.

As a multi-dimensional construct, all the characteristics, structure, interaction and functional aspects of social networks will have a great influence on the individual's ability to "repattern" to changes in life. For complete assessment, the Gerontological Clinical Nurse Specialist will need to be aware of all three components of social networks and the impact each has on the well-being of aging individuals. More research is necessary, however, to study the properties so that the definition of essential features of social support may be refined or situation-specific aspects of support be discovered for useful clinical application.

Effects of Emotional and Tangible Support

The overt need of tangible support may be more apparent then the need of emotional support for aging persons. Financial help, the help with errands, and help with household tasks, while usually welcome at any time, would be particularly valued by an older person who may have limited physical endurance, visual problems, or a

chronic disease. Objective tangible support, as well as subjective support (such as the individual's perceptions of available financial security and sense of control in the environment), may help to reduce worry and stress. Tangible aid may also make it physically easier to comply with therapeutic regimens (DiMatteo & Hayes, 1981).

Emotional support is primarily an interpersonal phenomenon. The human environment provides a means for the individual to engage in "social comparison" (Festinger, 1954). By looking at the reactions of others, individuals can judge the appropriateness of their own reactions. People usually look to others, particularly members of their primary reference group, for validation of value and worth, and for feedback about their behavior (Caplan, 1974; Mead, 1934).

In summary, social support involves two types of transactions, emotional and tangible aid. Each may play a significant role in the provision of social support. It will be the task of research and practice to determine the relative importance of these different types of support to health and to the prevention of illness.

Objective and Subjective Dimensions of Social Support

A comprehensive definition of social support has been provided by Robert Caplan (1979) that delineates two dimensions of social support: objective-subjective tangible and objective-subjective emotional. Objective-tangible

support is described as "behavior directed toward providing the individual with tangible resources that are hypothesized to benefit his/ her mental or physical well-being" (Caplan 1979; p.85). Objective emotional support is defined as "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" (Caplan,1979; p.85). Objective support, tangible and emotional, are measured by an outside observer. Subjective tangible support and subjective emotional support, in contrast, are based on the individual's perceptions of the degree to which support is offered and are measured by asking the individual about their perceptions. (Caplan, 1979).

Emotional support received and tangible support available are subjectively defined in this study. While objective assessment provides a basis for standard comparison across individuals and is less prone to self-reporting bias (DiMatteo & Hayes ,1981) the subjective approach can also be valuable (Donald, et al., 1978; Kiritz & Moos, 1974; Lipowski, 1969). In support of this position, Donald et.al. (1978, p.5) notes 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, Kiritz and Moos (1974; p.109) have suggested that "the most efficient predictor of a person's psychological behavior in a given environment may consist of how he conceives that environment". The subjective approach also finds support in 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).

Role and Function of Social Support

Numerous empirical studies have examined the association between social support and health status. Although social support is generally defined in positive terms it must be recognized that there is a potential for network interactions to have a negative impact on health. A relationship with a significant other could be characterized as domineering, overprotective or create independence and a negative response. The presence and effects of such negative functions have receive little attension in research. Social support is generally thought however, to buffer or protects individuals from the effects of day to day stressors and helps them to maintain health (Dimond & Jones, 1983; House & Jackson, 1979; Tholts, 1982).

House (1981) suggests that social support can modify or counteract the effect of stress in three ways: 1) main

effect; 2) buffering effect; and 3) main effect on stress which indirectly improves health (see Figure 1). First, social support can directly enhance health and well-being by meeting important human needs for security, social contact, approval, belonging, and affection (arrow c). That is, social support appears to offset or counterbalance the negative effects of stress.

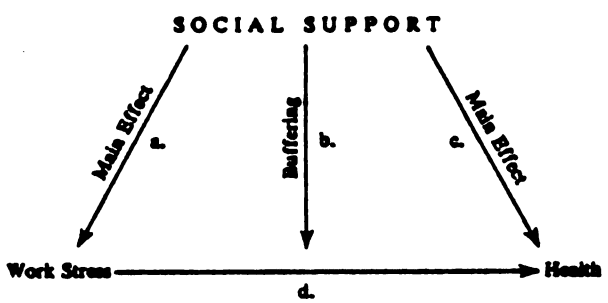

FIG. 2.1 *Potential effects of social support*

Source: House (1981)

Second, social support may directly reduce levels of stress (arrow a) and, therefore, indirectly improve health (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.

A third type of effect has more recently been described as interactive or buffering (arrow b). According to this interpretation, social support does not directly affect either stress or health, but rather modifies the relation between them.

Despite the potential practical importance of the idea 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 affect health." House (1981) illustrates three possible ways in which the main and buffering effects of support may jointly affect health (Figure 2) Each graph depicted represents the linear relationship between stress and health for three different levels of social support: low (...), medium (---), and high (____). Figure 2(a) illustrates a pure buffering effect. In this example social support has no beneficial effect on the health of individuals who are experiencing little stress, But the beneficial effects become increasingly apparent as stress increases. For example, in Figure 2(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 effect is occuring. Finally, figure 2(c) illustrates both main and buffering effects. Note that the three lines are not parallel. This indicates a buffering effect is occuring, but that even when stress is low, individuals with high levels of social support are healthier, indicating a main effect of support on health.

Although the distinctions of main and buffering effects are clear as depicted in Figure 2, there is considerable confusion about how to make these distinctions in empirical research (House 1981).

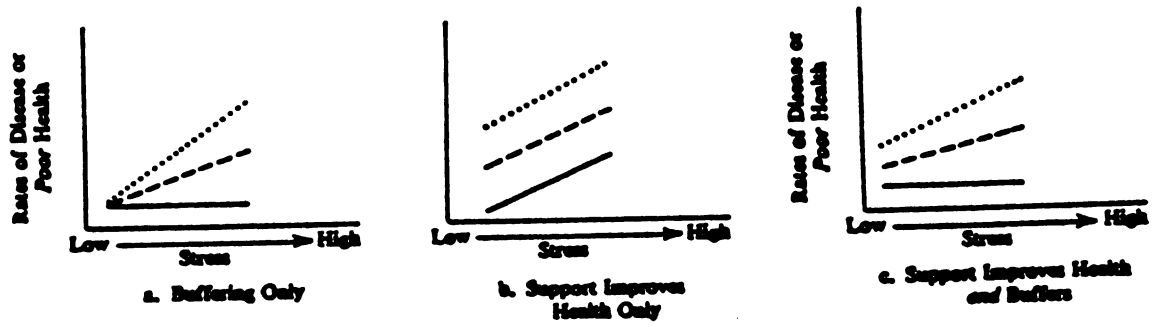

Fig.2 DIFFERENT PATTERNS OF EFFECTS OF SOCIAL SUPPORT ON HEALTH

.....Low support
- - - Medium support
_____High support

Source: House (1981)

Much of the writing on social support has implicitly or explicitly equated support effects with buffering. House (1981) states this view is clearly too narrow. To the extent that social support provides main effects, and acts to reduce stress, everyone would benefit from enhanced levels of social support. To the extent, however that social support provides buffering effects, it will be of significant value to individuals who are experiencing moderate to high levels of stress, but of lesser value to individuals experiencing little or no stress. Further, existent materials indicate that network properties which

effectively meet one need may not effectively meet all needs, i.e., one kind of support may not appropriate in all stressful situations (Walker et al., 1977)

Three factors influence the kind of support that is appropriate during periods of crises: the nature of the stressful situation; the timing in 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 occurance during stressful periods. A high degree of ambiguity is usually present for the individual and there is need of feedback from supportive persons that one's behavior is appropriate. Weiss (1976) distinguishes three forms of situational distress and suggests that each is likely to require different types of social support.

1) Crisis: 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) Transitions: 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 lead to a major transition. It is likely during transitions that information and tangible assistance would be appropriate types of social support.

3) Deficit Situations: A state in which relational provision important to well-being is unobtainable (Dimond & Jones, 1983). An example may be a widow who becomes involved with family and church activities but remains profoundly lonely. Emotional support from a confidant would likely be appropriate in deficit situations.

While there are there are other types of stressful situations, Weiss (1976) suggests deficit situations represent loss. Crisis occurs on first awareness of loss; and transition follows if the loss is unavoidable; and transition may lead to new ways of living that create deficit situations (Weiss, 1976).

Timing

The needs of people are likely to change over time, particularly the needs of older persons and those experiencing distress. Timing then, is the second factor to

be considered in determining the type of social support most important in a situation. Support that provides relief and comfort initially in a situation may not be appropriate at later stages in the adjustment process.

Personal Resources

A third factor in determining the appropriateness of social 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 counceling. Careful analysis of existing resources for social support will help to determine the appropriate kinds of interventions that may be necessary.

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 upon 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 of 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 need for consensus on the conceptual definitions, its measurement and replication is needed to gain knowledge with the precision required to guide clinical practice. According to Norbeck (1981; p.46-47), "the bulk of the social support research has explored relations between social support and health". She further notes, "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 3.

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 nursing theory of Unitary Man

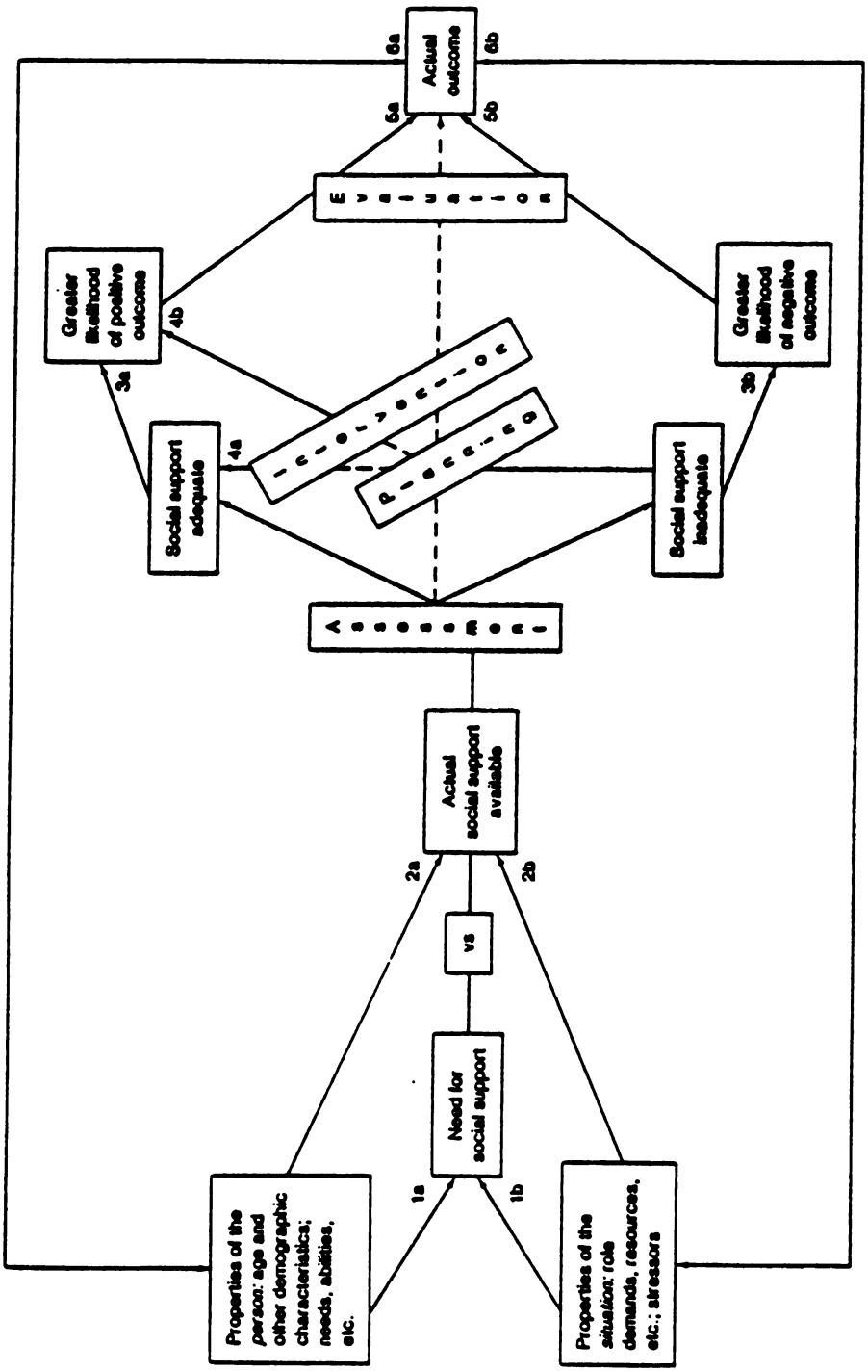

Fig 9. Framework for guiding research for incorporating social support into clinical practice.

proposed by Rogers postulates this mutual interaction of person and environment which in turn will determine the patterns of need for social support. The characteristics of both man/person and environmental situation will be discussed in more detail within the context of Rogers' conceptual system.

Characterisics of person

Age, sex, marital status, religion, and culture all influence the amount of social support needed by individuals as well as the degree to which support is available to them. These characteristics determine the uniqueness of each human, and together with other differences in needs, abilities, and orientation reflect individuality and wholeness. Age influences the amount and type of social support required for optimal functioning and these requirements change throughout the lifespan. During infancy, almost constant support is needed from one or two persons. In late adulthood, the frequency of supportive interactions decrease, as roles are relinquished, and support needs shift to accomadate a variety of losses (Norbeck, 1981).

Sex and marital status also influence the amount and type of social support needed. Several studies indicate females receive more social support than males (Burke & Weir, 1978; Hirsch, 1979). Elderly women are more likely to report having a confidant that elderly men, even through

there is a greater incidence of widowhood among women (Lowethal & Haven, 1968).

Individual differences may also influence need for social support. A person's need for affiliation is an important human need. Lowenthal and Haven (1968) suggest there may be various level of need for affiliation. Some individuals may require high levels of affiliation while others need moderate to low levels. Differences in personality, copying styles and income, as well as the ability of the person to attract and maintain a social support network, may also influence how much social support may be needed and available to individuals.

Environmental Characteristics

Norbeck (1981) proposes that a particular environmental situation will influence the amount and availability of social support. Based on theoretical formulations, it has been predicted that the amount of time support is required will be based upon whether the need is short-term, intermediate, or long-term/continuous. For an example, during a major life change or transition, such as retirement, an individual might need intense support of shorter duration. In contrast, during chronic illness support of medium intensity may be required over a long or continuous period of time.

The second situational determinant is the type of support a situation demands which may influence the

availability of support an individual will receive. In other words different situations may demand or require different types of support, and different situation may constrain or enhance the possibility of receiving support. An example of this is the spontaneous support that comes from friends and relatives during a maturational crisis such becoming a new grandparent. In contrast, support for working through grief is difficult for most members of an individual support network.

Two specific variables have been presented, personal characteristics and environmental characteristics as major determinants of need for social support. Together, person and environment have been conceptualized within a framework of continuous and mutual interaction.

Nursing assessment is 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 is inadequate, the assessment provides a basis for planning. Because of individual variences, Norbeck (1981) 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 with inadequate 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 with colleages through retirement. Additionally, the nature of their relationships change as they age so the functions and the relationships held origionally probably also change. Take the parent-child relationship for example, in the early life stage the child is dependent upon his mother, then 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 type of relationships that met earlier needs may no longer meet altered needs in old age. Cumming and Henry (1961), for example, postulated 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. Dean (1962) and Rosen and Neugarten (1960) provide support for this view with data that indicate a decline is in affect with age.

Since the pattern and organization of behaviors are maintained amidst this constant change between individuals and the social environment, characteristics of the individual will reflect differences and uniqueness while

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 perceptions of types of social support can add important pieces of information needed for more accurate assessment of clients needs.

Integration and Summary

The integration of the Norbeck Model into Rogers' conceptual system of Unitary Man focuses this study on man/human and environmental exchange in the process of determining perceptions of social support. As aging women experience multiple losses, social support may be a major factor in facilitating the achievement and maintenance of health and sense of well-being.

The Rogerian conceptual system of Unitary Man provides and excellent basis for the Gerontological Clinical Nurse Specialist because it emphasizes increasing complexity in developmental growth and the essential nature of the interaction between humans and the environment. The influence of the environment on elderly persons is critical in maintaining independence and health.

Norbeck's Model places emphasis on the nursing process and on achieving outcomes and provides a framework for guiding research for incorporating social support into clinical practice. Research such as this study may increase the accuracy of the nursing process through identification of patterns, such as age differences in perception of social support, which will add to the predictive value of the process.

In the next chapter, a review of literature pertient to the research question is presented. In addition, literature is reviewed to support the use of the particular instrument and method used in the present study.

CHAPTER III

LITERATURE REVIEW

Introduction

The literature reviewed in this chapter focuses on the major variables in this research and provides support for the instrument and method used to study these variables. The major variables are: aging females and differences in perception of two types of support; emotional and tangible aid. The review will proceed from literature on age and aging differences that support heterogenity among aging persons to literature related to social support. This chapter was written in collaboration with Sefton-Cojocel (1984).

Age and Differences Among Aging Persons

The relationship between age and differences among persons as they age is important in understanding the later years of life and for development of methodologies appropriate for investigating the life-span. Life-span theorists and researchers suggest repeatedly that there is increasing differentiation and variability as one ages (Neugarten,1973; Sarbin,1954).

Specifically, authors from a life-span perspective claim that individual differences in life style and

intellectual functioning observed in the middle years are accentuated in late life (Bromley, 1966; Havighurst, 1957; Riegel, 1971; Riegel,Riegel and Meyer, 1967). According to Neugarten (1964,p.345) "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".

Authors of life-span studies have focused on comparative analysis of cohorts. The findings of these studies support the hypothesis of diferentiation. 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 Hills' three generation study of couples in the Minneapolis-St. Paul area, the middle generation offers striking documentation of this thesis. Couples in the parent generation (N=95) actually represented two cohorts defined by marriage in the 1920's and 1930's. The pre-depression era couples produced a larger number of children X= 4.1, and 3.1, respectively, and pursued more varied careers. The two cohorts were found to be sufficiently different in life courses. The heterogeneity of the older

cohort is a dominant feature of this analysis, from family and worklife events to use of material resources. Important insights were gained from this comparative data in terms of identifying the impact of differential historical and cultural events on patterns of behaviors and life outcomes.

There are problems, however, of interpretation with respect to Hill's cross-sectional research on generations. As Hill (1970) acknowledges, the "extent historical circumstances have affected these three generations will be difficult to disentange from other influences which come with maturation and aging." Value differences between parents and adult children could be attributed to their different life stage or historical experience and socialization. The limitation of this study is that value differences and age changes in cross-sectional data are thus a problem with respect to interpretation.

Uhlenberg (1974, 1969) conducted comparative studies of women of cohorts. His classic research of the life patterns of American woman, white and non-white, was conducted with women from five birth cohorts; 1890-1894 to 1930-1934. Normative data obtained from these woman described their expectations of 1) becoming a wife; 2) bearing children; and 3) achieving a stable or intact marriage. Uhlenberg's study made two significant contributions to the study of woman and the life course of

cohorts. First he provided mortality data. Since early death has declined during this century, a complete picture of cohort change including mortality was taken into account in the life patterns of the woman in his study. Second, he provided a description of the relative prevalence of life paths followed by woman across sucessive cohorts.

Uhlenberg's research provided a new perspective on life-span and age differentiation by depicting the life course as a series of roles, events, social transitions, and turning points. Using U.S. Census Bureau Statistics, he provided a statistical profile of older women in 1970, with projections for 1980, 1990, and the year 2000 (See Table 2).

In analysis Uhlenberg has placed emphasis upon demographic features of the population of older women in terms of size, marital status, education, health status and income and employment. He predicted that the older female population will continue to grow in numbers and by the year 2000 there will be over 19 million older women. The special needs and resources of this population are, and will increasingly become, a factor to be considered in social policy.

One striking feature described by Uhlenberg is marital status. Almost 10 million (67%) of the total population of older women are not living with a husband. Over four million of these women are over 75 years of age. Since women of this cohort have devoted much of their lives to being a wife and raising children Uhlenberg raises the

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			

[a]Data refer to 1977.
[b]Assuming no change between 1975 and 1980
[c]Date 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.

question: How well equiped will women of this cohort be at functioning independently and entering new social roles.

Educationally, almost three-fourths of the older women had completed eight or more years of formal schooling. In 1975, for example, the median number of school years completed by those 65 years of age was 10.7, compared to 8.9 for those over 65. Uhlenberg predicts that by the year 2000 almost 90% of all older women will have completed 8 years of schooling, and 57% will be high school graduates.

Two competing forces affecting the future health status of the elderly may be seen in Table 1. On the one hand, the proportion of the older population in the old-old age group is increasing, and health problems in this segment of the aged are greater. As seen, the proportion of all those over age 75 is increasing from 40% in 1970 to 49% in the year 2000. In absolute numbers the increase is from 4.7 to 9.3 million women. The high incidence of chronic illness and chronic disability among the old will challenge the provision of adequate health care.

Finally, Uhlenbery predicts a decrease in the numbers of women who are below the poverty line as a result of improved coverage by retirement systems and increased social security benefits. Women in the work force are increasing but it is unlikely that employment in the labor force will be a major activity for older women in coming years (Barfield & Morgan, 1978; Shepard & Rix, 1977).

In summary, two observations can be made from Uhlenberg's statistical profile. First, there is a large group of older women who are impoverished, who may be unable to maintain independence because of health problems, physical limitations and loss of a spouse. But it is important to recognize that this group of women constitute a small minority of all older women in the United States. The second observation is the majority of the older women are increasingly educated, not invalids and have higher levels of income. The importance of Uhlenberg's statistical profile of American women to this study is that it was totally focused on women and provides a normative data base as well as demographic evidence of variability and differentiation in aging females.

Maddox and Douglas (1974), have proposed several methodological issues that need to be considered in research design if appropriate conclusions are to be drawn on age differences. These methodological issues will be discussed here and used as the framework for discussing other studies related to differences in aging.

1. Cross-sectional data sets. Most studies related to aging and individuals have been obtained from cross-sectional data which do not make a clear distinction between age differences and age changes. Optimal, definitive tests of the hypothesis of variability in older individuals require sequential observations of individual

differences in particular cohorts.

2. Selective survival. Selective mortality confounds test of variability over time. The effects of death and subject loss on the composition of a panel must be considered and accounted for when studying relationships between age changes and individual differences.

3. Sampling bias. Less able individuals in a population may refuse re-testing as well as intitial testing. This disadvantage is often true of an aging 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 may be interpreted as individual differences. In studying elderly individuals across a wide age range, the sample is likely to include both elite survivors and an undetermined number of persons experiencing this rapid change before death. Both could affect variability, although Maddox and Douglas state this is still a matter of conjecture.

5. Sex differences. There is much debate about whether differentiation by sex increases with age (Cameron, 1968; Neugarten, 1965; Palmore, 1968). The study of sex differences require designs that anticipate the dissimilar patterns of males and females. Another consideration in age differences, discussed 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.

In light of these methodological problems, Maddox and Douglas designed a study in which they tested two hypothesis: 1) individual differences do not increase 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 Douglas employed data from a continuing longitudinal investigation of human functioning at Duke University to examine age differences in social, psychological, and physiological variables. From the original study, specific indicators of individual variability were chosen for examination. The sample (N=106) was composed of survivors from the original study (N=271). Ages ranged from 60 years to 94 years with a mean age of 70 years. 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. 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 variables were considered in the study. The researchers concluded that when mortality and other losses are controlled, the observed variability of all measures tend to be stable over time. In some instances there were significant increases in variability or stability, confirming the first hypothesis. Second, the range of observed individual differences were maintained and, within the range of observed individual differences there remained a relatively constant range confirming the second hypothesis.

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

The literature reviewed pertinent to psychological functioning in late life also suggests that differences increase as people age. (Botwinick & Thompson, 1968;

Comfort, 1968; Orbrist, 1953). Dispersion of scores on a variety of physiological indicators, such as reaction time, and auditory reaction times, increases over time for a cohort of older persons, which the authors attributed to some persons maintaining their earlier performance level while others gave up activities because of decremental aging effects.

In the study conducted by Botwinick & Thompson (1968) individual differences in reaction time in relation to age was conducted using data from a previous study. Eighty-eight subjects, 44 men and women aged 18-35 years, and an equal number of men and women aged 60-87 years were tested for auditory reaction time. Preparatory intervals varied from one to two seconds given in a trial of regular and irregular series. The preparatory interval was defined as the interval of time between an alerting, a warning signal and a stimulus response. With regular series and within irregular series, reaction time variances associated with each of the four preparatory interval conditions 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 the corresponding ones of the younger groups.

In all but one instance the F-ratios were statistically significant at or below the $p<.05$ level. These results demonstrated that reaction times differs by age.

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 Douglas (1974) have pointed out cross-sectional data may not make a clear distinction between age differences and age changes. Additionally, the precise effect of such intra-individual variability on the assessment of individual differences within a group is unknown since relevant data are lacking.

Goebel (1979), conducted a study in which she investigated the age preferences of older adults (ages 61 to 89 years) with individuals for whom a relationship may potentially affect life satisfaction. The sample included 42 white older adults: 10 males ages 63 to 80 years, ($X=71.9$); and 32 females ages 61 to 89 years, ($X=71.2$). To limit confounding of social desirability usually found in verbal scales, the researcher used photographs representing three adult age groups to obtain an expression of age preferences. Older persons were asked to sort photographs into categories by age and attractiveness. Photographs of young, middle-aged, and old adults (ages from early 20's to early 70's) controlled for sex and attractiveness were then rated by older persons in relationships based on factors

important to quality of life, i.e. material well-being, physical well-being, helping, active socializing.

The results indicated that older adults prefered middle-aged and older individuals in relationships that were important to their own life satisfaction. Differences in older persons choice of photographs of other old persons as compared with their preference for middle-aged persons reached significance relatively few times. The direction varied with sex and attractiveness, and across factors, leading the author to conclude that there is either a relative lack of bias in evaluating these two age groups, (the impact of specific relationships on preferences), or there is an influence of individual differences in bias. An examination of the relationships for which the older adults in the study expressed significant age preferences and those for which they did not, suggests that the factors important to life satisfaction used in this study represented two types of relationships based on degrees of equality and or reciprocity.

Goebel described two types of relationships based on equality and reciprocity, those relationships that are independent and those that are interdependent. Independent, Goebel defined as those relationships that provide material well-being, physical well-being, information, and intellectural development but which tends

to keep the individual dependent on the other person. Interdependent relationships, on the other hand, provides relations with relatives, friends, someone to do things for, are closer and are more reciprocal in nature.

The older adults in Goebel's study expressed less preference for middle-aged and old individuals in independent relationships. The fact that this study obtained less substantial evidence of age preferences for interdependent relationships may not be so much be a lack of age bias as the stronger impact of individual differences in bias. Goebel's study has revalence to the present study as she further delineates types of relationships that require different types of support.

In evaluating age as a variable, Seelbach and Hansen (1977), reported significant differences ($p=<.005$) 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 filial responsibility expectations. Age was defined in this study as young-old, less than or equal to 80 years of age; old-old, greater than or equal to 81 years of age. Other variables that were cross tabulated with satisfaction were marital status, health, living arrangements and sex. This study design can be criticized on several points: 1) there was a severe restriction of range, 2) r values were

not reported and 3) validity of the instrument was not established. Despite these limitations, consistent findings, lend support to the view of variability among aging persons. The study also demonstrated age diferences in variables closely related to social support such as family relations and marital status.

In summary, there are few research studies on age differences and the few studies that exist are cross-sectional in design. Age differences versus normal changes that occur in the aging process are difficult to control and sequential observations of individual differences in particular cohorts are necessary for definitive tests of variability. From the literature reviewed, however, there appears to be considerable evidence to suggest age differences. Such evidence includes: the impact of historical events on individuals, life-span patterns changing over time; demographic shifts, populations trends, and the social-psychological impact of aging. The need for continued research in the area of age differentiation and variability is widely acknowledged. Although age stratification was not part of this research design, one cannot overlook the literature on age stratification theory (Atchley, 1980; Decker, 1980; Cockerham et al., 1983), These authors state 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

for further delineation of age differences.

Differences in perception of two types of social support within and between two groups of elderly women are additional variables in this study. The literature reviewed on the variable of social support will be the focus of revelw in the following section.

Social Support Literature

The review of the literature relavant to social support will begin with a discussion of the problems in conceptualizing and operationalizing this multidimensional construct. Then, two classic studies conducted by Cassel (1974) and Caplan (1974) will be reviewed, as these relavant studies provided direction for current research. Last, the literature pertaining to emotional support and tangible aid will be reviewed.

Problems in Conceptualization and Operationalization

A number of authors have examined the role of support in buffering or mediating the physical or psychological impacts of life events (Cobb & Kasl, 1977); Dean et al., 1980; Gore, 1978; Nuckolls et al., 1972; Walker et al., 1977). The results of these studies are generally consistent, however, social support literature has been hampered by a lack of clarity both in defintions of social support and in the conceptualization of its effects on health outcomes. Much of the present impetus for current research is based on theoretical statements interpreting

the health consequences of social disconnection (e.g., losing support because of death or separation, being unmarried, or due to geographical distance) in light of the hypothesis that social support affects health outcomes (Cassel, 1976; Cobb, 1976; Dean and Lin, 1977; Kaplan et al., 1977; Syme, 1981). Only a few researchers have looked at the effect of low social support in negative health outcomes such as, neurosis, (Henderson et al, 1978), complications of pregnancy (Nuckolls et al., 1972) and mortality (Berkman and Syme, 1979).

One of the problems identified by Schaefer et. al.,(1981) is that most frequently cited studies treat social network psychosocial assets, and perceived social support as interchangeable concepts. Many of the heavily weighted items on life-event scales are closely related to loss of social support through death, divorce, loss of a job. Thus, these individuals with low social support are also likely to be persons who are undergoing the severe stress of loss. The point is that when low social support is the result of a recent loss or separation, it is impossible to tell if the resulting poor health is due to the effects of the loss or from lack of social support itself (Schaefer, et al., 1981).

While confounding of social support with other psychological variables may be a major problem, another problem occurs when a distinction is not made between the

number of relationships a person has in their network and the person's perception of the supportive value of a social interaction (perceived social support). According to Schaefer and her associates, two questionable assumptions are made when social network size is used to measure the benefits of social relationships. First, benefits are directly proportional to the size and range of the network. Second, having a relationship is equivalent to getting support. This last assumption also applies when a single social connection such as marriage or having a confidant is used (Lowenthal and Haven, 1968).

While it is likely that network size and amount of support are positively correlated, this assumption ignores the demands, constraints, and conflicts associated with social relationships. In fact many problems in daily life may be the result of the stresses that come from significant social relationships.

Current researchers (House 1981; Schaefer 1981; Dimond & Jones 1983) emphasize the construct must first be explicitly delineated and then reliable and valid ways of measuring will follow. Few researchers have provided valid or reliable tools for measuring the concept (Tholts, 1982). Choosing an instrument that does not match or measure conceptual or operational definitions in the study can lead to two problems: 1) failure to find what was anticipated because of the discrepancy between the

instrument and definitions; and 2) misinterpreting the findings as a result of applying a different interpretation of social support than the one measured by the instrument (Wallston et al., 1983). Operationalization of the concept depends on measures which will distinguish the types of support measured. A related problem is the lack of consistency in the specific measures used that make it difficult to compare results across studies or to resolve conflicting findings (Wallston et al., 1983).

Several researchers have attempted to define and delineate the concept of social support. Cobb (1976) suggests, that support is information leading the individual to believe that he/she is 1) cared for and loved, 2) esteemed and valued, and 3) belongs to a network of communication and mutual obligation. Such a definition limits the construct to only one type of support, emotional while denying tangible aid and information as possible distinct dimensions. Kaplan et. al. (1977) proposed a more general definition which states: support is the degree to which an individual's needs for affection, approval, belonging, and security are met by significant others. The value this definition would have in research depends on development of measureable indicators of the concepts, such as, affection, approval, belonging and security (Tholts, 1982).

The conceptual problem in defining social support ultimately relates to the multidimensional nature of the concept. Several researchers assert that support is multidimensional (Dean & Lin, 1977; Hammer, 1981; House 1981; Walker et.al., 1977). Few studies, have operationally distinguished the dimensions of support measured. Further, lack of consistency in specific measures used, 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 1970s, John Cassel, an epidemologist, and Gerald Caplan, a social psychologist, presented seminal papers on the nature of social support and its public health implications (Cassel, 1974; Caplan, 1974). Cassel's early thinking on the psychosocial process and its relationship to stress was presented in a paper devoted to a discussion of the contradictory research findings on the health consequences of urban life (Cassel, 1974). His fundamental concern was how environmental conditions such as crowding, inadequate housing, and deteriorating neighborhoods exercised ill effects on people. This effect had been demonstrated in a series of studies which linked environmental conditions to higher infant mortality rates,

higher incidence of tuberculosis and gastrointestinal disease. Cassel asked: why do some persons fall victim to the environment while others are unaffected? He hypothesized that changes in the immediate social environment are capable of altering individual'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 importance to the individual" (Cassel, 1974; p.478). Cassel made no attempt to define social support or psychosocial process, 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 interaction with the social environment augment the individual's vulnerability to illness, and 2) how social forces can be mobilized in these situations to protect health.

Caplan, stimulated 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 to an individual'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).

While Caplan used the term "system" in referring to supportive networks he does not elaborate on any of the structural properties or boundaries of support systems. Caplan nevertheless, did attempt to define the concept and make it clinically useful.

Studies that followed Cassel's and Caplan writings have been largely exploratory and descriptive (Bott, 1957; Epstein, 1969; Palmore, 1979). Findings have provided the background from which delineation of the structural properties or network characteristics have evolved.

Wallston et.al. (1983), in reviewing past studies about social support and physical health, points out that conceptualization of social support has derived from two primary directions. First is quantitative versus qualitative. Donald et al. (1978) noted that social support can be operationalized in terms of amount, such as the number of people one interacts with, the frequency of contacts; or in terms of adequacy measures, such as perceptions about the adequacy of interpersonal contacts.

The second direction leads to differentiation between the type of support, instrumental versus expressive support (Lin, Dean, and Ensel, (1981). Pinneau (1975) further delineated instrumental/tangible support as the provision of assistance, from information and emotional support. He identified information as separate from the other two. Schaefer et al., (1981) found indices of emotional and informational support were highly correlated, whereas the measure of tangible support was quite distinct. Her finding would suggest that the indices of emotional and informational support may have been measuring the same construct.

In summary, the link between social support and various outcomes are beginning to be established, but there is need for consensus on the conceptual and operational definitions of social support. This study focuses is on type of support and dichotomizes the concept into emotional support and tangible aid. In addition, although it is recognized that there is a need to delineate between individual's perception of support and actual support available this study is focused on perception of support. In the following section literature will be organized into studies related to perceived emotional support and studies of perceived tangible aid.

Perceived Emotional Support

Comparison of studies which attempt to measure some aspect of emotional support demonstrate the problems in conceptualizing and measuring the concept. Lowenthal and Haven (1968) studied a sample of survivors (N=280) from a panel of elderly community residents to evaluate intimacy as a critical variable in the interaction and adaptation of elderly persons. The original study sample (N=600) was composed of individuals 60 years and older and was drawn from a stratified-random sample of persons living in 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?" Intimacy was measured by the presence or absence of a confidant and psychiatric status, role status, social interactions, opinion of own age and morale were used as indicators of adaptation. Data were collected in 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 interaction role status, or stability in interaction and role. The loss of a confidant had more adverse effects on morale, though not on mental status, than did a reduction in either role status or social interaction. Lowenthal and

Haven also observed that in the youngest group (60-64 years), women reported having nearly 50% more intimate companions then did men. Findings from the Lowenthal and Haven study are pertinent to the present study in two ways. First, the findings demonstrated the presence of an intimate relationship which serves to buffer against the losses of old age, i.e, widowhood, retirement. Second, the findings suggest differences among sexes, with women more likely to report close confidant relationships, lending support to the study of men and women separately. A limitation of the study is related measurement of other life events which can lead to confounding of the variables, i.e., death of a spouse can lead to losses of social support.

Fuller and Larson (1980), studied a sample of 50 older community residents who all had recently experienced a relocation to a newly constructed senior complex in a small western city of Illinois. The sample was drawn randomly from 100 residents and an attempt was made to maintain a representative proportion of men. The ages of subjects were 51 to 89 years with a mean age of 69 years. Fuller and Larson employed multiple-regression correlation analysis using a hierarchical model, to examine the effects of life events, emotional support, interaction of life events, and age on the variables of functional health, distress resulting from chronic health problems, combined

morale index, and three dimensions of morale (agitation, attitude toward own aging, and lonely dissatisfaction).

In Fuller and Larson's study, emotional support was measured on a ten point scale developed by graduate students in nursing and individuals in non-health related professions. The following questions were asked: "What kinds of things do people do to show another person emotional support?" "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 (1980,p.87) state that "results clearly indicated 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."

Several limitations may have lead to the inconclusive results obtained by Fuller and Larson. First, it would appear that the instrument choosen to measure social support may not have matched the theoretical and operational definitions of social support. Second, as Tholts(1981) has noted, measurements of life events are particularily susceptible to confounding with social support, because the occurance of the life events, such as loss from death, may have altered the results.

In a study designed by Babchuk (1979) primary relations were investigated among a sample of 800 non-institutionalized adults. All members were 45 years or older and were residing in Lincoln and Omaha, Nebraska. Based on his previous work, Babchuk chose to enumerate all primary ties in an aging population. To accomplish this, he examined two networks which he argues incorporates all primary resources, i.e., kin and very close friends. Ties with these people were characterized into four types: 1) primary relatives, 2) confidant relatives, 3) primary friend, 4) confidant friend. Respondants were first asked to list all relatives and to specify those persons to whom they were very close; these he designated as primary relatives. Among primary relatives listed he further requested respondents to identify those who served as confidants, and were labeled confidant relatives. A parallel procedure was completed to obtain a list of primary friend and confidant friend.

The opportunity to confide is a component of emotional support, and examinination of the results of Babchuk's study, provides a profile of resources for emotional support in an elderly population. The results indicate that elderly persons are not isolated from family. Only 30 respondants out of 800 reported being isolated from family. The remaining 770 respondants identified several primary

relatives (X=5.6) with whom they had contact. In comparison, 117 respondants stated they lacked primary ties with friends (X=4.2).

Significant differences were found between those under 55 and older than 55. Fewer of the younger individuals indicated lack of a confidant however, one individual in five above 70 years of age was without a primary friend. The results seem to indicate that those who were older had fewer resources than those who were younger which would be expected. Significant sex differences were also found. A greater proportion of men (25.1%) than women (11.6%) listed only one individual as a confidant relative and a substantially greater proportion of women (20.4%) than men (1.5%) listed six or more relatives as confidants. Lowenthal and Haven (1968) also found that elderly women are more likely to report having a confidant than elderly men, despite a greater incidence of widowhood among women. Whether females actually need more social support than males, rather than obtain more however is not clear from these studies.

Findings from Babchuk's research on age and sex differences in an elderly population have implications for the present study. First, these results support the idea of expected age differences in perceived emotional support. Second, the significant findings in sex differences provide support for limiting the study population to females only.

Blazer (1983) conducted research on the impact of late-life depression on the social network. The sample (N=331) included individuals 65 years and older who were assessed for the presence of symptoms of a major depressive disorder and the availability of adequate social support. Thirty months after the interview, a subset of the sample (N=275) was contacted by telephone and the respondants asked about their social support. Blazer's findings indicated that older adults expressing symptoms of depression were more likely to be members of a non-supportive social network. The follow-up data suggest however, that the depressed individuals did not suffer a relative decrease in social support over time, when compared to non-depressed persons. Blazer measured support from the subject's perception and greater emphasis was placed on the quantitative aspects of support. Blazer did not, however, identify the questions he used in data collection, making it difficult to determine if the instrument used in this study matched the theoretical and operational definitions defined by the author.

Schafer et.al. (1981), conducted a study of 100 persons 45 to 64 years of age to examine health-related functions of social support. The study sample was drawn from participants in a previous survey of Alameda County, California, carried out by the California State Health Department. Schaefer related social network size and three

types of perceived social support - tangible, emotional, and informational - to stressful life events, such as, psychological symptoms and morale. Among other results, Schaefer demonstrated that low tangible and emotional support were independently related to depression and poor self esteem. This study is notable because of the delineation of social support into three types of support. The limitations however, are related to methodological problems in the study. First, a causal role of support and its relationship to health cannot be inferred because the data was retrospective. Second, measurements of life events particularly depression makes the study results more susceptible to confounding with social support.

Two studies conducted by Gore (1978) and Nuckolls et. al. (1972) provide examples of well designed studies of social support. Although these two studies did not use an elderly sample, they deserve a brief review. Gore utilized a unique opportunity to study unemployed subjects and the relationship between social support and health.

In a sample of 100 men, all involuntarily unemployed as a result of a plant shut down, differences between individuals with high levels of social support or low levels of social support from family and friends were determined and compared to several physical indices of health. Results indicated that while unemployed, the unsupported individuals had significantly higher elevations

and more changes in measures of cholesterol, illness symptoms and affective responses then did the individuals with higher levels of support.

Nuckolls et al. (1972) also included objective outcome measures to demonstrate the relationship between support and health outcomes. In a sample of 170 primapara women, Nuckolls studied the role of psychosocial assets and life changes on the outcome of pregnancy. The measure of psychosocial assets contains elements of emotional support. Findings indicated that 91% of the women had high life change scores with one or more complications; whereas 33% of the women, with equally high life change and high asset scores did not have complications. This seems to support a positive health protective effect of social support.

The studies by Gore & Nuckolls serve to point out that empirical evidence on the important role of social support and health is available, and that well designed studies such as these need to be replicated. In this section, literature on one dimension of social support, i.e. perceived emotional support has been reviewed. In the following section literature pertaining to perceived tangible aid will be reviewed.

Perceived Tangible Aid

Branch and Jetta (1983) examined data from a unique survivor sample of old-old (71 to 97 years) people living in a community in Massachusetts. The data were drawn 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 a sample of 825 survivors from the original panel (N=1,625), Branch and Jette investigated the extent to which subjects used long term care (LTC) assistance to maintain themselves independently in the community. The informal support network of subjects was studied as a source of LTC assistance.

The use of LTC assistance, both formal i.e., governmental, voluntary service agencies or health care providers and informal i.e., family, friends or neighbors, was examined for 11 different activities of daily living (ADL). These ADL were divided into two categories: basic ADL-assistance in walking, transfer, dressing, bathing, feeding, and grooming; and instrumental ADL such as 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 activities of daily living, but that 82% used some form of assistance in instrumental activities of daily living. Women were more likely than men to use help for basic ADL. Men used more long term care assistance in instrumental activities of daily living than women. The proportion using assistance in ADL increased with age. The

overwhelming majority (68%) using assistance with instrumental activities of daily living relied on informal sources (Branch & Jette, 1983).

The importance of Branch and Jette's research to the present study 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 attempted to demonstrate that the need for tangible aid increases with age, and that women used this type of support differently than do men. A limitation of the study however, is related to the interpretaion of findings. It is not stated in the study if determination of need was asked of respondents or was assumed. Two additional studies by Branch and Jette supportted their intial findings and will be discussed below.

In a second study conducted by Jette and Branch (1981), an examination was made of a sample of 2,654 individuals, aged 55 to 84 years of age, from the original Framingham cohort. None-institutionalized elderly were interviewed in person or by telephone to evaluate physical disability. The Framingham Disability Study (FDS) was a component of the Heart Disease Epidemiological Study in Framingham, Massachusetts. Prevalence of physical disability among the study subjects was evaluated by the respondent's ability to independently perform six activities of daily living (ADL). Sex, age and age

specific gender comparisons were reported and statistical significance was tested by chi-square. The six activities of daily living were grooming, bathing, walking across a small room, transfer from bed to chair, dressing, and feeding. Most of the study subjects were able to perform the six ADL without assistance. For all activities except eating, the 75 to 84 year old group was significantly more likely to use help in doing the activity, compared to their younger counterparts. Nevertheless, over 90% of the 75 to 84 year olds were still independent in all six activities of daily living.

The ability to perform three gross motor activities, i.e., heavy housework, walking one-half mile, and climbing stairs, was found to be significantly related to age. Only 50% of those aged 75 to 84 years of age were able to perform heavy household tasks, in comparison to 79% of those aged 55 to 64 years who could do such work. In the 75 to 84 year old group, 77% were able to walk a half-mile, in comparison to 96% of the youngest age group (55 to 64). Eighty-five percent of the 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 revealed a consistent increase in physical disability with advancing age. The data results indicate that women are no more likely than men to report functional limitations.

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 similar in reported level of physical disability. The few differences that emerged suggested 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 a second part of the Framingham Disability Study, using the same sample as described for physical disability, Branch and Jette (1981) report on social disability among the aged. Social disability was defined as limitation in performing, or inability to perform, social roles or obligations. The data on social disability prevalence was depicted by study cohorts as being adequately performed in five essential social tasks: 1) housekeeping, 2) transportation, 3) social interaction, 4) food preparation, 5) grocery shopping. Only 6% of the cohort had unmet needs in one or more of these areas. One-fourth, was considered at risk however, for developing an unmet social need in one or more areas. Jette and Branch state the data support two observations. First, it revealed the well known increase in percentages of people needing, or at

risk of needing, assistance in performing social roles as a function of age. Housekeeping was the area shown to have the largest age-related increase in unmet needs. 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, or had an unmet need in housekeeping. 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 cohort.

Results of the Jette and Branch study on physical and social disabilities are relavant 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 clearer. The findings support independent living, but one cannot ignore the many avenues open to provision of tangible support in ADL. The second point, is that as individuals age they have increase their risk of unmet needs, which lends support to the need for more research on age differences and social support as a factor promoting health.

While the above studies used large samples there are several limitations that must be considered. First, it is questionable how unmet need and needs were operationalized. Results could be misinterpreted if need was assumed versus

asking the respondent. Second, a causal role of social support and relationship to health cannot be infer when retrospective data is used (Wallston et al., 1983)

The following study employed in-depth interviews and participant observation to investigate aspects of support networks in an elderly population (Wentowski 1981). 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). Wentowski utilized a sample composed of 50 Americans ages 55 to 83 (X=71) living in three Southern urban communities. In a description of the "helping out" funtion of informal support networks she states;

> 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 the households. People share all kinds of routine daily tasks and problems, such as cleaning house, transportation to and from needed services. Swapping and sharing makes households independent. The networks distribute goods and services between household 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 (Wentowski, 1981,p.601).

Wentowski's discription of these informal support networks points up the importance of tangible support found in supportive relationships. In her preliminary field

work, Wentowski discovered a complex exchange system. The exchanges of supportive assistance were directed by cultural rules. Such rules are a set of shared instructions for putting together elements of behavior (Spradley, 1972). Wentowski's investigation into the use of cultural rules which govern reciprocity provides in in-depth look at the exchange within an elderly person's social network.

In examining important supportive relationships outside the family system, Wentowski, described the regular exchange as important for defining responsibility of non-kin for one another. Eighty-two percent of persons in Wentowski's sample reported have "good" friends outside the neighborhood. Sixty percent had "close" and "best" friends, who were 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 on a sick person; because of their proximitry (Wentowski, 1981).

Wentowski's research is relavant for several reasons. First, the anthropological method yields a rich, indepth perspective on supportive relationships among the elderly. The indepth examination includes descriptions of specific

exchange mechanisms through which support is elicited by older people, and how this support is developed over time. Wentowski's observations made evident the concept of reciprocity as an essential component of self-esteem and pride of elderly persons. Second, the crucial role of tangible aid was demonstrated in observations of daily life patterns among the elderly. Finally, the importance of non-kin network in the provision of tangible aid was demonstrated. Valuable information can be obtained by the survey method. While this method provides indepth information it looks at only one side of a support relationship and at one point in time. Use of a 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 individuals was shown to have daily importance in maintainence of independence and ongoing relationships. Tangible aid likely plays a crucial role in the lives of aging persons.

Summary

In this chapter, literature relating to the study variables, age, perceived emotional support, and perceived tangible aid have been reviewed. Several methodological problems were discussed relating to reseach on age and variability associated with aging. Several methodological

issues were identified and used as criteria for critiquing several studies on age differences. Longitudinal designs provide opportunity for sequential observations of individual differences in particular cohorts and definitive tests of the hypothesis of variability versus age change. Only one study was identified (Maddox and Douglass 1974) that was of a longitudinal design.

Lack of agreement on the conceptual definitions of social support and methods of measurement have made it difficult to compare studies. In this chapter evidence has been presented which supports the idea of the elderly as a group to whom social support is crucial in daily living. The following 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 PROCEDURES

Overview

This descriptive study was designed to identify differences in mean values of perceived emotional support and tangible aid available among aging women 75 to 89 years of age. Age, perception of emotional support received and perception of tangible support available are the major study variables. In collaboration with Sefton-Cojecel (1984), the joint question of whether there is a difference in mean values of perceived emotional support and tangible aid available between two groups, aged 65 to 74 and 75 to 89 years, is examined. It was expected that the results of data analysis would describe a group of aging women 75 to 89 years of age and determine their perceptions of the types of support received and available. Sociodemographic information about this group of aging women will be presented to describe the study sample. Data were used from the pretest of seven instruments previously designed for use in a larger study, Active Participation: Health Care for the Elderly, directed by Given (1982) and funded through a Michigan State University All University Research

Grant. Specifically, data collected using the Norbeck Social Support Questionnaire and a sociodemographic survey were utilized in this study.

A discussion of the methods and procedures utilized in this research study is presented in this chapter. Initially, a discussion of the sample is presented followed by data collection procedures, operationalization of study variables, instrumentation, human subjects and data analysis.

Sample

In the original study, Active Participation: Health Care for the Elderly (Given 1982) a convenience sample was selected for evaluation of the quality of seven psychosocial instruments as applied to an elderly population. Attempts were made to obtain the following types of individuals in the sample: city-rural, seniors from senior apartment complexes, individuals living in their own homes, young-old and old-old, those with low income and and those more affluent. To do this, individuals in Grand Rapids, and the Greater Lansing area of Michigan were chosen as a convenience sample during March, April and May of 1983. There were 101 subjects, 15 males and 86 females between the ages of 59 to 95 years in the original sample.

All women aged 65 to 89 years of age were chosen for inclusion in the present study. The rationale for this

choice was both pragmatic and theoretical. First, for pragmatic reasons, all women within each age group were included in the sample because the numbers were small. The pretest sample in the original study did not contain sufficient data for analysis of males. Second, and for theoretical reasons, there is a disportionate increase in females after age 65. There is evidence in the literature also that women utilize social support differently from men (Norbeck 1981).

Because the sample was voluntary and not the result of random selection, the results of this study can be generalized only to the elderly women possessing characteristics which are similar to those of the sample. Results should not be considered to be representative of all elderly women.

Data Collection Procedure

Data were collected by four Graduate Assistants, all students in a Clinical Nurse Specialist program. Sites selected were based on the contacts these four individuals made with coordinators of nutrition sites for older persons, resident managers of Senior Apartments, and personnel with other programs, such as East Lansing Older Persons Association. In this section the sites will be described and the procedure for training and supervision of interviewers will be discussed.

Sites

Subjects were obtained primarily from senior nutritions sites, resident centers and centers for activity programs for the elderly. No attempt was made to randomly select the sample. A description of each site and number of subjects obtained from the site follows:

1) Williamston: Williamston is a rural community located some twenty miles east of Lansing. Participants were drawn from a Senior nutrition site which is one of the first established in the area. Participants are older, most were past 85 years, and attend the nutrition program regularly. Of the 50-60 individuals who regularly attend, 8 volunteered for the project. All individuals were interviewed in their homes.

2) Friendship Manor: Friendship Manor is a senior apartment complex located at the border of Lansing-East Lansing. Elders live in individual apartments with access to laundry facilities and shopping. Volunteers were solicited from the nutrition program from which they receive their noon meal. Approximately 60 persons attend this program and 10 volunteered to participate in the interviews in their own apartments.

3) Senior Center Lansing: The Senior Center, in addition to being the organization center for Tri-County Senior Planning (Ingham, Eaton and Clinton Counties), it is also a Lansing Parks and Recreation activity site for Seniors.

Unlike other nutrition sites which offer meals and activities for a consistent group of neighborhood elders, the Center serves as a meeting place for oranized groups, i.e., A.A.R.P., retirees from union groups, or women's groups. Approximately 15 volunteers were obtained at this site and interviews were conducted in small groups at the center.

4) Riverfront Apartments: This site is a senior apartment complex in which a resident meeting group was used to solicit volunteers. Four volunteers participated and were interviewed in their own apartments.

5) Grange Acres: This site is a senior housing complex of independent, ground level units. This design and the lack of a nutrition program on the grounds made it difficult initially to obtain volunteers, but approximately 20 volunteers were obtained and interviewed in their own housing units.

6) Waverly Area Lansing: Subjects were sought to obtain a group of elders who were living independently. Subjects were either known by the interviewers or were referred by friends. Approximately 5 volunteers were interviewed in their own homes.

7) Miller Road: This is a nutrition site operated by the Lansing Parks and Recreation. This group which is an older population and four volunteers chose to complete questionnaires at the site and two requested interviews in

their own homes.

8) East Lansing Older Persons Association: This site was selected with the hope of including a subset of seniors who were better educated, more affluent and physically and socially active. Volunteers numbered 15, of whom 2 were interviewed at home and 13 at the site.

9) Health Department: This group was included to obtain a subset of relatively young seniors who were still employed. Only 3 volunteered and were interviewed on the site.

Training Procedure

Training sessions were held with four Graduate Assistants. Discussion and procedures for administration of a questionnaire packet was discussed and the following protocol was presented.

1. Interviewers were instructed to telephone respondents who had earlier agreed to participate in the study. The interviewers were instructed to introduce themselves as Graduate Assistants within the College of Nursing at Michigan State University.

2. At contact with the respondents, a brief explanation was to be 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 approximately one hour of their time. Confidentiality was explained and respondents were assured that their names

would not appear on the questionnaires or in the research analysis. Respondents were then asked if they had any chronic diseases which were then recorded.

3. Interviewers were instructed to be prompt and to supply packets and pencils. The questionnaires were to be explained separately and collected after each was completed. Respondents were to be asked if they had any questions or concerns before starting, and were told they could stop participation at any time if they so desired. In the event a respondent decided not to participate, the interviewer was to thank the respondent for his/her time and consideration.

Special Forms

A. Consent Form: Interviewers reviewed the consent form with the respondent and he/she was assured that the questionnaires would be kept anonymous. Interviewers were instructed to allow participants to see that consent forms were not kept with their packets.

B. Sociodemographic: Interviewers reviewed the basic directions with the respondent. When the respondents had completed this survey they were provided with the following questionnaires: Health Habits; How I Feel About Myself; Involvement In Health Care; Life Events; Social Ability; Medication Survey: and Social Interaction. The Social Interaction form was Norbeck's Social Support Questionnaire from which data were drawn for this study. The Norbeck

Social Support Questionnaire is described in the following section.

C. Norbeck's Social Support Questionnaire (NSSQ): The NSSQ is the instrument utilized in this study. Instructions for use of this questionnaire are provided here. First, respondents were asked to list each significant person in their lives on the full sheet provided on the right side of the folder. They were told to consider all the persons who provided personal support or who are important to them now. In listing these network members, respondents were told to use only first names or initials. Respondents were then instructed to specify the category of the relationship with each person as provided in the instructions. Relationships listed were spouse/partner; family/relative; friends; work/school associates; neighbors; health care providers; counselor/therapist; minister/rabbi/priest; and other.

After listing up to twenty network members, respondents were directed to turn to the left side of the folder where each full sheet would contain two questions. In each question, the respondent was asked to rate each network member they listed on the right using a five point Likert scale (Norbeck et al.,1981,p.265)

Anticipating the sensory changes of this age population, the procedure from the orignial Norbeck research was modified. Interviewers were instructed to provide guidance in use of the questionnaire such as

reading the question(s) and assistence with writing as necessary. Responsibility for questions was left to the respondent. Respondents were also given 3x5 cards with the response alternatives (Likert Scale) to refer to as they answered the questions. Questionnaires were administered both individually and in small group settings.

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

Operational Definitions

The variables under study are age, and the perception of two types of social support, are operationalized in the following section:

Age was operationalized as a question that asked respondents to list their birthdate and current age. For purposes of analysis, respondents were classified as young-old (65 to 74 years) and, old-old, (74 to 89 years).

Perceived Emotional Support was operationalized using the following three items on the Norbeck Social Support Questionnaire:

1. How much does this individual make you feel liked or loved? (affect)
2. How much does this individual make you feel respected or admired? (affirmation)

3. How much can you confide in this person?

Perceived Tangible Aid: was operationalized using two items on the Norbeck Social Support Questionnaire.

1. If you needed to borrow $10, a ride to the doctor, or need 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?

Instrumentation

The Norbeck Social Support Questionnaire (NSSQ) was utilized in this study as one of the seven instruments in the larger study Active Participation: Health Care for the Elderly (Given, 1982). 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 used as the conceptual definition of social support. Affect, affirmation, and aid are proposed as three components of supportive transactions. Kahn's concept of social networks, which he terms a "convoy" is measured by assessing the number of persons in a network, duration of relationships, and frequency of contact with network members. Change in an individual's convoy over time, is measured by questions

regarding recent losses of network members (Norbeck et al., 1983). See Appendix A.

Administration and Scoring

The NSSQ can be self-administered in groups or through mailings. The average stated time for completion of the NSSQ is 10 minutes, (range: 5-20 minutes). Using an elderly population,the length of time was one hour (range: 30 minutes to two hours). The NSSQ was the last questionnaire to be administered in the packet of seven other instruments and the increased time probably reflects 1) decreased concentration, and 2) fatigue.

The NSSQ can be scored directly from the questionnaire or the responses may be transfered to a one-page scoring sheet. For each of the initial eight questions, the respondents rating for each network member on a given question are added to determine the score for that question. The number in the network is determined by the number of individuals listed by the respondent on the network list; i.e., if ten people are listed, the number is ten (Norbeck et al.,1981).

Normative Data and Validity Testing

In the first phase of testing the Norbeck Social Support Instrument high levels of test-retest reliability and internal consistency were established, and social desirability response set was ruled out (Norbeck, Lindsey, and Carrieri, 1981). This was accomplished by

administering the NSSQ to 75 Graduate Nursing Students initially and retesting the instrument with 67 of the same students one week later. The one week interval reduces the likelihood of tapping true changes in the student's social networks as they became better acquainted. Means, standard deviations, range of scores, and test-retest Pearson correlations were then computed for all the items on the NSSQ. The mean scores represent the ratings on each item for the total network list. The average ratings for members of the network lists were calculated by dividing the mean score by the number in the network. These average ratings were; affect, 4.14; affirmation, 3.81; aid, 3.07. Each of the functional items and network items had a high degree of test-retest reliability (range: 0.85 to 0.92).

Internal consistency was tested through intercorrelations among all items. The correlation between the two affirmation items was 0.97, and between the two aid items, 0.89. The affect and affirmation items were also highly correlated (range: 0.95 to 0.98), suggesting that the two dimensions are not distinct.

In establishing validity of the instrument, response bias was ruled out. In using any psychological or psychosocial instrument the respondent's answers may reflect a reporting of socially desirable answers rather than honest self-reports. To rule this out, Norbeck and associates administered the Marlowe-Crowne Test of Social

Desirability concurrently with the NSSQ to 76 respondents of the initial group. None of the items of the NSSQ were significantly related to the social desirability measure. The correlations ranged from 0.01 to 0.17. This suggested that the NSSQ responses are relatively free from the influence of the social disirability response bias.

In the initial phase of testing the basis of contruct validity was described, and moderate levels of concurrent validity were found. The initial approach to studying construct validity was to examine the relationship between the Norbeck Social Support Instrument (NSSQ) and a theoretically relevant variable. The Profile of Mood States was administered in conjunction with the NSSQ to 75 subjects from group one. None of the mood subscales or the total negative mood score were significantly related to the NSSQ functional subscales.

Concurrent validity testing was done to determine the degree to which the NSSQ coincides with a known measure of social support. The Social Support Questionnaire developed by Cohen and Lazarus (1982) was administered concurrently with the NSSQ to 42 subjects from group one. Each instrument defined their component subscales differently, but there were rough parallels between tangible support and aid, informational support and affirmation, and emotional support and affect.

In the second phase of testing of the NSSQ, normative data were developed for employed adult respondents, and construct validity was tested through correlations with related and unrelated interpersonal constructs. Further testing of concurrent validity was done with another social support instrument (Personal Resource Questionnaire; Brandt and Weinert, 1981) and testing of predictive validity was completed by assessing the buffering effect of social support on measures of negative mood following life stress.

In a follow-up study, Norbeck and Associates readministered the NSSQ to the same group of graduate students seven months later. The stability of the instrument was found to be high, but lower than the test-retest results from the one-week interval.

The result of the second phase of testing of the NSSQ lend support for the continued use of the instrument to determine specific parameters of social support that may have clinical relevance.

Protection of Human Rights

Specific procedures were followed to assure that the rights of study participants were not violated. The rights of the participants were protected using 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. An identification number was assigned to each questionnaire, and information was then transcribed in aggregate form for computer analysis.

Procedures For Data Analysis

Descriptive statistics were used to analyze sociodemographic data about two samples of aging women. Tables summarizing the distributions 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 completed using the Pearson Product Moment coefficient. This coefficient is computed when the variables being correlated have been measured on an interval or ratio scale. 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 for all three affect/affirmation questions ($p<.001$), and between the two aid questions ($p<.001$) level. The level of significance of the three emotional questions provide rationale for combining the items into one "robust" emotional support score, and the two tangible aid questions into one tangible aid score.

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

Inferential statistics using the Student's t-test were utilized to answer the question: Is there a difference between perception of emotional support received and perceived tangible aid available within each group of elderly women? An additional t-test was computed for the mean values of perceived emotional support received and perceived tangible aid available between two groups of women aged 65 to 74 and 75 to 89.

Summary

A discussion of the methods and procedures utilized for the preliminary testing of seven psycho-social instruments in the study, Active Participation: Health Care for the Elderly, and for use of a subset of data to answer three research questions was presented in Chapter IV. A detailed discussion of the sample, data collection procedures, instrumentation, operationalization of the study variables concerning aging women and differences in perception of emotional and tangible support, procedures for data analysis was presented. In Chapter V, data describing the sample of elderly women utilized in this

research and data pertaining to each question were presented.

CHAPTER V

DATA PRESENTATION AND ANALYSIS

Overview

Data presented in this chapter describe the study sample and the perceptions of aging women about the emotional support they received and the tangible aid available to them. The data were originally collected for a larger study, Active Participation: Health Care for the Elderly (Given, 1982). In collaboration with Sefton-Cojocel (1984) two groups of women, a young-old population aged 65 to 74 and an old-old population aged 75 to 89 were selected for study. For organizational purposes, demographic variables and descriptive findings of the old-old sample of women 75 to 89 years, the focus of this study, will be presented first. Next, the reliability of the scale utilized in this study will be presented. Finally, demographic variables and descriptive findings of the young-old sample, 65 to 74 years of age (Sefton-Cojocel, 1984) are presented. Following the section on the study samples the joint research question concerning perceptions of emotional support received and tangible aid available among the two groups of women will be discussed.

Descriptive Findings of the Study Sample

Demographic variables

The demographic variables utilized in the present study to describe a population of old-old women were: age, marital status, race, employment status, income level, education, and household headship. The frequency distributions are presented in Table 3.

Age. The age of the older participants ranged from 75 to 89 years. The mean age was 79 (n=24). This age range is referred to as the old-old (Neugarten, 1974). Their needs are often defined by multiple losses associated with death of their mates, siblings and friends. Decreasing physical abilities are related to chronic diseases associated with aging, i.e., arthritis, necessitating more frequent need for assistance outside one's self.

Marital Status. Two-thirds (67%) of the women in the older group were widowed. Fewer than one-fifth (17%) were married. Thirteen percent (n=3) identified themselves as single and four percent (n=1) listed themselves as divorced. This finding is closely related to the national statisic on marital status for women this age.

Race. All of the women in the study were Caucasian. This is not representative of the total population. Minorities, especially black women and hispanic women, have life expectancies of 3-5 years shorter than Caucasion

women (U.S. Census Bureau, 1982). The differences in need for social support may be quite different within each race as a result of values and ethnic background. It is likely that both would influence perception and need for support.

Employment Status. With but one exception all of the women were retired. This finding was expected for the age range of 75 to 89.

Income. Fifty seven percent (n=12) of the older group of women listed their income as between $5,000 and $9,999. Fourteen percent (n=3) listed income between $10,000 and 14,999. Ten percent (n=2) listed incomes between 15,000-19,000; 20,000-24,999; and 25,000-29,999 respectively. No one listed income above $30,000 per year. The mean income of the older age group was 3.190 or between $10,800 and $15,000 per year.

Education. Almost one-third (30%) of the women had graduated from college and three (13%) had received professional training. Twenty-nine percent (n=7) had at least one year of college education. Seventeen percent (n=4) were High School graduates. Four percent (n=1) had completed High School 10-11; Seventeen percent (n=4) completed 7-9; and four percent (n=1) had completed less than seven years of schooling.

Head of the Household. Not unexpectedly, eighty-three percent (n=20) of the individuals in the older group described

themselves as head of the household. Those females who were married, seventeen percent (n=4), responded that they were not the head of the house.

Additional Findings Regarding the Study Sample

Pearson Product Moment correlations were utilized to calculate the degree and the direction of relationships between selected sociodemographic variables concerning the old-old group of women (age, income, and education) and each scale utilized in this study. The correlation matrix is presented in Table 4. Correlation coefficients (r) range from -1.00 for a perfect negative correlation, through zero for no relationship, to +1.0 for a perfect positive correlation. The higher the absolute value of the coefficient (that is, the value disregarding the sign), the stronger the relationship. A correlation of -85, for instance, is stronger than a correlation of +35 (Polit & Hungler, 1978). A negative relationship is one in which high values on one variable are related to low values on the other. When a minus sign is not present the relationship is positive and is obtained when high values on one variable are associated with high values on the second variable. The magnitude of the relationship is also indicated by the absolute value of the correlation coefficient (r).

Table 3. Demographic Variables concerning older women (age, marital status, ethnic background, employment status, head of household) (N=24).

Variable	Number of Respondents	Percent
Age 75-89	24	100.0
Marital Status		
Married	4	17.0
Separated	0	0.0
Divorced	1	4.0
Single	3	13.0
Widow	16	67.0
Race		
White	24	100.0
Black	0	0
Mexican American	0	0
Indian	0	0
Oriental	0	0
Other	0	0
Employment Status		
Retired	23	96.0
Unemployed	1	4.0
Employed	0	0
Head of Household		
No	4	17.0
Yes	20	83.0

Table 3. Continued.

Variable	Number of Respondents	Percent
Education		
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 10-11 years of High School	1	04%
Completed 7-9 years of High School	4	17%
Completed less than 7 years of school	1	04%
Income Level		
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

Correlations were interpreted as:

value of (r)	strength of relationship
0.00 to 0.20	no meaningful relationship
0.20 to 0.35	very slight
0.35 to 0.65	moderate to fair
0.65 to 0.85	marked to fairly high
0.85 to 1.00	high to very high

(Borg & Gall, 1979)

Correlation coefficients can be tested for statistical significance. The minimum level of significance considered acceptable for this study was the .05 level. The following statements summarize the statistically significant correlations that are depicted in Table 4.

1. There is no statistically significant relationship between age of the old-old female sample and emotional support received. The analysis did show, however, an inverse relationship between age and emotional support. That is, as females age they reported receiving less emotional support (p< .15).

2. No statistically significant relationship was found between income and emotional support (P=<.40). scale. A correlation coefficient of .0331 (p=.40) was obtained. This sample of older women had higher than average incomes and perceived they were receiving emotional support.

3. There was no meaningful relationship between education of the old-old female sample and the emotional support scale. A correlation coefficient of .0707 (p=.30) was obtained.

Table 4. Correlation Matrix: Relationship Between Selected Sociodemographic Variables of the Old-Old Women and Emotional Support And Tangible Aid Scale.

Scale	Age	Income	Education
Emotional Support	-.1349	.0331	.0707
Tangible Support	-.2856*	-.0787	.0820

* P=<.1

4. A very slight relationship exists between age of the old-old female sample and the tangible support. A correlation coefficient of -.2856 (p=<.01) level was obtained. Such an inverse relationship may imply that as women age they perceive less tangible aid is available to them.

5. No meaningful relationship between income of the old-old sample and the tangible support scale was found. A correlation coefficient of -.0787 (p=.28) was obtained. This inverse relationship may mean that older women may not feel money is related to whether tangible aid is available.

6. There was no meaningful relationship between education of the old-old sample and the physical support scale. A correlation coefficient of .0820 (p=.27) was obtained.

Summary

The descriptive findings of the study sample were presented in this section. The sample was found not to be representative of older women in the general population in several ways. First, their educational levels were much higher with nearly 30 percent attending college. Second, their retirement incomes were higher which correlates with the higher levels of education.

Additional findings were also presented with selected sociodemographic variables (age, income, education) being correlated with each of the emotional support and tangible aid scales used in this study. Only one significant correlation was found between age and perception of tangible support available. This was not unexpected as women in the old-old range are more likely to require more tangible assistance and be unable to find it available. Descriptive data and the research question; Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 75 to 89?, is presented in the next section.

Data Presentation for the Research Question

In this section the research question will be presented with its associated data. A brief explanation of

the reliability of the instrument and statistical techniques utilized to analyze the data is addressed initially. Following the presentation of the reseach question with the old-old sample, demographic variables and descriptive findings from the parallel study by Sefton-Cojocel (1984) will be presented.

Use of the Norbeck Social Support Questionnaire With Aging Women

The reliability of the Norbeck Social Support Questionnaire has been established in two sample populations; graduate nursing students and working adults (Norbeck 1981, 1982). To establish the reliability in an aging population, the internal consistency of emotional and tangible support items were 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. The Cronbach alpha 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 come from the Pearson Product Moment Correlations between three emotional items and two tangible aid items for the first three significant others listed by each respondent in the study. The Pearson Correlation Coefficients are presented in Tables 5 and 6. Analysis of the Cronbach alpha on the three emotional support (affect and affirmation) items for three significant others yielded a high reliability

coefficient for the nine items (alpha = .87). The range of alpha values (.83764 to .87347) demonstrates consistently high correlations among the emotional items.

Analysis of two tangible aid (physical support) items for three significant others yielded a reliability coefficient for the six items of .79 (range .73628 to .78856). This finding shows consistency between the two items and provides the rationale for combining the tangible aid item responses into one tangible aid score.

In summary, evaluation of the Norbeck Social Support Questionnaire items of social support and tangible aid by the Cronbach's alpha provided statistical support for combining items into one score for each type of support. The following section describes the statistical averaging process for combining items to get a mean value on the emotional support score and one mean value on the tangible aid score.

Description of Statistical Averaging

An averaging process was used to compute individual mean scores for perceived emotional support and for percieved tangible aid for each study subject. These scores indicate the amount of support each individual perceived they received from the first three significant others they listed. Only the first three significant others were chosen for analysis because they likely represent the closest members of the network, and because

TABLE 5 :

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 2 (Respected)			EMOTIONAL 3 (Confide)		
	S.Q1	S.Q2	S.Q3	S.Q1	S.Q2	S.Q3	S.Q1	S.Q2	S.Q3
EMOTIONAL 1 (Loved)	S.Q.1								
S.Q1	1.000 P=****								
S.Q2	.6011 P= .001	1.000 P=****							
S.Q3	.4924 P= .001	.5514 P= .001	1.000 P=****						
EMOTIONAL 2 (Respected)									
S.Q1	.7646 P= .001	.5231 P= .001	.3812 P= .001	1.000 P=****					
S.Q2	.6600 P= .001	.7506 P= .001	.5416 P= .001	.6356 P= .001	1.000 P=****				
S.Q3	.5124 P= .001	.4502 P= .001	.7068 P= .001	.5286 P= .001	.5449 P= .001	1.000 P=****			
EMOTIONAL 3 (Confide)									
S.Q1	.7168 P= .001	.4340 P= .001	.3604 P= .002	.4733 P= .001	.4724 P= .001	.3659 P= .002	1.000 P=****		
S.Q2	.1831 P= .081	.2169 P= .048	.3545 P= .003	.1424 P= .139	.3676 P= .002	.2587 P= .023	.3303 P= .005	1.000 P=****	
S.Q3	.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 9

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

	Tangible Aid 1 (Tangible Help)			Tangible Aid 2 (Help When Ill)		
	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 Ill)						
S.O. 1	.3644 P=.002	.1481 P=.129	.3700 P=.002	1.0000 P=***		
S.O. 2	.1278 P=.165	.5987 P=.001	.4041 P=.001	.5052 P=***	1.000	
S.O 3	.2236 P=.043	.3398 P=.001	.4023 P=.001	.4244 P=.001	.5393 P=.001	1.000 P.***

the non-response rate rose rapidly after the first three significant others were listed.

The mean scores were derived using individual response data. from each of the individual's responses. For example, each respondent answered three emotional support questions for each significant other named. The values of the response on each emotional support item for one significant other (three scores) were added together and divided by 3, forming one single value. The averaging process yielded three emotional support scores and three tangible aid scores (one from each significant other). The mean of these composite values for each type of support was then used in tests of significance to evaluate differences between the mean perceptions of social support of two types, emotional support and tangible aid. In the next section the research question for the old-old sample will be addressed.

Reseach Question

The research question for the present study: "Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 75 to 89?" was examined by a t test comparison of composite means for each subject in the old-old group (N=24). The results of the t test are presented in Table 6.

In this sample of old-old women, a large difference (1.0995) was found in the mean for perceived emotional support received (x= 4.4120) and for perceived tangible aid available (x= 3.3125). The standard deviation for perceived emotional support was .522 while the standard deviation of perceived tangible aid available was 1.213 (Table 7). The standard deviation is an index of how variable the scores in a data set are and can be interpreted as an indication of the degree of error when a mean is used to describe a data set (Polit & Hungler, 1978). In computing the means and standard deviation in large samples from a population the distribution of those sample means will be approximately normal. When the sample is small (less than 30), as in this study, critical values are taken from a table of distributions called Student's t distributions. These distributions are symmetrical and cluster about the mean, but their graphs tend to be flatter than normal curves (Naiman et al.,1972).

Descriptive Findings of the Young-Old Sample Studied by Sefton Cojocel (1984)

The demographic variables utilized by Sefton-Cojocel (1984) to describe a population of young-old women, ages 65 to 74 were: age, marital status, ethnic background, employmnmet status, income level, education, and whether they were head of the household. The frequency distributions are presented in Table 8.

Table 7. Composite Mean Scores for Emotional Support and Tangible aid in Women Aged 75 to 89 (N=24).

Variable	Number Cases	Mean	Standard Deviation	Standard Error	Differences (Mean)	T Value
Emotional	24	4.4120	.522	.106	1.0995	5.08
Tangible	24	3.3125	1.213	.248		

Degree of Freedom = 23
2-Tail Probability (p<.001)

Age. The age of the younger participants ranged from 65 to 74 years, referred to as the young-old (Neugarten, 1974).

Marital Status. Twenty-five percent (n=9) of the young-old group were married. Seventeen percent (n=6) women were divorced. Fifty-six (n=20) women were widowed, and one individual or three percent of the population, was single.

Race. Of the younger group of women, ninety-four percent (n=34) were caucasian. Six percent (n=2) women were Black.

Table 8. Demographic Variables concerning a young-old population of women (age, marital status, ethnic background, employment status, head of household) (N=36).

Variable	Number of Respondents	Percent
Age 65-74	36	100.0
Marital Status		
Married	9	25.0
Separated	0	0.0
Divorced	6	17.0
Single	1	3.0
Widow	20	56.0
Ethnic Background		
White	34	96.0
Black	2	6.0
Mexican American	0	0.0
Indian	0	0.0
Oriental	0	0.0
Other	0	0.0
Employment Status		
Retired	32	91.0
Unemployed	1	3.0
Employed	2	6.0
Head of Household		
No	9	25.0
Yes	27	75.0

Table 8. Continued.

Variable	Number of Respondents	Percent
Education		
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 10-11 years of High School	3	8%
Completed 7-9 years of High School	3	8%
Completed less than 7 years of school	0	0%
Income Level		
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

Employment Status. Six percent (n=2) of the women were employed. Ninety-one percent (n=32) were retired and three respondents were unemployed.

Income. Income levels are varied among this group, with twenty-nine percent (n=10) of the women listing their income between $5,000 and $10,000. Fifteen percent (n=5) had incomes below $5,000, and between $10,000-$15,000 and $15,000 and $20,000 respectively. Twenty-one percent (n=7) had incomes between $20,000 and $25,000. Three percent had incomes between $25,000 to $30,000 and $30,000 to $35,000.

Education. Eleven percent (n=4) women were college graduates with professional training. Six percent (n=2) had a college education, while twenty-two percent (n=8) had attended college for at least one year. Forty-four percent (n=16) had graduated from High School. Eight percent (n=3) had completed 10-11th grade and 7-9th grades respectively. All respondents in the young-old group had education to the 7th grade.

Head of the Household. Seventy-five percent (n=27) of the women in this group had listed themselves as head of the household. Twenty-five percent (n=9) were not head of their households.

Data Presentation for the Research Question asked by Sefton-Cojocel

In this section the research question asked by Sefton-Cojocel will be presented with its associated data. The

research question asked by Sefton-Cojocel (1984) is: "Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 65 to 74?" was examined by the Student's t test. Comparison of composite means were made for each participant in the younger age group (n=36). The results of the t test are presented in Table 9.

Analysis of the data using the student-t test showed a statistical difference between perception of tangible support available and emotional support received. The mean was $\bar{X} = 3.95$ for tangible support with a level of significance of $P < .001$. The difference in standard deviations .544 for emotional support and .998 for tangible aid represents a 0.5 difference. There was a difference between the mean for perceived emotional support received and perceived tangible aid available in this study population of women aged 65 to 74, and that only one time in one thousand this great a difference would have occured by chance.

Table 9. Composite Mean Scores for Emotional Support and Tangible Aid in Women Aged 65 to 74 (N=36)

Variable	Number Cases	Mean	Standard Deviation	Standard Error	Differences (Mean)	T Value
Emotional	36	4.5617	.544	.091	.6034	3.68
Tangible	36	3.9583	.988	.165		

Degree of Freedom = 35
2-Tail Probability (p<.001)

Summary

The descriptive finding of the parallel study conducted by Sefton-Cojocel was presented in this section as well as the descriptive data and research question: "Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 65 to 74?". Findings indicated that women in the young-old age group perceived emotional support and tangible aid differently, and these two types of support are likely distinct. Additionally, tangible support was perceived to be less available by the young-old. In the

last section the joint collaborative reseach question concerning perceptions of emotional support received and tangible aid available among the two groups of women will be discussed.

Data Presentation for the Collaborative Reseach Question

In collaboration with Sefton-Cojocel (1984), data comparing emotional support and tangible aid between the young-old group aged 65 to 74, and the old-old group, 75 to 89 are presented in Table 10. A comparisons of the two age groups perceptions of emotional support revealed a difference in means of .1497, that is the mean of perceived emotional support in the younger group was X=4.5617 and that of the older group was X =4.4120. The t-test was use to compare the two groups on the dependent variables. The older group had a lower mean value for perceived emotional support received but the t-value was not statistically significant.

Comparing the composite means for perceived tangible aid available between the groups, the data shows a greater margin between the difference of means (dm= .6458). The standard deviation of the young-old group was (SD=9.88) and the old-old group (SD=1.213). The 2-tail probability indicates this difference in means to be valid 97% of the time at (p=.027). This can be interpreted as the magnitude of the difference between means would be due

Table 10. Composite Mean Scores for Emotional Support and Tangible Aid Between Two Groups of Women aged 65 to 74 and 75 to 89.

Variable	Number Cases	Mean	Standard Deviation	Standard Error	Difference (Means)	T Value
Perceived Emotional Support						
Group 1 (65-74)	36	4.5617	.544	.091		
					.1497	1.06
Group 2 (75-89)	24	4.4120	.522	.106		
Perceived Tangible Aid						
Group 1 (65-74)	36	3.9583	.988	.165		
					.6458	2.26
Group 2 75-89)	24	3.3125	1.213	.248		

Degrees of Freedom = 58
2-Tail Probability =(p=.293) for emotional (pooled variance estimate).
2-Tail Probability =(p=.027) for tangible (pooled variance estimate).

to chance only 3 out of 100 times. The large difference suggests that the respondents in the two groups perceive tangible aid differently. The women in the older group also perceive significantly less tangible support is available to them. This finding was expected since older women in their seventies and eighties are experiencing greater need for tangible support.

Summary

In summary, the data analysis for this study revealed three major findings:

1. The reliability (internal consistency) of the emotional support items and tangible aid items in the Norbeck Social Support Questionnaire was confirmed with an elderly study.
2. Significant differences were found within each age group between the mean of perceived emotional support received and the mean of perceived tangible aid available.
3. A significant difference was found between the younger and older group of women on the mean perception of tangible aid available.

In Chapter VI, the study findings will be interpreted and summarized. Implications will be discussed in relation to the conceptual framework utilized as the theoretical basis for the study and in relation to nursing practice, nursing education, and further research.

CHAPTER VI

SUMMARY AND IMPLICATIONS

Overview

This last chapter contains a review of the thesis content. First, the findings are presented and conclusions discussed. Then, implications and recommendations for nursing practice, nursing education and research are presented.

The purpose of this study was to examine the characteristics of an aging sample of women and to statistically determine if they perceived emotional or tangible support differently. The results have been compared to a similar study undertaken by Sefton-Cojocel (1984) who measured the same variables in a young-old sample of women. Analysis of the combined data indicates that there were significant differences within each age group (young-old and old-old women) between the mean of emotional support received and the mean of perceived tangible aid available. Additionally, a significant difference was found between the younger and older sample of women on the mean perception of tangible aid available. The application of these findings will now be discussed as

they relate to the samples and those of the general population of elderly women.

Characteristics of the Study Sample

Sex, Age, Marital Status. All participants in this study were females between the ages of 75 to 89, with an average age of 79 years; the span of years referred to as the old-old (Neugarten, 1974). It is well known that females outlive males and with the changes that have occurred in decreased infant mortality the older population has increased in numbers with proportionally more women. Concern over this growing number of aging females has initiated a number of conferances and discussions related to ways to improve health and quality of life for women (White House Conference on Aging, 1981; Hickey, 1980; National Institution on Aging, 1982).

Nursing responds to societal trends in an effort to meet the perceived health needs of the culture in which it exists. Using statistical data and empirical research as the basis of clinical intervention it is evident that age and being female may be a strong predictor of health practices and preventive health care (Gallin, 1980; Harris et al., 1975). Among factors studied that have been related to health, social support has become a major focus. Several researchers have identified that age and sex (being female) influences the amount and type of social support

required for optimal functioning (Branch and Jette, 1983; Cobb, 1976; Haggerty, 1980; Norbeck, 1981).

In two studies social support needs were studies in relationship to sex. In the first study, females reported having more social support available from peers but also more life stress than males (Burke and Weir, 1978). In the second study conducted by Lowenthal and Haven (1968) elderly women reported having a confidant whereas the males in the study did not. Additional research is needed to determine the social network patterns established by both men and women and as women's roles change social support patterns may take on a different picture.

In this study sample of old-old women two thirds or 67 percent of the study participants were widowed which is representative (69%) of women in the general population (U.S Census Bureau 1980). Among older adults, marital status has been related to whether or not the person reported having a confidant: married persons were more likely to have a confidant than widowed, widowed more than divorced or separated, and divorced or separated more than single perons (Lowenthal and Haven, 1968).

In summary, age, sex, and marital status, are properties of the person which influence how much social support may be needed by an individual, as well as how much may be available to them. In this study sample of 24 old-old women longevity and widowhood are likely to have

Influenced the need for support and therefore the perception of tangible aid available. Other studies cited appear to support this, however the extent to which these variables influence social support are not well defined. Continued research is necessary to isolate specific characteristics that may influence social support needs so that intervention strategies can be tailored to particular social support deficits.

Race. All participants in the study were Caucasian. National data based on U.S. Census Bureau (1984) statistics indicate that females over the age of 65 were 12.7 percent of the total population. Of this 12.7 percent 13.5 million are white females and 1.3 million are black. No comparisions can be made with other races from this study. Research on elderly minorities have been notoriously negligible in the past (White House Conference on Aging, 1981). Census data, however indicate that elderly minorities more often have lower life expectancies and are poorer than elderly white females. These factors are likely to affect need and availability of social support.

Education, Employment, Income Level. Nearly one-third or 30 percent of the female participants in this study were college graduates and three participants had completed college and professional education. In addition nearly one-half (47%) had completed High School. Compared to national data the median number of school years completed

for females over 55 years of age is 12.1 years. Only 7.4% of all aging females over age 65 have a college degree.

The higher than average education levels found in this sample may be related to the fact that the sample was taken in close proximity to a major university where values, attitudes and available opportunities may be greater. Additionally, education and income have been positively correlated, increasing the likelihood that the sample would have higher levels of income.

With the exception of one woman all respondents in this study were retired as would be expected. Over one-half (57%) reported incomes up to 10,000 per year while 44% reported incomes up to $30,000 per year. Compared to national statistics the average income for females in 1982 was $5,607 (Bureau of the Census, 1984).

In 1959, one-half of all elderly women fell below the poverty line. Although the official government "poverty index" was not developed in the 1960's, poverty among the aged was considered serious. According to data prepared for delegates to the 1961 White House Conference on Aging, 6-million elderly persons were living on incomes that were considered inadequate. Inadequate was not defined. Currently the poverty level is set for below $3,400 per year (Washington Social Legislation Bulletin 27, 1982). Since 1959, elderly white women have made remarkable gains

and the poverty rate has dropped to 16 percent (Kutz 1982). Of special concern are elderly women living alone. The poverty rates for this group of women are very high. One-quarter of all elderly white women living alone, one-half of Hispanic women, and two-thirds of aging black women have incomes below the poverty line.

The affluent elderly, on the other hand, may be victimized by great discrimination (Alford, 1978). Alford worked with old people of the upper middle class who were distressed over legal battles and swindles and had traveled great distances in search for health remedies. Because they had money they were often overcharged and underserved by professionals. Many had fears that someone would take advantage of them.

To summarize, women in this study have higher educational levels and higher retirement incomes then their cohorts in general. These characteristics need to be considered when interpreting the statistical findings in perceived emotional support and tangible aid available as they will likely influence the women's perceptions of need. This will be discussed further in the next section. Since the sample was small and defined by race additional research is necessary with a randomized sample to generalize the findings, however the findings in this study will add to the overall findings in women's and social support research.

Additional Findings Regarding the Study Sample

Selected sociodemographic variables concerning the elderly women in this study (age, education, and income) were correlated with each scale utilized in the study. In Chapter V, results of the Pearson Product Moment Correlations were reported between these relationships (Table 4). In this section data will be summarized and implications presented.

Age. There were negative relationships found between age of the respondents and both scales for emotional support and tangible aid. As women age they may be more likely to perceive that they need emotional and tangible aid differently. Although, only the relationship of age and tangible aid reached statistical significance, the practical significance of both must be considered along with other descriptive findings from the present study.

The majority of the study sample were widows. Widows, particularly the old-old are likely to have a different life picture than others. Cohorts die or age at such variable rates that they may be unable to provide the intimate exchange of earlier years. Territories shrink and secondary network members may be less available to an individual. Additionally, elders in the old-old range may have children in the young-old category, i.e., 60-70. While they may perceive that their children are able to

provide sufficent emotional support they may not be able to provide enough tangible aid. Branch and Jette (1983) found that 79 percent of the women in their study over 85 years required additional assistance with instrumental activities of daily living. Most of this assistance was provided by children, especially daughters. Children may yet be working and time limits their availability to assist in tangible support, or health problems may limit their capabilities to provide tangible support.

Education. There were positive relationships correlated between education and perception of emotional support and tangible aid. While these relationships cannot be interpreted as statistically significant observations would imply that individuals who are more highly educated than non-educated individuals may assess and perceive need differently. Education has been considered to have a direct or indirect influence on longevity. The higher the education the fewer the physical hazards and job risks. Higher paying positions afford the individual better opportunities for health care especially health maintence, which is recognized as a longevity factor.

A positive relationship between education and perception of emotional support might be explained at a theoretical level. Self-actualization is the highest level of human functioning defined by Maslow (1970). Education whether obtained formally or self-taught influences ones

ability to achieve significant life goals and to become self-actualized. Self-actualization implies that the social surroundings are no longer of utmost importance. Neugarten's (1964) theories embrace this belief. Persons begin in midlife to be increasingly interested in their internal status and self-determined needs. They begin to explore their inner selves and attempt to find continuity to their lives. Emotional investment in persons and objects may receive less attension and often older persons become more egocentric. This emotional detachment has been observed and interpreted by some as disengagement (Cummings and Henry, 1961). Other theorists however, feel that emotional detachment does not imply a lack of involvement or interest but a greater focus on inner strength that allows one to rely more on inner resources rather than others for support and strength. This may account for why in part, elderly women in this sample perceived emotional and tangible support needs differently.

Income. Income correlates highly with education. In this study sample women were more highly educated and had higher retirement incomes then females in the general population. The correlations, though not statistically significant, between income and emotional support was positive while the relationship between income and tangible aid was negative. In other words, this sample of older women with higher incomes perceived they were receiving

less tangible support, but higher amounts of emotional support.

In summary, only one correlation, age and tangible support was statistically significant. Old-old women in this sample perceived tangible aid to be less as they age, which was expected. Several trends were identified among income and education and the emotional and tangible aid scales. In the next section, the research questions will be presented with implications for nursing.

Research Questions

The research question in this study was: Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women aged 75-89? In a parallel study Sefton-Cojocel asked: Is there a difference in the mean value of perceived emotional support received and perceived tangible aid available among women 65 to 74? A collaborative question was then asked Is there differences in these same perceptions between the two groups. In this section a summary and implications of the findings for the study populations will be presented. Next, the findings from the collaborative research question will be summarized and implications discussed.

In the study sample of old-old women a large mean difference (1.0995) was found between perceived emotional support received and tangible aid available (See Table 6, Chapter 7). In other words, this sample of old-old women

perceived tangible aid to be less available to them than they perceived emotional support to be received. Sefton-Cojocel, (1984) found a high mean difference within her young-old sample as well, however, the mean difference was not as high (.6034) as in the old-old sample. Conceptually, the high mean differences among two different age groups demonstrates that both samples distinguished between the two types of support, as emotional and tangible aid. It is likely that emotional and tangible support are two distinct dimensions. This has been supported in other research. Schaefer et al., (1981) found that indices of emotional and informational support were highly correlated, whereas, the measure of tangible support was distinct.

At a practical level, several factors may have influenced older women's choices. In both samples educational and income levels were higher than the levels reported for the general female population of the same ages. Both education and income levels are likely to influence the need for, availability, and use of social support. A second factor relates to the complex issue of dependence/independence. Perceptions of tangible aid may seem more difficult to obtain particularly in the old-old population. An example of this is when old-old persons give up driving as a result of sensory deficits or chronic illness and must depend on others to assist them. If they use others in the kin-network to often they are afraid this will be interpreted as dependency.

Safety and security issues may also cloud their perceptions by raising fears that hiring someone to help with tangible needs may bring them harm. The old-old especially feel more vulnerable and while they perceive the need more tangible support may as a result of fear not perceive it available.

In summary, the findings show significant differences within the young-old sample, and the old-old sample that women perceive less tangible support to be available to them then reception of emotional support. Such findings can be generalized to women with similar characteristics. Several other contributions have been made by this study: 1) high mean differences were shown between emotional support and tangible support within each of two aging samples, demonstrating that emotional and tangible aid are two distinct dimensions of social support, and 2) validation of the reliability (internal consistency) of the emotional and tangible items on the Norbeck Social Support Scale was accomplished with samples of elderly women.

Collaborative Research Question

Analysis of the combined data from two samples of aging women aged 65 to 74 and 75 to 89 years, demonstrated a significant difference ($p<.001$) in the mean value of tangible aid perceived to be available between the two age groups, with the old-old respondents reporting less

perceived tangible aid available then the young-old respondents.

Several factors may account for the differences seen in perception of emotional support and tangible support between the two samples of aging females. One particular factor not controlled for in this study was changes that occur between the earlier and later decades of late life. Murray et al. (1980), has noted that the young-old are more flexible in personality and are less vulnerable to the harsh reality of aging. The young-old person often manifests self-respect without conceit; tolerates weakness while using strength to the fullest; regulates, diverts, or sublimates basic drives and impulses instead of trying to suppress them. The young-old are likely to respect others even if he/she does not agree with their behavior; and directs energies and creativity to master the environment both social and physical (Gitelson, 1975).

For the old-old, aging is a time for meditation and contemplation, not camaraderie. Old-old people may be friendly and pleasant, but they are also egocentric (Render, 1964; Rosen & Neugarten, 1964, 1981). Egocentricity is a physiologic necessity, a protective mechanism for survival. The life space shrinks for this age group. When old-old people get together, certain factors block camaraderie, even if they want to be

sociable: varying stages of deafness, blindness, other faulty sense perceptions, and the fact that they may have little in common other than age and past historical events. Further, the old-old have less energy to deal with challenging situations.

To summarize, the well young-old are often more in synchrony with the environment and have the physical and mental energy and reserves to repattern when deficits occur. On the other hand, the well old-old experience more sensory and physical changes as a normal part of aging that are likely to affect their perceptions of need for, availability, and use of emotional and tangible support.

Another factor that may have contributed to the old-old respondents perception of less perceived tangible support being available is that with increased age persons are likely to have fewer network members to supply emotional and tangible support and therefore have less opportunities for receiving tangible support. Additionally, significant differences may have occured as a result of wording of the questions within the Norbeck Social Support Questionnaire. For instance, all three emotional support questions ask the respondent to indicate "how much" the significant other mades you feel loved/respected, or"how much" you are able to confide in the significant other. Responses to these questions while based on perception also recall past experiences with a

significant other. Tangible aid questions are more hypothetical and ask the respondent, "If you needed $10, or a ride to the doctor, or some other immediate help, how much could this person usually help? Respondents may respond with more certainty in describing their perceptions of what they have received but with less certainty for future oriented situations, particularly the old-old who are more present oriented.

In summary, a significant difference was observed between the mean for perceived emotional support received and perceived tangible aid available. The women in the old-old sample not only perceived tangible aid differently but perceived that tangible support was less available to them. While the research question only addresses mean value differences in the perceptions of emotional support and tangible aid among and between aging women, several factors that many influence these perceptions have been discussed.

Additional Limitations of the Study

In addition to the eight limitations of the study outlined in Chapter I, results may have been affected by other limitations.

1. The findings of this study are limited to the sample or similar samples of young-old or old-old women since selection was not random.

2. The sample of old-old women consisted of highly educated persons with a high socioeconomic status. Findings from this study may not be relevant to other samples of elderly women who have lower educational levels and lower socioeconomic status.

Implications for Nursing Practice

The results of this study include a description of 24 women between the ages of 75 and 89 years, and their perceptions of emotional support received and tangible aid available to them. Study findings will be considered first in relation to Roger's theoretical basis of nursing and then within the nursing process as depicted in a model developed by Norbeck (1981). Implications of the findings related to practice will be discussed in terms of staff nursing then in relation to nurses in advanced practice.

Nursing's professionally educated members have a responsibility for elaboration and substantiation of nursing's scientific base. Nursing is both a science and an art. The practice of nursing encompasses the art of nursing and is the utilization of scientific and conceptual knowledge in service to people. According to Rogers (1970), individuals are the focus of nursing who must be viewed holistically and in constant interaction with the environment. Rogers provides a conceptual basis for

understanding clients and a frame of reference for envisioning relationships between humans and events.

Rogers characterizes client and environmental exchanges as, "continuous repatterning of both man/human and environment" (p. 53). Conceptually, the study findings can be considered patterns of aging women in relation to their perceptions to social support. The factors that may influence social support need, availability, and use involve complex dynamic interactions between such variables as age, sex, marital status, education, income, religion, and culture. Similarly, individual differences in needs, abilities, and orientation to the environment have direct impact on social support needs.

Complexity is a greater issue with aging individuals because the range of differences becomes greater, not narrower, as older persons move through the years of adulthood. This is acknowledged in Rogers' conceptual system by the Principles of Homeodynamics. Since the principle of helicy subsumes within it the principles of resonancy and integrality findings will be related to the principle of helicy. The principle of helicy is based on the assumption that the change which comes about through the interaction of humans and the environment is continuous, and initiates behavioral patterns which are ever changing. In relating the findings of this study to the principle of Helicy the practitioner cannot assume that

the perception of all older women are the same. The fact that two different age groups of women perceived differences in emotional and tangible support lends support to this assumption. Perceptions of emotional and tangible support needs of aging women must be assessed separately and the nurse's assessment should be sufficiently detailed so as to differentiate need, availability, past and present use of social support.

The conceptual use of the term environment is used by Rogers to denote anything external to the client. Individuals within the network of a client is part of that person's social environment. While perception of the client was a major variable and actual support was not measured the two variables are important to assess. Projecting beyond the scope of this study, the literature would suggest that perception and actual support may be quite different. Nurses should assess not only the aging client's perception of support needs but assess who the significant others are within the network and their abilities and willingness to supply emotional and tangible support.

Additionally, the nurse in advanced practice should utilize information gained from assessment to facilitate clients and significant others to identify patterns of social support needs, availability, and how the client uses network members to meet their needs.

In summary Rogers' conceptual system provides a framework for viewing clients and their interaction with the environment in terms of identifying behavior patterns. Observing patterns rather than isolated events provide a useful means of viewing the client individually and totally, and increases the likelihood of accuracy in assessment. Findings from this study were discussed briefly in terms of the patterns that were observed from data collected and were applied to Roger's principle of helicy. In the next section the basic assumptions of man/human and environment will be discussed in relation to elements of assessment, planning, interventions, and evaluation of the nursing process. Norbeck's model incorporating social support into clincial practice will be utilized to show these relationships. Implications of the study finding will be integrated into the discussion.

Characteristics of the client such as, age, sex, education, income and characteristics of the environment, network size, patterns of interaction, have been shown to jointly determine the individuals needs. Comprehensive assessment is nececessary to determine relevant factors from both the client and the environment and to weigh perception of need and actual availability of social support. With this information the nurse can then make clinical judgements whether the existing support is adequate or inadequate.

To date, reliable and valid instruments to measure social support for clinical assessment have not been developed, although Norbeck's Social Support Questionnaire could be adapted for clinical use. Murawski and associates (1978) proposed that clinical assessment of social support should include: an inventory of the individual's interpersonal support system and some measure of the nature, strength, and availability of this support; a definition of the individuals's roles; and indication of the amount of support available to meet these roles during illness; a measure of the individual's patterns of social affiliation; and a measure of the individual's need for social affiliation.

The descriptive findings in this study can only be generalized to a like sample, however, it was found that differences in perception of emotional support and tangible support exist and that two sample populations perceive these two types of support to be distinct. Research findings, supplemented with clinical judgment, can guide the nurse in determining whether the level of social support is adequate or inadequate for a given person. The elderly are not a homogenous population. Distinctions were found in this study in the way young-old and old-old females perceive their needs for social support. The question of how much or what types of support are needed

has not been totally answered and will require additional research.

Planning and intervention are the next phases of the nursing process When social support is assessed to be inadequate the nurse must consider several areas in her planning. Can the existing network members provide the kind of support that is needed in the situation. Litwak and Szelenyi (1969) contributed empirical data that suggest that different functions are carried out by specific primary groups. Because of nearness, neighbors are often better suited for assisting in emergencies. Family members often provide assistence on a long-term basis while friends are chosen to assist on the basis of mutuality.

At this point in time research has not been conducted to evaluate the effectiveness of intervention strategies. Norbeck (1981) provides the following guideline for intervention. Nurses should produce minimal disruption or alteration in the natural support system, unless it is a pathological system, while enhancing the capacity of that system to provide support.

Implications for Staff Nurses

Staff nurses comprise the largest proportion of workers in the health profession, and those working in acute care settings are most numerous. Educational level often determines the value individual nurses place on the

scientific approach versus an intuitive approach. Those nurses who have been socialized to regard research based practice will seek out research information and incorporate it into their practices. This socialization formally occurs at the Baccalaureate level.

One problem area identified in acute care settings is the long held myths of aging that most elderly persons are sick, dependent and require frequent hospitalizations. This belief can lead to interventions that promote dependent behaviors. Seligman (1975) coined the term "learned Helplessness". Briefly, this concept means that learned helplessness develops through repeated exposure to unpredictable and uncontrollable events, so that patients learn to be helpless. A cycle occurs in which the professional and patient believe things cannot be changed and both give up (Hochhauser, 1981). Hospital rules and regulations by their nature, assert and retain control over the major and minor daily activities of patients. Dress, mealtimes, menus, physical activity, environment, space, bed time, visiting hours are all prescribed for the patient. Elderly persons who learn and display helpless behaviors serve to further confirm the stereotypes of aging persons and justify the behavior of the nurse.

It will likely be some time before hospital rules are changed so that routines can be adapted to individual patient needs, however the area most susceptible to change

is that of dispelling widespread myths and stereotypes of aging persons. Increased awareness through education programs, publications, especially the inhouse hospital journals, and through clinical conferences. The stereotypical picture of the decrepit, irritable older person who is set in their ways and unable to change is rejected by empirical studies and specialists in aging.

In relation to this study it becomes clearer that older women are not a homogeneous group and their perceptions of social support are different as they grow older and needs change. Besides sharing these results with staff nurses the nurse in advanced practice must articulate these differences and role model the use of such finding, taking opportunities to discuss her rationale with others.

Additionally, it is the role of Nursing Administrators to assist in bridging the gap between various educational levels of nurses. Dissemination of research findings should be made available to this group with practical recommendations for integrating new knowledge into practice situations. Ideas such as Brown Bag lunches with staff nurses in their settings could benefit both the staff nurse and nurse researcher. Clinical research needs to be scientic but practical, and staff nurses can often see patterns of events from a different point of view. In effect both learn from the other.

The Gerontological Clinical Nurse Specialist

The nurse clinician has the best of both worlds. She is educated to be clinically "sound" and to be a beginning level researcher. The clinical situation provides a constant laboratory for observing human interaction with the environment. The nurse clinician has knowledge and skills for comprehensive assessments and the Gerontological Clinical Nurse Specialist (GCNS) has additional specialized knowledge in working with the elderly.

Evidence is provided in the literature that social network characteristics are related to health status. This has implications for individual assessment as well as, community level assessment of needs and program planning. The network analysis approach identified in Chapter II, conceptually delineated various structural and interactive components of an individual's network and the functions that network provides in terms of emotional and tangible support.

This framework can provide the Gerontological Clinical Nurse Specialist direction for assessment, clearer identification of problem areas, and more accurate statements of outcomes. For example, a client with hypertension may have a large network of support persons who provide only low intensity support. The Gerontological Clinical Nurse Specialist might direct interventions at assisting the client to strengthening interactions with

network members, herself included, by encouraging interactions that include mutual sharing and emotional support.

In a community assessment a network analysis might reveal a particular neighborhood has large numbers of widows. Support while present from family and friends may be enhanced by development of a self-help group to encourage individual women to interact and reach out to one another for emotional and tangible support.

Additionally, evidence has been found in empirical research that there is an association between reciprocity and well-being (Wentowski, 1981). First, interventions should attempt to facilitate interactions that are interdependent and mutual. This might be accomplished by teaching a client to be more reciprocol in his or her relationships by role modeling. Programs developed for community use might involve peer education, self-help groups in which mutual sharing and problem-solving are encouraged.

Israel (1982) has suggested that perhaps home care programs should be evaluated more closely in terms of the way services are delivered. Such programs often provide tangible aid to aging persons in terms of medication, dressing changes, exercises and assistance with activities of daily living. There may be little consideration or analysis made to evaluate whether an individual client

already has a network member who does or could provide some of these resources. Additionally, this network person might bring emotional support, closeness and mutual sharing. What occurs as the nurse begins to provide services is the network member feels he or she no longer needs to stop by as often. This may also lead to dependency on the professional as the patient has little opportunity or resources to reciprocate. The Gerontological Clinical Nurse Specialist using research as basis of practice should recognize the potential for this problem and provide opportunities thru consultation, education and publication to share the findings and implications for improved client health.

Up to this point, concentration has been on the positive effects of social support on client's well-being and as a factor to promote health. Little is found in the literature, particularly in empirical research that is related to the potential negative effects of social support. Negative effects however, may have a potentially detrimental effect on health. Negative effects on family equilibrium might result during an acute illness in which family functioning is disruped. With elderly persons acute episodes of chronic illness may place demands on spouse, children and other relatives and lead to decreased mutual sharing and a dependency cycle.

Social support may undermine the client's self esteem, to the extent that supportive others reflect a picture of an "impaired person". Two aspects of this problem has been noted in the literature. First, there is evidence that clients are often distressed by the "burdon" (emotional, physical, financial) that they place on family as a result of their illnesses (Harker, 1972; Schwartz, 1977). Second, receiving support from others requires the client to recognize his or her status as "needing assistance". In order to conceal their identity some clients may exhibit social detachment and not disclose information about their feelings or themselves (Goffman, 1963; Gussow and Tracy, 1968). Unfortunately, social detachment may lead to alienation of support persons.

Lastly, compliance could be negatively influenced by social support persons. If treatment is unacceptable to significant members of a client's support system or the treatment goes against their beliefs and values, they may discourage compliance with the treatment program.

In summary, negative support may be as detrimental as positive support is thought to be helpful. This strengthens the need to view the client holistically and the environment in assessment. Involvement of family and other significant members in the planning and implementation of the care plan should always be considered.

In summary, the primary care setting in which the Gerontological Clinical Nurse Specialist works offers the greatest advantage of longitudinal assessment, follow-up, and interactions with multi-network members. Elderly clients bring life-long patterns and values that can be strengths or may predispose them to isolation or depression. The Gerontological Clinical Nurse Specialist's main goal is to assist the client in identifying their existing supportive relationships or to facilitate the establishment of other relationships for those lost or unavailable. The Gerontological Clinical Nurse Specialist can suggest many supportive avenues for establishing effective social networks. Old friendships and siblings offer a potentially good resource for emotional and tangible support. Combining the findings from this study on the perceived types of social support available with actual support available allows the Gerontological Clinical Nurse Specialist to plan more accurate outcomes with the client.

Implications for Nursing Eduation

Implications for nursing education may be drawn from study findings as they relate to the conceptual framework upon which this research was based. Fundamental concepts of this framework will be presented along with the research findings and implications.

Patterns exist in the perceptions of old-old females concerning tangible aid available and emotional support received. Based on Rogerian theory individuals interaction with the environment to produce patterns. This framework provides a scientific basis for observing human responses in a holistic way. Students of nursing need such frameworks in which to base the nursing process, otherwise interventions become based on intuition and isolated events. Nursing curriculum at all levels must also include information regarding perceptions of aging persons and the effects that sociodemographic factors and individual differences can play in perceptions.

Undergraduate Education

Students at all levels of undergraduate education find themselves practicing with aging individuals. Emphasis in most programs are based on disease in aging persons and little knowledge is included in curriculums regarding the normal process of aging. Clinical decision-making is impaired when the student cannot judge normal from pathology or integrate the concept of differentiation or heterogenity among aging individuals. While the findings of this study did not deal with the issue of normal or abnormal changes, differences were shown to be statistically significant among aging women of like ages and between two groups of aging women. Clinical

instructors need to be aware of such studies and assist students to learn and integrate such findings into practice.

In addition, two other significant issues have been identified in Chapter II and Chapter III, 1) Only a small portion of elderly persons are institutionalized or fall into the group called the frail elderly. Increased focus should be placed on the healthy elderly with emphasis on health promotion and health maintainence. 2) Older women outnumber older men. There is increased need to develop strategies with older women to protect, promote, and maintain health.

Graduate Education

Graduate students in nursing have the opportunity to increase the depth and breath of their understanding of the aging process and in particular women's health. The focus of this study has been on women and a factor, social support, which has been identified as a mechanism to promote health. The design of this study prevents generalization to the total aging female population but should stimulate faculty and other graduate students to replicate or to design other studies that will add to the scientic base of factors influencing health aging.

Curriculums in graduate education should include objectives that 1) challenge myths and stereotypes associated with aging, 2) distinguish the normal process of aging from disease, 3) emphasize the growth potential of

women at all levels of health, 4) examine social, physical, and psychological factors influencing health aging, 5) develop strategies with older women to protect, promote and maintain health and, 6) refine a functional concept of health which acknowledges personal as well as environmental resources (Gelein, 1982; Norbeck, 1981).

Continuing Education

There are several implications for developing Continuing Education programs for nurses working with aging persons. The aim should be to increase their understanding of social support as a health promoting factor and for dissemination of study findings in professional literature to accomplish the same purpose. Programs that focus on normal aging and age differentiate can be built around physical assessment courses, which seem to be popular with staff nurses. Findings from studies such as this one could be integrated into courses that are an ongoing part of orientation so that they become a part of practice. In particular, findings from this study suggest that it is critical to obtain a history that includes client's perceptions and the individual's network characteristics, epecially need for emotional and tangible support.

In addition, tools such as, Gordon's Manual of Nursing Diagnosis (1982) could be utilized at all levels of nursing

education as it provides means of collecting and organizing data in functional health patterns. When problems or deficits are identified (potential or actual) they can be placed into diagnostic categories upon which strategies and outcomes can be determined. This tool provides a practical way to teach undergraduate as well as, graduate level nursing students. It would be expected that the depth of information collected and strategies would be different.

Implications for Nursing Research

The results of this study and the limitations in design have many implications for future research. In the statement of Research Priorites for the 1980's, the American Nurses' Association Commission on Nursing Research identified social support and networks as human and environmental determinants of wellness and health functioning that needs further study (NursingResearch 1980).

Social support is a multi-complex variable that is intuitively understood but has proven difficult to define. Methodological problems in data collection with an elderly sample must be addressed. Maddox and Douglas (1974) identified several problems that influence the interpretation of finding with an aging population. First, most studies are cross-sectional and provision for selective survival, sampling bias such as, frail elderly are less likely to be participants in research of this type, and sex differences are not accounted for in the

design. Second, age changes can be confused with age differences in cross-sectional designs.

Adequate sample size, random sampling, and the inclusion of control groups (in experimental studies) are critical to the achievement of valid conclusions about the role of social support and health. Additionally, most of the research has failed to assess more than one kind of support, provider, or recipient, and have been focused on only on one or two outcomes at a time. Multiple sources, kinds of support, types of illnesses, and recovery and coping outcomes need to be explored.

A methodological problem in this study is that a convenience sample was used which limits the generalizability of the findings to the sample population. Additionally, since studies (Garrity, 1973; Hyman, 1971) have indicated possible negative effects of social support on well being, investigators need to consider both positive and negative consequences in future research..

Recommendations for Future Research

1) The study needs to be replicated with a stratified sample that is representative of the elderly population.

2) Studies based on longitudinal design need to be developed and carried out.

3) Sex differences should be acknowledged and comparative designs carried out to examine the differences

in perception of social support and actual support available.

4) Examine sampling bias by attempting to determine characteristics of the persons refusing or unable to participate.

5) Include a measure of adequacy of social support perceived to be available.

6) Include a measure of external validation of perceived social support needs by surveying significant others as well.

7) Studies should include minorities and the elderly.

Summary

In summary, the overall value of this study emphasizes that large numbers of women are living longer and will require a greater share of the health care resources. Health promotion and maintenance of functioning of aging women is of critical concern to the Gerontological Clinical Nurse Specialist. Factors such as social support have been shown to promote health and as a concept needs refinement of definition and continued research to gain knowledge with the precision required to guide clinical application. In Chapter VI a summary and interpretation of the study findings was presented. Findings were related to the conceptual framework of this study, and recommendations for nursing practice, education, and research were presented.

BIBLIOGRAPHY

BIBLIOGRAPHY

Ahammer, I., and Bates, P. (1972). Objective vs. Perceived age differences in personality: How do adolescents, adults, and older people view themselves and each other? Journal of Gerontology, 27(1), 46-51.

American Nurses' Association (1981). Research priorities for the 1980's: Generating a scientific basis for nursing practice. American Nurses' Association Publication.

Atchley, R. (1980). The social forces in later life (3rd Ed.). Belmont, Ca: Wadsworth Publishing.

Babchuk, N. (1978). Aging and primary relations. International Journal of Aging and Human Development, 9(2), 137-151.

Baltes, P. (1968). Longitudinal and cross-sectional sequences in the study of age and generation effects. Human Development, 11, 145-171.

Baltes, P.B, and Goulet, I. (1971). Exploration of developmental variables by manipulation and stimulation of age differences in behavior. Human Development,14, 149-173.

Baltes, P., Reese, H., and Lipsitt, L. (1980). Life-span developmental psychology. Annual Reveiw of Psychology, 31, 65-110.

Barfield, R.E., and Morgan, J.N. (1978). Trends in satisfaction with retirement. Gerontologist, 18, 19-23.

Barnes, J.A. (1954). Class and committtees in a Norwegian island parish. Human Relations,7, 39-58.

Bartlett, J., Till, R., Gernsbacher, M. and Gorman, W. (1982). Age related differences in memory for lateral orientation of pictures. Journal of Gerontology, 38(4), 439-446.

Basson, P. (1967). The gerontological nursing literature: search study and results. Nursing Research, 16, 267-272.

Bengtson, V., Kasschau, P. and Ragan, P. (1980). The impact of social structure on aging individuals. In J. Birren and K. Schau (Eds.),Handbook of the Psychology of Aging, New York: Van Nostrand Reinhold Co.

Berkman, L. and Syme, L. (1979). Social networks, host resistance, and mortality: A nine-year follow-up study of Alameda County residents. American Journal of Epidemiology,109(2), 186-204.

Bigner, J. and Jacobsen, R. (1981) June. Models of developmental research: Individuals and families. The Personal and Guidance Journal, 2, 647-651.

Billings, A. and Moos, R. (1982). Social support and functioning among community and clinical groups: A panel model. Journal of Behavioral Medicine, 5(3), 295-311.

Binstock, P. and Shanas, E. (1976). Handbook of Aging and Sciences. New YorK: Van Nostrand Reinhold Co.

Blazer, D. (1983). Impact of late-life depression on the social network. American Journal of Psychiatry, 140(2), 162-166.

Blazer, D. (1982). Social support and mortality in an elderly community population. American Journal of Epidemiology, 115(5), 684-694.

Borg, W. and Gall, M. (1979). Educational Research. New York: Longman, Inc.

Bott, E. (1975). Family and Social Networks. London: Travistock.

Bott, E. (1955). Urban families: Conjugal roles and social networks. Human Relations, 8, 345-383.

Botwinick, J. and Thompson, L. (1968). A research note on individual differences in reaction time in relation to age. The Journal of Genetic Psychology, 112, 73-75.

Boyce, W. (1981). Comment: Interaction between social variables in stress research. Journal of Health and Social Behavior, 22(2), 194-195.

Branch, L. and Jette, A. (1983). Elders' use of informal long term care assistance. The Gerontologist, 23(1), 51-56.

Branch, L. and Jette, A. (1981). The Framingham Disability Study: social disability among the aging. American Journal of Public Health, 71(11), 1202-1210.

Branch, L. (1977). Understanding the health and social service needs of people over age 65. Center for Survey Research, University of Massachusetts and the Joint Center for Urban Studies of Harvard University and Massachusetts Institute of Technology, Boston, MA.

Brandt, P. (1981). PRQ - A social support measure. Nursing Research, 30(5), 277-280.

Brody, E. (1981). "Women in the middle" and family help to older people. The Gerontologist, 21(5), 471-479.

Brody, J. (1982). Length of life and the health of older people. National Forum, 62(4), 4-5.

Bromby, D. (1966). The Psychology of Human Aging. Baltimore: Penquin Books.

Burke, R.J., and Weir, T. (1978). Sex differences in adolescent life stress, social support, and well-being. Journal Psychology. 98, 277-288.

Butler, R. (1969). Age-ism: another form of bigotry. The Gerontologist, 9, 243.

Cameron, P. (1968). Masculinity-feminity in the aged. Journal of Gerontology, 10, 63-65.

Caplan, G. (1981). The family as a support system. In B. Gottlieb (Ed.), Social Networks and Social Support (vol.4). Beverly Hills, California: Sage Publications.

Caplan, G. (1974). Support Systems and Community Mental Health: Lectures on Concept Development. New York: Behavioral Publications.

Caplan, G., and Killilea, M. (1976). Support Systems and Mutual Help. New York: Grune & Stratton.

Caplan, R. (1979). Patient, provides, and organization: Hypothesized determinants of adherence. In S.J. Cohen (Ed)., New Directions in Patient Compliance. Lexington, Ma.: D.C. Heath.

Carveth, W. and Gottlieb, B. (1979). The measurement of social support and its relation to stress. Canadian Journal of Behavioral Science,11(3), 179-188.

Cassel, J. (1974). An epidemiological perspective of psychoisocial factors in disease etiology. American Journal of Public Health, 64(11), 1940-1043.

Cassel, J. (1974). Psychosocial processes and "stress": Theoretical formulations. International Journal of Health Services. 4, 471-482.

Cassel, J. (1976). The contribution of the social environment to host resistance. American Journal of Public Health, 101(2), 107-123.

Chappell, N. (1981). Measuring functional ability and chronic health conditions among the elderly: A research note on the adequacy of three instruments. Journal of Health and Social Behavior, 22(3), 90-102.

Cobb, S. (1976). Presidential address - 1976: Social support as a moderator of life stress. Psychosomatic Medicine, 38(5), 300-314.

Cobb, S. and Kasl, S. (1977). Termination: the consequences of job loss. DHEW (N105H) Publication No. 77-244, Cincinnati: Department of Health, Education and Welfare.

Cockerham, W., Sharp, K. and Wilcox, J. (1983). Aging and perceived health status. Journal of Gerontology, 38(1), 349-355.

Cohen, C. and Sokolovsky, J. (1979). Health-seeking behavior and social networks for the aged living in single room occupancy hotels. Journal of the American Geriatrics Society, 27(6), 270-278.

Comfort, A. (1968). Physiology, homeostasis and aging. The Gerontologist, 24, 224-234.

Conner, K., Powers, E. and Bultena, G. (1979). Social interaction and life satisfaction: An empirical assessment of late life patterns. Journal of Gerontology 34(1), 116-121.

Cumming, E. and Henry, W. (1961). Growing Old: The Process of Disengagement. New York: Basic Books.

Dacey, J. (1982). Adult Development. Glenview, Illinois: Scott, Foresman and Company.

Danish, S. (1981). Lifespan human development and intervention: A necessary link. The Counseling Psychologist, 9(2), 40-43.

Davidson, T., Bowden, M., Tholen, D., James, M. and Feller, I. (1981). Social support and post-burn adjustment. Archives Physical Medicine and Rehabilitation, 62(6), 274-278.

Dean, A. and Lin, N. (1977). The stress-buffering role of social support: Problems and prospects for systematic investigation. Journal of Nervous and Mental Disease, 165(6), 403-417.

Dean, A., Lin, N. and Ensel, W. (1980). The epidemiological significance of social support systems in depression. In R. G. Simmons (Ed.), Research in Community and Mental Health, Vol. 2. Greenwick: JAI Press.

Decker, D. (1980). Social Gerontology: an Introduction to the Dynamics of Aging. Boston: Little, Brown and Co.

DiMatteo, M. and Hays, R. (1981). Social support and serious illness. In B. H. Gottlieb (Ed.),Social Networks and Social Support. Beverly Hills: Sage Publications.

Dimond, M. (1979). Social support and adaptation to chronic illness: The case of maintenance hemodialysis. Research in Nursing and Health, 2, 101-108.

Dimond, M. and Jones, S. (1983). Social support: A review and theoretical integration. In P. L. Chinn (Ed.), Advances in Nursing Theory Development. Rockville, Maryland: Aspen Systems Corporation.

Donald, C., Ware, J., Brook, R. and Davies-Avery, A. (1978). Conceptualization and Measurement of Health for the Health Insurance Study: Social Health. Vol IV. Santa Monica: The Rand Corporation.

Ebersole, P. and Hess, P. (1981). Toward Healthy Aging: Human Needs and Nursing Response. St. Louis: The C.V. Mosby, Company.

Eisenstodt, S.N. (1956). From Generation to Generation: Age Groups and Social Structure. Glencoe, Illinois: Free Press.

Elder, G., Jr. (1975). Age differentiation and the life course. In A. Fukelea (Ed.), Annual Review of Sociology. Palo Alto, California: Annual Review, Inc.

Epstein, A.L. (1969). The network and urban organization. In Mitchell, J.C. (Ed)., Social Networks in Urban Situations: Analysis of Personal Relationships in Central African Towns. Manchester, England: Manchester University Press.

Ewing, E. (1984). Who cares about Mr. D. Journal of Gerontological Nursing, 10(4), 16-25.

Falco, S. and Lobo, M. (1980). Martha E. Rogers. In J.B. George (Eds.), Nursing Theories: The Basis for Professional Nursing Practice. New Jersey: Prentice Hall, Inc.

Ferraro, K. (1980) December. Self-ratings of health among the old and the old-old. Journal of Health and Social Behavior, 21, 377-383.

Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.

Freedman, D., Pisani, R. and Purves, R. (1978). Statistics New York: W.W. Norton and Company, Inc.

Fuller, S. and Larson, S. (1981). Social support, personal autonomy, and the well-being of family-member care givers. In I. G. Mauksch (Eds.), Primary Care: A Contemporary Nursing Perspective. New York: Grune and Stratton.

Fuller, S. and Larson, S. (1980). Life events, emotional support, and health of older people. Research in Nursing and Health, 3, 81-89.

Gallin, R. (1980). Life difficulties, coping, and the use of medical services. Culture, Medicine and Psychiatry, 4, 249-269.

Garrity, T. (1973). Vocational adjustment after first myocardial infarction; comparative assessment of several variables suggested in the literature. Social Science and Medicine, 7, 705-717

Gelein, J. (1982). Aged women and health. Nursing Clinics of North America, 17(1), 179-185.

Gelein, J. (1980). The aged American female: Relationships between social support and health. Journal of Gerontological Nursing, 6(2), 69-73.

German, P. (1981). Measuring functional disability in the older population. American Journal of Public Health, 71 (11), 1197-1199.

Given, B. (1982). Active-Participation: Health Care for the Elderly. College of Nursing, Michigan State University, East Lansing, Michigan.

Goebel, B. (1979). Age preferences of older adults in relationships important to their life satisfaction. Journal of Gerontology, 3(4), 461-467.

Gore, S. (1978) June. The effect of social support in moderating the health consequences of unemployment. Journal of Health and Social Behavior, 19, 157-165.

Gottlieb, B. (Ed.), (1981). Social networks and social support (vol. 4) Beverly Hills, California: Sage Publications.

Gulliver, P.H. (1968). Age differentiation. In D.L. Sills (Ed), International Encyclopedia of the Social Sciences. New York: Macmillan and Free Press, 1,157-161.

Gunter, L.M. and Miller, J. (1977). Toward Nursing Gerontology. Nursing Research, 26, 208-221.

Haggerty, R.H.J., (1980). Life stress, illness and social support. Development Medicine and Child Neurology, 22, 391-400.

Hamburg, B.A. and Kllllea M. (1979). Relation to social support, stress, illness, and use of health services. In Healthy People: Background Papers. The Surgeon Generals Report on Health Promotion and Disease Prevention, Washington, D.C.: U.S. Government Printing office.

Hammer, m. (1981). Impact of social networks on health and disease. In B. Gottlieb (Ed.), Social networks and social support. Beverly Hills, California: Sage Publications.

Harris and Associates, Inc. (1975). The Myth and Reality of Aging in America. Washington D.C., National Council on the Aging.

Havighurst, R. (1957). The social competence of middle-aged people. Genetic Psychological Monographs, 56, 297-375.

Hyman, M. (1971). Disability and patient's perceptions of preferential treatment: Some preliminary findings. Journal of Chronic Disease, 24, 329-342

Heller, K. (1979). The effects of social support: Prevention and treatment implications. In. A.P. Goldstein and F.H. Kaufos (Eds.), Maximizing Treatment Gains. New York: Academic Press.

Henderson, S. (1977). The social network, support and neurosis: The function of attachment in adult life. British Journal of Psychiatry, 131, 185-191.

Hickey, T. (1980). Health and Aging. Monterey, California. Brooks-Cole.

Hill R. (1970). Family Development in three Generations. Cambridge, Ma: Schenkman.

Hill, R. (1964). Methodological issues in family development research. Journal of Psychosomatic Research, 11, 213-218.

Hirsch, B. (1981). Social networks and the coping process: Creating personal communities. B. Gottlieb (Ed.), Social networks and social support. Beverly Hills, California: Sage Publications.

Hirsch, B. (1980). Natural support systems and coping with major life changes. American Journal of Community Psychology, 8(2), 159-172.

Hirsch, B. (1979). Psychological dimensions of social networks: A multimethod analysis. American Journal of Community Psychology, 7(3), 263-277.

Holmes, T. and Rahe, R. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

House, J. (1981). Work stress and social support. Reading, Massachusetts: Addison-Wesley Publishing Company.

House, J., LaRocco, J. and French, J. (1982). Comment: Reply to Schaefer. Journal of Health and Social Behavior, 23(1), 98-101.

House, J.S. and M.F. Jackson (1979). Occupational stress and health. In P. Ahmed and G. Coelhs (Eds)., Toward a New Definition of Health. New York: Plenum Publishing.

Ide, B. (1983). Social network support among low income elderly: A two-factor model? Western Journal of-Nursing-Research, 5(3), 235-244.

Israel, b. (1982). Social network and health status: Linking theory, research and practice. Patient Counseling and Health Education, 4(2), 65-79.

Jette, A. and Branch, L. (1981). The Framingham Disability Study: physical disability among the aging. American Journal of Public Health, 71(11), 1211-1216.

Job, E. (1983). Retrospective life span analysis: A method for studying extreme old age. Journal of Gerontology, 38(3), 369-374.

Kahn, R. (1979). Aging and social support. In M.W. Riley (Ed), Birth to death: interdisciplinary Perspectives. Boulder, Colorado: Westview Press, 77-91.

Kahn, R. and Antonucci, T. (1981). Convoys over the life course: attachment, roles, and social suport. In P. Baltes and O. Brim, (Eds.), Life span development and Behavior. New York: Academic Press.

Kane, R. and Kane, P. (1981). Assessing the elderly - a practical guide to measurement. Lexington Books.

Kaplan, B., Cassel, J. and Gore, S. (1977). Social support and health. Medical Care, 15(5), 47-58.

Kasl, S. (1972). Physical and mental health effects of involuntary relocation and institutionalization of the elderly - a review. American Journal of Public Health, 62(3), 377-384.

Katch, M. (1983). A negentropic view of the aged. Journal of Gerontological Nursing, 9(12), 656-660.

Kee, C. (1984). A case for health promotion with the elderly. In The Nursing Clinics of North America. Vol. 19, No. 2. W.B. Saunders Co., Philadelphia.

Kim, H. (1983). Use of Roger's conceptual system in research: comments. Nursing Research, 32(32), 89-91.

Kirity, S. and Moos, R. (1976). Physiological effects of social environments. Psychosomatic Medicine, 36, 96-114.

Kohen, J. (1983). Old but not alone: Informal social support among the elderly by marital status and sex. The Gerontologist, 23(1),57-63.

Langlie, J.(1977) September. Social networks, health beliefs, and preventive health behavior. Journal of Health and Social Behavior, 18, 244-260.

LaRocco, J. (1983). Comment: Theoretical distinctions between causal and interaction effects of social support. Journal of Health and Social Behavior, 24(1), 91-92.

LaRocco, J., House, J. and French, J. (1980) September. Social support, occupational stress, and health. Journal of Health and Social Behavior, 21, 202-218.

Larson, R. (1978). Thirty years of research on the subjective well_being of older Americans. Journal of Gerontology, 33(1), 109-125.

Lawton, M.P. (1977). Impact of environment on aging and behavior. In Birren, J. and Schale K. (Eds). The Psychology of Aging. New York, Van Nostrand. 276-301.

Lawton, M. and Nakemow, L. (1973). Ecology and the aging process. In C. Elsdorf and M. Lawton (Eds.), Psychology of Adult Development and Aging. Washington D.C.: American Psychologic Association.

Lin, N. (1981). Comment: Causal interpretation of interaction effect. Journal of Health and Social Behavior, 22(2), 195-196.

Lin, N., Dean, A. and Ensel, W. (1981). Social support scales: A methodological note. Schizophrenia Bulletin, 7(1), 73-89.

Lin, N., Ensel, W., Simeone, R. and Kuo, W. (1979) June. Social support, stressful life events, and illness: A model and an empirical test. Journal of Health and Social Behavior, 20, 108-119.

Lindsey, A. and Hughes, E. (1981). Social support and alternatives to institutionalization for the at-risk elderly. Journal of the American Geriatrics Society, 29(7), 308-315.

Lipowski, Z. (1969). Psychological aspects of disease. Annals of Internal Medicine. 71, 1197-1206.

Lowenthal, M. and Haven, C. (1968). Interaction and adaptation: Intimacy as a critical variable. American Sociological Revelw, 33, 20-30.

Maddox, G. (1977). Scope, concepts and methods in the aging. In Binstock, R., and Shanas, E. (Eds), Aging and the Social Sciences. New York, Van Nostrand, Reinhold, 3-34.

Maddox, G. and Douglass, E. (1974). Aging and individual differences: A longitudinal analysis of social, psychological, and physiological indicators. Journal of Gerontology, 29(4), 555-563.

Maddox, G. and Douglass, e. (1973). Self-assessment of health: A longitudinal study of elderly subjects. Journal of Health and Social Behavior, 14, 87-93.

Maslow, A. (1970). Religions, values, and peak experiences. The Viking Press, New York.

McCrae, R. (1982). Age differences in the use of coping mechanisms. Journal of Gerontology, 37(4), 454-460.

McFarlane, A., Neale, K., Norman, G., Roy, R. and Streiner, D. (1981). Methodological issues in developing a scale to measure social support. Schizophrenia Bulletin, 7(1), 90-100.

McKinley, J.B. (1980). Social network influences on morbid episodes and the career of help seeking. In Eisenberg L., Kllenman A. (Eds)., The Relevance of Social Science for Medicine. Dordrecht, Holland: D. Reidel Publishing Co.

Mead, G.H. (1934). Mind, Self, and Society. Chicago: University of Chicago Press.

Minkler, M. (1981). Applications of social support theory to health education: Implications for work with the elderly. Health Education Quarterly, 8(2), 147-165.

Mitchell, J. (1969) Social network in urban situations. Manchester, Great Britain: The University of Manchester Press.

Mitchell, R. and Trickett, E. (1980). Task force report: Social networks as mediators of social support - an analysis of the effects and determinants of social networks. Community Mental Health Journal, 16(1), 27-44.

Murawski, B., Penman, D. and Schmitt, M. (1978) October. Social support in health and illness: The concept and its measurement. Cancer Nursing, 365-371.

Murray, R., Huelskoetter, M. and O'Driscoll, D. (1980). The nursing process in later maturity. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Murray, R. and Zentner, J. (1979). Nursing assessment and health promotion through the life span, (2nd Ed.). Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

National Center for Health Statistics. (1976). Health characteristics of persons with chronic activity limitations. Series 10, No. 112. U.S. Government Printing Office, Washington D.C.

National Institute on Aging: Special Report on Aging 1981. In Information on Aging. No. 25. Michigan Institute of Gerontology, Wayne State University.

Neugarten, B. (1982). Age or need? National Forum--The Phi Kappa Phi Journal, 62(4), 25-27.

Neugarten, B. (1981). Growing old in 2020: How will it be different? National Forum--The Phi Kappa Phi Journal, 61,(3), 28-43.

Neugarten, B. (1979). Time, age, and the life cycle. The American Journal of Psychiatry, 136(7), 887-894.

Neugarten, B. (1974). Age groups in American society and the rise of the young-old. Annals of the American Academy of Political and Social Service, 415, 187-198.

Neugarten, B. (1973). Developmental perspectives. In V. Brantl, and M. Brown (Eds.), Readings in Gerontology. Saint Louis: The C.V. Mosby Company.

Neugarten, B. (1973). Personality change in late life: A developmental perspective. In E. Eisdorfer and M. Lawton (Eds.), The Psychology of Adult Development and Aging. Washington: American Psychological Association.

Neugarten, B. and Datan, N. (1973). Sociological perspective on the life cycle. In P. Baltes and K. Schale (Eds.), Life-span developmental psychology: Personality and socialization. New York: Academic Press.

Neugarten, B. (1968). Middle Age and Aging. Chicago: The University of Chicago Press.

Neugarten, B., Moore, S. and Lowe, J. (1965). Age norms, age constraints, and adult socialization. American Journal of Sociology, 70, 710-717.

Norbeck, J.(1981) July. Social support: A model for clinical research and application. Advances in Nursing Science, 3, (4), 43-59.

Norbeck, J., Lindsey, A. and Carrieri, V. (1981). The development of an instrument to measure social support. Nursing Research, 30(5), 264-269.

Norbeck, J., Lindsey, A. and Carrieri, (1983). Further development of the Norbeck Social Support Questionnaire: Normative data and validity testing. Nursing Research, 32(1), 4-9.

Nuckolls, K., Cassel, J. and Kaplan, B. (1972). Psychosocial assets, life crisis and the prognosis of pregnancy. American Journal of Epidemiology, 95, 431-441.

Obrist, W. (1953). Simple auditory reaction time in aged adults. Journal of Psychology, 35, 259-266.

Palmore, E. (1968). The effects of agin on activities and attitudes. The Gerontologist, 8, 259-263.

Palmore, E., Cleveland, W., Nowlin, J., Ramm, D. and Sielger, I. (1979). Stress and adaptation in later life. Journal of Gerontology, 34(6), 841-851.

Parkes, C.M. (1971). Psychosocial transitions: a field of study. Social Science and Medicine, 5, 101-115.

Patrick, M. (1979). The elderly and their responses to aging. In Carnevali, D. and Patrick, M. (Eds)., In Nursing Managment for the Elderly. J.B. Lippincott Co., Philadelphia.

Pilisuk, M. and Froland, C. (1978). Kinship, social networks, social support, and health. Social Science and Medicine, 12B, 273-280.

Pilisuk, M. and Minkler, M. (1980). Supportive networks: Life ties for the elderly. Journal of Social Issues, 36(2), 95-115.

Pinneau, S. Jr. (1975). Effects of social support on psychological and physiological stress. Unpublished doctoral dissertation, University of Michigan.

Polit, D. and Hungler, B. (1978). Nursing research: Principles and Methods. Philadelphia: J.B. Lippincott Co.

Projection of Population 1977-2050, (1976). Superintendent of Documents. U.S. Government Printing Service. Series P-25, No. 704.

Riegel, K. (1971). The prediction of death and longevity in longitudinal research. In E.B. Palmore, and F.C. Jeffers (Eds)., Prediction of Life Span: Recent Findings. Lexington, MA. Health Lexington Books.

Riegel, K.F.; Riegel, R.M. and Meyer, G. (1967). Socio-psychological factors of aging: a cohort sequential analysis. Human Development. 10, 27-56.

Riley, M. (1980). Age strata in social systems. In J. Birren and R. Sloane (Eds.), Handbook of mental health and Aging. Englewood Cliffs., New Jersey: Prentice-Hall, Inc.

Rogers, M. (1983). Science of Unitary Human Beings: a paradigm for nursing. In Clements, I. and Roberts, F. (Eds). Family Health: a Theoretical Approach to Nursing Care. John Wiley & Sons, New York.

Rogers, M. (1982, May). Lecture, panel discussion and interview. Michigan State University, College of Nursing, East Lansing, Michigan.

Rogers, M. (1980). Nursing: A science of unitary man. In J. Riehl and C. Roy (Eds.), Conceptual models for Nursing Practice. New York: Appleton-Century-Crofts.

Rogers, M. (1970). An introduction to the theoretical basis of Nursing, Philadelphia: F.A. Davis Company.

Rossi, A. (1980). Life-span theories and women's lives. Signs: Journal of women in culture and society, 6, (1), 11-22.

Sarbin, T.R. (1954). Role theory. In G. Lindzey (Ed). Handbook of Social Psychology. In Addison-Wesley, Cambridge, MA.

Schaefer, C., Coyne, J. and Lazarus, R. (1981). The health-related functions of social support. Journal of Behavioral Medicine, 4(4), 381-405.

Seelbach, W. (1977). Gender differences in expectations for filial responsibility. The Gerontologist, 17(5), 421-425.

Sefton-Cojocel, L. (1984). A descriptive study of older women's perceptions of two types of social support, Unpublished thesis, Michigan State University, East Lansing, Michigan.

Shanas, E. (1982). The family relations of old people. National Forum--The Phi Kappa Phi Journal, 62(4), 9-11.

Shanas, E. (1980), February. Older people and their families: The new pioneers. Journal of Marriage and the Family. 9-15.

Shanas. E. (1980). Self-assessment of physical function in white and black elderly in the U.S.. In Haynes, S.G., and Feinleib, M. (Eds)., Second Conference on the Epidemiology of Aging. Bethesda, MD., National Institute of Health.

Shanas, E., and Maddox, G. (1976). Aging, health, and the organization of health resources. In R. Binstock and E. Shanas, (Ed). Handbook of Aging and the Social Sciences. New York: Van Nostrand Reinhold Co.

Shanas, E. (1960). Family responsibility and the health of older people. Journal of Gerontology., 15, 408-411.

Shepard, H.L., and Rix, S.E. (1977). The Graying of Working American. New York, The Free Press.

Stearns, P. (1980) Spring. Old women: Some historical observations.Journal of Family History, 44-57.

Sussman, M. (1977). The family bureaucracy, and the elderly individual: An organizational/linkage perspective. In E. Shanas and M. Sussman (Eds.), Family, bureaucracy and the elderly. Durham, N.C: Duke University Press.

Sussman, M. (1976). The family life of old people. In E. Shanas and R. Binstock (Eds.), Handbook of aging and the social sciences. New York: Van Nostrand Reinhold.

Tholts, P. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. Journal of Health and Social Behavior, 23, 145-159.

Tholts, P.A., (1981). Undesirable life events and psychophysiological distress: A problem of operational confounding, American Sociological Review, 46, 97-109.

Treas, J. (1977). Family support systems for the aged - some social and demographic considerations. The Gerontologist, 17(6), 486-491.

Troll, L. (1982). Continuations: Adult development and aging, Monterey, California: Brooks-Cole Publishing Company.

Troll, L. (1977). The family of later life: A decade reveiw. Journal of marriage and the family, 33, 263-290.

Uhlenberg, P. (1979). Older women: The growing challenge to design constructive roles. The Gerontologist, 19(3), 236-241.

Uhlenberg, P. (1977). Changing structure of the older population of the U.S.A. during the twentieth century. The Gerontologist, 17, 195-202.

Uhlenberg, P. (1974). Cohort variations in family life cycle experiences of U.S. females. Journal of marriage and the family, 36, 284-292.

Uhlenberg, P.R. (1969). A study of cohort life cycles: cohorts of native born Massachusetts women, 1930-1920. Population Studies. 23 (3), 19-23.

Unger, D., and Powell, D. (1980). Supportive families under stress: The role of social networks. Family Relations, 29, 566-574.

U.S. Bureau of the Census (1984). National Data Book and Guide to Sources: Statistical Abstract of the United States, 104th Ed. U.S. Department of Commerce.

U.S. Bureau of the Census (1984). U.S.A. Statistics in Brief: A Statistical Abstract Summary, (1984). U.S. Department of Commerce.

Walker, K., MacBride, A. and Vachon, M. (1977). Social support networks and the crisis of bereavement. Social Science and Medicine, 11, 35-41.

Wallston, B., Alagna, S., DeVellis, B. and DeVellis, R. (1983). Social support and physical health. Health Psychology, 2(4), 367-391.

Weeks, J. and Cuellar, J. (1981). The role of family members in the helping networks of older people. The Gerontologist, 21(4), 388-394.

Weg, R., and Reeve, K. (1978). The aged: who, where, how well (data sheet), Ethel Percy Andrus Gerontology Center, University of Southern California, Los Angeles, Spring.

Weiss, R. (1976). Transition states and other stressful situations: their nature and programs for their management. In G. Caplan and M. Killilea (Eds.), Support systems and mutual help. New York: Grune and Stratton.

Weiss, R. (1974). The provisions of social relationships. In Z. Rubin (Ed.), Doing unto others, Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Wentowski, G. (1981). Reciprocity and the coping strategies of older people: Cultural dimensions of network building. The Gerontologist, 21(6), 600-609.

White House Conference on Aging (1981). Executive Summary of Technical Committee on the Physical and Social Environment and Quality of Life. U.S. Government Printing Office. TC ES-11.

Wohlwill, J.F. (1973). The Study of Behavioral Development. New York: Academic.

Wood, V. and Robertson, J. (1978) May. Friendship and kinship interaction: Differential effect on the morale of the elderly. Journal of Marriage and the Family, 367-375.

APPENDICES

APPENDIX A

CONSENT FORM

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

Signed _____
(Signature of Patient)

Date _____

APPENDIX B

NORBECK'S SOCIAL SUPPORT QUESTIONNAIRE

Pt. I.D. _ _ _ _ (1-4)

Form _ _(5-6) Site _ _(7-8)

Card _ _(9-10)

Date _ _ _ _ _ _(11-15)

SOCIAL INTERACTION

Everyone has some type of interaction with other people. It may be family, friends, people at work, or someone providing a service for you. You may talk, share an activity, or offer or receive assistance with a project.

On the right hand page please list each significant person in your life. Consider all the people who provide personal support for you or who are important to you now.

In the column on the LEFT, list each person by their first name or initials only.

In the column on the RIGHT, list the relationship of each person to you. Please use words from the following groups to describe the relationship.

Spouse or partner	Family or relative	Friend
Work or school associate	Neighbor	Health care provider
Counselor or therapist	Minister/priest/rabbi	Other

Here is an example:

	FIRST NAME OR INITIALS		RELATIONSHIP
1.	*Mary*	1.	*Spouse*
2.	*D. M.*	2.	*Minister*
3.	*Ted*	3.	*Friend*

After completing the first page, please open the booklet on the left and follow the directions for completing the rest of the 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)

GO ON TO NEXT PAGE

End Card #10

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?

Repeat 1-15

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)

GO ON TO NEXT PAGE

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

	Question 5	Question 6
1.	_____ (56)	_____ (16)
2.	_____ (57)	_____ (17)
3.	_____ (58)	_____ (18)
4.	_____ (59)	_____ (19)
5.	_____ (60)	_____ (20)
6.	_____ (61)	_____ (21)
7.	_____ (62)	_____ (22)
8.	_____ (63)	_____ (23)
9.	_____ (64)	_____ (24)
10.	_____ (65)	_____ (25)
11.	_____ (66)	_____ (26)
12.	_____ (67)	_____ (27)
13.	_____ (68)	_____ (28)
14.	_____ (69)	_____ (29)
15.	_____ (70)	_____ (30)
16.	_____ (71)	_____ (31)
17.	_____ (72)	_____ (32)
18.	_____ (73)	_____ (33)
19.	_____ (74)	_____ (34)
20.	_____ (75)	_____ (35)

End Card 11 GO ON TO NEXT PAGE

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-1½ years
3 = Between 1½ 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)

GO ON TO NEXT PAGE

End Card 12

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)

Repeat 1-15

_____Yes ____No (16)

If yes, specify _____

9a.
If YES, indicate the category(s) 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

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

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