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Siblings as social support providers: The role of need, availability, and choice

Richard Lee Newtson

Iowa State University

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Siblings as social support providers: The role of need, availability, and choice

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Siblings as social support providers:
The role of need, availability, and choice

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Richard Lee Newtson

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CHAPTER 1

INTRODUCTION

Later life sibling relationships have been an issue of sociological concern for several decades. Owing to trends and cultural changes the study of sibling relationships in later life will continue to be an important contributor to the sociological literature. The purpose of the present study is to explore the sibling relationship as a potential source of social support in later life. Particular attention will be given to the roles of need, sibling availability, and personal choice in the provision of support.

Several trends make the study of sibling relationships in later life more salient. The "baby boom" has produced a cohort that will begin to enter later life about the year 2010. Baby boomers have more siblings than do cohorts born before or since, but generally, fewer children. In addition, baby boomers are more likely to enter later life single, either the result of divorce or greater likelihood of having never been married.

Greater numbers of men and women choosing to remain single as well as increased numbers of couples who, for whatever reason, are childless, is especially significant for sibling relationships because spouses and children represent the major sources of support in later life. For instance,
O'Bryant (1988) found that as many as 20% of older widows are childless. In such cases, whom do they turn for support? Of widows, O'Bryant suggests they are more likely to increase contact with their remaining kin. Certainly then siblings may be an important source of support for elderly widows.

Other trends that will affect sibling relationships in later life include higher divorce rates, increased longevity, and greater labor force participation of women (Connidis, 1989). For instance, Goetting suggests that the modern household, mother/wife away from the home while working, encourages siblings to turn to each other as sources of support in the absence of parents. Will siblings who have spent time in the shared household while the mother worked be more likely to carry those supportive sibling relationships into old age?

Most elderly have at least one living sibling (Hays, 1984). With declining birth rates, increased rates of divorce and singlehood, and greater longevity, the elderly are more likely to live out their lives alone for a greater length of time than ever before, often without children. As a response to affectual and instrumental needs, the elderly often turn to family and close friends. Siblings may serve as a valuable resource in later life as components of that "network" of family and friends who provide such support. Research exploring the factors that play a part in the supportive
nature of sibling relationships in later life might lead to an understanding of the exchanges that take place between siblings, and the impact that having siblings as members of the older person’s social support network has on that older person’s independence and well-being.

The present study seeks to explore the factors that determine the inclusion of a sibling or siblings into the social support network of the elderly.

Informal Social Support Among the Elderly: Needs and Resources

Social support in general is a complex set of interactions that includes family, an extended social network (i.e., extended kin and friends), formal organizations, and the cultural beliefs and values of society. Formal social support is provided typically from federal, state and local government agencies as well as voluntary organizations, whereas informal social support refers to the provision of help primarily from family and friends. Informal social support is a valuable resource to the elderly and helps to provide the gratification of "...basic social and emotional needs through interaction with others" (McPherson, 1990:338). Family and friends can help the elderly cope with illness, widowhood, loneliness, and other common stressors associated with later life. In addition, informal support may also include help with transportation, shopping, home repairs, and
sometimes advice on money and legal matters. Cantor and Little (1985), believed that the elderly need social support that encourages self-competence and independence as opposed to increasing dependence. In fact, Avioli (1989) suggests that receiving less social support from others, as opposed to more, might be associated with increased well-being in later life. In short, informal social support serves to help the older person remain independent and psychologically and physically viable.

Informal social support to an elderly person is usually provided by more than one person. Generally, social support networks have multiple members who together provide needed resources for older persons. For instance, Gallo (1982) found that, among his sample of elderly, 64% reported having four or more people on whom they could turn for support; only 7% said they had no one to whom they could turn for support. Gallo also found that social support network members tended to live near the elderly respondents, the relationships were typically at least ten years old, and were more often than not reciprocal in nature.

Throughout our lives we are part of a social support network. Within the network is a core group of people, usually family. In fact, in the later years the family provides the greatest source of informal support (Antonucci, 1990). Also within the social support network is a more
transitory group, usually friends, neighbors and coworkers. During the life course the social support network expands and contracts largely due to changes in work, marital and parental status; although changes are more evident in the more transitory group than in the core. The social support network, made up of family, friends, and neighbors, provides the context where the exchange of resources takes place throughout our lives.

The size of the social support network is also important for the elderly. For instance, Gallo (1982) found that there was a moderate association between size of the social support network and health status; the greater the size of the network the better the health status of his respondents. Gallo also found a slight but significant relationship between distance of the network members and health status. Respondents tended to be healthier when there was greater distance between them and their social support network member. "Contrary to prevailing myths, the elderly are not isolated, disengaged, alienated, or abandoned. Rather, networks of varying sizes, with relationships of varying strengths, are available for most older adults" (McPherson, 1990:342).

Although the family represents the core of the social support network, it is also important to understand that within the family there are patterns of choice for the provision of social support. The principle of substitution
(see Shanas, 1979) suggests that when a spouse or adult children are not available, people turn to distant kin and non-kin, in that order, for support. For instance, married elderly are more likely to identify their spouse as the primary source of social support followed by adult children (Peters et al., 1987). When a spouse or adult children are not available, often the elderly turn to other kin. For instance, among never married or unmarried childfree elderly there is a reliance on siblings and more distant kin like nieces and nephews (Johnson and Catalano, 1981) and widows tend to turn to adult children and siblings for support (Johnson, 1983).

With age and decreased abilities comes a greater reliance on family members, other than a spouse, for the provision of support. It is thought that decreased dependence on a spouse is the result of either widowhood or the decreased capacity of the spouse if still living. Although the principle of substitution suggests that widowed or unmarried elderly will turn to adult children for support, often adult children are unable or unwilling to provide support. In fact, "the presence of kin alone does not guarantee that support is available, nor that all ties will be supportive" (McPherson, 1990:340). As a result, for a significant part of the elderly population, seeking help from a spouse or adult child may not be possible. In such cases, it is argued that siblings may
represent an important source of informal support for the elderly.

The Nature of Sibling Relationships Among the Elderly

The sibling relationship may be the most suitable for the provision of social support when the elderly can not turn to a spouse or adult child. At the beginning of the sibling relationship there is constant contact and exchange during the sharing of familial experiences. Socialization occurring at home provides siblings with similar patterns of responses, values, beliefs, and a general outlook on life, all of which are rather stable and resistant to change throughout the life course. The sharing of a common interactional heritage forms the basis for memories that will last a life time. In later life, the process of life review depends on those shared memories, the result of which is often an enhanced self-identity and increased feelings of closeness with siblings. Sharing a common biological heritage is also the foundation for creating a unique relationship that combined with a long history of shared intimate family experiences, provides the basis for lifelong attachment (Cicirelli, 1991). Sibling relationships are ascribed by nature but, as siblings leave the home, interaction becomes voluntary. Relations between siblings are also egalitarian, unlike other familial relationships. Finally, sibling relationships have the
potential for being the longest in duration of any relationship, familial or otherwise.

Most elderly do have siblings (Hays, 1984) and live within 100 miles of each other (Cicarelli, 1980) or within the same or an adjacent county (Scott, 1990). The sibling relationship is unique because of its lengthy duration and because of the sharing of a "genetic and social heritage, a common cultural milieu, and common early experiences within the family" (Goetting, 1986:703). Increased longevity provides the availability of siblings for interaction longer. Geographical mobility, divorce and then subsequent remarriage, all of which seem to make relationships tenuous and unpredictable, may actually encourage the perpetuation of sibling relationships because of their rather permanent nature.

Characteristics of Sibling Relationships Among the Elderly

Frequency of Sibling Contact

Studies have found that elderly siblings have a high degree of contact in later life (Rosenberg and Anspach, 1973). For instance, Cicirelli (1979) found that 17% of his elderly sample reported seeing siblings once a week while another 33% saw siblings once a month and 56% reported seeing siblings at least several times a year. Scott (1983) reported that siblings who had the most contact lived anywhere from 31 to 60
In-person contact is highest between "sibling pairs" in which at least one member is single (i.e., never married) followed by pairs of previously married siblings, pairs where one sibling is married and the other previously married, and married pairs, in that order. Frequency of in-person contact is greatest in pairs of childless siblings, followed by pairs where one has children and the other does not, and pairs where both are married.

Contact between siblings does seem to change during the life course. For instance, Leigh (1982) found a U-shaped relationship between sibling interaction and age, with the lowest frequency of interaction during middle adulthood. Shanas (1979) refers to this pattern of declining relationships with kin during the childrearing years followed by a resurgence of kin involvement after the children have left home as the 'hourglass effect.'

Carstensen (1992) seems to confirm Leigh's findings. She found that interaction frequency declined from age 17 to 30, but increased between the ages of 30 and 40, and remained stable from 40 to 50 years of age. There does seem to be some disagreement in the literature however. Whereas Carstensen had looked primarily at the second, third, and fourth decades of life, Rosenberg and Anspach (1973) investigated respondents aged 45 to 64. They reported that 68% of their middle-aged
(45-54) sample saw a sibling during the week preceding the interview, whereas only 58% of their respondents aged 55-64 did so. It seems that, though a significant portion of the elderly do maintain contact with their siblings, contact does seem to decrease with age (Cicirelli, 1980). However, it is important to note that siblings may be part of an active familial information network that allows for all siblings to be kept informed about other siblings indirectly without in-person or other direct contact (Connidis, 1989c).

**Emotional Closeness**

In her longitudinal study, Carstensen (1992:333) reported that emotional closeness between siblings declined between the ages of 17 to 30 but increased between the ages of 30 and 40 and remained stable from 40 to 50 years. Most older siblings reported being or feeling close to at least one sibling (Connidis, 1989c), and feel that closeness has deepened over the years (Cicirelli, 1982). It may be that, compared to younger groups, older siblings experience greater feelings of closeness that may be at least in part due to decreased contact in later life (Goetting, 1986).

Studies indicate that, whereas there are changes in closeness over the life course, siblings who feel close as adults were more than likely close in childhood (Ross and Milgram, 1982). In fact, Gold (1987) argues that shared childhood experiences help to form permanent feelings of
closeness to particular siblings that are carried into adulthood.

In a later study, Gold (1989) characterized five types of sibling relationships: the intimate, the congenial, the loyal, the apathetic, and the hostile. The intimate type is characterized by closeness and devotion, whereas the congenial type is characterized by caring for and seeing a sibling as a friend, the loyal type by allegiance because of a shared heritage and bond, the apathetic type by indifference, and the hostile type by anger and resentment. The majority of sibling relationships (78%) fell into the three supportive types with the loyal type, characterized by closeness, being the most frequent type (34%) as reported by her female respondents.

Hostility, one of Gold’s typologies of sibling relationships, may be the result of sibling rivalry carried over into adulthood. Although the majority of siblings feel close or very close, and for most, closeness to siblings increases through adulthood into old age, the situation is less clear in regard to sibling rivalry. "Although some feelings of rivalry may indeed persist into old age, the evidence indicates that siblings value their connection highly in the later years and seem to have developed ways of interaction that avoid conflict and overt rivalry" (Cicirelli, 1991:295). Although in general, sibling rivalry seems to decrease with age, the presence of rivalry in later life would
certainly be negatively associated with the degree of perceived sibling closeness.

Availability

Typically, most older people still have at least one living sibling (Hays, 1984), although with increasing age there is a decrease in the number of surviving siblings (Rosenberg and Anspach, 1973). In support of Rosenberg and Anspach’s findings, Cicirelli (1988) reported that the number of living siblings decreases during the last several decades of life, dropping from a mean of 2.9 living siblings in the seventh decade to a mean of 1.1 in the ninth.

When investigating sibling proximity, Cicirelli (1979) asked where the sibling with whom a respondent had the most contact lived. He found that 56% (26/same city, 56/within 100 miles) of his older subjects had a living sibling within 100 miles. Cicirelli’s findings seem to be consistent with Adams (1968) who reported that 60% of his subjects had a sibling close in age living within 100 miles, Connidis’ (1989b) study in which she found that 70% of her respondents had a living sibling within a day’s drive, and McGhee (1985) who found that almost three-quarters of her rural elderly sample had at least one living sibling and that two-thirds who had a living sibling reported that sibling as living in the same or adjacent county.

Proximity does seem to have a negative effect on sibling
interaction (Ross and Milgram, 1982); greater impact on sibling interaction than it does on parent-child interactions (see Lee and Ihinger-Tallman, 1980); and, when distance is maintained for a lengthy period of time, there may be a decrease in the amount of contact and feelings of closeness (Connidis, 1989b).

In summary, although there is a decrease in the total number of surviving siblings with age, most elderly have at least one living sibling who live within a day’s drive. Later life is generally a time when sibling interaction rates increase or remain the same up until the very last stages of life, when they begin to decline due to illness and disability. Later life is also a time when siblings appear to grow closer, and, although rivalry is less likely to occur in old age, the presence of rivalry may mitigate the likelihood of increased closeness.

Functions of Sibling Relationships Among the Elderly

Having a sibling in later life is a valuable resource. Often siblings may provide more subtle benefits to the elderly than simply the outward provision of instrumental or expressive supportive behavior. One such benefit illustrated in the literature is that siblings may help socialize one another for various roles often associated with older age. Widowhood is one such event where one sibling may serve as a
role-model for the other. McGloshen and O'Bryant (1988:108) found that having siblings was significantly associated with widows' positive affect. The authors explained this by reporting that "38% of the women had siblings who were also widowed and may have served as 'advance role models', providing the new widows with the assurance that they are not alone in bereavement and the evidence that they will likely survive it." Siblings often serve as role models throughout the life course. In later life, one sibling may serve as a role model for widowhood, retirement, illness, and so forth.

In addition to role modeling sometimes siblings may provide a great deal of help in the form of role substitution (Cicirelli, 1985). The death of a spouse may lead to a sister assuming many of the deceased wife's duties for her brother, or, likewise, a brother may take on some of the deceased husband's roles for a widowed sister. Thus role substitution may help to explain the growth in closeness of cross-sex siblings that has been reported in later life.

Another important function elderly siblings may fill is that of providing individuals with the sense that they continue to be contributors to life's tasks (Ross and Milgram, 1982). In addition, siblings may contribute to the affirmation of oneself as an object of affection and care; that there are others who still feel fondly about you and who are willing to care for you.
One of the most important psychological developmental tasks associated with old age and siblingship is that of self validation and reminiscing (Ross and Milgram, 1982; Goetting, 1986). Siblings often use reminiscing as a way to validate and clarify earlier events and relationships which is important as it is at this time that older people begin the life-review process. Goetting goes on to identify a total of four developmental tasks of siblingship in later life: 1) companionship and emotional support, the sibling bond seems to intensify but contact may decrease; there are expressed sentiments of greater closeness, 2) shared reminiscence and perceptual validation, this may provide comfort and well-being in old age, 3) resolution of sibling rivalry, and 4) aid and direct services.

Some studies suggest that it is the quality of the sibling bond that is important and not the quantity or frequency of interaction. It is particularly important to note in this regard that sociological measures such as interaction rates, although assessing quantitative aspects of the relationship do not necessarily tap important qualitative aspects of the sibling relationship.

A study by Lee and Ihinger-Tallman (1980) failed to find a significant relationship between frequency of interaction with the sibling whom older people saw most frequently and morale. McGhee (1985) suggested that Lee and Ihinger-
Tallman’s findings reflect the idea that it is the simple availability of a sibling that is important and not the frequency of sibling interaction. McGhee also failed to find support for an association between frequency of sibling interaction and well-being (morale) but the study did suggest that the mere availability of a sister was related to greater life satisfaction. McGhee found that there was a positive and significant relationship between the availability of a sister and life satisfaction among women; having a sister was associated with greater life satisfaction among women. Although there was a similar direction for availability of cross-sex siblings and frequency of interaction with life satisfaction, it was not significant.

Lee and Ihinger-Tallman believe that the failure to find a positive association between sibling interaction and greater morale may be the result of seeing the sibling relationship as ascribed rather than voluntary. Lee and Ihinger-Tallman’s findings suggest that siblings may not be selected for greater interaction because of their desirable qualities, as in the case of friends and other voluntary associations, but because of the sibling bond and the attachment and commitment that bond implies. Interestingly, Lee and Ihinger-Tallman described both marital and friendship relationships as being "achieved," and although they clearly included siblings as "kin," and thereby relationships were more ascribed, they
completely ignored the parent-child relationship as also being ascribed. Their findings might suggest the presence of other variables that would mediate the ascribed or obligatory nature of sibling or other kin relationships on greater interaction. In fact, McGhee (1985) goes on to argue that, because higher morale is associated with greater interaction with friends than with siblings, sibling relationships also may be associated with higher morale if the relationship is seen as a voluntary friendship and not an ascribed responsibility.

The perception of a close bond with siblings also serves to enhance the well-being of the elderly. Cicirelli (1979, cited in Cicirelli, 1982) reported that 83% of his respondents felt "close" or "extremely close" to the sibling with whom they had the most contact. Feelings of positive affect may be more important indicators of the quality of sibling relationships than the amount of interaction between them. In a later study, Cicirelli (1989) reported that the perception of a close bond to sisters by either men or women was related to well-being, as indicated by fewer symptoms of depression, whereas a close bond to brothers seemed to have little relevance for well-being. The perception of a close bond to sisters by either men or women appears to be uniquely important to the older person's well-being, whereas a close bond with brothers seems to have little relevance for well-being.
Cicirelli (1977:321) believed that, for women, sisters are challenging and stimulating in regard to the fulfillment of social roles and activities. In fact, Cicirelli went on to suggest that the more sisters an elderly woman has, the more dominant and aggressive the older woman would become in fulfilling those social roles. For men, Cicirelli suggests that sisters are emotionally supportive and have the effect of increasing positive feelings. While investigating the life satisfaction of the rural elderly and the effects of sibling interaction, McGhee (1985:87) suggests that it is a "special relationship" with a same-sex sibling that positively affects life satisfaction. In addition, she found that, for older rural women, the close proximity of a sister was second only to physical mobility in predicting higher life satisfaction.

Another function of siblings in later life may be to enhance self-efficacy. Cicirelli (1982) reported that older individuals who saw their siblings more often, reported greater closeness to their siblings, and shared value consensus were more inclined to have an internal locus of control and to feel a sense of mastery over their environment. On the other hand, elderly who have a greater number of brothers are more likely to have an external locus of control than those with fewer brothers which may be due to the inability of males to understand affective needs.

Sibling relations serve many important functions in later
life. Siblings serve as role models for important transitionary events; they may even serve as role substitutes. Siblings may enhance self-efficacy and increase feelings of well-being, both extremely important psychological considerations at any time during the life course, but especially important in later life. Sisters appear to be challenging for women, and emotionally supportive for men. Siblings make us feel loved and cared for and provide us with a chance to validate our lives and reminisce about shared memories.

This chapter has offered a general overview of sibling relations in later life. In addition, social support among siblings in later life as well as the functions of sibling support has been presented.

Chapter 2 presents a literature review of contemporary theories that are used to explain and predict the provision of support in old age. Building on previous work by Cicirelli, Cantor, and Litwak, a theoretical model of sibling support will be proposed and hypotheses presented.
There have been many theories and models used to explore sibling relationships. Bowlby's Life Span Attachment theory has been used fairly successfully by Cicirelli (1980, 1982, 1985, and 1988) to investigate sibling relationships in later life. Although not explicitly a model of sibling support, the theory does suggest why siblings would be expected to provide supportive functions in later life. The most common theories dealing with the provision of social support to the aged are Litwak's Task Specificity model, and Cantor's Hierarchical Compensatory model. For both models, siblingship is seen as capable of providing needed supportive functions in later life.

Bowlby's Life Span Attachment Model

Life span attachment theory essentially utilizes a systems approach and attempts to portray sibling relationships as a subsystem of the family system. The sibling relationship is characterized by attachment, emotional bonds that result from prolonged interpersonal interaction, and represents a system itself that has a history and future. To Cicirelli, the sibling subsystem is autonomous from other family subsystems and one in which "mini" subsystems may develop (i.e., alliances and coalitions). The basis for the survival
of the sibling relationship rests in the memory of the family system. Cicirelli’s use of attachment theory explains poor sibling relations in later life as being the result of weak attachment and sibling rivalry carried over into adulthood.

In attempting to explain the provision of sibling support life span attachment theory suggests that siblings rally in order to maintain the existence of the sibling subsystem. The attachment bond is seen as crucial for the physical and mental well-being of siblings. Studies seem to confirm this use of attachment theory in that it has been found that siblings are ready to provide instrumental help in times of crises (Cicirelli, 1991; Cicirelli, 1985). Cicirelli (1991:305) writes, "attachment refers to an emotional or affectual bond between two people. It is essentially being identified with, having love for, and desiring to be with the other person." He believes that there is a need for sibling closeness and contact. However, some studies suggest that the sibling relationship is by itself not predictive of across the board support. Peters et al. (1987) reported that the sibling relationship was, by itself, not able to predict either the provision of instrumental or affective supportive tasks. They believed that there were other factors involved when an older person decided who to ask for support. Attachment by itself may not adequately explain the sibling provision of affective support.
Cantor's Hierarchical Compensatory Model

Both Cantor (1979) and Shanas (1979) proposed theoretical models that delineated the provision of support to older people. Although both models are very similar, there has been limited use of Shanas' theory of substitution. A more widely used theoretical approach is Cantor's hierarchical compensatory model that suggests that there is hierarchical order of preference that operates in the selection of support providers. Cantor believes that informal sources of support are preferred and sought after before more formal sources, which are regarded as more of a last resort by the elderly, and that kin are likewise sought after first before non-kin. When the most highly positioned provider is not available, a substitution is made from the next lower position within the hierarchy. Cantor's model delineates a clear and consistent pattern in the choice of support providers with married persons choosing a spouse, adult children, and then other relatives, in that order, and this has been widely supported in the literature (Johnson and Catalano, 1981; Johnson, 1983; Shanas, 1979; Hoyt and Babchuk, 1983).

It is clear that the spouse, followed by an adult child is the pattern of support most often sought. Peters et al. (1987) suggest that the pattern is less clear for friends, siblings, and other relatives but that choices are most likely made on the basis of availability and propinquity. In fact,
they suggest that the most pervasive finding in their study was the significance of proximity when looking at aid sought and received from friends, siblings and other kin.

Therefore, Cantor’s hierarchical compensatory model would predict that (1) where there is a spouse, the spouse will provide the majority of support, followed in serial order by adult children, other relatives, and friends; (2) where a spouse is not available, adult children will provide the majority of support, followed by other relatives and friends; (3) where a spouse or adult child is not available, other relatives will provide the majority of support followed by friends.

To test Cantor’s model, the following two hypotheses are proposed.

Hypothesis 1:
Married respondents will name their spouse as the primary support provider more than they will others.

Hypothesis 2:
Unmarried parents will name an adult child as the primary support provider more than they will others.

Cantor in her model, and studies attempting to validate her findings, have failed to adequately define when an adult child is "available." One of the more consistent findings as reported by Peters et al. (1987), when speaking of the provision of supportive tasks by relationship type, is that of
proximity as an independent variable. Although Peters et al. only reported proximity as an issue for support from others than spouse and adult child, it is important to note that only the marital relationship necessarily negates proximity as an issue of the provision of support. In later life, the adult-child/parent relationship does not by its nature imply proximity.

For divorced and widowed elderly with children the lack of proximity of an adult child is likely to be predictive of turning to other relatives and friends. In fact, O'Bryant (1988) reported that widows with no proximate children received significantly more support from siblings than did widows who had both proximate children and siblings. Connidis and Davis' (1992) study seems to confirm O'Bryant's findings by reporting that the greater the number of children that were available, the less likely of confiding in siblings. It is not enough for an older person just to have an adult child when trying to predict the provision of support. The provision of support from an adult child is most likely to occur when that child lives nearby; if the adult child is not proximate, then a sibling may be sought.

Because Cantor's model lacks a concern for adult child proximity, two additional hypotheses are proposed elaborating on his model.
Hypothesis 3:

For unmarried parents, the nearer in proximity are a respondent and an adult child, the more frequently will an adult child be named the first person the respondent would turn for help and support.

Hypothesis 4:

For unmarried parents, the more distant in proximity are a respondent and an adult child, the more frequently will a sibling be named as the first person the respondent would turn for help and support.

Litwak's Task-specific Model

Another theory often used is Litwak's (1985) task-specific model. The theory suggests that older persons seek out the particular type of help they need on the basis of who or what can provide that assistance most effectively. When informal support is perceived as adequate for the elderly, family and friends may be sought after on the basis of their unique abilities to provide particular types of support. It is thought that primary relationships have the potential to provide differential supports. For instance, for the married elderly, the spouse most often provides both instrumental and expressive supports (Peters et al., 1987). Often when a spouse is unavailable (deceased, ill, or disabled) an adult child is sought after usually for the provision of instrumental support (Troll, 1982). Although Kendig et al. (1988:S36) reported that the childless elderly confide more in
siblings than do elderly parents.

Siblings are more often turned to for instrumental support than are friends or other relatives. Studies have found siblings provide economic assistance (Litwak, 1985), temporary sick care (Cantor, 1979; Scott, 1983), home maintenance (O'Bryant, 1988), legal or financial advice (Litwak, 1985), and financial support (Goetting, 1986). There are contradictory findings on transportation with Scott (1983) reporting that siblings were more likely to provide transportation than were grandchildren, whereas Peters et al. (1987) found friends more likely to do so. Likewise, Goetting (1986) reported that siblings were more likely to help with shopping whereas Peters et al. (1987) found that friends were more likely to do so. Expressive functions that have been found to be provided by siblings include acting as a role model (Cicirelli, 1980:460), validating self-perceptions (Ross and Milgram, 1982), and shared reminiscence (Cicirelli, 1985), companionship (Goetting, 1986), reassurance of self-worth (O'Bryant, 1988), providing generalized emotional support (McGhee, 1985; Goetting, 1986), validating perceptions (Ross and Milgram, 1982), and shared reminiscence (Cicirelli, 1985).

Litwak's model suggests that support providers are selected on the basis of who can best provide a particular supportive task. However, empirical work has provided evidence that, for each particular task, there may be several
potential support providers. Clearly, Litwak's task specific model does not adequately deal with how choices are made when there are multiple potential support providers for a given task. The proposed model (see Figure 1) seeks to explain the determinants of those choices. It is based on Cantor's thesis that there is a preferred support hierarchy and that siblings are potential support providers behind spouse and adult children. When choices can be made among potential support providers with equally satisfying supportive abilities, siblings will be chosen more often because of the value of kin and a desire to maintain the family system.

Proposed Model

Sibling Availability

Numerous empirical studies have found proximity and sibling age to be central issues of availability in the provision of sibling support.

Proximity. Sibling proximity is a factor that affects to whom an older person turns for support. Both affective and instrumental dimensions of the sibling provision of support are associated with sibling proximity. For instance, in the provision of both affective support and instrumental support, Peters et al. (1987) found that proximity was an important variable in predicting whether siblings, friends, or other relatives provide that support. They found that sibling
Figure 1. Proposed model of social support

Proximity was associated with the sibling provision of five types of instrumental support: introductions, transportation, shopping, care when ill, and help around the house. In addition, proximity has been found to be associated with
greater obligatory contact and responsibility for sibling welfare (Lee, Mancini, & Maxwell, 1990), mutual helping behaviors (Suggs, 1989), and sibling interaction (Lee, Mancini, and Maxwell, 1990). These findings reflect only a small percentage of the studies reporting on the link between sibling proximity and the provision of instrumental support.

Other studies, though fewer in number, have documented association between sibling proximity and the provision of affective support. For instance, Penning (1990) found that after spouses and adult children, affective support came from other family and friends and was in a large part determined by proximity/availability. Related to the importance of proximity in determining the inclusion of a sibling into the social support network are findings that suggest that proximity is an integral part of choosing someone in whom to confide. When investigating the link between sibling proximity and confiding, as an affective support, Connidis and Davis (1992) reported that distant siblings are less likely to be listed as confidants, whereas Hoyt and Babchuk, (1983) found that frequent sibling interaction increases confiding between siblings. The authors found that there was a strong association between frequency of interaction with siblings and the greater likelihood of being named a confidant; no such association was found between frequency of interaction with adult children and the greater
likelihood of being named a confidant. "Apparently siblings seen most often are also those with whom it is easier to discuss intimate and confidential matters" (Hoyt and Babchuk, 1983:95).

Supporting Connidis' and Hoyt and Babchuk's findings, Peters et al. (1987:410) found that proximity was associated with discussing personal problems with a sibling and emotional support from a sibling. Likewise, they found that "among friends, siblings, and other relatives, a pattern of choosing significant others was less clear, though choices were made from the pool of available others with proximity as extremely important in the selection process." Their findings suggest that, if proximity is controlled, there is a greater likelihood an older person will seek affective support from a sibling over friends and other relatives.

Proximity is likely to be especially crucial for widows and other unmarried, childless elderly. For instance, O'Bryant (1988) found that the best predictors of sibling support to widows was seeing unmarried sisters often and having them nearby, having a married sister living nearby, and not having an adult child living nearby.

Geographical proximity involves a very basic issue: siblings must be available so that there may be an exchange of supportive tasks. Therefore, the following hypothesis is proposed.
Hypothesis 5:
For the unmarried, the nearer the sibling, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.

**Sibling Age.** The age of the sibling is also a factor that is likely associated with sibling availability for the provision of instrumental support. The age of the sibling is largely associated with the health and functional status of the sibling. Consequently, increased sibling age is likely to be associated with a decreased ability to provide instrumental support. Depner and Ingersoll-Dayton (1988) found that older respondents were less likely to provide health support to siblings. They interpreted this finding to mean that the respondent was physically incapable of providing such support. Therefore, the following hypothesis is proposed.

Hypothesis 6:
For the unmarried, the younger the age of the sibling, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.

It seems clear that availability is central to the provision of support by siblings. The two best indicators of sibling availability may be sibling age and proximity.

Consistent with Cantor’s model and Litwak’s task-specific model, siblings would be expected to provide support to the never-married, widowed and divorced childfree individuals. In
addition, it is likely that siblings would provide support to widowed and divorced parents who have no adult children living nearby. Peters et al. (1987:407) found that, in eight types of supportive tasks, both instrumental and affective, proximity had a predictive effect on naming a sibling as a support provider: "types of helping obviously requiring physical presence." Their findings suggest that, when proximity is controlled, a sibling seems to be preferred over other relatives and friends for the provision of these tasks.

Respondent Factors

Respondent's Health. Central to the present model is a concern for the respondent's health. Consistent with Cantor's model, in the event of an older person's poor health, spouses would be expected to provide the greatest assistance. Likewise, if a spouse is nonexistent or unable to provide assistance, an adult child typically provides the necessary instrumental assistance (Peters et al., 1987; Troll, 1982).

As a function of age, the elderly are more likely to have more problems with health and mobility. With age, there are increased demands for health related support (Brody, 1985), and kin are most often sought for the provision of that support (Stoller & Pugliesi, 1988). As a consequence, there are more unreciprocated exchanges. Cicirelli (1983) reported that, in later life, there was a greater amount of unreciprocated support from adult child to elderly parent than
at any other time during the life course. For the elderly with no spouse or proximate adult child, it is likely that elderly in poor health will be more likely to seek out a sibling because of a similar, implied familial obligation. Exchange theory would suggest that, unlike friendships that would essentially require an immediate reciprocity, in adult sibling relations there is less concern for immediate reciprocity and greater generalized reciprocity over the span of the relationship. For the elderly in poor health, siblings may represent a source of support that is less dependent on immediate reciprocity and more characterized by generalized reciprocity over the life of the relationship (see Ikels, 1988).

Siblings might be perfect, after spouse and adult child, for the provision of support. The proposed model should also include an older person’s health as contributing to the selection of a social support provider. It is expected that never married, widowed, and divorced respondents in poor health, childfree or with no proximate children, would turn to siblings for the provision of support. Therefore, the following hypothesis is proposed.

Hypothesis 7:

For the unmarried, the poorer is the respondent’s health, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.
In fact, Cicirelli (1979) reported that 60% of his sample identified a sibling as a potential source of support. He concluded that siblings appeared to play complementary roles to spouses and adult children in the provision of support. His findings seem to add further support for Cantor's model, and in fact, he writes, when looking at the family support system as a hierarchy, the spouse is first in line "to give help, followed by adult children, then siblings, grandchildren, and other kin."

**Respondent's Age.** The respondent's age is also likely to influence the naming of potential support providers. Hoyt and Babchuk (1983: 96) found that "kinship ties become especially critical for persons in the last stage of the life cycle." Several studies seem to confirm Hoyt and Babchuk's findings. Carstensen (1992:332) believes that with age comes fewer acquaintanceships and an ever-increasing desire to take in kin as "core members" of the social support convoy. Likewise, Troll, Miller and Atchley (1979:110) reported that "the elderly disengage into rather than from their families. As their worlds shrink, their kinship networks, including their siblings, become more important to them." Cicirelli (1988:449) suggested that, as people age, they desire more help from siblings. He reported that "the norms of help flowing to and from adult children and of self-reliance and equity in sibling relationships appear to minimize sibling
helping behavior throughout much of life. But in later life when other supports (i.e., spouse, adult children) may no longer be present or cannot give sufficient help, sibling readiness to help finds expression." It does seem that age is associated with greater support from siblings. Therefore, the following hypothesis is proposed.

**Hypothesis 8:**

For the unmarried, the greater is the respondent’s age, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.

**Respondent Choice Factors**

For never married, divorced, widowed with no children or proximate children, affect toward any potential support provider is likely to play a key part in whom an older person "chooses" to turn for support. For older people especially, it may be important that they "like" a potential support provider - especially when their health does not mandate familial obligation to provide such support. Why may it be important that an older person like someone before they turn to that person for the provision of non-crises support?

Choice may be an important set of predictor variables when choices among social support providers can be made. The importance of choice seems to reflect Peters et al.’s (1987:410) belief that when choosing between friends, siblings, and other relatives, "...choices were made from a
pool of available others" and that proximity was an important determinant in the selection process. They reported that "circumstances, convenience, or personal preference" may likely have lead to the selection of support providers other than for spouse or adult children. In such cases, given a selection between proximate potential support providers, including siblings, other relatives, and friends, it may be that personal choice is an important factor to be considered. Although "circumstances" and "convenience" may be indicative of an older person's needs relative to a sense of familial obligation and availability, "personal preference" may represent other factors more typically associated with choice.

Familial obligation and kinship can not fully explain to whom an older person will turn for the provision of support. Hoyt and Babchuk (1983:86) suggest that "choice" may be involved in the selection of who among kin will be named as an intimate and confidant. They reported that, when selecting siblings as kin worthy of developing more intimate ties with, interaction frequency was found to be significantly associated with siblings serving as confidants. They identify frequency of interaction as a voluntary act that "can be taken as one good indicator of liking, of seeking out between individuals who enjoy close association." It is expected that frequency of sibling interaction would be a good indicator of the affective "choice" in naming a sibling as a social support
provider when a respondent is in good health. McGhee (1985) argues that, because higher morale is associated with greater interaction with friends than with siblings, sibling relationships can also be associated with higher morale if the relationship is seen as a voluntary friendship and not an ascribed responsibility. Therefore, the following hypothesis is proposed.

Hypothesis 9:

For unmarried, the greater is the frequency of sibling interaction, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.

Other factors that may reflect the voluntaristic nature of liking someone, and thereby enhancing the likelihood of their being named as someone to whom they can turn for support, include subjective assessments of the relationship. It may be an important predictor of the sibling provision of support to know whether the sibling is an age peer. With increased age there is an increased preference for social contact with age peers (Avioli, 1989:45). Among friends, siblings, and other relatives, being close in age may enhance the likelihood of having similar experiences and values. Among siblings, the formation of coalitions, which may be lifelong, most often involves siblings with a small age difference between them (Schvaneveldt and Ihinger, 1979). Siblings can also form alliances based on closeness or common
interests, "exchanging confidences and sharing activities" and this, too, seems more likely with age closeness (Cicirelli, 1985:206). Therefore, the following hypothesis is proposed.

Hypothesis 10:

For the unmarried, the nearer the respondent's age to the sibling's age, the more frequently will a sibling be named as the person a respondent would turn to first for help and support.

The sibling bond may be well suited for the provision of support. In fact, it is often characterized by unusual closeness, frequent emotional support, and weekly contact (Gold, Woodbury and George, 1990). It seems likely that factors assessing the affective and voluntaristic nature of the sibling relationship may represent "personal preference[s]" or "choice" variables and that "choice" may be an important predictor of an older person naming a sibling as someone to whom they can turn for support, especially when that older person is in better health and not in need of "crises" support.

It is proposed in the present model that four sets of variables are associated in the naming of a sibling as a social support provider. Those variables include proximity of adult children, if any; respondent factors, which include respondent health, age, and gender; sibling availability, which includes sibling age and proximity; and factors associated with respondent choice, which includes whether or
not the sibling is an age peer. It is proposed that the present model will explain a significant amount of the total variance in the process of naming a sibling as a social support provider.

The final hypotheses are concerned with testing the overall proposed model. Three regression analyses are used to test the model. The first attempts to explain the effects of marital status, respondent factors, sibling availability, and respondent choice factors, on the dependent variable. Therefore, the following hypothesis is proposed.

Hypothesis 11:

For the unmarried, respondent factors (respondent health, respondent age), sibling availability (sibling age, sibling distance), and respondent choice factors (respondent age, respondent/sibling age difference), will together explain a significant amount of the total variance in the dependent variable.

The second regression analysis attempts to explore the effects of parental status, in conjunction with the other endogenous variables, on the dependent variable.

Hypothesis 12:

For the unmarried, parental status, respondent factors (respondent health, respondent age), sibling availability (sibling age, sibling distance), and respondent choice factors (respondent age, respondent/sibling age difference), will together explain a significant amount of the total variance in the dependent variable.
And finally, the third regression analysis attempts to associate respondent/adult-child proximity, in combination with the other endogenous variables, with the dependent variable, for unmarried parent respondents.

Hypothesis 13:

For unmarried parents, respondent/adult-child proximity, respondent factors (respondent health, respondent age), sibling availability (sibling age, sibling distance), and respondent choice factors (respondent age, respondent/sibling age difference), will together explain a significant amount of the total variance in the dependent variable.

Summary

Siblings may be a widely selected informal source of support because many older persons do not have a living spouse (Watkins et al., 1987, cited in Avioli, 1989:45). The elderly most likely to seek support from their siblings are those whose marriages have been disrupted due to widowhood or divorce (Rosenberg and Anspach, 1973). Likewise, for those divorced or widowed elderly with adult children, adult children often are not proximate to the elderly and provide only a little support (Cicirelli, 1981). Probably at no other time in the life course is having a social support network more critical. For the never married, divorced or widowed with no children or proximate children, later life may be a time of great vulnerability.

Studies are divided as to when siblings may become an
important social support resource. Including siblings in the social support network of the aged may be the most underutilized source of available support. Yet, siblings may be a better choice for the provision of support because there are fewer acquaintanceships in later life (Carstensen, 1992:336), with increased age, adults show an increased preference for social contact with age peers, and later life is a time when there is a tendency to strengthen sibling relations and exchange support (Goetting, 1986:711). Siblings are crucial for the elderly. In fact, Depner and Ingersoll-Dayton (1988) found that the absence of sibling relationships in later life was associated with a decline in health and emotional support.

The sibling relationship is uniquely suited to the provision of support in old age. Although siblings may be potentially the perfect providers of support in later life, studies have shown that siblings are not often called upon for that support (Peters et al., 1987; Suggs and Kivett, 1986; Mosatche, Brady, and Noberini, 1983). It seems that neither Cantor’s hierarchical compensatory model or Litwak’s task-specific model can adequately predict the inclusion of a sibling in the social support network of the elderly.

Both Cantor’s and Litwak’s models seem to lack a concern for availability. What is needed is a model that proposes predictor variables beyond simple relationship type and
recognizes the unique ability of siblings to provide both instrumental and affective supportive tasks. Such a model would include, as does Cantor’s, the notion that there is a hierarchical basis for the selection of support providers but that also allows for the influence of sibling availability. The model also needs to recognize, as does Litwak’s, that, for some supportive tasks, there are potentially multiple providers. The model must also consider factors associated with the older person’s supportive needs such as the respondent’s age and health. Likewise, gender must be considered because of its social structural nature. And finally, the model must recognize the personal and subjective nature of the selection if there are choices that can be made in the provision of support.

There seems to be no definite answer in the literature as to who provides the greatest amount of support to an older person following a spouse or adult child. It may well be the result of failing to consider other important factors associated with unmet needs, sibling availability, and personal choice. A model predicting the naming of a sibling as a support provider has been proposed and incorporates elements of Cantor’s hierarchical compensatory model, Litwak’s task-specific model, and previous empirical findings, while recognizing the uniqueness of the sibling relationship as outlined in Cicirelli’s use of Bowlby’s Life Span Attachment
model.

In the next chapter, the proposed methodology will be presented. Data collection procedures, and proposed variable measurement, coding procedures, and statistical analyses, will also be presented.
CHAPTER 3

METHODOLOGY

This chapter deals with descriptions of the data collection procedures, sample characteristics, variable measurement, statistical analyses, and coding procedures. Descriptive statistics for the sample and correlational matrices are presented.

The Sample

The present section attempts to acquaint the reader with the sample. Data from the Aging and Change in Rural Iowa pilot study (1991-1992) was used in the present study. Sample respondents were randomly selected from three small towns in rural Iowa; each with no more than 5,000 people. The three towns were unique in that the proportion of elderly residents over the age of 60 years varied between 25 and 28% of the total population. The towns were also unique in that there was little or no formal support available to elderly residents. From the original data set 25 respondents were identified as not having living siblings. The final sample used for the present study consisted of 90 respondents, who were aged 60 years or over, and who were identified as having living siblings.
Operationalization and Descriptive Statistics
for Independent Variables

Marital Status

Five marital categories were used to identify respondents in the Aging and Change survey: married, widowed, divorced, separated, and never married. These have been collapsed into two categories, identified as Rms, and coded as: married=1 and unmarried=2. Of the overall sample, 54.4% (n=49) were married and 45.6% (n=41) were not married (widowed, divorced, or never married). Table 3.1 shows marital status by respondent sex.

Table 3.1. Marital status by respondent sex for the overall sample.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Married</th>
<th>Not Married</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Overall</td>
<td>54.4</td>
<td>49</td>
</tr>
<tr>
<td>Males</td>
<td>69.2</td>
<td>27</td>
</tr>
<tr>
<td>Females</td>
<td>43.1</td>
<td>22</td>
</tr>
</tbody>
</table>

Parental Status

Parental status (Child) is identified as parent or childfree and coded as: parent=1 and childfree=2. Of the total sample, 84.4% (n=76) of the respondents had living children. Table 3.2 shows the proportion of respondents with living children by respondent sex.
Table 3.2. Proportion of respondents with living children by respondent sex for the overall sample.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Living Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
</tr>
<tr>
<td>Overall</td>
<td>84.4</td>
</tr>
<tr>
<td>Males</td>
<td>82.1</td>
</tr>
<tr>
<td>Females</td>
<td>86.3</td>
</tr>
</tbody>
</table>

Proximity of Adult Children

Proximity of adult children (Cdist) is measured as the distance in miles the adult child lives from the respondent. Responses were collapsed into four distance categories and coded as: 0-10 miles=1, 11-25 miles=2, 26-50 miles=3, more than 50 miles=4. Table 3.3 shows the distance to the nearest living child by category. Although there appears to be a substantial difference in mean distance from nearest living child for males and females, this difference is not statistically significant.

Table 3.3. Respondent/nearest living child distance by category for respondents with children.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Overall</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%  N</td>
<td>%  N</td>
<td>%  N</td>
</tr>
<tr>
<td>0-10 Miles</td>
<td>52.6 41</td>
<td>54.5 18</td>
<td>51.1 23</td>
</tr>
<tr>
<td>11-25 Miles</td>
<td>12.8 10</td>
<td>9.1 3</td>
<td>15.6 7</td>
</tr>
<tr>
<td>26-50 Miles</td>
<td>9.0 7</td>
<td>6.1 2</td>
<td>11.1 5</td>
</tr>
<tr>
<td>50 + Miles</td>
<td>25.6 20</td>
<td>30.3 10</td>
<td>27.2 10</td>
</tr>
</tbody>
</table>
Respondent Factors: Respondent's Health

Respondent's health (Rhealth) was assessed by a self-rated single-item evaluation of the respondent's health. Respondents were asked, "Compared to other people your age, how would you describe your health?" Responses were coded as: Very poor=1, Poor=2, Fair=3, Good=4, and Excellent=5. Table 3.4 provides a breakdown of respondent health by category for the overall sample as well as by respondent sex. While there appears to be a difference in the self-rated health of males versus females, this difference is not statistically significant, t=-.08, n.s.

Table 3.4. Respondent health by category for the overall sample, and by sex.

<table>
<thead>
<tr>
<th>Self-Rated Health</th>
<th>Overall</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Excellent (5)</td>
<td>27.8</td>
<td>30.8</td>
<td>25.5</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Good (4)</td>
<td>47.8</td>
<td>46.2</td>
<td>49.0</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td>Fair (3)</td>
<td>16.7</td>
<td>5.1</td>
<td>25.5</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Poor (2)</td>
<td>5.6</td>
<td>12.8</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>7</td>
<td>--</td>
</tr>
<tr>
<td>Very Poor (1)</td>
<td>2.2</td>
<td>5.1</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
<td>--</td>
</tr>
</tbody>
</table>

Respondent Factors: Respondent's Age

Respondent's age (Rage) is measured by the actual age of the respondent at the time of completing the survey. The mean age of the sample is 71.03 years with a mean age of 71.33 years for females and 70.64 for males (see Table 3.5).
Table 3.5. Mean respondent age for the overall sample, males and females.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mean</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>71.03</td>
<td>90</td>
</tr>
<tr>
<td>Males</td>
<td>70.64</td>
<td>39</td>
</tr>
<tr>
<td>Females</td>
<td>71.33</td>
<td>51</td>
</tr>
</tbody>
</table>

Respondent Factors: Respondent’s Gender

The respondent’s gender (Rsex) was coded as male=1 and female=2. The overall data set is made up of a total of 90 respondents over the age of 55 years. Of those, 43.3% (n=39) were male, and 56.7% (n=51) were female (see Table 3.6).

Table 3.6. Respondent sex for the overall sample.

<table>
<thead>
<tr>
<th>Sex</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>43.3</td>
<td>39</td>
</tr>
<tr>
<td>Females</td>
<td>56.7</td>
<td>51</td>
</tr>
</tbody>
</table>

Sibling Availability: Sibling Age

Sibling age (Sage) was assessed by identifying the age of the nearest living sibling and coded as actual age at the time the respondent completed the survey. The mean sibling age is 70.99.

Sibling Availability: Sibling Proximity

Sibling proximity (Sdist) was measured by the distance in miles to the respondent’s nearest living sibling. Responses were collapsed into four distance categories and coded as:
0-10 miles=1, 11-25 miles=2, 26-50 miles=3, and more than 50 miles=4. Table 3.7 shows the frequency of respondent/nearest living sibling distance by category.

**Respondent Choice: Age Peer**

A measure of whether a respondent and the nearest sibling are age peers (Speer) is obtained by the actual age difference between them in years at the time the respondent completed the survey. Values are coded as the actual age difference in years. The mean age difference between respondent and nearest sibling is 5.72 years for the overall sample. Table 3.8 shows that for male respondents the mean respondent-sibling age difference with the nearest sibling is 4.69 years while for female respondents the mean respondent-sibling age difference is 6.5 years. The difference between male and female means in mean age difference between respondent and nearest living sibling is significant, \( t=2.17, p<.05 \).

**Respondent Choice: Sibling Interaction**

Sibling interaction (Ssee) was assessed by recording the
Table 3.8. Mean age difference between respondent and sibling.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mean Age Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>5.72 Years</td>
</tr>
<tr>
<td>Males</td>
<td>4.69 Years</td>
</tr>
<tr>
<td>Females</td>
<td>6.51 Years</td>
</tr>
</tbody>
</table>

number of times the respondent saw his/her sibling in the past 12 months. Responses were coded as: not at all=1, about once a year=2, several times a year=3, 1 to 3 times a month=4, about once a week=5, and several times a week=6. Respondents reported seeing their nearest living sibling relatively frequently. More than half of the sample respondents reported seeing a sibling at least 1 to 3 times a month. Table 3.9 presents a breakdown by category of number of times the respondent saw his/her sibling in the last 12 months. There are no significant male/female or marital status differences in the mean number of times respondents saw their siblings in

Table 3.9. Number of times respondents saw their siblings in the last 12 months by category.

<table>
<thead>
<tr>
<th>Number of Times Respondent Saw Sibling</th>
<th>Overall %</th>
<th>N</th>
<th>Males %</th>
<th>N</th>
<th>Females %</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several Times a Week (6)</td>
<td>8.9</td>
<td>8</td>
<td>12.8</td>
<td>5</td>
<td>5.9</td>
<td>3</td>
</tr>
<tr>
<td>About Once a Week (5)</td>
<td>13.3</td>
<td>12</td>
<td>20.5</td>
<td>8</td>
<td>7.8</td>
<td>4</td>
</tr>
<tr>
<td>1-3 Times a Month (4)</td>
<td>30.0</td>
<td>27</td>
<td>20.5</td>
<td>8</td>
<td>37.3</td>
<td>19</td>
</tr>
<tr>
<td>Several Times a Year (3)</td>
<td>23.3</td>
<td>21</td>
<td>25.6</td>
<td>10</td>
<td>21.6</td>
<td>11</td>
</tr>
<tr>
<td>About Once a Year (2)</td>
<td>10.0</td>
<td>9</td>
<td>7.7</td>
<td>3</td>
<td>11.8</td>
<td>6</td>
</tr>
<tr>
<td>Not at All (1)</td>
<td>14.4</td>
<td>13</td>
<td>12.8</td>
<td>5</td>
<td>15.7</td>
<td>8</td>
</tr>
</tbody>
</table>
the last year. While not a variable employed within the present model to be tested, respondents rated the quality of their relationship with the nearest living sibling as extremely high. All respondents rated their relationship with their nearest living sibling as being good or excellent (see Table 3.10).

Table 3.10. Quality of respondent/sibling relationship by category.

<table>
<thead>
<tr>
<th>Quality of Relationship</th>
<th>Overall %</th>
<th>Overall N</th>
<th>Males %</th>
<th>Males N</th>
<th>Females %</th>
<th>Females N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (1)</td>
<td>93.3</td>
<td>84</td>
<td>94.9</td>
<td>37</td>
<td>92.2</td>
<td>47</td>
</tr>
<tr>
<td>Good (2)</td>
<td>6.7</td>
<td>6</td>
<td>5.1</td>
<td>2</td>
<td>7.8</td>
<td>4</td>
</tr>
<tr>
<td>Fair (3)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Poor (4)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Measure of the Dependent Variable

The dependent variable (Bysib) was measured by the number of times a sibling, any sibling, was named as a person the respondent would turn to first for help and support in six supportive tasks from the Help and Support items in the survey. The six items are combined to provide an overall measure of social support. For each question the naming of a sibling as a potential support provider is coded as 1; naming others was coded as 0. Scores yielded a range from 0 (naming persons other than a sibling for all six dimensions), to 6 (naming a sibling for all six supportive dimensions).

Within the social support literature, there seems to be
no consensus as to a definition of "social support" (Vaux, 1985:91). However, there does seem to be consensus over what dimensions social support scales need to address. Typically, there are three or four dimensions that deal with emotional support, advice, and assistance. Krause and Markides (1990) presented a fourth dimension, integration, which is not quite the same as Russell and Cutrona’s (1986) and Weiss’ (1974) dimension of social integration. Social integration has to do with feeling as if a person belongs to a group of similar others while Krause and Markides saw integration as a dimension assessing the degree to which a person provides help to others. Likewise, Weiss, and later Russell and Cutrona, also proposed two other dimensions: reassurance of worth and opportunity to provide nurturance. In addition, it could be argued that reassurance of worth might be dealt with as an emotionally supportive behavior. At any rate, these latter three dimensions are not consistent in their use in measures of social support.

Within the literature, emotional support is discussed as nondirective support (as reported in the Inventory of Socially Supportive Behaviors by Barrera et al., 1981), as emotional support (Krause and Markides, 1990), or as attachment (Weiss, 1974; Russell and Cutrona, 1986). Behaviors exhibited as emotionally supportive include caring and a sense of emotional closeness. The second dimension, advice, is presented as
directive guidance by Barrera et al., informational support by Krause and Markides, and guidance by Weiss, Russell and Cutrona. Supportive behaviors included advice and information. Finally, assistance is talked about by Barrera et al. as tangible assistance, reliable alliance by Weiss and Russell and Cutrona, and as tangible support by Krause and Markides. This latter dimension is characterized by help with transportation, shopping, household chores, borrowing money, and so forth.

When assessing the reliability of their social support scale, Krause and Markides found good support for the informational, and emotional dimensions, but less support for their measure of tangible support. When factor analysis was performed on the tangible support items, three items were found that had significantly high factor loadings: help with shopping, transportation, and household chores. Therefore, it is suggested that these items may be best to represent what the authors considered a measure of tangible support. However, their overall measure of tangible support with a total of 9 items proved to be the least reliable (Heise and Bohrnstedt's omega coefficient, .669) of all the subscales. The imbalance in the tangible support measure reflects not only Krause and Markides findings but also previous work by Schaeffer et al. (1981; cited in Krause and Markides, 1990). It is suggested that, unlike the other dimensions of social
support, items typically contained within tangible support measures are more independent of one another. Physical assistance differs between tasks and simply requires different levels of commitment and time. It is likely that items found to load highly onto tangible support in Krause and Markides study may increase reliability of that particular subscale. Therefore, because of the independence and multidimensionality of tangible support items, unlike measures of emotional support and advice, it may be necessary to use a disproportionate number of items in attempting to assess tangible support.

The social support measure within the present study is divided into the same three dimensions as supported by previous work mentioned above. Survey questions on help with household activities, transportation, and care when ill are together likely to be good indicators of tangible support, assistance, or reliable alliance. Items dealing with advice and help with decisions are likely to be indicators of advice, informational assistance, or guidance. Finally, help with emotional problems may be the only indicator necessary of emotional support; there is likely little or no diversity between tasks in levels of emotional support.

Assessment of the dependent variable is based on the total of six items from the Help and Support section of Hoyt's Aging and Change in Rural Iowa study. The six dimensions of
social support are measured by the following help and support items:

If you needed help with ...

1) Household chores or other activities around the house, who would you first ask for help? (CHORES)
2) Transportation to your doctor, to the store, or other places, who would you first ask for help? (TRANS)
3) Information or advice about personal concerns or problems, who would you first ask for help? (ADVICE)
4) Decisions to make about health problems you might be experiencing, who would you first ask for help? (DECISIONS)
5) Emotional problems or concerns, who would you first ask for help? (EMOTIONAL)
6) Care when you are sick, who would you first ask for help? (CAREILL)

It is argued that the six items represent in abbreviated form the three dimensions typically used in social support measures: advice, assistance, and emotional support. No subscale within the presently proposed measure of social support is used independently. Table 3.11 reports the means and standard deviations in the dependent variable for various sample groups.

Table 3.11. Means and standard deviations in the naming of siblings as potential support providers for the overall sample, for the unmarried, unmarried parents and unmarried childfree respondents.

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall sample</td>
<td>90</td>
<td>.211</td>
<td>.662</td>
</tr>
<tr>
<td>Unmarried</td>
<td>41</td>
<td>.463</td>
<td>.925</td>
</tr>
<tr>
<td>Unmarried Parents</td>
<td>30</td>
<td>.233</td>
<td>.679</td>
</tr>
<tr>
<td>Unmarried Childfree</td>
<td>11</td>
<td>1.090</td>
<td>1.220</td>
</tr>
</tbody>
</table>
Finally, to conclude the present chapter, correlation matrices of all independent and dependent variables for both the unmarried sample and unmarried parent sample are presented. Two tables are presented because the variable Cdist (respondent/adult child proximity) only appears when testing associations for unmarried parents. Table 3.12 presents the coefficients for the unmarried sample and Table 3.13 presents coefficients for the unmarried parents. There are significant associations between Ssee (frequency of respondent/sibling in person visits) and Sdist (respondent/sibling distance), Ssee and Rhealth (respondent health), and Rage (respondent age) and Sage (sibling age), in both samples. The associations for both Ssee and Sdist, and Ssee and Rhealth, are inverse and are consistent with the theme of the present study. In addition, in the unmarried

<table>
<thead>
<tr>
<th>Variable</th>
<th>Bysib</th>
<th>Sdist</th>
<th>Sage</th>
<th>Rhealth</th>
<th>Rage</th>
<th>Ssee</th>
<th>Speer</th>
<th>Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bysib</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sdist</td>
<td>-.07</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sage</td>
<td>-.03</td>
<td>-.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhealth</td>
<td>-.11</td>
<td>.03</td>
<td>.21</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rage</td>
<td>.24</td>
<td>.11</td>
<td>.71**</td>
<td>-.04</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ssee</td>
<td>.37*</td>
<td>-.63**</td>
<td>.05</td>
<td>-.33*</td>
<td>.03</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speer</td>
<td>-.01</td>
<td>-.12</td>
<td>-.10</td>
<td>-.03</td>
<td>-.07</td>
<td>.18</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td>.42**</td>
<td>.11</td>
<td>.07</td>
<td>.15</td>
<td>.14</td>
<td>.04</td>
<td>.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p<.05  
** p<.01
Table 3.13. Correlation matrix for dependent and independent variables for the unmarried parent sample (N=30).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Bysib</th>
<th>Sdist</th>
<th>Sage</th>
<th>Rhealth</th>
<th>Rage</th>
<th>Ssee</th>
<th>Speer</th>
<th>Cdist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bysib</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sdist</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sage</td>
<td>-0.01</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhealth</td>
<td>-0.26</td>
<td>-0.06</td>
<td>0.29</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rage</td>
<td>0.13</td>
<td>0.21</td>
<td>0.73</td>
<td>0.04</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ssee</td>
<td>0.33</td>
<td>-0.55</td>
<td>0.03</td>
<td>-0.36</td>
<td>-0.02</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speer</td>
<td>-0.04</td>
<td>-0.19</td>
<td>-0.28</td>
<td>-0.13</td>
<td>-0.22</td>
<td>0.22</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Cdist</td>
<td>0.05</td>
<td>0.43</td>
<td>0.17</td>
<td>-0.04</td>
<td>0.32</td>
<td>-0.36</td>
<td>-0.43</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* p<.10
** p<.05
***p<.01

For the unmarried parent sample, there are significant associations between adult-child/respondent distance and respondent/sibling distance, adult-child/respondent distance and frequency of in-person respondent/sibling visits, and adult-child/respondent distance and respondent/sibling age difference. This latter finding suggests the importance of respondent/adult-child proximity in the provision of support by siblings. It is consistent with the theme of this study to find that increased respondent/adult-child distance is related to an increased frequency of naming siblings as potential support providers. However, there was an inverse association between respondent/adult-child distance and sibling in-person visits.

Variable associations will be analyzed more closely in Chapter 4. In addition, individual hypotheses will be tested, as well as the proposed models of sibling support.
CHAPTER 4

RESULTS

Chapter 3 discussed the operationalization of both dependent and independent variables. In addition, data collection procedures, sample characteristics, variable measurement, and coding procedures were presented. Finally, descriptive statistics were used to present sample characteristics and intercorrelational matrices were presented. This chapter will present the results of the statistical analyses used to test the hypotheses presented in Chapter 3.

Hypothesis 1.

Married respondents will name their spouse as the person they would turn to first for help and support more than they will others.

Previous studies have documented the hierarchical selection of support providers (Cantor, 1979; Johnson and Catalano, 1981; Hoyt and Babchuk, 1983). Cantor in her hierarchical compensatory model demonstrated a clear and consistent pattern in the choice of providers. Married respondents tend to choose their spouse first and then adult children as potential support providers.

It was expected that married respondents in the present study would name their spouse as the person they would turn to
first for help and support more than they would others. Present data support the hypothesis. Married respondents did name their spouse as the primary potential support provider (of the six combined tasks) significantly more often than they named all others (adult children, siblings, and "others"), t=4.86, p<.01. In the overall sample (n=49), the mean number of married sample respondents naming a spouse as a potential support provider (for the combined six tasks) was 73.1%.

Table 4.1 shows the frequency of married respondents naming either a spouse, adult child, sibling, or other, as someone they would turn to first for help and support by supportive task.

Tables 4.2 and 4.3 provide frequencies of named primary

Table 4.1. Married respondents naming of a support provider by supportive task (N=49).

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Spouse</th>
<th>Child</th>
<th>Sibling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help with ...</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Chores</td>
<td>79.6</td>
<td>39</td>
<td>4.1</td>
<td>2</td>
</tr>
<tr>
<td>Transportation</td>
<td>79.6</td>
<td>39</td>
<td>10.2</td>
<td>5</td>
</tr>
<tr>
<td>Advice</td>
<td>69.4</td>
<td>34</td>
<td>14.3</td>
<td>7</td>
</tr>
<tr>
<td>Decisions</td>
<td>61.2</td>
<td>30</td>
<td>12.2</td>
<td>6</td>
</tr>
<tr>
<td>Emotional Problems</td>
<td>61.2</td>
<td>30</td>
<td>4.1</td>
<td>2</td>
</tr>
<tr>
<td>Care When Ill</td>
<td>87.8</td>
<td>43</td>
<td>6.1</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Frequency of Named Choice 215 25 0 54

Mean for Combined Tasks 73.1 8.5 0.0 18.4
potential support providers for married male and married female respondents, respectively. As can be seen, married females named children and others as potential support providers more than did married males; though this difference is not significant, \( t=.99 \), n.s. In addition, married males were much more likely to be dependent on their spouse for potential support than were married females; this difference neared significance at the .05 level, \( t=-1.54 \), \( p=.06 \).

The most striking finding when exploring who married respondents named, both for the overall sample, as well as married males and females, was that no respondent identified a sibling as a primary potential support provider. It seems the data support the present hypothesis; married respondents did
Table 4.3. Married female respondents naming of a support provider by supportive task (N=22).

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Spouse</th>
<th>Child</th>
<th>Sibling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Chores</td>
<td>68.2</td>
<td>15</td>
<td>5.4</td>
<td>1</td>
</tr>
<tr>
<td>Transportation</td>
<td>77.3</td>
<td>17</td>
<td>9.1</td>
<td>2</td>
</tr>
<tr>
<td>Advice</td>
<td>63.6</td>
<td>14</td>
<td>22.7</td>
<td>5</td>
</tr>
<tr>
<td>Decisions</td>
<td>54.5</td>
<td>12</td>
<td>18.2</td>
<td>4</td>
</tr>
<tr>
<td>Emotional Problems</td>
<td>50.0</td>
<td>11</td>
<td>9.1</td>
<td>2</td>
</tr>
<tr>
<td>Care when Ill</td>
<td>72.8</td>
<td>16</td>
<td>13.6</td>
<td>3</td>
</tr>
<tr>
<td>Total Frequency</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Named Choice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

name their spouse as the first choice of potential support providers over all others.

Hypothesis 2.

Unmarried parents will name an adult child as the person they would turn to first for help and support more than they will others.

If married respondents are expected to turn first to a spouse for the provision of support, Cantor’s model would suggest that unmarried respondents would seek out adult children as potential support providers. The mean number of unmarried respondent parents naming an adult child as a potential support provider (for the combined six tasks) was 46.0% and 54.0% for all others (siblings and "others"). However, unmarried parents were no more likely to turn to
adult children for help and support than they were all others, t=-.81, n.s. Based on these results the hypothesis is not supported.

Table 4.4 shows unmarried respondents' choices for potential primary support providers by supportive task. Although adult children are named as potential support providers more often than are siblings, others are named slightly more frequently than adult children.

Table 4.4. Unmarried respondents with children naming of a potential support provider by task (N=30).

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Child</th>
<th>Sibling</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help with ...</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Chores</td>
<td>33.3</td>
<td>10</td>
<td>0.0</td>
</tr>
<tr>
<td>Transportation</td>
<td>43.3</td>
<td>13</td>
<td>10.0</td>
</tr>
<tr>
<td>Advice</td>
<td>56.7</td>
<td>17</td>
<td>3.3</td>
</tr>
<tr>
<td>Decisions</td>
<td>60.0</td>
<td>18</td>
<td>3.3</td>
</tr>
<tr>
<td>Emotional Problems</td>
<td>40.0</td>
<td>12</td>
<td>0.0</td>
</tr>
<tr>
<td>Care when Ill</td>
<td>43.3</td>
<td>13</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Total Frequency of Named Choice 83 7 90

Mean for Combined Tasks 46.0 4.0 50.0

Hypothesis 3.

For unmarried parents, the nearer in proximity are a respondent and an adult child, the more frequently will an adult child be named as the first person the respondent would turn to first for help and support.

Central to this third hypothesis is availability.

Availability is tested in the present hypothesis as a factor
affecting the naming of an adult child as a potential support provider. It has been shown in the present sample that married respondents are more likely to name a spouse as the person they would turn to first for help and support. In addition, it was thought unmarried respondents with children would be more likely to name an adult child. Is this likely to occur if there is greater distance between respondent parent and child? While the marital relationship implies close proximity the filial relationship does not.

A Pearson correlation was used to assess the association between adult child/respondent proximity and the number of times an adult child was named as the person the respondent would turn to first for help and support. The association was significant for unmarried respondents with children (n=30), r=-.44, p<.05. The hypothesis was supported.

Hypothesis 4.

For unmarried parents, the more distant in proximity are a respondent and an adult child, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

If the proximity between a respondent and an adult child is thought to affect the naming of an adult child as a potential support provider, it is also likely that when respondent/adult child proximity is great, there would be greater dependency on others. The present hypothesis seeks to explore the association between adult-child/respondent
proximity and the naming of a sibling as a potential support provider by the respondent. Previous work by O’Bryant (1988) and Connidis and Davis (1992) suggests that greater respondent/adult child proximity may effect the naming of a sibling as a potential support provider. It is thought that when an adult child is distant, and unable to provide support, other blood kin may be sought. A sibling likely represents the next closest blood kin after adult child. However, the present hypothesis was clearly not supported in the present sample, $r=.051$, n.s.

Hypothesis 5.

For the unmarried, the nearer in proximity the sibling, the more frequently will a sibling be named as a person the respondent would turn to first for help and support.

Based on previous work (Hoyt and Babchuk, 1983; Peters et al., 1987; and O’Bryant, 1988) there is likely an association between respondent/sibling proximity and the provision or exchange of supportive services. Proximity of respondent to nearest sibling was also thought to influence the naming of a sibling as a potential support provider. The results of Pearson correlations showed mixed results. For unmarried respondents ($n=41$, $r=-.07$, n.s.) the results were not significant but for unmarried childfree respondents ($n=11$, $r=-.46$, p<.10), there was a significant relationship found between respondent/sibling proximity and the naming of a
sibling as a potential support provider.

**Hypothesis 6.**

For the unmarried, the younger the age of the sibling, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

Besides sibling proximity the other likely best indicator of availability is age. Depner and Ingersoll-Dayton (1988) found that older respondents provided less health support to siblings which may be largely due to decreased ability. The age of the sibling is associated with the health and functional status of the sibling. It was thought that the younger the age of the sibling, the greater the likelihood of the sibling being named as a potential support provider. However, Pearson correlations for unmarried respondents (n=41, r=-.035, n.s.), for unmarried with children (r=-.01, n.s.), and for unmarried childfree (n=11, r=-.167, n.s.), failed to reveal any significant associations. The hypothesis was not supported.

**Hypothesis 7.**

For the unmarried, the poorer is the respondent's health, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

The respondent's health was also thought to influence the naming of a sibling as a potential support provider as an
issue of respondent need. It was thought that unmarried respondents in poor health would be more likely to name a sibling as a potential support provider; expected in a large part due to the unreciprocated demands associated with providing more intensive and physically demanding supportive services. As such, it was thought that only close blood kin would be seen as ready and willing to provide such support. However, no significant association was found for unmarried respondents ($r= -.11, n.s.$), unmarried parents ($r= -.26, n.s.$), or for the unmarried childfree sample, $r= -.11, n.s.$ The hypothesis was not supported.

Hypothesis 8.

For the unmarried, the older the respondent, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

Another factor associated with respondent need was respondent age. It was thought that the greater the respondent’s age, the greater the respondent’s need. As with respondent health, the greater the respondent’s need for the provision of supportive services, or the contemplation of those services at some point in the future, the greater the likelihood that only a close blood kin like a sibling would be thought of as a potential source of support.

Pearson correlations were used to test the association between the respondent’s age and the frequency of naming a
sibling as someone to whom the respondent would turn first for help and support. Clearly, this association was significant for the overall sample (n=90), $r=.31$, $p<.01$. However, this result for the overall sample was not hypothesized. For unmarried respondents ($r=.24$, n.s.), for unmarried parents ($r=.13$, n.s.), and for the unmarried childfree ($r=.32$, n.s.), the hypothesis was not supported.

Hypothesis 9.

For unmarried respondents, the greater the sibling interaction, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

Based on work by Hoyt and Babchuk (1983) sibling interaction was thought to influence the likelihood of a respondent naming a sibling as a potential support provider. A Pearson correlation was used to assess the association between sibling interaction and the naming of a sibling as someone the respondent would turn to first for help and support. For the overall sample ($r=.26$, $p<.01$) the results were significant. However, this association was not hypothesized. For both the unmarried ($r=.37$, $p<.05$) and unmarried parents ($r=.33$, $p<.10$) there was a significant association between frequency of in person respondent/sibling visits and naming a sibling as a potential support provider. While not significant, the results neared significance at the .10 level and were in the predicted direction for unmarried
childfree respondents, $r = .48$, $p = .131$. It is likely that the small sample size in the latter group contributed to the nonsignificant association.

When the overall proposed model of sibling support was tested, presented later in this chapter, the variable Ssee (frequency of in person sibling/respondent visits) was the only independent variable consistently predictive of the dependent variable Bysib (naming a sibling as a potential support provider). Since data on the unmarried childfree sample is presented as incidental because of the small sample size, the hypothesis was supported.

Hypothesis 10.

For the unmarried, the nearer the respondent’s age to the sibling’s age, the more frequently will a sibling be named as the person the respondent would turn to first for help and support.

Based on previous work by Schvaneveldt and Ihinger (1979) it was thought that siblings close in age would be more likely to turn to each other for help and support due to the existence of life-long patterns of closeness and coalition maintenance. The present hypothesis attempted to investigate the association between the respondent’s being an age peer of the respondent and the greater frequency of naming a sibling as a potential support provider. A Pearson correlation was used to test the association. Results indicate no significant association between being an age peer and a greater frequency
of naming a sibling as a possible source of support for the unmarried sample \( (r=-.01, \text{n.s.}) \), for unmarried respondents with children \( (r=-.04, \text{n.s.}) \), and unmarried childfree respondents \( (r=.02, \text{n.s.}) \). The hypothesis was not supported.

Testing the Proposed Model

In order to test the overall model, regression analysis was used to find the individual effect of each independent variable on the dependent variable and also to learn more about the combined effects of all the independent variables on the dependent variable.

**Hypothesis 11.**

Model independent variables will explain a significant amount of the total variance in predicting the naming of a sibling as a potential support provider among sample unmarried respondents.

A regression model was calculated for unmarried respondents. No such model was tested for married respondents as no respondents named a sibling as a potential support provider (therefore there was no variability in the dependent variable for that group). The regression equation for the unmarried sample was:

\[
\text{BYSIB} = b_0 + R\text{HEALTH} + R\text{AGE} + S\text{AGE} + S\text{DIST} + S\text{SEE} + S\text{PEER}
\]

Table 4.5 shows the results of this regression analysis for the overall unmarried sample. The R Square value suggests that the proposed model explains 21% of the variance in the
Table 4.5. Regression coefficients for model independent variables on the naming of a sibling as a potential support provider for the overall unmarried sample.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Overall Unmarried Sample</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Standardized Beta</td>
<td>Unstandardized Beta</td>
</tr>
<tr>
<td>Rhealth</td>
<td>.201</td>
<td>.218</td>
<td></td>
</tr>
<tr>
<td>Rage</td>
<td>.556**</td>
<td>.062**</td>
<td></td>
</tr>
<tr>
<td>Sage</td>
<td>-.492*</td>
<td>-.048*</td>
<td></td>
</tr>
<tr>
<td>Sdist</td>
<td>.210</td>
<td>.149</td>
<td></td>
</tr>
<tr>
<td>Ssee</td>
<td>.590**</td>
<td>.353**</td>
<td></td>
</tr>
<tr>
<td>Speer</td>
<td>-.087</td>
<td>-.022</td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td></td>
<td>.209</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>41</td>
<td></td>
</tr>
</tbody>
</table>

* p<.05  
** p<.01  

naming of a sibling as a potential support provider when investigating marital status. For unmarried respondents these independent variables, together in combination with each other, are significantly predictive of naming a sibling as a potential support provider (F[6,34]=2.76, p<.05). When examining individual independent variables and their predictive ability, the variables Rage (respondent age), Ssee (frequency of in person respondent/sibling visits), and Sage (sibling age), are significantly associated with, and predictive of, the dependent variable, Bysib (naming a sibling as a primary potential support provider).
Hypothesis 12.

Parental status, in combination with other model independent variables, will explain a significant amount of the total variance in predicting the naming of a sibling as a potential support provider among sample unmarried respondents.

In order to learn more about the effects of parental status by itself and in conjunction with marital status and the other endogenous variables, the present hypothesis was proposed. A regression model was created to test the effects of having adult children on unmarried respondents potentially turning to siblings for help and support. The regression equation was:

\[ \text{BYSIB} = B_0 + \text{CHILD} + \text{RHEALTH} + \text{RAGE} + \text{SAGE} + \text{SDIST} + \text{SEE} + \text{SPEER} \]

Table 4.6 shows the effects of adult children on the respondent’s naming of a sibling as a potential support provider. The regression analysis found significant support for the proposed model relating to parental status and naming a sibling as a potential support provider \((F[7,33]=3.48, p<.01)\). By employing the present independent variables, together in combination with each other, 30% of the total variance is explained. The hypothesis is supported.

Hypothesis 13.

Respondent/adult child proximity, in combination with other model independent variables, will explain a significant amount of the total variance in predicting the naming of a sibling as a potential support provider among sample unmarried parents.
Table 4.6. Regression coefficients for model independent variables and the effects of parental status on the naming of a sibling as a potential support provider for the overall unmarried sample.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Overall Unmarried Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standardized Beta</td>
</tr>
<tr>
<td>Child</td>
<td>.329*</td>
</tr>
<tr>
<td>Rhea1th</td>
<td>.108</td>
</tr>
<tr>
<td>Rage</td>
<td>.478*</td>
</tr>
<tr>
<td>Sage</td>
<td>-.437*</td>
</tr>
<tr>
<td>Sdist</td>
<td>.126</td>
</tr>
<tr>
<td>Ssee</td>
<td>.493*</td>
</tr>
<tr>
<td>Speer</td>
<td>-.085</td>
</tr>
</tbody>
</table>

R square = .303
N = 41

* p<.05

Finally, the present study proposed that adult child proximity was an important predictor of naming a sibling as a potential support provider. It was thought that the distance to the nearest adult-child would be predictive of unmarried respondent parents turning to siblings for help and support. To test the effects of respondent to child distance on the dependent variable, a regression model was calculated for unmarried parents. The regression equation was:

\[ \text{BYSIB} = B_0 + CDIST + RHEALTH + RAGE + SAGE + SDIST + SSEE + SPEER \]

Table 4.7 shows the results of this regression analysis for respondents with children (N=30). The R Square value (R Square = .050) for the analysis suggests that respondent to child distance failed to explain a meaningful amount of the
Table 4.7. Regression coefficients for model independent variables and the effects of respondent/adult child proximity on the naming of a sibling as a potential support provider for sample unmarried parents.

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Unmarried Parent Sample</th>
<th>Standardized Beta</th>
<th>Unstandardized Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cdist</td>
<td>.070</td>
<td>.035</td>
<td></td>
</tr>
<tr>
<td>Rhealth</td>
<td>-.035</td>
<td>-.028</td>
<td></td>
</tr>
<tr>
<td>Rage</td>
<td>.207</td>
<td>.018</td>
<td></td>
</tr>
<tr>
<td>Sage</td>
<td>-.209</td>
<td>-.014</td>
<td></td>
</tr>
<tr>
<td>Sdist</td>
<td>.182</td>
<td>.095</td>
<td></td>
</tr>
<tr>
<td>Ssee</td>
<td>.476*</td>
<td>.216*</td>
<td></td>
</tr>
<tr>
<td>Speer</td>
<td>-.093</td>
<td>-.018</td>
<td></td>
</tr>
</tbody>
</table>

R square .050
N 30

* p<.05

The total variance (F[7,22]=.803, n.s.). Only the variable Ssee (frequency of respondent/sibling in person visits) is significantly associated with, and predictive of, the dependent variable, Bysib (naming a sibling as a potential primary support provider), and then only at the .10 probability level. The hypothesis was not supported.

Summary of Proposed Model Results

Thus, the first regression analysis, proposing marital status as a significant predictor of naming a sibling as a potential support provider, for the overall sample and for females, supports the model. Three variables stand out in their associations with the dependent variable and
contributing to the success of the model: sibling age, frequency of respondent/sibling in person visits, and respondent age. For the overall sample, the model is said to explain 21% of the variance. Presented incidentally, for female unmarried respondents in particular, the model may be even more predictive with 32% of the total variance being explained by the independent variables employed.

The second regression analysis, testing the effects of adult children, in combination with the other model independent variables, on the dependent variable, was also significant. Parental status with the other model independent variables explained 30% of the total variance in Bysib.

The final regression analysis, testing the effects of respondent/adult child proximity, was not found to explain a significant amount of the variance in the dependent variable among sample unmarried parents. Respondent/adult child proximity, in combination with the other model independent variables, failed to adequately predict the naming of siblings as potential primary support providers.
CHAPTER 5

DISCUSSION

Recent trends in American history have contributed to a higher proportion of aged than at any other time and this will continue into the foreseeable future. Never has there been such a need for studies exploring the social support systems of the aged. In the future, formal support organizations may not be able to adequately and responsively deal with the large numbers of older Americans. Informal sources of support for the aged may represent the key to successful aging for this cohort.

Families are considered to be the best potential resource base for the provision of informal support for the aged. The marital relationship is regarded as the primary source of support for most Americans. However, in later life the exchange of supportive tasks is disrupted by the death of a spouse. Children are the next important source of support for the aged but often times children are not available. In addition, the aged often hesitate to ask an adult child for help and support. Siblings may be the next best source of support for the aged, albeit an underutilized one.

Summary of Findings

The present study found partial support for Cantor’s hierarchical compensatory model. Married respondents were
much more likely to name a spouse as a potential support provider than an others (adult children and/or siblings); and this was especially true of married males. The marital relationship is clearly shown as one in which partners feel as if they may depend on each other for support.

Whereas married respondents were more likely to name a spouse as a potential support provider, unmarried respondents with children were no more likely to name others or adult children as the first persons they would turn to for help and support. This finding is largely influenced by the great number of respondents who named professionals as people they would seek out first for help and support; i.e., doctors, lawyers, ministers, and so forth.

Availability is an important issue in the provision of support. For unmarried parents, it was thought that having an adult child nearby would increase the frequency of an adult child being named as the first person they would turn to for help and support and this was found to be true among the present sample. Likewise, it was thought that if proximity was associated with naming an adult child as a potential support provider, then greater adult child/respondent distance might well increase the frequency of siblings being named. However, the latter was not supported.
Sibling Availability

Availability was thought to be a crucial factor in the naming of siblings as potential primary support providers. Based on previous work reporting the significance of proximity to the provision of supportive tasks (Hoyt and Babchuk, 1983; Peters et al., 1987; and O'Bryant, 1988), and work done by Depner and Ingersoll-Dayton (1988) on the effects of age and health status on sibling relationships, proximity and age were investigated as affecting the naming of siblings as potential support providers. It was thought that siblings who were both proximate and young in age would be regarded as potential support resources. Two independent variables were therefore proposed to indicate sibling availability, respondent/sibling proximity and sibling age. Neither variable was found to be significantly associated with the dependent variable in the overall sample or the unmarried parent sample. Only for the unmarried childfree was there a significant relationship between respondent/sibling proximity and the dependent variable: the closer the respondent and sibling lived, the more often was a sibling named as a potential primary support provider. However, this particular finding can only be presented as incidental due to the small sample size of the unmarried childfree group (N=11). The small sample size no doubt contributed to its nonsignificance. In addition, in the regression analysis testing the overall model, sibling age was
found to be, in combination with other independent variables, a significant predictor of naming a sibling as a social support provider (Bysib).

There was a strong and significant inverse association between respondent/sibling proximity and frequency of in-person respondent/sibling visits. This inverse association was found in the overall unmarried sample, and both the unmarried parent and unmarried childfree samples.

**Respondent Factors**

Respondent variables, respondent health and respondent age, are concerned with respondent need and the effects of that need on naming a sibling as a potential support provider. It was thought that with greater respondent need, as measured by a respondent’s health and age, there would be greater likelihood of turning to kin for the provision of support. Only close blood kin might be willing to provide such support because of the unreciprocated demands associated with the provision of that support. However, respondent health was not found to be significantly associated with naming a sibling as a potential support provider and this was true of the overall unmarried sample, as well as for the unmarried parent and childfree samples.

The other respondent variable, respondent age, was not found to be directly associated with the dependent variable. However, in the regression analysis designed to test the
overall model, respondent age was found to be, in combination with other independent variables, a significant predictor of naming a sibling as a potential support provider for the overall unmarried sample and for unmarried females.

Respondent Choice

Two variables, sibling interaction and respondent/sibling age difference, were thought to represent respondent choice factors associated with choosing a sibling as a potential support provider. Sibling interaction, frequency of in-person respondent/sibling visits, was thought to be associated with turning to siblings for support because of the implied affect. Hoyt and Babchuk (1983) wrote that frequency of interaction could be a "good indicator of liking, of seeking out between individuals who enjoy close association." It was thought that respondents would "choose" to receive support from, or exchange with, those they liked, when choice was possible.

Frequency of in-person respondent/sibling visits was one of the few independent variables to be associated with the dependent variable. For the unmarried overall sample and the unmarried parent sample the association between sibling interaction and naming a sibling as a potential support provider was significant. It is suggested that the nonsignificant finding for the unmarried childfree sample may be largely due to the small sample size, n=11; note the large correlation value. When the regression analysis was performed
on the overall model, sibling interaction was also found to predict naming a sibling as a potential support provider in combination with other independent variables.

The other variable thought to represent respondent choice was respondent/sibling age difference. Based on previous research (Schvaneveldt and Ihinger, 1979) it was thought that small respondent/sibling age differences would continue into later life the coalitions and alliances that often result from such age closeness during childhood. Respondent/sibling age difference was therefore used as a proxy measure of respondent/sibling closeness which was not measured in the Aging and Change survey. However, there were no significant associations between respondent/sibling age difference and the dependent variable or any other independent variable for all samples.

Cantor (1979:453) in her hierarchical compensatory model found that relationship type was more important in determining who provided support than was the task itself. In her model, "kin [are] generally seen as the most appropriate support giver followed by significant others and lastly by formal organizations." The present study found partial support for Cantor’s hierarchical compensatory model. Among married respondents, support for Cantor’s model was found only to the level of spouse. Married respondents were much more likely to name a spouse as a potential support provider than
others (adult children and/or siblings); and this was especially true of married males. Clearly, spouses felt they would turn primarily to a spouse for all six types of help and support. The marital relationship is clearly shown as one in which partners feel as if they may depend on each other for support. Beyond spouse, relationship type seemed to have little to do with naming someone as a potential support provider.

Litwak (1985) in his task-specific model found that the demands of the task itself determined who was likely to be turned to when support was needed. Litwak believed that depending on the particular task, and who could best provide assistance, formal or informal support could be sought. The nature of the particular task and the characteristics of the supportive source are the determinants of who can best provide support for a given task. In Litwak’s model "the kinship system is seen as most appropriately carrying the traditional kin-associated tasks involving long-term history and intimacy. But given the geographic dispersion of many children, only those tasks not requiring proximity or immediacy will be appropriate for kin. Neighbors...can be expected to assist with tasks requiring speed of response, knowledge of and presence in the territorial unit. Friends are uniquely able to deal with problems involving peer group status and similarity of experience and history" (Cantor, 1979:453).
Litwak's model suggests that kin would most likely be named as potential sources of support involving care when ill and decisions about health problems owing to the seriousness of the situation. For unmarried parents in the present study, decisions about health problems clearly fell to kin (children and siblings). Care when ill, however, was evenly divided between kin and others. Litwak (1985) clearly identified kin as providing temporary sick care. One possible reason why kin were not named significantly more than others as potential support providers for care when the respondent was ill, may have to do with the uniqueness of the sample. The close-knit characteristics of rural, small-town Iowa, with its high proportion of elderly, may suggest a larger than normal informal support network of age peers.

Help with chores, transportation, and emotional problems, as well as the seeking of advice, are likely to be identified with friends and neighbors because they do not require great effort and often adult children are not proximate. However, for unmarried parents, only in the case of help with chores and emotional problems were others named more frequently. It may be possible that the reason that help with transportation did not clearly fall to either adult children or others may be a function of small-town living. Maybe respondents perceived a cost to the act of transporting them differentially, depending on the destination. Trips to the local grocery
store or their own physician might involve only a slight cost and so the respondents felt more able to depend on friends and neighbors. Whereas, the occasional trip to the physical therapist or a specialist might involve greater distance and cost. In such cases, respondents may have felt only adult children could be asked to provide such support. The physical ability of others to provide transportation services may well have influenced respondent’s choices when destinations were greater.

When looking at the provision of tasks by kin (adult children and/or siblings) two tasks stand out: help with decisions and the seeking of advice. Help with decisions was expected to fall to kin and it did so in the present study. Litwak (1985) found that sharing problems and seeking advice was a task that fell to friends and seldom to kin. However, in the present study there was a greater frequency of respondents who named kin as the primary potential provider of that task. One possible reason that kin rather than friends served as potential sources of advice may be the close-knit characteristics of the small, rural town. In these small, rural, age-homogenous towns, where many elderly residents knew each other, help with decisions and seeking advice may well have meant respondents making themselves vulnerable to gossip.

There seems to be very limited support in the present study for either Cantor’s or Litwak’s models. However, it
should be noted that the sample used in the present study was very unique. The communities from which the respondents were recruited were rural, very age homogenous, and had little available formal support. Aged community members are likely to have developed extensive informal support networks among friends and neighbors. In addition, that informal support network may include lawyers, ministers, doctors, and so forth, as friends and not just as formal support providers. The end result may be an abnormally expansive informal support network reflected as 'others' and including more than the typical amount of 'primary' members. In society at large, kin may take on a more important role than they do in the present sample because of the inability of smaller informal support networks to provide needed support. It is likely that if the present sample was more representative there would have been additional support for both Cantor's and Litwak's models.

The Proposed Model

Results from testing the overall model were mixed. The first part of the overall model explored the effects of respondent factors, sibling availability, and respondent choice factors, on the dependent variable for unmarried respondents (n=41). The regression analysis was significant but the total amount of variance explained was only 21%. When investigating the unmarried female sample, 32% of the variance in the dependent variable was attributed to the model
independent variables. For sample unmarried males, the model independent variables were not significantly predictive. Clearly, unmarried females were responsible for the significance of the regression analysis.

Neter, Wasserman, and Kutner (1989) wrote that the "...stepwise regression procedure is probably the most widely used of the automatic search methods...arriving at the best subset of independent variables...with the identification of a single regression model as best". In order to offer a revised proposed model for future research, backward stepwise regression was done on the overall unmarried sample, as well as for unmarried males and females. "For small and moderate numbers of variables in the pool of potential X variables, some statisticians argue for backward stepwise search over forward stepwise search."

Backward stepwise regression was done to determine a model that contained the greatest predictive ability. The final result was a significant model ($F[3,27]=4.71, p<.01$) that contained the variables sibling age, respondent age, and sibling interaction. Together the three independent variables were predictive of Bysib and explained 22% of the total variance. When stepwise regression was calculated for unmarried males and females, again, the model for females was a significant predictor of naming a sibling as a potential support provider ($F[2,26]=6.52, p<.01$), and explained 28% of
the total variance with two variables, respondent age and sibling interaction.

The second part of the overall model tested the effects of parenthood on the dependent variable. Results of the regression analysis indicate that parental status, in combination with the other independent variables, is a significant predictor of Bysib ($F[7,33]=3.48, p<.01$) and together explains 30% of the total variance. In order to improve the proposed model a backwards stepwise regression was calculated. Four variables remained significant at the .05 level: parental status, sibling interaction, sibling age, and respondent age. Together these four variables produced a significant model in predicting Bysib ($F[4,36]=6.14, p<.01$) that explained 34% of the total variance.

Finally, the third regression analysis tested the effects of respondent/adult-child proximity on the dependent variable. Respondent marital status and parental status served as control variables. Results of the regression analysis indicated that respondent/adult-child proximity, in combination with the independent variables, is not a significant predictor of naming a sibling as a potential support provider. Respondent/adult child proximity, as an endogenous variable, along with the other independent variables, was not able to offer any substantial ability to predict the naming of a sibling as a potential support
provider. Apparently, respondent to adult child distance has no significant affect on naming a sibling to the support network by itself or in combination with other model independent variables. No backwards stepwise regression analysis could be performed.

The three factors associated with naming a sibling as a potential support provider (respondent factors, sibling availability, and respondent choice) are essentially upheld in the present study. Each factor contains one independent variable that was found in the present study to be predictive of the dependent variable in the two regression analyses found significant. Together, and in combination with parental status, an overall revised model of sibling support is proposed that explains 34% of the total variance (see Figure 5.1).

Limitations of the Study

As with any secondary analysis, there were always variables that "belonged" in the present study but were not available to be included. For example, sibling health would have been a better indicator than was sibling age of sibling health and functional status. Perhaps the most glaring is some comprehensive measure of respondent/sibling closeness. In an attempt to capture some measure of closeness, the present study utilized the variable Speer (respondent/sibling age difference), thought to reflect emotional closeness
Figure 5.1. Revised proposed model of naming a sibling as a potential support provider for the unmarried aged.

resulting from research on age closeness. Clearly, using respondent/sibling age difference was not productive. Another variable that was available but not used in the present study was Srel; the self-rated single item measure of the respondent's assessment of the quality of his/her relationship with the nearest sibling. Unfortunately, this yielded no substantial variance in respondent scores. In the end, frequency of respondent/sibling in-person visits, may actually represent the best indicator of respondent/sibling closeness available in the present study. Its consistent and significant association with the dependent variable, alone and in the proposed model, suggests the obvious: the best predictor of whom the aged, or anyone, turn to for emotional
and physical support, are likely the people they like enough to visit often.

Perhaps one of the most striking findings of the present study is the slight use by sample respondents of siblings for supportive purposes. No married respondents in the present study identified a sibling as a potential source of primary support. Unmarried sample respondents named siblings as potential sources of primary support infrequently. Indeed, perhaps one of the most outstanding findings was the large number of respondents, both married and unmarried, who named others as potential support providers. Two things should be noted. First, the present study has investigated who respondents named first, not second or third. Is there an important distinction between being named first, second, or even third? Secondly, during the process of entering data, it became apparent that many respondents named doctors, lawyers, ministers, pharmacists, and so forth, as persons they would turn to first for help and support. Would the present results be different had respondents been confined in their responses to nonformal sources of support?

Other limitations of the present study include the relatively small sample sizes and the quality of measures. Because of the small sample size for the unmarried childfree sample (n=11), findings are not generalizable and therefore offered incidentally. Marital status was collapsed into two
categories primarily for purposes of keeping sample sizes inflated. The combining of widowed, divorced, or never-married, into one category, likely obscured valuable data but this was unavoidable. And finally, respondent's health was a self-rated single-item measure that provided a very limited assessment of respondent's overall health.

Perhaps the greatest limitation of the present study was the non-representativeness of the sample. Sample respondents were drawn from three small towns (under 5,000 people) in rural Iowa. Each town had a higher than normal age homogeneity (25% or more of the population in each town was 60 years of age or older), and there were virtually no formal sources of support within the communities. Current findings are no doubt largely influenced by the uniqueness of the sample and are likely not generalizable.

Implications

Clearly spouses felt as if they could depend on each other for potential support and this was especially true of married males. But what of the unmarried? Perhaps the single most important finding of the present study was the prevalence among unmarried respondents to name others as frequently as they did. In addition to friends and neighbors, respondents frequently named doctors, lawyers, ministers, pharmacists, housekeepers, and so forth, as being the first person(s) they would ask for help and support. The significance of this
seems clear. Certainly it illustrates the notion that social support is a complex set of interactions between component parts. Component parts that include formal organizations, kin, and extended kin, as well as friends, even acquaintances, and is not limited to close family members alone. Siblings, along with adult children and others, are potential resources for the elderly, especially the rural elderly.
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