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The relationship of social support networks and support network function to the health status of older widowed black females

Perry, Charlotte Marie, Ph.D.

The University of North Carolina at Greensboro, 1991

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THE RELATIONSHIP OF SOCIAL SUPPORT NETWORKS AND SUPPORT NETWORK FUNCTION TO THE HEALTH STATUS OF OLDER WIDOWED BLACK FEMALES

by

Charlotte Marie Perry

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
1991

Approved by

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Dissertation Advisor

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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The purpose of this study was to examine the relationships among personal characteristics, situational characteristics, network structure, network function, and network adequacy and their relationships to the health of older widowed black females.

The Convoy of Social Support Model, (Kahn & Antonucci, 1980) a life course theoretical approach, was modified to reflect culturally relevant variables to examine family life and support networks of older widowed black females. Health status was defined as the widows' ability to perform instrumental activities of daily living with or without assistance.

Widowed female participants (N = 110) who lived as community dwellers in Guilford County, North Carolina were selected to determine the extent of dependency on family members and others. The participants were recruited from congregate luncheon sites, senior housing complexes, churches, single family and multi-family dwellings.

A series of hierarchical multiple regression procedures showed that 40% of the variance in activities of daily living was explained by income, age, frailty, frequency of contact, symmetry, and network satisfaction. Membership in organizations, living arrangement, network size, and network stability, were also major contributors to a significant relationship with activities of daily living.

Based on the results of this study it was concluded that high incomes suggest the importance of income to health or ability to perform instrumental activities of daily living. The impact of increased age and frailty reduces the ability to perform instrumental activities of daily living. Widows who have larger more stable networks are likely to receive frequent contact and assistance with instrumental activities of daily living. In addition widows who belong to several organizations, including the church, and who live with others are more likely to receive assistance with instrumental activities of daily living. Widows who were most dependent, based on lower instrumental activities of daily living scores, were providing more support than they received. This finding suggested that perhaps widows gave support to older frail members, but did not receive assistance from healthy able members.

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CHAPTER I

INTRODUCTION

Society in general, and policymakers view the family as the core support system for the older adult. Adult-children provide nearly 80% of all health care the older adult receives (Cohen & Syme, 1985). The aging population, and in particular older black adults, is steadily growing. Social policy is leaning toward a philosophy of increased familial responsibility for the older adult. The lack of formal supports to assist families will have an adverse impact on the black family. Older black females during their younger years, for the most part, were concentrated in low-paying female dominated jobs. Consequently, their retirement incomes have been negatively affected by this work-history. Social Security benefits are minimal and retirement pensions are practically non-existent among this group of women, making it necessary for them to rely on their families or public programs for assistance. A smaller group of older black females aged 65 and over have adequate retirement incomes and rely on families for emotional support (Claude, 1986; Ladner, 1986).

Older black females tend to outlive black males and dominate the elderly black population. There were 79 males

for every 100 females in the mid 1980s among persons aged 65-69. The male/female ratio was 68 males for every 100 females among persons aged 70-75 (U.S. Bureau of the Census,1987). Population projections indicate that women will continue to outlive men. The longer life expectancy for women has important implications for older black women. National data indicate that civilian non-institutionalized elderly have greater dependency needs with advancing age (National Center for Health Statistics (NCHS), 1986). An analysis of data made available from NCHS revealed that older black females, when compared to older black males, had limitations in doing heavy housework and handling money (Jackson & Perry, 1989) which suggests the levels of support older black females will need from family and friends.

Historical Background for the Study

The general literature indicates the importance of age, gender, marital status, income, threatening life events, and support network size and composition to health status (Antonucci & Akiyama, 1987; Berkman, 1984; Broadhead, Kaplan, James, Wagner, Schoenbach, Grimson, Heyden, Tibblin, & Gehlbach, 1983; Cohen & Syme, 1985; Grant, Patterson, & Yager, 1988;). Some investigators have found that as individuals age they broaden their support networks to include friends and neighbors (Cantor, 1979; Gibson, 1982; Litwak, 1986; Taylor and Chatters, 1986). Other research has reported that support networks decrease as the elderly

person ages (Antonucci & Akiyama, 1987). Limited research is available regarding the relationship of age, gender, and marital status to the health and well-being of older black adults (Chatters, Taylor, & Jackson 1985; Chatters, Taylor, & Jackson, 1986; Gibson & Jackson, 1987; Neighbors & Jackson, 1984; Taylor, 1986).

Previous works on social support for older black adults have suggested that black families maintain a modified extended family structure, as a result of cultural heritage, to pool resources and exchange services (Aschenbrenner, 1973; Martin & Martin, 1978; McAdoo, 1978; Shimkin, Shimkin, & Frate, 1978; Stack, 1974). Other studies related to widows have reported that widows with strong ethnic affiliations and lower socioeconomic status are more likely to live with their children because they have more children; they are also more likely to become widowed earlier in life, and they have a financial need to combine their resources with family members (Lopata, 1973; Shanas, 1979; Troll, 1971).

The population trends relating to black families have important implications for older widowed black women. These population trends indicate that the ability of adult daughters who usually provide support to parents is diminishing. Therefore, the social support networks of older widowed black females are gradually diminishing. This diminished support can be attributed to the changes in

family structures, most affecting women, which are occurring within the younger generations (Burton & Dilworth-Anderson, in press; Ladner, 1986; Staples, 1986; Wilkinson, 1978). For example, the reduction in fertility rates among black Americans has reduced the potential pool of caregivers for older widowed black females. Secondly, there are disproportionately more black middle-aged females functioning as heads of households (Worobey & Angel, 1990). The high divorce rates among blacks and the high mortality rates among young and middle-aged black men, have been partly responsible for this phenomenon during the past two decades. Unemployment and underemployment of the black male have also contributed to the increase in female-headed households (Claude, 1986; Ladner, 1986; Wilkinson, 1978). A large number of black women in two-parent families are also members of the labor force. These changing family structures within the middle generation have not only reduced available resources to this group, but also reduced their ability to provide support to older widowed black females. Despite this observation, White-Means and Thornton (1990) found that among four ethnic groups Afro-American families were providing more caregiving hours to the elderly when compared to German, Irish, and English families. The investigators also found that, if the elderly person had limitations in performing instrumental activities of daily living (e.g., traveling, housework, meal preparation), more

assistance was provided, most often by the daughter, without reducing hours in the labor market. If the elderly person had limitations in performing physical activities of daily living (e.g., eating, dressing, bathing) more assistance was also provided but hours in the labor market were reduced.

Given the demographic trends of black families and the status of older widowed black females and their families, it is not understood whether adequate support networks exist to influence the health status for this highly vulnerable group. This group, in general, is highly impoverished and dependent and requires strong support networks. For these reasons, it is important to study this social problem to determine how present-day support networks and support functions affect the health status of older widowed black females.

The purpose of this research was to examine the relationships among personal characteristics, situational characteristics, social support networks, support function, support adequacy and the health status of older widowed black women. A second purpose was to acquire more information on the available social support network structures and support functions that affect this group's health status.

Conceptual Framework and Hypothesis

The Convoy of Social Support Model (Antonucci, 1985; Kahn & Antonucci 1980) is useful as a conceptual framework

to describe the relationships that exist among support network structures, network functions, and the health status of older widowed black females. Antonucci and Depner (1982) have used this model to examine the relationships among network structures, network function, and the well-being of older adults. Other researchers (Kahn, Wethington, & Ingersoll-Dayton, 1987) have tested several hypothesized links in the model with elderly adults. They found that stability and frequency of contact were predicted by variables measuring personal and situational characteristics; that care when ill was best predicted by variables measuring support network structure; and that well-being was best predicted by the direct contribution of personal, situational, and network structure variables. Symmetry, or the balance of exchange, predicted well-being via the network. Kahn et al. (1987) found that, overall, the model was a better predictor of well-being for a widowed group when compared to a disabled group and a non-widowed group of elderly persons.

The Convoy of Social Support Model, a life course approach, permits examination of the focal person's current support relationships and earlier experiences. The dotted-line arrows in the model from personal characteristics and situational characteristics to network function, network adequacy and health status represent the direct relationships. The heavy un-dotted arrows represent the

combined relationships outlined in the model. The model posits that the individual's life course is based on a variety of occupied roles. Spousal roles, parent roles, sibling roles, work-related roles, and group membership roles are examples of the many roles adults may play. Role changes are inevitable as one experiences aging. For instance, the spousal role is relinquished in widowhood, but the grandparent role may be acquired or take on a different meaning. Older black females may occupy and function simultaneously in a variety of vertical roles such as parent, grandparent, and great-grandparent. This has been referred to as the verticalized intergenerational family (Burton & Dilworth-Anderson, in press). The older black female tends to become more involved with her kin. This involvement results from the smaller number of kin that is secondary to the overall decline in fertility rates among black families (Burton & Dilworth-Anderson, in press). Reciprocal support relationships are also common among the generations in the black family (Taylor, 1986). Symmetry is used in the Convoy of Social Support Model to explain the exchange of support functions between the older widow and support network members.

Hypothesis

This study tested the following hypothesis: The health status of older widowed black females is related to their personal characteristics, situational characteristics,

social support network structures, social support network functions and social support network adequacy.

Contributions of this Research

The present study contributes to the body of knowledge in the field of gerontology by identifying the social support networks and functions of those networks presently available to older widowed black females. The demands from federal, state, and local governments to contain costs related to long-term care of older adults require that families assume a larger role in that care. Information from this study on the support networks of older widowed black women will have important implications for black families. Ideally, the information will enable family members to better understand and predict the support needs of older widowed black females. In addition, the information can be useful to helping-professionals and policymakers in planning for community services.

Scope and Limitations

The purpose of this study was to examine the relationships among personal characteristics, situational characteristics, social support networks, social support function and the health status of older widowed black females. Participants were community-dwellers who live in Guilford County, North Carolina. Guilford County is an urban area in the Northern Piedmont section of North Carolina. They were recruited from congregate nutrition

sites, subsidized senior housing complexes, churches, apartment dwellings, individual homes, family-care homes, and intergenerational family homes. This approach to selecting respondents (a non-probability sampling technique) may have introduced threats to external validity. The use of this cross-sectional survey from volunteers does limit the representativeness of the sample. As a result, caution is warranted in generalizing the findings from this study to other older widowed black females. Volunteers may differ from non-volunteers on the variables of interest.

The Convoy of Social Support Model suggests an investigation over time to determine change or continuity in the focal person's support network. This study was exploratory and cross-sectional. Even though the study had a cross-sectional design, several instrument items elicited information related to continuity or change during the lifespan. For example, continuity or changes were reported for symmetry during the lifespan, and continuity or changes for frailty, income, network size, network satisfaction, over a five year span, were reported or anticipated by the respondent. Further research is necessary to determine if the identified relationships found in this study persist over time. Efforts were made to report unique situations, but qualitative information on the respondent can be lost by the use of coded responses, and the precoded categories can affect how the information is reported.

CHAPTER II

REVIEW OF THE LITERATURE

Researchers in the field have indicated that studies related to the black family have been primarily descriptive in nature and lack grounding in a particular theory (Gibson, 1988; Taylor, 1986). They challenge researchers to frame research questions within a theoretical model. To take this criticism into account, the Convoy of Social Support Model (Figure 1.) was selected as a framework to examine the relationships among the social support networks and the health status of older widowed black females (Antonucci, 1985; Kahn & Antonucci, 1980). The Convoy of Social Support Model is a life course perspective model that is useful in studying a population group such as older widowed black females. Conceptual models based on the life course perspective can be adapted or reframed to reflect culturally relevant definitions of family life for ethnic minority groups (Dilworth-Anderson, Johnson, & Burton, in press). The process of reframing was applied to the existing conceptual model in order to make the model applicable to the study of older widowed black women. Theoretically, a cultural variant approach was used to adapt the Convoy of Social Support Model to capture the distinctiveness that is

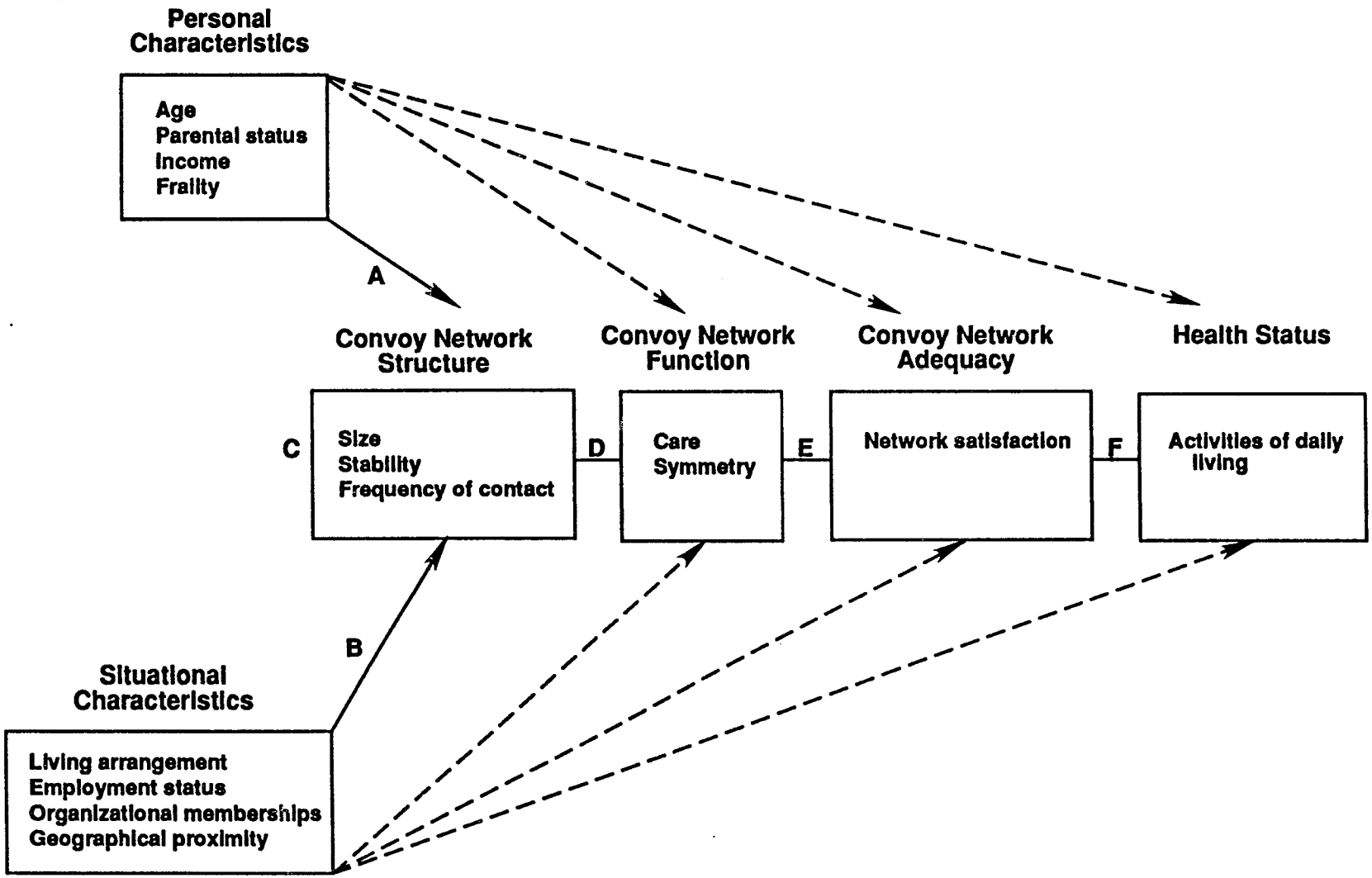

Figure 1. Modified Convoy of Social Support Model
From "Convoys over the life course, attachment, roles and social support" by R. L. Kahn and T. C. Antonucci, 1980, In P. B. Bates and O. G. Brim (Eds.), Life-Span Development and Behavior, 3 p. 271. Academic Press.

indicative of black family life and to explain the support networks that exist for older widowed black females. The adaptation involved utilizing variables in the Convoy of Social Support Model and replacing those, where necessary with, variables that were culturally relevant for and appropriate to black family life. The selected variables were identified from the literature which has reported relationships that were specific to the lives of older widowed black females. For example the literature has reported that immediate family members, most often daughters, are the primary helpers in the support networks of older black adults and that adult-children influence the likelihood of the elderly parent receiving help from extended family members (Chatters, Taylor & Jackson, 1986). Parental status was selected as a variable to include in the Convoy of Social Support Model to determine if widows who had children were more likely to receive assistance with activities of daily living. Secondly, living arrangement was also chosen as an independent variable and predictor of support. Earlier works have reported that older black adults tend to reside in extended households to pool economic resources and provide child care services (Aschenbrenner, 1973; Shimkin, Shimkin & Frate, 1978).

Historically, churches in the black community have been very involved in providing aid and spiritual support to the members and the community as a whole. Taylor and Chatter's

(1986) work on church support to the elderly found that amount of assistance to the elderly was directly related to frequency of church attendance. Therefore, membership in organizations with a special emphasis on widows' church involvement were examined to determine which supports were available to them.

The friendship networks of older blacks have often included friends who were given the status of kin, and friends are commonly referred to as "play-sister or play-mother." A fictive-kin category was included in the network structure construct to determine if fictive-kin played a major role in the widows' support networks. Symmetry or the exchange of support functions which is common within the black family was also examined as a network variable in the Convoy of Social Support.

In summary, parental status, living arrangement, organizational membership, fictive-kin relationships and reciprocal support were the selected variables that represented a reframing of the Convoy of Social Support Model. This adaptation made the model culturally relevant and applicable to examine their support networks and their health status.

The Convoy of Social Support Model is also based on a continuity perspective. Continuity Theory sets forth the

premise that older adults attempt to preserve familiar strategies and social environments. They attempt to maintain consistent patterns to adapt to changes associated with normal aging (Atchley, 1989). Themes of continuity and discontinuity were examined in the sociodemographic and network components of the model. The network components: network structure, network function, and network adequacy are central concepts of the model and are defined for clarification.

The review of the literature is divided into five main sections. The first section includes definitions of social networks, social support, an overview of the conceptual framework and issues related to social networks and social support. The second section discusses the literature related to the extended family and support relationships among older black females. The third section focuses on a review of the research related to personal and situational characteristics and support networks among older black adults. The fourth section presents a review of the literature related to support networks and the health status of older black women. The final and fifth section includes a discussion related to the support literature and widowhood in general. Emphasis is placed on older widowed black females.

Social Networks and Social Support

Definitions

Social Networks

Social networks are considered vehicles through which social support is provided or exchanged. Networks are composed of points or nodes (e.g., persons) and bonds (e.g., relations of emotional support) which indicate connections between the points (Gottlieb, 1981; Kahn & Antonucci,1980). Israel (1982) simplifies the definition of social network by defining it as a set of linkages that are person-centered and involve human interaction.

Social network analysis (Gottlieb, 1981) is an analytic approach which allows for the study of complex networks and ties. This approach permits consideration of support ties across network members from various groups in society (e.g., kinship groups, organizational groups). Moreover, this approach permits an investigation of the overall effects of the structure of the social network and its component parts on the flow of support functions (Kahn & Antonucci, 1980).

Social Support

Social support has been defined as any action that functions to assist the focal person to meet his or her personal goals (Tolsdorf, 1976). Other researchers have defined types of social support as emotional, informational, and material (House, 1981; Lopata, 1973). The consistency among the definitions is evident. Gottlieb (1981) describes

four types of support: support that is emotionally sustaining, support that is problem-solving oriented, support that involves indirect personal influence, and support that involves environmental action.

Conceptual Framework

The Convoy of Social Support Model (Kahn & Antonuci, 1980) is designed to examine support relationships over the lifetime. An outline of the modified model is presented in Figure 1. The authors have indicated that the model is depicted as linear and unidirectional for simplicity, but other configurations are possible. Social support is defined as the functional behaviors of the network, and the term social support network refers to the structure (Antonnucci & Depner, 1982). The term Convoy, defined as to transmit, was borrowed from Plath (1980) to describe the dynamic concept of social networks over the life span. The interpersonal relationship of attachment to the primary caregiver forms the basis for the Convoy of support in infancy. The nature of these relationships change as individuals grow and develop. Through the life course, members of the support convoy will be lost, replaced, and new members added. Elderly widowed women are a typical example of individuals who have lost important members of their Convoy, yet some widows may have network members who have been a source of social support over the years (Kahn & Antonucci, 1981).

In the Convoy of Social Support Model, social support is defined as aid (instrumental support), affect (emotional support), and affirmation (acknowledgment or agreement with another's statement or act). Social support has been assumed to have a positive influence; however, the influence may be negative. For example, the support person may be positive, but the recipient does not perceive the support as positive. Personal and situational characteristics of the focal person are the determinants of convoy network structure, convoy network functions, and convoy network adequacy.

Personal Characteristics

Some personal characteristics will remain stable (e.g., gender, parental status), and others will change (e.g., age, frailty). Demographic characteristics may vary for some individuals (e.g., the upwardly mobile person who moves from lower to middle socioeconomic class over a lifetime). Other individuals may be members of the same socioeconomic class during the entire course of their lifetimes.

Situational Characteristics

Situational characteristics are measured by the focal person's living arrangement, employment status, organizational membership, and geographical proximity to network members (Antonuci, 1985; Kahn & Antonuci, 1980). Role expectations, limitations, and resources are explored to determine influences on the social support network.

Convoy Network Structure

The structure of a social network for the older adult is assessed by asking the individual about persons who are important and who are close to her. It is thought that if the network structure changes over the life course the changes can impact the focal person's perception of the network and the functions of the network.

The following network structure variables are included in the modified model:

Size the number of people in the network

Stability the constancy of the network, that is, if network size has increased, decreased, or remained the same over a five-year period

if network has become more important to the focal person, less important, or remained about the same over a five year period

Frequency of Contact the number of times the focal person is contacted by network members at daily, weekly, monthly or yearly intervals.

Convoy Network Function

Social support network function is the type of support given, received, or exchanged by network members. The model contains variables to measure two types of support, affective and instrumental. Affective support is defined as the provision of caring, respect, and love. Instrumental support is the provision of tangible aid and services, such as money, food, help with daily activities, and personal care when ill. The model measures elicited information on

the number of network members who provide care, demonstrate respect, and permit the focal person to feel accepted and loved.

The concept of symmetry is defined as reciprocity in the support network. It relates to providing and receiving various types of support. This definition of symmetry, as defined by the authors of the model, is the rationale for transferring symmetry from a network structure variable to a support function variable in the model. The convoy concept permits one to examine support exchange functions over time and can serve to explain the principle of "support reserve" (Antonucci, 1985, p. 20). A belief in "support reserve" may operate when the older adult has provided high levels of support at an earlier time to network members. She presently believes she is drawing from this support reserve as she receives higher levels of support from network members.

Convoy Network Adequacy

The construct of convoy network adequacy includes the variable network satisfaction. An assessment is made of the recipient's perception of the support received and the support she gives.

Outcome Variables

Health satisfaction, health outcomes, life satisfaction, well-being, happiness, positive and negative effects are the dependent or outcome measures most often

used in the Convoy of Social Support Model (Antonucci & Akiyama, 1985; Kahn & Antonucci, 1981; Kahn, Wethington, & Ingersoll-Dayton, 1987). Health status, as measured by instrumental activities of daily living, was used as the outcome measure in the present study. The Convoy of Social Support Model developed by Kahn and Antonucci (1980) provided a conceptual framework to explore the personal, situational, and network support relationships that influence the health status of older widowed black females.

Issues Related to Social Networks and Social Support

The literature is inconclusive regarding social support and the benefits to physical and mental health. A major work on social support networks examined sources of support and support functions by exploring the effects of marital status, family ties and the participation of friends and neighbors (Berkman & Syme, 1979). It was demonstrated that social ties were important, but failed to show the effects of social support on health.

Other researchers have attempted to determine the relationship between social support and health by examining the stress-buffering hypothesis (Caplan, 1974; Dean & Lin, 1977). Their findings indicated that an individual's stress was alleviated by receiving social support. The effects of social support on health behaviors were examined in other studies (Berkman, 1984; Schaefer, Coyne & Lazarus, 1981). The emphasis was placed on the importance of social support

in the focal person's compliance with medical regimen, utilization of health services, and health behavior changes.

The inconsistent definition of social support has also contributed to ambiguous findings. Researchers have used different classifications (i.e., verbal praise, encouragement, provision of aid, emotional or instrumental support) to refer to the same dimensions (House, 1981; Leavy, 1983; Thoits, 1982). Demographic variables (i.e., marital status) have been used to make inferences regarding quantity of social support. Instead, social support should be measured according to its definition of social interaction (Jung, 1984).

Subjective versus Objective Measures of Support

Several studies have reported that perceived support or subjective support from family members was a better predictor of mental health status than objective measures (Henderson, 1982; Procidano & Heller, 1983; Schaefer, Coyne, & Lazarus, 1981). Perceived support was reported to be a better predictor of support than measures of objective support (Schaefer, Coyne, & Lazarus, 1981; Procidano & Heller, 1983). Jung (1984) pointed out that exclusive reliance on the recipient's perception of support is an area of concern. Perceived support is affected by the individual's ability to cope with life situations. Thus, successful coping might lead to attributing credit to social support that is not warranted. Jung stressed the need to

measure both subjective and objective support in order to calculate a discrepancy score between the two indices. He explained that if large discrepancies are present it provides the evaluator with an indicator to predict the focal person's well-being outcome.

Support Measured by Specific Behaviors

Measures delineating actual behaviors from the providers permit the researcher to understand the underlying process of social support. Barrera, Sandler, and Ramsey (1981) used Gottlieb's (1978) helping behavior taxonomy to develop an instrument of specific support functions. Their subsequent study (Barrera, Sandler & Ramsay, 1981) found that depression (i.e., mental health) was alleviated by emotional and tangible aid support.

A literature review (Israel, 1982) indicated that several studies (Gore, 1978; Kaplan, Cassel, & Gore, 1976; Schaefer, Coyne, & Lazarus, 1981) showed that the effects of social support on physical health were inconclusive. However, Berkman and Syme (1979) reported that the quality dimension of support is a better predictor of physical health status than the quantity dimension. Schaefer and associates (1981) suggested that different stressors, such as physical or mental problems, may require different types and amounts of social support at different points in the course of the problem.

Multiple Outcome Measures

Another issue affecting support network analysis is the use of single global outcome measures. Single global outcome measures are deficient. These measures do not allow for the effects of social support on dimensions of the outcome measure. Therefore, it is recommended that several dimensions of an outcome measure be used, or that several different outcome measures be used (Jung, 1984).

The use of inconsistent measures of support networks and support functions have contributed to the inconclusive findings related to social support and health. Researchers in the field call for investigators to use consistent measures and to measure support functions by specific behaviors of the providers.

Extended Family Support Among Older Black Females

The importance of family functioning to older black females has been emphasized in the ethnographic literature (Aschenbrenner, 1975; Shimkin, Shimkin & Frate, 1978; Stack, 1974). The reciprocal nature of support from older adult females has also been crucial to the family life of the younger generation (Martin & Martin, 1978; Stack, 1974). Allen (1979) reported that the black extended family structure was most commonly found within the lower socioeconomic groups, and this family structure served a survival function. On the contrary, Jackson (1981) claimed that relics of this structural pattern are found across all

socioeconomic groups, suggesting that a structural connectedness of the family is culturally pervasive.

A recent study has suggested that the support needs of older black adults may not be met. Data were extracted from the National Survey of Black Americans, and a secondary analysis was conducted to determine the probability of family members receiving support from extended family (Taylor, 1986). Respondents reported frequent interactions with family members, close residential proximity, and family closeness. Comparisons were made for support provided to younger and older respondents. Those persons aged 65 and older, with or without adult children, received the least support when compared to the younger respondents. When elderly persons with adult children were compared to elderly persons without children, those with children were more likely to receive support. The negative relationship found between age and receipt of support refutes the earlier works of Martin and Martin (1978) and Wylie (1971). They reported that black elderly persons were highly respected and received high levels of support among extended family members.

Personal and Situational Characteristics and Support Networks Among Older Black Adults

Personal Characteristics and Support

In general, elderly black adults with children tend to have larger networks comprised of immediate family members.

The presence of an adult child (parental status) tends to reduce the negative effects of age. Assistance from extended family is more likely available to older black adults with at least one adult child (Taylor, 1986). Other research with older black adults found that social support was a function of marital status (Chatters, Taylor & Jackson, 1986). These data suggested that never-married persons received the most support and that widowed persons received the least support. The "hierarchical compensatory model" (Cantor, 1979, p.453) serves to explain the social support network of widows. This model suggests that older black adults receive support from distant kin, and non-kin when close kin are not available. Widowed black elderly, compared to married black elderly, have also been reported to have smaller informal support networks comprised of adult children, siblings, and friends (Chatters, Taylor & Jackson, 1986).

The needs associated with being elderly, having limited income and education, have not conclusively predicted support relationships. Taylor (1986) found that socioeconomic status among older black adults was not consistently related to the receipt of support. This study explored the influence of socioeconomic status on the social support relationships of older black adults. Income was positively related, but education was negatively related to the frequency of support received. The findings suggested

that elderly black adults with limited income and education tend to have smaller support networks comprised of family members. In contrast, elderly persons in higher socioeconomic groups tend to broaden their network by including friends (Ferraro, Mutran, & Barresi, 1984; Lee, 1985). National data on the frailty level among older adults indicate that older black adults have reported poorer subjective health, more bed days, and greater limitations in their daily activities than older whites (National Center for Health Statistics, 1986).

Situational Characteristics and Support

This subsection includes an overview of the literature on living arrangements, organizational memberships, employment status, and proximity of network members as they relate to elderly black adults. Elderly blacks, like elderly in general, prefer to live alone. Widowhood, poor health, and limited income are factors which often require them to live in extended family living arrangements (Hess & Markson, 1980; Worobey & Angel, 1990).

Older black females, widows in particular, are noted for taking into their homes grandchildren, nieces, nephews, other relatives, fictive kin, and non-kin to combine the resources of the extended family and provide child care services (Hill & Shackelford, 1975). Some have traced this practice to the culture of the tribes of West Africa (Herskovits 1958; Demetri, Louie & Frate, 1975). Other

researchers (Ladner, 1986; Mitchell & Register 1984) have suggested that this phenomenon is common in black families across all socioeconomic groups. Allen (1979) and Wilson (1986), in particular, have stressed the importance for researchers to adopt a cultural variant perspective in an extended family model to examine the uniqueness of the black family.

Older black women, when compared to white women, remain in the work force longer. Jackson and Gibson (1985) have explained that poor economic conditions and marital status (i.e., widowhood and singlehood) might be the reason for the higher labor-force participation common among older black females. Older black females tend to remain in the work force to alleviate the risk of poverty (U.S. Bureau of Labor Statistics, 1987). Life-time work histories in the secondary labor market without retirement pensions or minimal Social Security benefits place these women at risk for substandard living conditions (Claude, 1986; Ladner, 1986). Taylor's work (1986) has indicated that work status is positively related to the size of network structure. Elderly persons in the work force tend to have larger network structures than retirees.

Memberships in formally organized groups serve as a source of social and personal identity. Members receive and give services, and the latter enhances self-esteem. Participation in formally organized groups is usually

measured by counting the groups to which a person belongs (Clemente, Rexroad & Hirsch, 1975; Ralston, 1984).

Socioeconomic status is considered a predictor of the type of organization joined and level of participation (Clemente, Rexroad, & Hirsch, 1975). Ralston (1984) reported that older black adults tend to participate in senior citizen centers and other socially oriented clubs. Membership in educational and informational organizations is less prevalent among this group.

The church has served as a major organization for participation, as well as the provision of support among older black adults. Chatters and associates (1987) found that the church not only provided spiritual support, but also provided financial assistance, goods and services, and total support. The investigators concluded that type of assistance to older black adults and frequency of church support were found to be related to frequency of church attendance. Moreover, age and parental status were indicators of frequency of assistance from the church. There was a positive relationship between age and receipt of support from church members for older black adults with children. The receipt of support and age were negatively related to childless elderly.

Geographical proximity of network members to the focal person has been found to predict frequency of contact among older adults (Antonucci & Akiyama, 1987; Kahn, Wethington, &

Ingersoll-Dayton, 1987). The National Survey of Black Americans study confirmed this finding (Taylor, 1986). Increased geographical distance between the focal person and relatives tended to reduce the frequency of contact. Jackson (1971) reported that a curvilinear relationship existed between proximity of kin and satisfaction. Elderly mothers were dissatisfied with too little contact when adult children lived far away, and dissatisfied with too much contact when an adult child shared the residence.

Social Support Structures, Function and Health Status Among Older Black Females

Network size is an indication of frequency of contact. Distant relatives and non-kin are important network members among the oldest-old group of elderly blacks, who tend to have fewer kin, (Gibson & Jackson, 1987). As a result, network size is unaffected by the absence of close kin. Gibson and Jackson (1987) found that, network size was comparable for young-old, middle-old, and old-old. The mean numbers of helpers were 3.6, 4.2, and 3.8, respectively. Health outcomes were also unrelated to the size and composition of support networks of older black adults. The researchers explained that the absence of network size effects for health may indicate that parental status is more important to health outcomes than size of network.

Frequency of contact is also an important predictor of the receipt of support for black older adults. Elderly

Blacks tend to have face-to-face interactions with adult children or extended family members as often as once a week (Taylor, 1986). Lopata's work (1979) with widows confirmed the importance of adult children in the support network. Older widowed black females who reported contact with adult children indicated that contact was frequent. Other research findings suggest that generally older widowed black women report that they have as much contact as they want from a personal confidante (Scott & Kivett, 1980).

Friends are important to the social network of older black adult females. Engaging in fictive-kin relationships is common to American black culture. Close friends have been regarded as kin. This is probably more true for childless and spouseless elderly black females than for married persons (Aschenbrenner, 1973; Wolf, Breslau, Ford, Zieler, & Ward, 1983). Fictive-kin take on the rights and obligations associated with kin status and actively participate in the social support network. Geographical differences occur in the perception of fictional kin. Gibson and Jackson (1987) found that when fictive-kin relationships were compared for the four United States geographical regions, these relationships were more prevalent among Southern older black adults who did not consider themselves affectively close to their families. Johnson and Barer's work (1990) with inner-city elderly black adults in California also found fictive-kin

relationships among older women. Some women had created fictive-kin relationships, not only with friends, but with choreworkers as well.

Elderly females tend to have a dominant role in black extended families. Exchanges of services (e.g., symmetry) are a common practice. The older adult is often responsible for maintaining the kinship network of the extended family, planning family celebrations, and providing child care (Taylor, 1986). These services are considered a part of the exchange system which is common among black extended families. Adult children participate in this exchange by providing extra income to the total household if the family resides in a multigenerational living arrangement. Adult children also provide instrumental and other tangible supports to elderly parents who maintain independent living arrangements. Additionally, the adult child provides care to the elderly parent as health declines.

The provision of assistance to older black females by younger black females is consistent with the literature in general. Studies have reported that elderly blacks receive family support for personal care and assistance with household tasks (Cantor, 1979; McAdoo, 1978; Taylor, 1986). Daughters, daughters-in-law, and sisters are more often reported as providers. They provide instrumental and emotional support--for example, care when ill, meal preparation, and reassurance. Sons and grandchildren

provide money, transportation, shopping services and home repairs.

Recent work has shown that family, friends, and church members are important to the health behaviors and outcomes of older black adults (Cantor, 1979; Chatters, Taylor & Jackson, 1986; Taylor, 1986). Chatters et al. (1986) explored the informal support network among a sample of 581 black adults who had an impairment. The major purpose of the study was to determine which category of helper would most often be selected by the respondent. The findings suggest that a consistent pattern of helper choices was made irrespective of the elderly person's health status. For example, the respondent in poor health continued to select the same helpers, although those persons were not the most capable of providing the necessary supports. Spouses, if available, were chosen as first preference. This held true even though help from others was available. Adult children were selected over siblings and friends. Unmarried older adults tended to select siblings, friends, and neighbors, in that order. The investigators concluded that poor health status failed to differentiate helper selection, suggesting that other preexisting relationships, such as marital and parental, were more important than the older adult's support needs.

The health care costs, for older adults, associated with high morbidity at earlier ages, could drain family

resources. Gibson & Jackson (1987) studied 734 older black adults who lived in the community to determine their health status, physical functioning, and social support. They found that among three groups of older black adults, the youngest-old group was more disabled than the middle-old group. For instance, persons aged 75-79 were less likely to have physical limitations than persons aged 65-74. Thus, it was concluded that age was not a predictor of physical functioning among older black adults. Jackson and Perry (1989) analyzed national health status data and found that persons (65 to 69) were more limited in their ability to perform major activities due to chronic conditions than were persons aged 70 years and older. An examination of dependency in performing activities of daily living by persons aged 65 and older showed that age was negatively related to activities of daily living (Jackson & Perry, 1989).

The findings in the Gibson and Jackson (1987) study also suggested that emotional support decreased as instrumental support increased in successively older age groups. For example, the very old (80 and over) received more instrumental support for physical limitations, and those persons aged 65-74 received more emotional support for morale and mental health. Perceptions of the adequacy of support were strong and did not diminish in the older age groups. These findings confirm the work of other research

(Cantor, 1979; Litwak, 1986; Chatters et al., 1986), which found that as individuals age they broaden their support networks to include friends and neighbors.

Another study of older black adults (Smith-Ruiz, 1985) indicated that those persons who had interactions with relatives, friends, and church members were less depressed than those who did not have these interactions. The investigator concluded that there was a direct relationship between social support and psychological health among older black adults.

Social Support and Widowhood

Phase of widowhood was examined by Bankoff (1983) to determine the effects of social support on well-being. She provided descriptions of three phases. The first phase was a crisis-loss-phase which is characterized by disbelief and confusion regarding the future. The developmental tasks for widows in this phase are to mourn the loss of a spouse and to form a new life. The second phase, the transition-phase, takes place when the widow begins to create a new life and the development of a new identity. The third phase is the establishment and continuation of a new lifestyle as a single widowed person. This is particularly so if the wife is the survivor.

Bankoff (1983) found that, among widows in the crisis-phase, only emotional support had a positive effect on the newly-bereaved widows' well-being. Parents and other widows

were important sources of support for widows in the crisis-phase. Three types of support (i.e., contact, intimacy, and emotional support) influenced the well-being of widows in the transitional-phase. Source of support had little effect on widows in the transitional-phase. Widows' support expectations from children parallel the support literature in general (Lopata 1973, 1979). Support expectations of male and female children are sex-typed. Lopato's works reported that daughters and daughters-in-law provided more help than sons and sons-in-law, particularly in the areas of emotional and confidant support. The literature is inconclusive on widows' adjustment to living alone (i.e., financial concerns, size of house, getting household tasks done) after the death of the spouse.

Recently, studies have explored socioeconomic status, living arrangement, health status and type of support neighbors provided to widows (Cadigan, Hebel & Parry, 1988; Holden & Magaziner, 1988; O'Bryant, 1985). Overall, the findings suggest that widows who live alone and have children elsewhere receive more total support than childless widows. Choosing to live with others is a matter of economics for older black women. Whereas, older white women choose a shared living arrangement because of poor health.

Anderson (1984) examined source and type of support among older married and widowed women. Contrary to popular belief, widows had more support relationships than married

women. Widows generally received emotional support from children or friends, but when they were sick or in need of financial assistance they turned to siblings.

Summary

The research indicates that an increased life span, among the elderly in general, has made it necessary for gerontologists to discuss older adults in the context of young-old, middle-old, and old-old. Older black women in general tend to closely interact with family members and are simultaneously involved in the roles of parent, grandparent and great-grandparent. This family structure is considered a cultural variation from other elderly family structures. Family members tend to interact frequently and have close affective bonds. Pooling limited resources in multigenerational households is common among black families. Widows tend to take grandchildren, nieces, and nephews into their homes. Reciprocity among kin, fictive kin, and non-kin is a common family theme within the black family. Services for child care, household tasks, transportation, and care when ill are often exchanged.

Social support is provided by substituting the next network member in the hierarchy. Older black mothers, in particular, expect adult children to provide for their needs, as necessary. Sex-typed support expectations from daughters and sons are prevalent among this group. Adult children are important linkages for older black adults to

receive assistance from churches and other community resources.

Research indicates that an inverse relationship exists between age and receipt of support. Physical limitations were more likely in the young-old rather than the middle-old group (Gibson, 1987). The size of network structures generally are unrelated to health outcomes among older black adults. In contrast, network size increases with declining health for white samples.

Older white widowed females tend to seek emotional support from adult children and sick care from siblings. Childless widows increase network size by including friends and neighbors. The literature has shown that, with limited resources, older widowed black females frequently give more support than they receive. This group has been known to share their homes with kin, fictive-kin, and non-kin. In general, widows who live in the South have larger and more varied social support networks when compared to widows who reside in large metropolitan areas.

In this study the relationships among personal characteristics, situational characteristics, network structure, network functions, net adequacy, and the health status of older widowed black females were examined. The Convoy of Social Support Model developed by Kahn and Antonucci (1980) permits exploration of these relationships within a conceptual framework. The model was modified based

on reported identified relationships in a preliminary analysis (Kahn, Wethington & Ingersoll-Dayton, 1987). The kinship category of fictive-kin, specific to the social support networks of older widowed black females, was also included.

Older black adults are a heterogeneous group. Research findings suggest that additional study is needed within and between groups of older black female adults to further delineate the relationships that exist among the support network and health status.

CHAPTER III

METHODS AND PROCEDURES

Setting and Sample

The participants of the study were community-dwellers who lived in two urban cities of Guilford County, North Carolina. The estimated total population in Guilford County for persons aged 60 and over in 1989 was 58,050 (NC State Data Center, 1990). Of that total estimated population of older adults aged 60 and over, 6,133 females (10.5%) were reported in the "Other Race" category. Older black females were the primary subgroup for this category. The data were not categorized into groups by race for estimated counts and the 1990 U.S census data were not available at this writing. Therefore the 1980 population count for older adults is provided as a point of comparison to the estimates for 1989. The total population for persons age 60 and over for 1980 was 45,086. There were 4,693 (10%) black females in 1980 and approximately 715 (15%) were counted as female householders. The Census Bureau has replaced the term head of household with the term householder. Therefore one can conclude that 15% of the older black female population in Guilford County were living alone or they were the only adult person in the household. Estimates for 1989 indicate

that older black females in Guilford County still represent approximately 10% of the older population. If 15% or more are living alone in 1989 it suggests that this group of women are living independently, but will become more dependent on family and friends for support as they age.

Group settings were selected in order to gain access to older widows. Twelve formal presentations were made to explain the purpose of the study to approximately 140 older black females at congregate nutrition sites, senior housing complexes, and church groups. Group members made referrals to other older widows. Of the 125 potential participants identified, 8 were ineligible because they were not sure of marital status (separated from husband for years and didn't know his whereabouts). An additional seven potential participants refused to be interviewed. The participants were requested to give signed consents and appointments were made with them for structured interviews. A total of 110 widows or 79% completed the interviews.

Research Design and Interviewing Procedures

The data for the study were collected by two trained interviewers who verbally administered a structured interview schedule. The interview took approximately one hour and thirty minutes. At least two call backs were made in the event the potential respondent was not available for the appointed interview time.

Procedures

All instruments, forms, letters, and other materials associated with this study were submitted to the Human Subjects Review Committee for approval prior to initiating the study.

Respondents were assured that their participation was completely voluntary. Those participants who were recruited from congregate nutrition sites, senior housing complexes, and other groups were assured that services would not be withheld for non-participation. Furthermore, all study participants were given the right to withdraw at any time. Respondents were also informed that the findings from the study would be disseminated; however, confidential information and their identities would not be disclosed. Respondents signed informed-consent forms prior to participation. After conducting the interview all the items on the instruments were checked for completeness, categories were created for the open-ended responses and all of the responses were coded and entered into a computer data file.

Research Instrument and Measurements

The Instrument

The 292-item instrument was administered in a structured interview with the respondents. Subsets of items were selected, and, in some cases, adapted from two instruments to measure the variables of interest. Subsets of items were selected from the Social Networks in Adult

Life Network Questionnaire developed by the Survey Research Center, Institute for Social Research, University of Michigan (1980). Selected items obtained information on the following constructs: Social Network Structure, Social Network Function, and Social Network Adequacy.

Items were also adapted from the OARS Multidimensional Functional Assessment Questionnaire (OMFAQ) developed by the Center for the Study of Aging and Human Development at Duke University (1978). This instrument is a subset of the Older American Resource Scale (OARS). It was designed to measure an individual's functional status in terms of social resources, economic resources, physical health, mental health, and capacity for self-care or activities of daily living (ADLs). Systematic evaluations of the items were conducted by a group of physician's assistants, psychiatrists and physical therapists. The OMFAQ items were pretested with elderly populations over a period of years to make sure the items were comprehensible (Fillenbaum, 1978; Fillenbaum & Smyer, 1981). Physical health, mental health, and activities of daily living items were selected to use in the instrument for this study with widowed females.

A pilot study with fifteen older widowed black females was implemented prior to the larger study in order to detect problems in item construction. After the pilot testing, several open-ended questions were added to the instrument to obtain qualitative information. For example, a question was

included to ask the respondent to indicate what change in living arrangement she might make if illness occurred. Respondents were also asked to explain their alternate living choices. Other questions were asked to obtain specific help-tasks information. Several questions were included to obtain information about church involvement.

Validity Assessments of the OMFAQ. Criterion validity has been assessed for the physical health scale, the mental health scale, and the activities of daily living (ADLs) scales of the OMFAQ (Fillenbaum & Smyer, 1981). Independent ratings of older adults, conducted by health care professionals, were correlated with physical health scores, mental health scores, and activities of daily living scores (ADLs). Thirty-three participants were selected from a pool of 130 patients enrolled in the Family Medical Clinic of Duke University Medical Center. These participants had completed the OMFAQ two years before joining the clinic. The OMFAQ was administered to them again, and they received additional assessments from a psychiatrist for mental health ratings, a physician's associate for a physical health rating, and a physical therapist for ability to perform ADLs. Spearman rank order correlations were performed to determine agreement between the questionnaire scale scores and the health professionals' ratings. The Spearman rank order correlations were .67, .82, and .89 for mental health,

physical health, and ADLs, respectively, and were statistically significant ($p<.001$).

Validity and Reliability of the Instrument and Preliminary Analyses. After pretesting the instrument with 15 older widowed black females, items were assessed by 3 gerontologists and 1 family relations expert. These experts were helpful in determining if selected variables and items did measure the constructs of interest.

In addition, Principle Axis factoring with varimax rotation procedures were used to assess physical frailty, mental frailty, well-being, and activities of daily living variable items for construct validity. Factor analysis permits one to identify the underlying dimensions of a variable and the interrelationships of the items in order to justify using the item for variable measurement. Eigenvalues greater than 1.0 (Kaiser's criterion) and Cattel's scree test were used as criteria for the number of factor extractions. The minimum acceptable factor loading was .50. The varimax rotation was used to simplify the factor solutions. For example, the final solution for physical frailty with this sample was defined as two factors: cardiovascular disease and mobility affective disorder. Several chronic diseases failed to load on the two factor solution of physical frailty. Therefore, those items were deleted from the frailty scale and subsequent analyses. The final solution for instrumental activities of

daily living was also a two factor solution. Five items traveling, shopping, housework, meal preparations, and handling money loaded onto general instrumental activities of daily living. Two items, using the telephone and taking medicines loaded onto cognitive instrumental activities of daily living. The findings for the instrumental activities of daily living scale differ from the results of Fillenbaum and Smyer (1981) who identified a one factor solution. In addition, two items, dressing and eating, were deleted from the physical activity of daily living scale because none of the respondents needed help with these activities. The remaining items for the physical activities of daily living scale loaded onto one factor, physical activities of daily living.

The restandardized Philadelphia Geriatric Morale Scale (Lawton, 1972; McCulloch, 1988), a 15-item scale, was used to measure well-being. The restandardized scale consisted of three factors: agitation, attitude toward own aging, and lonely dissatisfaction. Principle Axis factoring results differed from results obtained by Lawton (1975) and McCulloch (1988). The analysis with this sample revealed a two factor solution, agitation and worry. Additionally, items to measure the participant's involvement in treatment or counseling for mental health problems, the participant's reported nervousness, and the participant's general

satisfaction were also selected to measure the respondent's well-being.

Spearman rank correlations were calculated to determine if the frailty variable items measured a different dimension than the variables in the health status construct. The correlation coefficients for the physical frailty with activities of daily living were assessed for discriminant validity. Discriminant validity is present if a distinction can be made between different content measured by the same method (Kidder & Judd, 1986). The coefficients ranged from -.01 to -.28 for the physical frailty and instrumental activities of daily living. These findings indicated that, at the most, only 8% of the variance in any activity of daily living was explained by the variability of scores in the physical frailty items. This researcher concluded that physical frailty and instrumental activities of daily living met the test for discriminant validity. Spearman rank correlation coefficients were also calculated for the perceived-health items and the instrumental activities of daily living composite score to test for convergent validity. The correlation coefficient for the Cantril Ladder score and the instrumental activities of daily living composite score was .31 significant at the .01 level, indicating that the items met the test for convergent validity. Internal consistency reliability coefficients (Cronbach's Alpha) were .62 (physical frailty) .67

(symmetry) .89 (network satisfaction) and .78 (instrumental activities of daily living.

Measurements

Measurement of Personal Characteristics. Personal characteristics were represented by age in number of years, monthly personal income, and number of children (parental status). "How far did you go in school?" was asked to assess educational level. Frailty was measured by presenting the respondent with a listing of 15 health problems common to older adults. The respondent was also asked, "Please tell me if a doctor has given you treatment or medication for this problem in the past year." Responses included yes or no for each of the 15 items. Respondents were asked if physical health interfered with activities. The yes responses, were ranked (1), "a little," (2), "somewhat", and (3), "a lot." The respondent was also asked to provide information on the number of visits to the doctor, and the number of hospital days within the past six months.

Measurement of Situational Characteristics. Situational characteristics were measured by the respondent's living arrangement: whether the respondent lived alone or with others. The number of organizational memberships was also measured. An employment status measure distinguished workers from retirees. Proximity to the most important person in the network was measured by asking if

the individual (5), lived in the city, (4), lived within 49 miles, (3), lived 50-100 miles, (2), lived 150-200 miles, or (1), lived over 250 miles.

Measurement of Network Structure. To identify the social support network structure, respondents were asked to cite the names of persons important to them. The responses were grouped by categories of people. For example, the respondent was asked, "Are there family members or relatives who are close and important to you?" The same question was repeated for fictive-kin, friends, neighbors, and professionals. Structural characteristics also included questions to assess kinship relationships (i.e., children, siblings, other relatives, or friends) among the network members. Network size was measured by actual number of network members. Stability was measured by asking the respondent, "Have the number of network members (5), increased, (1), decreased, or (3), remained the same since the relationship began?" Respondents were also requested to indicate if the network had become (5), more important, (1), less important, or (3), remained about the same compared to five years ago. Frequency of contact was measured by asking the following questions: "How frequently are you in touch with the most important person?", "How frequently are you in touch with most of your network members?" The coded responses ranged from (7), everyday, to (1), once a year.

Measurement of Network Function. The six network functions used in the original model (Kahn & Antonucci, 1980) were also used in this study. Respondents were asked, "Tell me how many people in your network: (1), make you feel respected, (2), make you feel loved, (3), accept you as you are, (4), show you they really care." Respondents were also asked, "Tell me how many people in your network would make sure you were cared for if you were ill, and how many people do you talk to about your health?" The response codes ranged from (1), none, to (5), all.

Reciprocity of support (i.e., symmetry) between members and the respondent was measured by asking the respondent, "Would you say that (1), you provided more support than network members, (5), he or she provided more, or (3), exchange of support has been about equal?" This question was asked for the present time and as well as over the respondent's lifetime.

Measurement of Network Adequacy. Network adequacy was measured by: (1) assessing the respondent's satisfaction with the support she received from others, and (2) assessing the satisfaction with support she gave to others. A picture of a ladder with 9 rungs (Cantril's Ladder) was shown to the respondent. The respondent was asked to point to the rung that represented her satisfaction with the adequacy of her network. The respondent was asked the following question for the five different groupings of members: "In general,

how satisfied are you with the support you receive from members?" Response choices ranged from (0), completely dissatisfied, to (9), completely satisfied.

Measurement of Health Status. Health status, the dependent construct for the study, was measured by instrumental activities of daily living (ADLsINS). The instrumental activities of daily living such as using the telephone, traveling, shopping, doing housework, preparing meals, handling money, and taking medicines were explored with the respondent. The following question was asked for the seven activities related to daily living: "I would like to know if you can do these activities (2), without any help at all, (1), with some help, or (0), can not do the activity at all." Additional information related to perceived-health was also requested of the participants. Perceived-health was measured by the following question: "Generally speaking, would you describe your present health as (4), excellent, (3), good, (2), fair, or (1), poor?" This item is often referred to as subjective-health or self-rated health. A Cantril Ladder was also used for the rating. The top rung represented the best possible health, and the bottom rung represented the worse possible health. The self reported health ratings of older widowed black females may be compared to the results of the Duke University Second Longitudinal Study conducted on a group of middle-aged and older adults (Palmore & Kivett, 1977). The mean self-rated

health score with the Duke sample was 6.8. The mean score for self-rated health with widows in the present study was 7.1 on a scale of 0 to 9.

Data Analyses

The data analyses for this study consisted of descriptive statistics, factor analysis procedures, path analysis procedures, and hierarchial multiple regression procedures. The preliminary analysis involved an examination of frequencies and percentages to provide a demographic profile of the sample (Table 1). Principle Axis factor solutions were used to create composite indices for the following multiple item variables: frailty, symmetry, network satisfaction, and instrumental activities of daily living. A decision was made to retain the instrumental activities of daily living index as the Health Status dependent variable because the instrumental activities of daily living scores indicated that a greater number of the widows needed assistance with instrumental activities than with physical activities. An examination of a correlation matrix of the independent and dependent variables showed that multicollinearity (i.e. Pearson correlation coefficients greater than 0.50) did not exist. Therefore, all the variables of interest were retained, and composite mean scores were computed for subsequent analyses.

Three statistical procedures were conducted before a model was identified that fit the data. First, a two-stage

least squares path analysis approach with a series of multiple regression equations was used to test the model (See Figure 1 p. 11). The two-stage least squares approach involved predicting a value for a dependent value. This predicted value was then used as an independent variable in the subsequent multiple regression equation. For example, network size (set C) was regressed on set A (personal characteristics) to arrive at a predicted value for network size (See Figure 1 p. 11). The attempt to use the set A (personal characteristics) and the predicted value of network size to show a relationship to the variables in the subsequent set D (convoy network function) was unsuccessful. This approach failed because Set A (personal characteristics) explained such a small amount of the variability in network size that the predicted network size was essentially a constant. Therefore, an equation could not be generated, and this statistical approach was abandoned.

Another path analysis technique (LISREL) using a maximum-likelihood approach was selected to test the Convoy of Social Support Model with these data. This path analysis technique also failed to produce estimates for the model. There are three possible explanations for this failure: (1) The model was misspecified or wrong; or (2) The sample was a non-probability sample and did not represent the population; or (3) The sample ($\underline{N}$ = 110) was too small.

The final analyses consisted of a series of hierarchical multiple regression procedures to determine the amount of variation in the dependent variable that could be explained by the linear combination of independent variables. While this procedure did not permit a determination of the mediating effects of variables in the model, it did provide an observation of overall variance explained in the dependent variable. The ultimate goal of this procedure was to determine the incremental and total explanatory power of the independent variables in the relationship to the dependent instrumental activities of daily living variable.

The following assumptions were met for the use of multiple regression procedures with this sample data: (1) the dependent variable had a normal distribution for any fixed value of the independent variable; (2) the independent variables were linearly related to the dependent variables; and (3) there was homogeneity of variance among the dependent variable scores at each combination of values of the independent variables. A normal probability plot of the standardized residuals did not show gross deviations from normality. An examination of residuals and independent variable plots showed that the residuals were close to the zero, indicating linearity. The uniformity of the random pattern observed in the plots of the residuals and dependent

variables indicated that there was homogeneity of variance among the scores.

The variables were organized for statistical analysis in hierarchical sets according to the diagrammatic scheme set forth in the Convoy of Social Support Model (See Figure 1. p. 11). The several sets in the model were labeled alphabetically to conceptualize the entry of the sets into a hierarchial analysis procedure (See Figure 1. p. 11).

The variable entry involved a series of multiple regression equations (See Figure 1. p. 11). The first group of analyses consisted of regressing set C (Convoy Network Structure variables) on set A (Personal Characteristic variables). In the second equation set C (Convoy Network Structure variables) was regressed on set B (Situational Characteristic variables). Subsequent equations included regressing set D (Convoy Network Function variables), set E (Convoy Network Adequacy variables), and Set F (Health Status), on set A (Personal Characteristic variables), and set B (Situational Characteristic variables). Then set D (Convoy Network Function variables), was regressed on set C (Convoy Network Structure variables), set B (Situational Characteristic variables), and set A (Personal Characteristic variables); and set E (Convoy Network Adequacy variables), was regressed on set D (Convoy Network Function variables), set C (Convoy Network Structure variables), set B (Situational Characteristic variables),

and set A (Personal Characteristic variables). In the final regression equations set F (Health Status) was regressed on set E (Convoy Network Adequacy variables), set D (Convoy Network Function variables), set C (Network Structure variables), set B (Situational Characteristic variables), and set A (Personal Characteristic variables). This approach was used to determine if a set of variables was influenced by the set (s) that preceded it, and then to determine if the set (s) that followed it was also influenced.

The significance of each equation was tested by the F-ratio. Statistical relationships at the significance level of $p<.10$ or higher were accepted because the study is exploratory. The ultimate purpose in using multiple regression procedures with these data was to determine which independent variables were most important in explaining the health status as determined by instrumental activities of older widowed black females.

CHAPTER IV

RESULTS

The first section of this chapter includes a discussion of the demographic characteristics and a description of the sample. The second section discusses the statistical results which are structured according to the Convoy of Social Support Model and the hypothesis that guided the study.

Descriptive Results

Personal Characteristics

The age range of the 110 widows was 60-100 years (Table 1). Almost 68% of the women had daughters and 50% had sons. Social Security benefits were the primary sources of income. Almost 72% received a yearly income of less than 10,000 dollars. A majority reported that they were the only person supported by their personal income, only one-fourth reported having enough money for needs. More than two-thirds of the women had less than a high school education. Table 1 presents frequencies and percentages for the variables of interest.

The widows usually ranked their health as good (frailty). Less than 20% reported that their health caused a great deal of interference with daily activities

Table 1

Characteristics of Older Black Widows: Frequencies and Percentages

Variable	(N=110)	(%)
Personal Characteristics		
Age		
60 to 64	12	10.9
65 to 74	49	44.5
75 to 84	36	32.7
85+	13	11.8
Parental Status		
0 Daughters	36	32.7
1-2 Daughters	55	50.0
3 or more Daughters	19	17.3
0 Sons	55	50.0
1-2 Sons	44	40.0
3 or more Sons	11	10.0
Yearly Personal Income		
Less than $5,000	46	41.8
$5,000-$9,999	33	30.0
$10,000-$19,000	11	10.0
$20,000 and above	9	8.2
Refused to give Information	10	9.0
Education		
0 to 8 years	56	50.9
High school incomplete	19	17.3
High school graduate	10	9.1
College incomplete	15	13.6
College graduate	2	1.8
Post-college graduate	8	7.3
Frailty (Physical Health)		
Heart Disease		
No	78	70.9
Yes, no interference	15	13.6
Yes, a little interference	13	11.8
Yes, a great deal of interference	4	3.6

(table continued)

Variable	(N=110)	(%)
Circulatory Problems		
No	91	82.7
Yes, no interference	9	8.2
Yes, a little interference	6	5.5
Yes, a great deal of interference	4	3.6
Stroke		
No	105	95.5
Yes, no interference	2	1.8
Yes, a little interference	0	0.0
Yes, a great deal of interference	3	2.7
Paralysis		
No	106	96.4
Partial paralysis	2	1.8
Non-functional limb	2	1.8
Situational Characteristics		
Living Arrangements		
Live alone (single family dwelling)	18	16.0
Live alone (senior housing)	56	51.0
Live with others	36	33.0
Geographical Proximity (Most Important Person)		
Co-residence	14	12.7
Live in same city	65	59.1
Within 49 miles	7	6.4
Within 50-250 miles	3	2.7
More than 250 miles	21	19.1
Employment Status		
Retired	90	81.8
Working	20	18.2
Memberships in Organizations		
None	3	2.7
1-3	42	38.2
4-6	58	52.7
7 or more	7	6.4

(table continued)

Variable	(N=110)	(%)
Network Structure		
Network Size		
0 members	6	5.4
1-2	50	45.5
3-4	45	40.9
5 or more members	9	8.2
Network Size Over Five-Year Period		
Increased	23	20.9
Remained the same	58	52.7
Decreased	29	26.4
Network Importance Over Five-Year Period		
More importance	60	54.6
Remained the same	49	44.5
Less importance	1	.9
Frequency of Contact (Most Important Person)		
Daily	56	50.9
Weekly	41	37.3
Monthly	9	8.2
Yearly	4	3.6
Network Function Care		
(No. that Provide Support)		
None	1	.9
1 member	1	.9
2-3 members	12	10.9
4-5 members	40	36.3
More than 5 members	56	51.0
Symmetry for All Years		
Receive more support from members	26	23.6
Support exchanged about equal	53	48.2
Give more support to members	31	28.2

(table continued)

Variable	(N=110)	(%)
Network Adequacy		
Network Satisfaction		
Completely satisfied	50	45.5
Moderately satisfied	41	37.2
Moderately dissatisfied	13	11.8
Completely dissatisfied	6	5.5
Health Status		
Activities of Daily Living		
Transportation		
No assistance needed	69	62.7
Some assistance needed	39	35.5
Unable without assistance	2	1.8
Housework		
No assistance needed	87	79.1
Some assistance needed	23	20.9
Unable without assistance	0	0.0
Shopping		
No assistance needed	92	83.6
Some assistance needed	14	12.7
Unable without assistance	4	3.7
Handle Money		
No assistance needed	94	85.5
Some assistance needed	13	11.8
Unable without assistance	3	2.7
Prepare Meals		
No assistance needed	101	91.8
Some assistance needed	8	7.3
Unable without assistance	1	.9
Telephone Use		
No assistance needed	103	93.6
Some assistance needed	5	4.5
Unable without assistance	2	1.8
Take Medication		
No assistance needed	109	99.1
Some assistance needed	1	.9
Unable without assistance	0	0.0

(Table 1). Almost one-half of the sample stated that their physical health had remained about the same in the past five years. The five most common health problems experienced in the past six months among this group were arthritis, hypertension, eye problems, heart disease, and diabetes mellitus.

Situational Characteristics

At the time of interview the women had been widows for an average of 16 years. Most of the women reported that they were married and living with their husbands prior to their death. More than one-half (51%) reported that they presently lived alone in a senior housing complex, 16% reported they lived alone in a single family dwelling, 16% also reported living with an adult-child, 12% lived with other relatives, and 5% lived with paid helpers (Table 1). Widows who lived in the senior housing complexes, in particular, were at risk for insufficient support because they had small families or no family members. The widows' "most important persons" usually lived in close proximity. More than one-half (59%) of the respondents reported that the most important person to them lived in the same city.

Most of the women (82%) were retired. Less than 20% considered themselves retired but working part-time. Their jobs were primarily in domestic work and child care. They generally reported that they liked working very much. A majority of the women had been retired for 5 or more years,

and one-half reported poor health as the reason for retirement. The respondents at age 50 had either worked in domestic work or child care, commercial cooking, or factory work. A small group had been teachers, beauticians, or health care workers.

The widows were actively involved in community organizations. More than one-half belonged to four or more organizations. The church, missionary circles, and senior citizens' groups were the primary organizations of membership. Most of the women reported that the church was very important to them, and a majority reported being very active in church activities. They saw the church's most important role as uplifting their spirit and providing inspiration for daily living. Several women reported that they were "church mothers", a position that serves to provide guidance to younger parishioners. A majority of the women did not receive any form of instrumental help from the church. When asked, "What types of support are generally provided to you by the church?" Less than one-third of the widows reported moral support and instrumental support in the form of transportation to church services, and money contributions when ill. The widows were asked, "How could the church help older widowed females?" The respondents most often stated they would like to receive moral support, and help with household and business-related tasks.

Support Network Structure

A majority of the widows (87%) had between one and four network members (Table 1). Most often the support members were family members. Almost one-half said the daughter was the most important person.

The support network of older widows was relatively stable. Almost three-fourths reported that the number of network members had either increased or remained the same size for the past five years. Respondents also reported that the network was either more important to them (55%) or of the same importance to them (45%) compared to five years ago. More than one-half had daily contact, either face-to-face or by phone, with the most important person in the network.

Friends and neighbors were also important support members to this group. A majority reported they had close friends and neighbors. Ministers, in the professional group category, were most often reported to be friends. Nurses and other professionals mostly teachers and social workers, were also reported as friends.

Support Network Function

Respondents were asked, how many members of their support network would participate in their care, and 47% reported that between two and five members would be able to assist. More than one-half of the widows (51%) predicted

that more than five would assume some caregiving responsibility (Table 1).

When respondents were asked what living arrangement changes would be made if they became ill, 46% stated they would move to a nursing home, and 26% indicated they would move in with a relative. A smaller group of respondents (15%) stated they were living with a relative and a change would not be necessary. Another 8% indicated they would have a relative or paid helper move in with them. Approximately 5% of the widows indicated they did not know what would happen (not in Table). The widows were asked why they made certain choices about living arrangements in the event of illness. The most common reasons given for moving to a nursing home were "I will not burden my children", and "It's the only option available." Only one-forth of the sample indicated that they had discussed the decision with their family. A smaller group of respondents reported that the nursing home decision was made independent of input from family members. Widows who chose to have a relative come live with them said it was important to them to remain in a familiar environment.

The widows were asked to predict the length of time that network members might provide care if needed. One-half of the widows reported that if they became ill and care was provided, it would most likely be available as long as

needed. Primary caregivers were identified as a daughter, son, niece, or cousin, in that order.

The exchange of support with family network members (symmetry) for 48% was about equal over the years (Table 1). Almost one-third reported that they had provided more support to family members during the relationship.

Approximately one-half of the widows reported fictive-kin relationships, and widows stated that they were completely satisfied with the support they received.

Support Network Adequacy

The widows were asked to report their level of satisfaction with the support they received for the total length of the relationship. A majority (80%) of the widows reported being completely satisfied with support from persons most important to them. Almost three-fourths were moderately to completely satisfied with family members' support. Almost one-half reported being moderately to completely satisfied with support from neighbors. Those respondents who reported having professionals (i. e., nurses, ministers, social workers and teachers) in their network indicated they were moderately or completely satisfied with the support they received.

The respondents were also asked, "What is your most important purpose in life?", they reported practice a Christian life, maintain health, help others, and live a happy life in that order.

Health Status

When asked about instrumental activities of daily living, 37% needed help with transportation (Table 1). Housework (21%), shopping (13%), and handling money (12%), were the other activities most often requiring assistance. The widows were asked to rank their health and to report their ability to perform activities of daily living. A majority ranked their health between 6 to 8 on a scale of 0 to 9. Two-thirds of the widows reported that they were completely satisfied with their physical ability to do tasks. Furthermore, less than four percent needed minimal help with personal care. Almost three-fourths were "checked on" (i.e. contact by phone or face-to-face contact) at least five times a week by family members or friends. More than one-half reported that they wanted someone to check on them.

Inferential Results

The purpose of this study was to determine if there was a relationship among personal characteristics, situational characteristics, network structure, network function, network adequacy and health status of older widowed black females. The Pearson Product Moment Correlations, means, and standard deviations for the variables of interest are presented in Table 2. The correlation range was -.35 to .49. The independent variables correlate more often with instrumental activities of daily living the dependent variable (item 15). This correlation indicates that social

Table 2

Pearson Product Moment Correlations Between Age, Parental Status, Income, Frailty, Living Arrangement, Proximity, Work Status, Total Memberships, Stability, Frequency of Contact, Care, Symmetry, Network Satisfaction, and ADLsINS. Including Means and Standard Deviations.

	Pearson Product Moment Correlation															Mean	S D
Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1. Age	1.00	-.23*	-.35**	.01	.19	-.12	-.17	-.18	-.15	-.19	-.15	-.22*	.01	-.03	-.39**	74.23	8.59
2. Parental status		1.00	.01	-.02	.15	.27**	-.08	-.00	.41**	-.04	.08	.22	.08	.18	.21*	1.21	1.24
3. Income			1.00	-.04	-.25**	-.06	.02	.37**	.07	.23*	.18	.08	-.23*	.11	.49**	6.57	2.67
4. Frailty				1.00	-.24	-.04	.14	-.28**	.10	.01	.09	-.09	-.02	-.10	-.21*	1.20	.64
5. Living arrangement					1.00	.11	-.22*	-.02	-.01	.01	-.22*	-.09	.08	-.07	-.15	.69	1.02
6. Geographical proximity						1.00	-.04	.07	.06	-.03	-.09	.07	-.06	.11	.08	1.82	.13
7. Work or retired							1.00	.10	.00	-.05	.12	.08	-.21*	-.06	.02	3.18	.74
8. Total memberships								1.00	.06	.06	.20*	.17	.06	.25**	.34**	3.92	1.93
9. Network size									1.00	-.09	.19	.22*	.22*	.27**	.19*	2.48	1.71
10. Network stability										1.00	.09	.11	-.04	.06	.19*	3.48	.87
11. Frequency of contact											1.00	.21*	.08	.25**	.03	5.88	.98
12. Care												1.00	.34**	.28**	.08	3.93	.79
13. Symmetry													1.00	.19	-.22*	2.64	.91
14. Network satisfaction														1.00	.25**	6.71	1.88
15. Activities of daily living															1.00	1.84	.25

* p<.05

** p<.01

variables and physical attributes most often were associated with instrumental activities of daily living.

A hierarchical multiple regression approach was used to enter the sets of variables according to the A B C D E and F labeling scheme of the Convoy of Social Support Model (Figure 1 p. 11). Results of the multiple regression analyses used to examine the relationships in the model are presented in Table 3 through Table 20. The dotted-line arrows in the model from personal characteristics and situational characteristics to network function, network adequacy, and health status represent the direct relationships (Figure 1. p. 11). The heavy un-dotted arrows represent the combined relationships outlined in the model. Standardized regression coefficients (Bs) are reported to compare the strength of the relationships in this study. Unstandardized regression coefficients (bs) are reported to compare findings of this study with previous works. The following sections describe the relationships of each set in the model.

Personal Characteristics, Situational Characteristics and Network Structure

The first multiple regression equation (Table 3) involved testing the relationships between personal characteristics and network structure. Personal characteristics explained 15% of the variance in network size [adjusted R^2 = .15, $F(4, 104) = 5.812$, $p<.001$.)] with

Table 3

Multiple Regression of Network Structure on Personal Characteristics

Independent Variable Personal Characteristics	Dependent Variables Network Structure					
	Network Size		Network Stability		Frequency of Contact	
	B	b	B	b	B	b
Age	-.039	-.007	-.082	-.009	-.082	-.009
Parental status	.399	.550***	.063	.050	.063	.050
Income	.055	.035	.163	.059	.163	.060
Frailty	.106	.286	.095	.014	.095	.146
R^2 (unadjusted)	.183		.070		.057	
R^2 (adjusted)	.151		.035		.020	
F (4, 104)	5.812***		1.977 n.s.		1.560 n.s.	

+p<.10
*p<.05
**p<.01
***p<.001

parental status the significant contributor (B = .40, $p<.001$). Women with children had larger networks.

The examination of the relationships between situational characteristics and network structure showed that frequency of contact was explained [adjusted R^2 = .06, $F(4, 104) = 2.872$, $p<.05$] (Table 4). Living arrangement B = -.20, $p<.05$, and membership in organizations B = .20, $p<.05$ were the major contributors. If the respondent lived alone frequency of contact was less and as membership in organizations increased so did frequency of contact.

Personal Characteristics, Situational Characteristics and Network Function

Both groups of relationships: (1) personal characteristics and network function, and (2) situational characteristics and network function were not significant. The relationship between personal characteristics and the care network function was not significant [adjusted R^2 = .04, $F(4, 104) = 2.155$ n.s.] (Table 5). Personal characteristics also were not significantly related to the symmetry network function variable [adjusted R^2 = .02, $F(4, 104) = 1.669$ n.s.]. When the care network function and situational characteristics were examined, the relationships were not significant [adjusted R^2 = .01, $F(4, 104) = 1.341$ n.s.] (Table 6). The relationship between symmetry and situational characteristics was also examined [adjusted R^2 = .03), $F(4, 104) = 1.764$ n.s.] and the relationship was not

Table 4

Multiple Regression of Network Structure on Situational Characteristics

Independent Variables	Dependent Variables Network Structure					
Situational Characteristics	Network Size		Network Stability		Frequency of Contact	
	B	b	B	b	B	b
Living alone or not	-.012	-.021	.011	.009	-.199	-.190*
Proximity	.056	.732	-.036	-.236	-.084	-.623
Work or retired	-.004	-.009	-.056	-.065	.053	.069
Membership in organization	.061	.054	.065	.029	.200	.101*
R^2 (unadjusted)	.007		.007		.009	
R^2 (adjusted)	-.030		-.030		.064	
F (4, 104)	.193 n.s.		.202 n.s.		2.872*	

+p<.10
*p<.05
**p<.01
***p<.001

Table 5

Multiple Regression of Network Function on Personal Characteristics

Independent Variables	Dependent Variables Network Function			
Personal Characteristics	Care		Symmetry	
	B	b	B	b
Age	-.154	-.014	-.034	-.004
Parental Status	.179	.110	.067	.049
Income	.021	.006	-.245	-.082
Frailty	-.069	-.082	-.014	-.019
R^2 (unadjusted)	.076		.060	
R^2 (adjusted)	.041		.024	
F-ratio (4, 104)	2.155 n.s.		1.669 n.s.	

+p<.10
*p<.05
**p<.01
***p<.001

Table 6

Multiple Regression of Network Function on Situational Characteristics

Independent Variables	Dependent Variable Network Fundtion			
Situational Characteristics	Care		Symmetry	
	B	b	B	b
Living alone or not	-.110	-.080	.029	.025
Proximity	.072	.416	-.080	-.546
Work or retired	.034	.035	-.229	-.276
Memberships in organizations	.167	.066	.089	.041
R^2 (unadjusted)	.049		.064	
R^2 (adjusted)	.012		.028	
F (4, 104)	1.341 n.s.		1.764 n.s.	

+p<.10
*p<.05
**p<.01
***p<.001

significant (Table 6). Personal characteristics and situational characteristics variables also failed to explain a significant amount of variance in the network function variables.

Personal Characteristics, Network Structure and Network Function

Personal characteristics intervening with network structure variables explained 8% of the variance in the care network function [adjusted R^2 =.08, $F(7, 101) = 2.338$ $p<.05$]. Frequency of contact was the major contributor B = .17 $p<.10$ (Table 7). This finding suggested that as frequency of contact increased the likelihood of the widow receiving care also increased. Personal characteristics and network structure variables failed to explain a significant amount of variance in the symmetry network function variable [adjusted R^2 = .06, $F(7, 101) = 1.990$ n.s.] (Table 7).

Situational Characteristics, Network Structure and Network Function

Situational characteristics intervening with the network structure variables explained 7% of the variance in the care network function [adjusted R^2 = .07, $F(7, 101) = 2.129$ $p<.05$] (Table 8). Network size was the major contributor (B = .20 $p<.05$). The likelihood of receiving care increased with the size of the network. The intervening effects of situational characteristics and

Table 7

Multiple Regression of Network Function on Network Structure and Personal Characteristics

Independent Variables	Network Function			
	Care		Symmetry	
	B	b	B	b
Network Structure				
Network size	.149	.066	.241	.126
Network stability	.118	.103	.044	.046
Frequency of contact	.171	.133+	.091	.083
Personal Characteristics				
Age	-.117	-.010	-.011	-.001
Parental Status	.117	.072	-.032	-.022
Income	-.035	-.010	-.281	-.094
Frailty	-.102	-.122	-.049	-.069
R^2 (unadjusted)	.139		.121	
R^2 (adjusted)	.079		.060	
F (7, 101)	2.338*		1.990	n.s.

+p<.10
*p<.05
**p<.01
***p<.001

Table 8

Multiple Regression of Network Function on Network Structure and Situational Characteristics

	Dependent Variables Network Function			
Independent Variables	Care		Symmetry	
	B	b	B	b
Network Structure				
Network size	.196	.087*	.205	.107
Network stability	.135	.118	-.036	-.037
Frequency of contact	.134	.104	.062	.057
Situational Characteristics				
Living alone or not	-.079	-.059	.044	.039
Proximity	.077	.445	-.087	-.579
Work or retired	.036	.036	-.234	-.281
Memberships in organizations	.120	.047	.066	.030
R^2 (unadjusted)	.128		.116	
R^2 (adjusted)	.068		.055	
F (7, 101)	2.129*		1.889+	

+p<.10
*p<.05
**p<.01
***p<.001

network structure variables also explained variability in symmetry [adjusted $\underline{R}^2$ = .06, $\underline{F}(7, 101) = 1.889$, $\underline{p}<.10$] (Table 8). The likelihood of receiving support increased with network size.

Network Structure and Network Function

The network structure variables explained a significant amount of variance in care network function [adjusted $\underline{R}^2$ = .07, $\underline{F}(3, 105) = 3.896$ $\underline{p}<.05$] (Table 9). Network size (B = .20 $\underline{p}<.05$) and frequency of contact (B = .17 $\underline{p}<.05$) were the major contributors. Widows who had frequent contact with larger networks were more likely to receive care. The network structure variables did not explain a significant amount of variance in symmetry function [adjusted $\underline{R}^2$ = .02, $\underline{F}(3, 105) = 1.832$ n.s.] (Table 9).

Personal Characteristics, Situational Characteristics, and Network Adequacy

Personal characteristics did not explain a significant amount of variance in network adequacy [adjusted $\underline{R}^2$ = .02, $\underline{F}(4, 104) = 1.428$ n.s.] (Table 10). Situational characteristics did explain a significant amount of variability in network satisfaction [adjusted $\underline{R}^2$ = .06, $\underline{F}(4, 104) = 2.585$ $\underline{p}<.05$] (Table 11). Membership in organizations was the major contributor (B = .25 $\underline{p}<.05$). As the widow's memberships in organizations increased so did network satisfaction.

Table 9

Multiple Regression of Network Function on Network Structure

Independent Variables	Dependent Variables Network Function			
Network Structure	Care		Symmetry	
	B	b	B	b
Network size	.203	.089*	.209	.109
Network stability	.134	.117	-.015	-.015
Frequency of contact	.172	.134*	.044	.040
R^2 (unadjusted)	.100		.050	
R^2 (adjusted)	.074		.023	
F (3, 105)	3.896*		1.832	n.s.

+p<.10
*p<.05
**p<.01
***p<.001

Table 10

Multiple Regression of Network Adequacy on Personal Characteristics

Independent Variables	Dependent Variables Network Adequacy	
Personal Characteristics	Network Satisfaction	
	B	b
Age	.080	.017
Parental Status	.190	.283
Income	.130	.090
Frailty	-.074	-.217
R^2 (unadjusted)	.052	
R^2 (adjusted)	.016	
F (4, 104)	1.428	n.s.

+p<.10
*p<.05
**p<.01
***p<.001

Table 11

Multiple Regression of Network Adequacy on Situational Characteristics

Independent Variables	Dependent Variables Network Adequacy	
Situational Characteristics	Network Satisfaction	
	B	b
Living alone or not	-.110	-.202
Proximity	.105	1.487
Work or retired	-.107	-.267
Memberships in organizations	.251	.243*
R^2 (unadjusted)	.090	
R^2 (adjusted)	.055	
F (4, 104)	2.585*	

+p<.10
*p<.05
**p<.01
***p<.001

Personal Characteristics, Network Structure, Network Function and Network Satisfaction

Network function, network structure and personal characteristics explained 10% of the variance in network satisfaction [adjusted R^2 = .10, $F(9, 99) = 2.352$ $p<.10$] (Table 12). Network size (B = .19 $p<.10$) and frequency of contact (B = .35 $p<.10$) were the contributors. Network satisfaction increased with size of network and frequency of contact.

Situational Characteristics, Network Structure, Network Function and Network Satisfaction

Network function, network structure, and situational characteristics explained 13% of the variance in network satisfaction [adjusted R^2 =.13, $F(9, 99) = 2.725$ $p<.05$] (Table 13). Network size (B =.19 $p<.05$) and membership in organizations (B = .18 $p<.10$) were the two contributors. Network satisfaction increased with organizational memberships and network size.

Network Function and Network Satisfaction

Network function explained a significant amount of variance in network satisfaction [adjusted R^2 = .05, $F(2, 106) = 3.889$ $p<.05$] (Table 14). Network function care was the major contributor (B = .22 $p<.05$). Network satisfaction increased with care network function.

Table 12

Multiple Regression of Network Satisfaction on Network Function, Network Structure, and Personal Characteristics

Independent Variables	Dependent Variable Network Satisfaction B	b
Network Functions		
Care	.128	.134
Symmetry	.075	.157
Network Structure		
Network size	.185	.201+
Network stability	.070	.151
Frequency of contact	.353	.184+
Personal Characteristics		
Age	-.101	-.298
Parental Status	.080	.120
Income	.093	.065
Frailty	-.101	-.299
R^2 (unadjusted)	.176	
R^2 (adjusted)	.101	
F (9, 99)	2.352+	

+p<.10
*p<.05
**p<.01
***p<.001

Table 13

Multiple Regression of Network Satisfaction on Network Function, Network Structure, and Situational Characteristics

Independent Variables	Dependent Variable Network Satisfaction B	b
Network Functions		
Care	1.108	.266
Symmetry	.049	.101
Network Structure		
Network size	.190	.207*
Network stability	.055	.119
Frequency of contact	.157	.298
Situational Characteristics		
Living alone or not	-.067	-.123
Proximity	.105	1.494
Work or retired	-.103	-.259
Memberships in organizations	.183	.176+
R^2 (unadjusted)	.199	
R^2 (adjusted)	.125	
F (9, 99)	2.725*	

+p<.10
*p<.05
**p<.01
***p<.001

Table 14

Multiple Regression of Network Adequacy on Network Function

Independent Variables	Dependent Variables Network Adequacy	
Network Function	Network Satisfaction	
	B	b
Care	.219	.538*
Symmetry	.091	.190
R^2 (unadjusted)	.068	
R^2 (adjusted)	.051	
F (2, 106)	3.889*	

+p<.10
*p<.05
**p<.01
***p<.001

Personal Characteristics, Situational Characteristics and Health Status

Personal characteristic variables explained 34% of the variance in health status which was measured by instrumental activities of daily living [(adjusted R^2 = .34, $F(4, 104)$ = 15.092 $p<.001$] (Table 15). All the variables income (B =.41 $p<.001$), age (B = -.22 $p<.05$), frailty (B = -.20 $p<.05$), and parental status (B = .16 $p<.05$) contributed to the relationship. Instrumental activities of daily living scores increased with income and number of children. Instrumental activities of daily living scores decreased as age and frailty increased .

Situational characteristics were also significantly related to instrumental activities of daily living [adjusted R^2 = .11, $F(4, 104)$ = 4.3110 $p<.01$] (Table 16). Membership in organizations (B = .33 $p<.001$) and living arrangements (B = -.16 $p<.10$) were the major contributors. Membership in organizations increased with activities of daily living scores. Living with others was associated with lower instrumental activities of daily living scores.

Network Satisfaction and Instrumental Activities of Daily Living

Network satisfaction (B = .26 $p<.01$) explained a significant amount of variance in instrumental activities of daily living [adjusted R^2 = .06, $F(1, 107)$ = 7.806 $p<.01$]

Table 15

Multiple Regression of Health Status on Personal Characteristics

Independent Variable	Dependent Variable	
Personal Characteristics	Health Status ADLsINS	
	B	b
Age	-.219	-.006*
Parental Status	.162	.033*
Income	.406	.038***
Frailty	-.199	-.078*
R^2 (unadjusted)	.367	
R^2 (adjusted)	.342	
F (4, 104)	15.0922***	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

Table 16

Multiple Regression of Health Status on Situational Characteristics

Independent Variable	Dependent Variable	
Situational Characteristics	Health Status ADLsINS	
	B	b
Living alone or not	-.162	-.039+
Proximity	.073	.140
Work or retired	-.042	-.014
Memberships in organizations	.334	.043***
R^2 (unadjusted)	.142	
R^2 (adjusted)	.109	
F (4, 104)	4.311**	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

(Table 17). Satisfaction with support network increased with instrumental activities of daily living scores.

Personal Characteristics, Network Structure, Network Function, Network Adequacy and Instrumental Activities of Daily Living

Overall 40% of the variance in instrumental activities of daily living (Table 18) was explained by income B = .34 $p<.001$, age B = -.24 $p<.01$, frailty B = -.19 $p<.05$ frequency of contact B = -.13 $p<.10$ symmetry B = -.17 $p<.05$, and network satisfaction B = .22 $p<.05$, [adjusted R^2 = .40), $F(10, 98) = 8.093$ $p<.001$]. Income and network satisfaction increased with instrumental activities of daily living scores. Activities of daily living scores decreased as age, frailty, and frequency of contact increased.

Situational Characteristics, Network Structure, Network Function, Network Adequacy, and Instrumental Activities of Daily Living

Situational characteristics, network structure and network function explained 25% of the variance in instrumental activities of daily living. Membership in organizations (B = .32 $p<.001$), living arrangement (B = .-16 $p<.10$), network size (B =.23 $p<.05$) network stability (B = .18 $p<.05$), symmetry (B = -.30 $p<.01$), and network satisfaction (B = .16 $p<.10$) were significantly related to instrumental activities of daily living [adjusted R^2 = .25), $F(10, 98) = 4.535$ $p<.001$] (Table 19). Instrumental

Table 17

Multiple Regression of Health Status on Network Adequacy

Independent Variable	Dependent Variable	
	Health Status	
	ADLsINS	
Network Adequacy	B	b
Network Satisfaction	.261	.035**
R^2 (unadjusted)	.067	
R^2 (adjusted)	.059	
F (1, 107)	7.806**	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

Table 18

Multiple Regression of ADLsINS on Network Adequacy, Network Function, Network Structure, and Personal Characteristics

Independent Variables	Dependent Variables ADLsINS	
	B	b
Network Adequacy		
Network Satisfaction	.215	.029*
Network Functions		
Care	-.018	-.006
Symmetry	-.174	-.049*
Network Structure		
Network size	.130	.019
Network stability	.078	.023
Frequency of contact	-.134	-.034+
Personal Characteristics		
Age	-.239	-.007**
Parental Status	.098	.020
Income	.337	.032***
Frailty	-.188	-.074*
R^2 (unadjusted)	.452	
R^2 (adjusted)	.396	
F (10, 98)	8.093***	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

Table 19

Multiple Regression of ADLsINS on Network Adequacy, Network Function, Network Structure, and Situational Characteristics

Dependent Variables Independent Variables B	ADLsINS b	
Network Adequacy		
Network Satisfaction	.163+	.022+
Network Functions		
Care	.043	.014
Symmetry	-.305	-.085**
Network Structure		
Network size	.231	.034*
Network stability	.181	.052*
Frequency of contact	-.149	-.038
Situational Characteristics		
Living alone or not	-.159	-.039+
Proximity	.010	.019
Work or retired	-.077	-.026
Memberships in organizations	.317	.041***
R^2 (unadjusted)	.316	
R^2 (adjusted)	.246	
F (10, 98)	4.535***	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

activities of daily living scores increased with membership in organizations, network size, network stability, and network satisfaction. Furthermore, living with others and receiving less support from others showed a decrease in instrumental activities of daily living scores.

In summary two situational characteristics, membership in organizations, and living arrangement combined with convoy network variables to explain the health status of older widowed black females. Personal characteristics income, age, and frailty combined with convoy network variables to explain a greater amount of variance in instrumental activities of daily living.

A Comparison of The ABCDEF Model to The ACDEF Model

A model that included situational characteristics with all other variables (ABCDEF model, Table 20) was compared to the model that omitted situational characteristics (ACDEF Model, Table 18). This approach was used to determine if the ABCDEF model increased the explained variance in instrumental activities of daily living above the variance explained by the ACDEF model. The percentage of variance in instrumental activities of daily living explained by the ABCDEF model [R^2 = .40, $F(14, 94) = 6.072$ $p<.001$] was essentially the same as that explained by the ACDEF model [R^2 = .40, $F(10, 98) = 8.093$ $p<.001$].

Table 20

Multiple Regression of ADLsINS on Network Adequacy, Network Function, Network Structure, Situational Characteristics, and Personal Characteristics

Dependent Variable Independent Variables B	ADLsINS b	
Network Adequacy		
Network Satisfaction	.185	.025*
Network Functions		
Care	-.035	-.011
Symmetry	-.191	-.054*
Network Structure		
Network size	.137	.020
Network stability	.099	.029
Frequency of contact	-.165	-.042*
Situational Characteristics		
Living alone or not	-.118	-.029
Proximity	-.024	-.046
Work or retired	-.028	-.009
Memberships in organizations	.143	.019
Personal Characteristics		
Age	-.216	-.006*
Parental Status	.137	.028
Income	.263	.025**
Frailty	-.177	-.070*
R^2 (unadjusted)	.475	
R^2 (adjusted)	.397	
F (14, 94)	6.072***	

Note. ADLsINS = Instrumental activities of daily living.

+p<.10
*p<.05
**p<.01
***p<.001

CHAPTER V

SUMMARY AND DISCUSSION

Overview of Findings

The purpose of this study was to examine the relationships among personal characteristics, situational characteristics, network structure, network function, network adequacy, and the health status of older widowed black females. Health status was defined as the widows' ability to perform instrumental activities of daily living. Widows (N = 110) who lived in the community were selected to determine the extent of dependency (i. e., support needed) on family members and others.

The respondents as a group were healthy individuals primarily needing assistance with transportation and household tasks. In general, the widows were satisfied with the support they received from network members. The mean age of the older widows was 74.23 years, and they had low to moderate incomes. A majority reported that they did not have enough money for all of their needs.

One overall hypothesis was examined: the health status as measured by the activities of daily living of older widowed black females would be related to their personal characteristics, situational characteristics, support

network structure, support network function, and support network adequacy. The findings showed that income, age, and frailty (personal characteristics) had significant effects on the activities of daily living of the widows. Membership in organizations and living arrangement (situational characteristics) were also significantly related to the widows' activities of daily living. Of the support network variables, significant relationships were found among: size, stability, frequency of contact, symmetry, network satisfaction, and instrumental activities of daily living. As a result, the findings of this study showed support for the hypothesis.

The findings also support, in part, the Convoy of Social Support Model. All of the network convoy variables with the exception of care network function were significantly related to the widows' health status. The care network function variable emerged in the equation with network structure variables, then failed to achieve significance when personal characteristics and situational characteristics were added to the equations. Parental status was related to network size, but this relationship was not maintained when the overall convoy network variables were considered. This investigation identifies several areas for discussion. The major findings are divided into two sections for discussion: (1) personal characteristics

and network variables, and (2) situational characteristics and network variables.

Personal Characteristics and Network Variables

Overall, the data showed that older widows' health status is largely a function of personal characteristics, network structure, network function, and network adequacy. Of these variables, income was most important to instrumental activities of daily living. Income was positively related to instrumental activities of daily living. This finding suggested that older black widows who had higher incomes had maintained adequate health care over the years, and perhaps this resulted in good health.

Other personal characteristics related to instrumental activities were age and frailty. The finding that older widows and frail widows were less likely to perform activities of daily living is supported by the literature Jackson and Perry (1989) found that increased age coupled with chronic health conditions, resulted in overall limited activity. Increased age also limited ability to perform heavy housework and shopping tasks.

Several network variables also where related to instrumental activities of daily living. These variables included size, stability, and frequency of contact (convoy network structure), symmetry (convoy network function), and satisfaction with network (convoy network adequacy).

Widows who had lower instrumental activities of daily living scores and who needed assistance received frequent contact from network members if the network was large and stable.

A negative relationship was observed between symmetry and instrumental activities of daily living. That is, widows who were most dependent, according to their instrumental activities of daily living scores, gave more support to their support network members than they received. It could be that widows gave support to older dependent individuals in the network who were unable to reciprocate. In addition, the results showed that widows reported high levels of satisfaction with the functioning of their support networks. This finding suggested that reciprocity, or exchange of support with network members, was not important to them. It is possible that widows saw their role as giving and not receiving from the support network. Other findings, such as high satisfaction with church involvement and church roles, suggested a pattern of general satisfaction with helping roles.

In summary, higher incomes in earlier life suggest the importance of income to health or ability to perform instrumental activities of daily living. The impact of increased age and frailty reduces the ability to perform instrumental activities of daily living. Furthermore, widows who have larger more stable networks are more likely to receive assistance with instrumental activities of daily

living and are more likely to be satisfied with their support networks.

Situational Characteristics and Network Variables

Two situational characteristics variables, membership in organizations and living arrangement, combined with several components of the convoy network to explain health status. These findings suggested that older widows who lived with others, who belonged to several organizations, who had larger more stable networks, and who were more satisfied with network support received more assistance with instrumental activities of daily living.

These data showed that situational characteristics were more important to the symmetry variable than were personal characteristics. The negative relationship between symmetry and instrumental activities of daily living suggests that widows' reciprocal support relationships were affected by their living arrangements. That is, more than one-half of the widows lived in public senior housing, which may have accounted for the negative reciprocal relationship. Widows perhaps gave support to their more dependent neighbors, who were unable to return support by helping widows with instrumental activities of daily living. These data further underscore the importance of living arrangement to instrumental activities of daily living. The restrictive policies related to sharing the living unit with others also may have interfered with possible reciprocal exchanges with

family members. The negative reciprocal relationship may have been due to an unawareness of the widow's needs or family members' lack of resources to assist her.

Support for the Convoy of Social Support

The current study reframed the Convoy of Social Support Model as originally developed by Kahn and Antonnuci (1980). The reframing consisted of variables that were culturally relevant to the lives of older widowed black females. The results of the study showed moderate support for the model. The findings reinforce the importance of personal characteristics and situational characteristics in addressing the support network of older widowed black females. All of the convoy network variables, with the exception of the care function variable were also important to health status.

Kahn et al. (1987) applied the model to a group of married, widowed, and disabled older adults. The authors concluded that although the model reflected weak relationships among the network variables it was particularly useful in explaining the well-being of a widowed group. The present study followed the Kahn et al. (1987) model with two exceptions: the outcome construct was changed to instrumental activities of daily living, and some of the variables were operationalized to reflect the cultural dimensions of black family life with older widows. The results of the two studies indicated several parallel

findings. In both studies network size was predicted by personal characteristics. Whereas, parental status was the major contributor in the present study, widowhood was the contributing variable in the Kahn et al. (1987) study. Similarly, network size and frequency of contact, as in the Kahn et al. (1987) study were related to the care network function. Both studies also showed that the care network function was a major contributor in the explanation of network satisfaction. The final relationship comparison possible between the two studies was the satisfaction variable. The present study showed that membership in organizations and network size were related to network satisfaction; whereas, in addition to these variables, Kahn et al. (1987) found income, care, and frequency of contact to be important. Differences in the direction of relationships were observed in the two studies. The present study found that the number of memberships in organizations was associated with greater network satisfaction; whereas, in the Kahn et al. (1987) study the number of memberships was associated with less network satisfaction. The types of organizations may have been different for each sample. The widows were primarily involved in the church and exchanged services with church members. The Kahn et al. (1987) sample may have been involved in civic organizations that expected high levels of service without the benefit of exchange.

Support of the Literature on Black Family Exchanges

The literature has pointed out a number of cultural distinctions in the personal characteristics of older black adults and support networks. Taylor (1986) found that income and support were positively related. The results of this study support that finding. Income was the most important contributor to the widows' ability to perform instrumental activities of daily living. A small group of older widows received retirement pensions and interest income. The majority of the widows, however, reported that they did not have enough money for needs. Almost three-fourths of the widows had annual incomes of less than $10,000. Most of the widows had worked in the secondary labor market, and the only source of retirement income was Social Security benefits. Therefore, they were unable to purchase services to assist them with instrumental activities of daily living. This finding of limited incomes among older black females is supported by the literature (Claude, 1986; Ladner, 1986).

The literature also emphasizes the importance of a daughter to provide support (Taylor, 1986; White-Means & Thornton, 1990). However, the present study did not indicate that gender of child was significantly related to instrumental activities of daily living. Widows did indicate that daughters were most often the primary support persons.

The findings are inconclusive regarding age and support. Whereas, Taylor (1986) found that persons aged 65 and older received the least support, the current study indicated that as the widow aged she received more help with instrumental activities of daily living. The present study also showed that age was negatively associated with ability to perform instrumental activities of daily living. The negative relationship between age and instrumental activities of daily living supports other's findings that younger-old black females (65 to 74 years) were more able to perform instrumental activities of daily living than middle-old (75 to 84 years) and older-old (85+ years) black females (Jackson & Perry, 1989). Similarly, frailty was also negatively associated with the ability to perform instrumental activities of daily living. This finding did not parallel the work of Gibson and Jackson (1987) who reported that younger-old (65 to 74 years) black females had more physical limitations than the middle-old (75 to 79 years) and old-old (80+ years) black females. Age category differences may be responsible for the differences in findings. Perhaps the self-selection process of participants from community programs generated a group of black females who were overall healthier than the norm.

Chatters et al. (1986) have reported that widows have smaller networks when compared to married black elderly adults. The current study found that the network size of

widows was also small, mostly comprised of children and friends.

The literature has shown cultural distinctions in the situational characteristics of older black females. The positive relationship between membership in organizations, primarily the church, and ability to perform instrumental activities of daily living is supported by the work of Chatters et al. (1986). The investigators found that the church provided money, goods, and services to older adults. The church also provided for widows in a similar manner in the current study.

Evidence has been cited that the black modified extended family may not be able to meet older members' needs in their entirety (Taylor, 1986). Social changes and changing family structures that are occurring within the black family and the younger generations may be partly responsible for this finding. Female daughters who function as heads of households and female daughters who work have less resources (i. e., money and time) to provide support to their mothers. The results of the present research support this observation in part. Widows, in the present study, did not live in multigenerational living arrangements, as the literature has suggested (Hess & Markson, 1980; Hill & Shackelford, 1975; Worobey & Angel ,1990). The findings indicated that a majority of the widows lived alone either in senior housing units or single family dwellings and did

not receive assistance with instrumental activities of daily living. More than one-half of the widows lived in senior multiple-dwelling complexes (i. e., senior housing, apartments). In most situations, the policies in public housing regarding living arrangements restrict sharing the unit with others. Widows who had this type of living arrangement were disadvantaged for building support networks, their incomes were minimal, and their neighbors were equally or more dependent.

Population statistics report that older black females tend to remain in the work force to alleviate the risk of poverty (U.S. Bureau of Labor Statistics, (1987). In addition, Taylor (1986) reported that employed elderly adults had larger networks than retirees. Most widows in the present study were retirees, which contributed to their having smaller networks. These combined socioeconomic factors place the older widowed black female at-risk for lack of support with instrumental activities of daily living.

The care network function was of relatively little importance to network satisfaction when widows' personal characteristics and situational characteristics were considered in the present study. Perhaps it was the overall health status of widows' that rendered the care function insignificant, i. e., most were healthy. The negative symmetrical relationship with instrumental activities of

daily living for older widowed black females indicated that the widows were not the recipients of the high levels of support from extended family members that have been reported in the literature (Cantor, 1979; Martin & Martin 1978; McAdoo, 1978; Wylie, 1971). In this study widows gave more support than they received from network members. This finding supports Taylor's (1986) evidence which indicated a negative relationship between age and receipt of support. This could mean that the widows, in general, provided support to an older frail group of network members who were unable to reciprocate. Despite the negative symmetrical relationships, widows reported high satisfaction with support networks. The reported satisfaction could be attributed to self-esteem as a result of giving support to others.

Gibson and Johnson (1985) found that health outcomes were unrelated to the size and composition of support networks of older black females. They suggested that parental status might be more important to health outcomes than the size of the network. In contrast, the results of the present study showed that widows who had larger networks were more likely to receive assistance with instrumental activities of daily living.

The findings of the present study also support the findings of Lopata (1979), Scott and Kivett, (1980), and Taylor (1986), that older widowed black females report

frequent, most often face to face interactions with network members. Burton and Dilworth-Anderson (in press) explain that older black females occupy and function simultaneously in vertical roles of parent, grandparent and great-grandparent. Although widows reported involvement with children, grand-children, and great grand-children the findings of the present study did not provide conclusive results regarding level of involvement in their vertical roles.

Fictive-kin relationships have been an integral part of the social support networks of older black females (Aschenbrenner, 1973; Gibson & Jackson, 1987; Johnson & Barer, 1990). Studies have shown that fictive-kin take on the rights and obligations associated with kin and actively participate in the provision of social support. The current study showed that widows referred to friends as play-sister or play-mother but fictive-kin did not have a major role in providing support to them.

Support of Continuity Theory

The results of the present research, in general, support the continuity theory, a basic premise of the study. Continuity was observed in several areas. The first example of continuity was living arrangement. Widows still lived alone in their homes and had maintained this arrangement for a number of years. They expressed that they had plans to pay for assistance and to remain in their homes if they

became ill. The second area of continuity was in social relationships. Many widows reported having friendships that had been maintained for more than 50 years. Some friends had taken roles of fictive-kin. Continuity was also seen in the composition of the support networks. A majority of the widows reported that their support network had remained about the same (i. e., same number of members) over the preceding 5 year period.

In contrast, discontinuity was also present. There was limited evidence that constant support ties or communication existed among network members. Seemingly, support for widows was motivated more by support members' needs than the widows' needs. The timing and nature of assistance were at the discretion of network members. There was no evidence of coordinated plans of support to widows.

Implications

Practice

Community health nurses might use these findings in working with older widowed black females and their families. A primary step would be to assess the widow's support network in order to determine how it might be enhanced. A second step would be to assess the widow's personal and situational characteristics. This process would show areas necessitating changes in the support network. The widow's needs would indicate plans that could be developed with family members. Using this approach, schedules of

assistance by family members and friends would be coordinated. For example, such a plan might include assistance with household tasks or transportation services. This approach would also permit active involvement by family members.

Family members should be encouraged to recommend to older widows that they become involved in community organizations. These experiences could afford widows more opportunities to enlarge their networks. Families considering relocation decisions with older widows might use the Convoy of Social Support Model as an assessment tool to evaluate how well present support networks are functioning prior to relocation.

Churches could use the results of this study to provide even greater instrumental support to widows in the area of assistance with household tasks. A support exchange group could be developed so that the widows could receive, as well as provide, services for non-pay exchange or for a nominal fee. Churches might also take a leadership role in providing seminars on the functioning of the black family and reciprocal support relationships.

Community leaders might appropriate a work program fund for part-time child care in day care centers in order for widows to supplement their incomes. Funds are also needed to provide additional household tasks services for older adults. Widows reported that they need assistance with

major household tasks, such as cleaning the refrigerator and stove or mowing the lawn.

Program directors of the various programs and services for older adults should examine existing policies to determine if such policies are restrictive. The policies related to individual use units in senior housing complexes need to be re-examined so that residents are not at-risk for lack of supports in their daily activities. Another example would be policies in food programs related to meal deliveries; meals for the residents who live in multiple dwelling complexes must be delivered to the individual's living unit, not to the common areas. Such a policy restricts the recipient from attending activities that are held within the building. A third example would be the policies related to the limited transportation services. Older adults who participate in the transportation services often spend hours waiting to be taken to and from destinations. Funding is needed for door to door public transportation services to alleviate some of the transportation problems experienced by older adults in general. Additionally, county-wide transportation services should be made available to older adults.

Research

The Convoy of Social Support Model should be used to test and explore other categories of marital status. This model should also be used to explore other ethnic groups.

Investigators should use larger probability samples. Use of a design to include the collection of observational data might serve to provide greater insights concerning older widows' abilities to perform daily activities. In addition, use of open-ended questions would encourage more discussion on the topics of interest. Interviews with support network members would provide information on the network function from the support network members' perspectives. Finally, further investigation of the negative symmetrical phenomenon of support should be examined. That is, an examination should be conducted into why older widowed black females who are in need of assistance with instrumental activities of daily living are more likely than others to be giving support.

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APPENDIX

Interview Schedule

The Social Support Networks and

Health Status of Older Widowed Females

City of Greensboro
Department of Child Development and Family Relations
University of North Carolina at Greensboro

Subject Number _____

Subject's Name _____
Last First MI

Subject's Address _____
(Street & Number)

_____
(City & State)

Date of Interview _____
Month Day Year

Time Interview Began _____

Interviewer's Name _____

Place of Interview (BE SPECIFIC)

_____

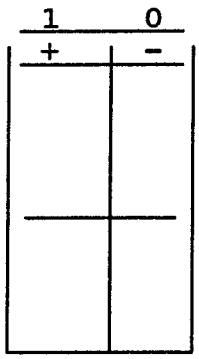
Questionnaire: _____ **complete** _____ **incomplete**

Some items on this questionnaire were taken or adapted from the OARS Multidimensional Functional Assessment Questionnaire, Older Americans Resources and Services Program of the Duke University Center for the Study of Aging and Human Development, Durham, North Carolina and Social Networks In Adult Life: Network Questionnaire, Survey Research Center, Institute for Social Research, The University of Michigan, Ann Arbor, Michigan.

Preliminary Questionnaire

ASK QUESTIONS 1-10 AND RECORD ALL ANSWERS. (ASK QUESTION 4a ONLY IF SUBJECT HAS NO TELEPHONE.) CHECK CORRECT (+) OR INCORRECT (-) FOR EACH AND RECORD TOTAL NUMBER OF ERRORS BASED ON TEN QUESTIONS.

1	0	
+	-	
		1. What is the date today?
		Month Day Year
		2. What day of the week is it?_____
		3. What is the name of this place?
		4. Where is it located (address)?
		5. What is your telephone number?
		(ASK ONLY IF SUBJECT DOES <u>NOT</u> HAVE A PHONE.) a. What is your street address?
		6. How old are you?
		7. When were you born?
		Month Day Year
		8. Who is the president of the U.S. now?



9. Who was the president just before him?

_____

10. Who is the governor of North Carolina?

_____

_____ TOTAL NUMBER OF ERRORS

INTERVIEWER: Error scores of 4 or higher are an indication that the information obtained may not be reliable. Indicate to the respondent that this concludes the interview and express your appreciation for her cooperation.

Section A

Personal Characteristics

Now we would like some background information on you and your family.

A1. Did your spouse die?

1. No 2. Yes

A2. How long ago did he die?

_____

A3. What was your marital status prior to becoming a widow?

1. Married 2. Divorced
3. Separated 4. Living Together

A4. How many living daughters do you have?

_____(Number)

Names Birth Order

_____

_____

_____

A5. How many living sons do you have?

_____(Number)

Names Birth Order

_____

_____

_____

A6. How many non-living children do you have?

_____ daughters _____sons

A7. How many living sisters do you have?

_____(Number)

Names Birth Order

_____

_____

_____

A8. How many living brothers do you have?

_____(Number)

Names Birth Order

_____

_____

_____

A9. How many non-living sisters and brothers do you have?

_____ sisters _____ brothers

A10. Race of Subject

1 White (Caucasian)

2 Black (African-American)

3 Asian-American

4 Spanish-American (Spanish surname)

5 American Indian

6 Other

7 Not Answered

A11. How far did you go (have you gone) in school?

1 0-4 years

2 5-8 years

3 High school--incomplete

4 High school--completed

5 Post-high school, business or trade school

6 1-3 years of college

7 4 years college completed

8 Post-graduate college

9 Not answered

Section B

Network Structure

EXACT TIME NOW _____

I want to ask you some questions about adults who are important in your life right now. Please focus on people who are important to you--not just on people you happen to know or who may be related to you. I will be asking you about different categories of people.

B1. Is there a person who is close and important to you?

1. No 5. Yes

B2. Are there immediate <u>family members</u> who are close and important to you?

1. No--**GO TO B3** 5. Yes

B2a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES, RELATIONSHIP, AND AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name Relationship

_____

_____

_____

B3. Are there other relatives who are close and important to you?

1. No--**GO TO B4** 5. Yes

B3a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES, RELATIONSHIP, AND AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name Relationship

_____

_____

_____

(Sometimes in the black family there are make-believe relatives, such as a play-daughter or play-sister.)

B4. Are there **make-believe** relatives (i.e. play-daughter, play-sister) who are close and important to you?

1. No--**GO TO B5** 5. Yes

B4a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES, RELATIONSHIP, AND AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name Relationship

_____

_____

_____

B5. Are there <u>friends</u> who are close and important to you?

1. No--**GO TO B6** 5. Yes

B5a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES, RELATIONSHIP, AND AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name Relationship

_____

_____

_____

B6. Are there <u>neighbors</u> who are close and important to you?

1. No--**GO TO B7** 5. Yes

B6a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES AND, AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name

_____

_____

_____

B7. Are there <u>professionals</u> who are close and important to you?

1. No--**GO TO B8** 5. Yes

B7a. Would you tell me their first names and last initials?

(INTERVIEWER: WRITE THE NAMES, THE PROFESSION, AND AT THE END OF THE LIST, THE NUMBER OF PEOPLE RESPONDENT MENTIONS.)

Name Profession

_____

_____

_____

B7b. INTERVIEWER: HOW MANY OF THESE PROFESSIONALS ARE NURSES?

_____

B7c. INTERVIEWER: HOW MANY OF THESE PROFESSIONALS ARE DOCTORS?

_____

B7d. INTERVIEWER: HOW MANY OF THESE PROFESSIONALS ARE MINISTERS?

_____

B7e. INTERVIEWER: ARE THERE OTHER PROFESSIONALS WHO ARE CLOSE TO YOU THAT I HAVE NOT MENTIONED?

1. No 5. Yes

TO WHICH PROFESSION DOES S(HE) BELONG?

_____

B8. Of all the persons you feel close to, who is the most important?

NAME: _____

B8a. How is this person related to you? Is he/she your child, grandchild, brother or sister, some other relative, a friend, a neighbor, a professional, or a play-daughter, a play-sister, or a play-son.

1. Daughter	2. Grandchild	3. Brother
4. Sister	5. Son	6. Friend
7. Neighbor	8. Professional	
9. Play-daughter	10. Play-sister	
11. Play-brother	12. Play-son	
13. Other relative		

B9. Does s(he) live with you?

1. No 5. Yes **(GO TO B14)**

B10. Does s(he) live in this city, but not with you?

1. No 5. Yes **(GO TO B14)**

B11. Does s(he) live within 49 miles?

1. No 5. Yes **(GO TO B14)**

B12. Does s(he) live within 50-250 miles?

1. No 5. Yes **(GO TO B14)**

B13. Does s(he) live over 250 miles?

1. No 5. Yes **(GO TO B14)**

B14. About how old is he/she?

_____ years old

B15. How often are you in touch with him/her--every day, 2-3 times a week, about once a week, 2-3 times a month, once a month, 2-3 times a year, or once a year.

7. Every day 6. 2-3 times a week
5. Once a week 4. 2-3 times a month
3. Once a month 2. 2-3 times a year
1. Once a year

B16. How do you keep in touch with this person?

3. Face to face visits 2. Telephone
1. Mail 4. Other_____

B17. Considering the number of people you have mentioned, would you say that the people who are important to you consist of:

5. All women 4. More women than men
3. About half and half 1. All men
2. More men than women

B18. Beside the most important person, how frequently are you in touch with most of the people who are important to you?

7. Every day 6. 2-3 times a week

5. Once a week
4. 2-3 times a month
3. Once a month
2. 2-3 times a year
1. Once a year

0. INAP (This is for people who say they live with everyone in their network.)

B19. Compared to five years ago, have the number of people who are important to you increased, decreased, or remained about the same?

5. Increased
1. Decreased
3. About the same

B20. Compared to five years ago, have the people who are important to you become more important to you, less important, or remained about the same?

5. More important
1. Less important
3. About the same

Section C

Frailty Status

EXACT TIME NOW _____

Now I would like to ask you some questions about your health in general.

C1. Have you had any treatments for physical problems in the past six months?

1. No
5. Yes

C1a. About how many times did you see or talk to a medical doctor or assistant in the past six months.

_____ (Times)

C1b. Have you been hospitalized for a medical problem in the past six months?

1. No
5. Yes

I am going to read a list of health problems. After each one, please tell me whether a doctor has given you treatment or medication for that problem in the past 6 months.

(CHECK "YES" OR "NO" FOR EACH OF THE FOLLOWING. IF "YES", ASK: "How much does it interfere with your activities--not at all, a little (some), or a great deal?" AND CHECK THE APPROPRIATE BOX.)

0		1	2	3	
YES	NO	NOT AT ALL	A LITTLE	A GREAT DEAL	
					stomach problems or problems with digestion or ulcers
					arthritis or rheumatism
					cancer
					hypertension or "high blood pressure"
					diabetes or "sugar" or hypoglycemia
					a liver problem
					a kidney problem
					stroke
					a blood circulation problem or "hardening of the arteries"
					heart trouble
					a lung problem or trouble breathing
					serious eye problems like glaucoma or cataracts
					hearing loss
					Epilepsy

C2. Do you have any other health problems (that I have not mentioned)?

1. No--GO TO C3 5. Yes

C2a. What are they?

_____

_____

_____

C3. Do you have any physical disabilities such as partial paralysis, missing or non-functional limbs, or broken bones?

0 No
1 Partial paralysis
2 Missing or non-functional limbs
3 Broken bones

C4. Is your health now <u>better</u>, <u>about the same</u>, or <u>worse</u> than it was five years ago?

0 Better
1 About the same
2 Worse

<u>Mental Health Problems</u>

C5. Have you had any treatments for nervousness in the past six months; that is, since _____ (SPECIFY MONTH)?

1 No
5 Yes

(IF "NO", SKIP TO C5e; IF "YES", ASK C5a, C5b, C5c, AND C5d.)

C5a. Were you hospitalized for nervousness at any time during this period; that is, WITHIN THE LAST SIX MONTHS)?

1 No
5 Yes

C5b. During the past six months, how many sessions have you had with a mental health professional for these problems (other than those when you were an inpatient in the hospital)?

0 None

1 Less than 4 sessions (only occasionally or for evaluation)

2 4-12 sessions

3 13 or more sessions

C5c. Was the nature of the problem personal or family related?

1 Family related
5 Personal

C5d. Are you still receiving this help?

1 No
5 Yes

C5e. Do you feel that you need counseling?

1 No
5 Yes **(ASK ITEM C5f)**

C5f. How do you think counseling might help?

_____

_____

_____

C6. Is your mental or emotional health now <u>better</u>, <u>about the same</u>, or <u>worse</u> than it was five years ago?

0 Better
1 About the same
2 Worse

Section D

<u>Situational Characteristics</u>

EXACT TIME NOW _____

Now I would like to ask some questions about your housing and living arrangements.

D1. Do you live in an apartment, a duplex, a single story house, a multiple story house, a condominium, or a trailer?

1. Apartment 2. Duplex 3. Single story house
4. Multiple story house 5. Condominium
6. Trailer 7. Other_____

D2. Do you own, are you buying, receive government assistance, have lifetime rights, rent,or live with others?

1. Own 2. Buying
3. Receive government assistance
4. Have lifetime rights 5. Rent
6. Live with others

D3. Which of the following best describes your living situation?

(CHECK "YES" OR "NO" FOR EACH OF THE FOLLOWING.)

1 YES	0 NO	
_____	_____	Live alone
_____	_____	Live with children
_____	_____	Live with grandchildren
_____	_____	Live with parents
_____	_____	Live with brothers and sisters
_____	_____	Live with other relatives (Does not include in-laws covered in the above categories.)
_____	_____	Live with friends
_____	_____	Live with non-related *paid helper (*Includes free room)
		Live with make-believe kin (i.e., play-sibling, play-daughter, etc.) (PLEASE SPECIFY) _____

Now, Mrs._____ this is a question that might take a few minutes for you to think about.

D4. If you became ill or incapacitated and you had to change your present living arrangements, please tell me what changes you would make?

_____

_____

Why did you make that choice?

_____

_____

_____

Now I would like to know about your work or retirement.

D5. In regards to working, are you presently...

1 Employed full-time?
2 Employed part-time?
3 Retired?
4 Retired, but working some?
5 Retired on disability?
6 Not employed?

(IF WORKING, ASK ITEMS D6, D7, D8, D9, D10 AND D15)

(IF RESPONDENT ANSWERS #3, #4, OR #5 RETIRED, GO TO ITEM D11)

D6. What kind of work are you presently doing? Be specific as to type.

_____

D7. Which of these best describes how you feel about your work? You...

3 Like it very much?
2 Have no strong feelings about it?
1 Dislike it very much?

D8. You are presently working. However, tell me which of these you think you will probably do in the next five years with regards to your work?

1 Continue working at the same job
2 Work at something else
3 Retire, because it will be required
4 Other
5 Don't know

D9. Do you have co-workers on your job who help you in your personal life?

1. No 5. Yes

D10. How are they helpful to you?

_____

_____

(INTERVIEWER GO TO ITEM D15)

D11. How long have you been retired?

1 Less than one year
2 1-2 years
3 3-4 years
4 5-9 years
5 10-15 years
6 16-20 years
7 Over 20 years

D12. Why did you retire?

1 Poor health (own decision)
2 Poor health (employer's decision)
3 Preferred leisure
4 Compulsory retirement age
5 Laid off or job discontinued
6 Other

D13. How do you like being retired? Do you...

3 Like it very much?
2 Dislike it very much?
1 Have no strong feelings about it?

(IF RESPONSE TO ITEM D13 WAS #2, ASK ITEM D14)

D14. Why do you dislike being retired?

_____

_____

D15. What kind of work did you do at age 50? (Be specific.)

_____

Organizational Memberships

D16. I have a list of organizations and clubs that some people belong to. Please tell me which of these kinds of organizations you belong to now? (CHECK ALL THAT APPLY.)

0 = No 1 = Yes

_____ Church

_____ Missionary Circle

_____ Women's Sewing Circle

_____ Labor union

_____ Business, civic, or professional group

_____ Community or neighborhood organization

_____ Social or card playing group

_____ Political organization or issue and action-oriented group

_____ Senior Citizens group

_____ Art and Craft group

_____ Other (PLEASE SPECIFY)_____

_____ None--**GO TO D18**

Total Memberships _____

D17. How active are you in this/those organization(s)? Would you say you are very active, somewhat active, or not very active?

5. Very active
3. Somewhat active
1. Not very active
2. Temporarily inactive

D18. Thinking about the clubs, social groups, or organizations you have ever belonged to in your life, would you say they are more important, less important, or of about the same importance to you now as they were five years ago?

5. More important
2. Less important
3. About the same
1. Unimportant
0. Have never belonged to an organization

D19. How important is going to church or a place of worship to you? Is it very important, fairly important, or not important at all?

5. Very important
3. Fairly important
1. Not important at all

D20. What is the one most important thing going to church does for you?

_____

_____

D21. What do people in your church do to help you?

_____

_____

_____

D21a. How much help is the church to you? Would you say a lot of help, some help, or only a little help?

5. A lot of help
3. Some help
1. Only a little help
0. No help

(INTERVIEWER--GO TO D21C IF RESPONSE IS 0, OTHERWISE GO TO D21B)

D21b. How is the church <u>most</u> helpful to you?

_____

_____

(INTERVIEWER--GO DIRECTLY TO D22)

D21c. Would the church help you if you needed help?

5. Yes 1. No

D21d. In what way could the church be <u>most</u> helpful?

_____

_____

D22. Now, I am going to read you a list of events--I know that some of these will not apply to you. Please tell me which of them have happened to you <u>in the past five years</u>; that is, since 1985. Have you:

1 NO	5 YES	- INAP	
_____	_____	_____	...been seriously ill or injured?
_____	_____	_____	...lost your husband/wife through death?
_____	_____	_____	...experienced a death of some other close member or friend?
_____	_____	_____	Has a family member been seriously ill or injured (not including yourself)?
_____	_____	_____	Has an immediate family member been a patient in a nursing home?
_____	_____	_____	Has a son or daughter left home?
_____	_____	_____	...changed your place of residence?
_____	_____	_____	...had a change in financial status?
_____	_____	_____	...changed your job or started a new one?

1 NO	5 YES	- INAP	
			...been fired or laid off, or have you quit your job?
			...retired from your job or major life occupation?
			...been robbed or attacked (personal or household)?

Section E

Social Support Functions

EXACT TIME NOW _____

E1. Now, I would like to talk about the support you receive from family and friends; that is, the things people do for you. For each of the 6 things I will mention, just tell me how many people do these things for you. How many people....

0 NONE	1 ONE	2 2-3	3 4-5	4 >5	
					...make you feel respected?
					...would make sure that you were cared for if you were ill?
					...do you talk to about your health?
					...make you feel loved?
					...accept you just the way you are?
					...show you they really care about you?

E2. Now, I would like you to think about how much support you have exchanged with people who are important to you during <u>all the time</u> you have known them. Would you say that <u>you provided more</u> support, <u>he/she provided more</u>, or has it been <u>about equal</u>? What about....

1 I HAVE PROVIDED MORE	3 ABOUT EQUAL	5 THEY HAVE PROVIDED MORE	0 INAP (NO RELATION-SHIP)	
				...(AND STARTING with the most important to you?
				...family members who are important to you?
				...make-believe kin members?
				...friends?
				...neighbors?
				...profes-sionals

E3. Now, I would like to ask you the same question, but for the present; that is, right now. Would you say that you provide more support, he/she provides more, or has it been about equal? What about...

1 I HAVE PROVIDED MORE	3 ABOUT EQUAL	5 THEY HAVE PROVIDED MORE	0 INAP (NO RELATION-SHIP	
				...(AND STARTING with the most important to you?
				...family members who are important to you?
				...make-believe kin members?
				...friends?
				...neighbors?
				...profes-sionals

E4. If you became ill and someone were caring for you...

3 Would this person take care of you as long as needed?

2 Would this person take care of you only for a short time (a few weeks to six months)?

1 Would this person help you now and then (taking you to the doctor or fixing lunch, etc.)?

0 No one to provide care

E4a. Who is this person?

Name_____

Relationship_____

Code: Daughter = 1; Grandchild = 2; Sister = 3;

Brother = 4; Son = 5; Friend = 6;

Neighbor = 7; Professional = 8;

Play-sister = 9; Play-daughter = 10;

Play-son = 11; Play-brother = 12;

Other relative = 13

Section F

Network Adequacy

F1. Now I have a ladder to show how satisfied you are with the support you receive from the people who are important to you. The ladder ranges from 0 to 9, with "0" being Completely Dissatisfied, and "9" being Completely Satisfied.

(INTERVIEWER WRITE IN THE CODE FOR EACH RESPONSE. USE (-) FOR INAPPROPRIATE)

In general, how satisfied are you with the support you receive from...

0	1	2	3	4	5	6	7	8	9	-	
COMP DISSAT				NEU				COMP SAT		INAP	
											...the person most important to you?
											...family members?
											...friends?

0 1 2 3 4 5 6 7 8 9 -	
COMP DISSAT NEU COMP SAT INAP	
	...make-believe kin?
	...neigh-bors?
	...nurses?
	...doctors?
	...minister?

F2. Now, I would like to ask you some questions about how satisfied you are with the support you provide to people who are important to you. Use the same satisfaction responses as in the previous question (where "0" is Completely Dissatisfied, and "9" is Completely Satisfied). In general, how satisfied are you with the support you provide to...

0 1 2 3 4 5 6 7 8 9 -	
COMP DISSAT NEU COMP SAT INAP	
	...the person most important to you?
	...family members?
	...friends?
	...make-believe kin?

0 1	2	3	4	5	6	7	8	9	-	
COMP DISSAT			NEU				COMP SAT		INAP	
										...neighbors?
										...nurses?
										...doctors?
										...minister?

F3. Now, I am going to ask you the extent to which you think relatives and friends should help older people <u>if they need help</u>. Tell me if you think relatives and friends should be responsible <u>always</u> (4), <u>most of the time</u> (3), <u>occasionally</u> (2), or <u>never</u> (1).

(INTERVIEWER: WRITE CODE IN UNDER APPROPRIATE COLUMN-- (4) Always, (3) Most of the time, (2) Occasionally, (1) Never)

Kinds of Assistance to Older Adults

Provide a home	Visit	Help when sick	Assist Financially	Provide services (transportation, shopping, etc.	
					Children
					Grandchildren
					Brothers and sisters
					Other kin
					Make-believe kin

Provide a home	Visit	Help when sick	Assist Financially	Provide services (transportation, shopping, etc.	
					Friends/ Neighbors
					Profes-sionals

F4. What are some reasons why you **WOULD NOT** always expect relatives, friends, or neighbors to help older people?

_____

_____

Section G

Health Status (Well-Being)

EXACT TIME NOW _____

Next, I would like to ask you some questions about how you feel about life.

G1. How often would you say you worry about things--very often, fairly often, or hardly ever?

0 Very often
1 Fairly often
2 Hardly ever

G2. In general, do you find life exciting, pretty routine, or dull?

2 Exciting
1 Pretty routine
0 Dull

G3. Taking everything into consideration, how would you describe your satisfaction with life in general, at the present time--good, fair, or poor?

2 Good
1 Fair
0 Poor

Now, I am going to ask some questions; answer "Yes" or "No", according to the question.

G4. Things keep getting worse as I get older.

1 Yes 2 No

G5. I have as much pep as I did last year.

1 Yes 2 No

G6. Little things bother me more this year.

1 Yes 2 No

G7. As I get older, I am less useful.

1 Yes 2 No

G8. I sometimes worry so much that I can not sleep.

1 Yes 2 No

G9. As I get older, things are better than I thought they would be, or things are worse than I thought they would be.

1 Yes, worse 2 Yes, better

G10. I sometimes feel that life is not worth living.

1 Yes 2 No

G11. I am as happy now as when I was younger.

1 Yes 2 No

G12. I have a lot to be sad about.

1 Yes 2 No

G13. I am afraid of a lot of things.

1 Yes 2 No

G14. I get mad more than I used to.

1 Yes 2 No

G15. Life is hard for me much of the time.

1 Yes 2 No

G16. How satisfied am I with my life today--not satisfied, or satisfied?

1 Not satisfied 2 Satisfied

G17. I take things hard.

1 Yes 2 No

G18. I get upset easily.

1 Yes 2 No

G19. What do you consider your most important purpose in life today?

_____

_____

_____

Section H

Health Status (Activities of Daily Living)

Now I would like to ask you about some of the activities of daily living, things that we all need to do as a part of our daily lives. I would like to know if you can do these activities without any help at all, or if you need some help to do them, or if you can not do them at all.

(BE SURE TO READ ALL ANSWER CHOICES, IF APPLICABLE, TO RESPONDENT)

Instrumental ADL

H1. Can you use the telephone...

2 Without help, **including looking up numbers and dialing;**

1 With some help (can answer the phone or dial operator in an emergency, but need a special phone or help in getting the number or dialing);

0 Or are you completely unable to use the telephone?

H2. Can you get to places out of walking distance...

2 Without help (**drive your own car, or travel alone on buses, or taxis**);

1 With some help (need someone to help you or go with you when traveling);

0 Or are you unable to travel unless emergency arrangements are made for a specialized vehicle, like an ambulance?

H3. Can you go shopping for groceries or clothes (ASSUMING SUBJECT HAS TRANSPORTATION)...

2 Without help (**taking care of all shopping needs yourself, assuming you had transportation**);

1 With some help (need someone to go with you on all shopping trips);

0 Or, are you completely unable to do any shopping?

H4. Can you prepare your own meals...

2 Without help (**plan and cook full meals yourself**);

1 With some help (can prepare some things, but unable to cook full meals yourself);

0 Or, are you completely unable to prepare any meals?

H5. Can you do your housework...

2 Without help (**can clean floors, vacuum**);

1 With some help (can do light housework, but need help with heavy work);

0 Or, are you completely unable to do any housework?

H6. Can you take your own medicine...

2 Without help (**in the right doses at the right time**);

1 With some help (able to take medicine if someone prepares it for you and/or reminds you to take it);

0 Or, are you completely unable to take your medicines?

H7. Can you handle your own money...

2 Without help (**write checks, pay bills, etc.**);

1 With some help (manage day-to-day buying, but need help with managing your checkbook and paying your bills);

0 Or, are you completely unable to handle money?

Physical ADL

H8. Can you eat...

2 Without help (**able to feed yourself completely**);

1 With some help (need help with cutting, etc.);

0 Or, are you completely unable to feed yourself?

H9. Can you dress and undress yourself...

2 Without help (**able to pick out clothes, dress and undress yourself**);

1 With some help;

0 Or, are you completely unable to dress and undress yourself?

H10. Can you take care of your own appearance; **for example, combing your hair...**

2 Without help;

1 With some help;

0 Or, are you completely unable to maintain your appearance yourself?

H11. Can you walk...

2 Without help (**except for a cane**);

1 With some help from a person or with the use of a walker, or crutches, etc.;

0 Or, are you completely unable to walk?

H12. Can you get in and out of bed...

2 Without any help or aids;

1 With some help (either from a person or with the aid of some device;

0 Or, are you totally dependent on someone else to lift you?

H13. Can you take a bath or shower...

2 Without help;

1 With some help (need help getting in and out of the tub, or need special attachments on the tub);

0 Or, are you completely unable to bathe yourself?

H14. Do you ever have trouble getting to the bathroom on time?

2 No

0 Yes--**IF "YES", ASK H14a**

1 Have a catheter or colostomy

H14a. How often do you wet or soil yourself (either day or night)?

1 Once or twice a week

0 Three times or more a week

Section I

Income

EXACT TIME NOW _____

INTERVIEWER: READ TO RESPONDENT

"Now, for a few minutes I would like for us to talk about income."

I1. Where does your income (money) come from? (CHECK "YES" OR "NO" FOR EACH OF THE FOLLOWING **(BREAKDOWN TO MONTHLY INCOME).**)

1 YES	0 NO	IF YES, HOW MUCH	FREQUENCY	
			Monthly	Earnings from employment (wages, salaries), or income from your business
			Monthly	Income from rental, interest from investments, etc. (Include trusts, annuities & payments from insurance policies & interest from savings)
			Monthly	Social Security (Include Social Security disability payments, but not SSI)
			Monthly	V.A. benefits, such as G.I. Bill, and disability payments
			Monthly	Disability payments not covered by Social Security, SSI, or VA.
			Monthly	Both government & private (and including Workmen's Compensation)

1 YES	0 NO	IF YES, HOW MUCH	FREQUENCY	
			Monthly	Unemployment Compensation
			Monthly	Retirement pension from job
			Monthly	Alimony or child support
			Monthly	Scholarships, stipends (Include only the amount beyond tuition)
			Monthly	Regular financial assistance from family members (including regular contributions from employed child)
			Monthly	SSI payments (yellow government check)
			Monthly	Regular financial aid from private organizations and churches
			Monthly	Welfare payments and Aid to Dependent Children
			Monthly	Other

(IF COMPLETE INCOME AMOUNTS ARE OBTAINED IN QUESTION I1, SKIP TO QUESTION I2; BUT, IF <u>ANY</u> AMOUNTS ARE MISSING, ASK I1p.)

I1p. How much income do you have a year?

(SHOW MONTHLY INCOME LADDER AND CIRCLE THE LETTER WHICH IDENTIFIES MONTHLY INCOME CATEGORY.)

CODE	MONTHLY
01	(0 - $41)
02	($42-$83)
03	($84-$166)
04	($167-$249)
05	($250-$333)
06	($334-$416)
07	($417-$583)
08	($584-$833)
09	($834-$1,249)
10	($1,250-$1,666)
11	($1,667-$2,499)
12	($2,450-$3,333)
13	($3,334 or more)

I2. How many total people live on this income (that is, it provides at least half of their income)?

_____ (Number)

I3. Next, I would like to talk with you about having enough money for what you need. Which of these best describes how far your money goes?

4 You have enough money for everything you need

3 You have enough money if you are careful

2 You have enough money if supplemented by $ _____ per month

1 You do not have enough money for things that you need.

Concluding Statement to the Respondent

(MAKE A BRIEF CONCLUDING STATEMENT TO THE RESPONDENT INDICATING THE CONCLUSION OF THE INTERVIEW AND EXPRESSING YOUR APPRECIATION FOR HER COOPERATION.)