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Family conflict as a source of stress among caregivers to Alzheimer's patients

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FAMILY CONFLICT AS A SOURCE OF STRESS AMONG CAREGIVERS TO ALZHEIMER'S PATIENTS

by

Shirley J. Semple

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I had a great time.

ABSTRACT

Family Conflict as a Source of Stress Among Caregivers to Alzheimer's Patients

by

Shirley J. Semple

Doctor of Philosophy in Human Development and Aging

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This dissertation utilizes cross-sectional data to examine antecedents and consequences of family conflict in a sample of 555 primary caregivers to non-institutionalized Alzheimer's disease patients. Three dimensions of family conflict were assessed: 1) those involving disagreements over family members' attitudes and actions toward the caregiver; 2) those revolving around the level of family members' attentiveness and respect for the patient; and 3) those reflecting differences in the definitions of the impairment, its seriousness, and strategies for care.

Three sets of multiple regression analyses are presented. The first entails the identification of antecedent factors and conditions that influence family conflict. Each dimension of conflict was found to be associated with a unique pattern of antecedent factors and conditions that vary according to caregiver type (i.e., spousal versus adult children). The second set of analyses assesses the consequences of family conflict in relation to caregivers' experiences of depression.

Each dimension of conflict was found to be positively associated with a global measure of depression. Multiple regression analyses indicate that conflict involving family members' attitudes and actions toward the caregiver has the strongest effect on depression for both spousal and adult children caregivers. A third set of analyses examines the buffering effect of social support in relation to the impact of family conflict upon depression. For adult children caregivers, emotional support from family members only (as compared to friends only) buffers the negative impact of treatment of the caregiver conflict upon depression, whereas for spousal caregivers, emotional support from the combination of family member and friend serves this same function. Finally, an analysis of conflict risk reveals that caregivers tend to experience conflict with family members whom they perceive as having ties of emotional commitment and social obligation to the patient, themselves, or both. Spousal caregivers are most "at risk" for experiencing conflict with their adult children. Adult children caregivers are most "at risk" for experiencing conflict with their siblings. Limitations of cross-sectional data, the value of dimensionalizing family conflict, issues of causality, and future research directions are discussed. A general interpretative framework for the study of family conflict and its antecedent is also presented.

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CHAPTER I

INTRODUCTION

Research Objectives

This research seeks to examine the relationship between family conflict and depression in a sample of 555 primary caregivers to Alzheimer's disease patients. While systematic studies of the consequences of family conflict in relation to caregiver well-being have yet to be conducted, there is some clinical evidence to suggest that family conflict is a potent stressor in relation to depression (Zarit et al., 1985). A primary goal of this research is to begin to specify and explain the processes that may lead to family conflict, and those that may underlie the observed relationship between family conflict and depression. Specifically, the present study aims to: 1) examine antecedent factors and conditions that may affect three dimensions of family conflict; 2) assess the interrelationships among three dimensions of family conflict and their independent and direct effects upon depression; and 3) examine family support as a factor that may buffer the impact of family conflict upon depression.

In addition, we shall address one other important issue that underlies each of our three main analytic questions. Specifically, we seek to identify the types of family members with whom Alzheimer's caregivers are most likely to experience family conflict. Because conflict behavior necessarily involves interactive processes, it is useful for us to identify the specific members of the family role set who engage in conflictive interactions with the caregiver. This knowledge will enhance our ability to draw inferences about the operative norms, expectations and structural constraints that may underlie the antecedents of family conflict and the effects of family conflict upon depression.

To address the first research objective, we shall examine three broad categories of antecedent factors and conditions in relation to three dimensions of family conflict. Our three dimensions of family conflict include conflict around: 1) Definitions of the illness and strategies for care; 2) Family members' treatment of the patient; and 3) Family members' treatment of the caregiver. The three categories of antecedent conditions that will be examined in relation to each dimension of family conflict are: 1) Sociodemographic characteristics of the caregiver, including gender, age, education, income, marital status, and health status; 2) Objective conditions of caregiving, which include number of years as a caregiver, the patient's level of functional disability, the extent of the patient's behavioral problems and cognitive symptoms, and whether or not the caregiver resides with the patient; and 3) Network characteristics, including household composition, size and geographic proximity of family network, and frequency of telephone and face-to-face contact with family members. The relationships that emerge from this analysis will help to reveal the relevance of caregivers' social, situational, and network characteristics in terms of understanding the conditions that may lead to family conflict.

The second major objective of this research is to examine the interrelationships among our three dimensions of family conflict and a global measure of depression. Effects will be analyzed in three ways.

First, the independent and direct effects of each dimension upon depression will be assessed. Second, the joint or combined effects of the three dimensions will be evaluated. For example, it is possible that two dimensions will combine to produce a single dimension that accounts for depression more fully than either dimension alone. The third set of analyses will involve testing for conditional relationships. The purpose of this analysis is to specify the conditions under which the original relationship between family conflict and depression may be either strengthened or weakened.

The specification of the dimensions of family conflict is a pivotal feature of this study. As will be seen, it enables us to make a more detailed determination of which aspect(s) of family conflict are most likely to result in depression under different conditions. Is it conflict that focuses on strategies for care? Is it conflict that arises from family members' treatment of the patient? Is it conflict that stems from family members' treatment of the caregiver? Do all three dimensions combine in such a way that their joint effect is more powerful than their single effects? This level of specification helps to distinguish the dynamic forces that shape the variety of conflicts within this institutional sphere. Specification also helps to explicate the mechanisms that may underlie the relationship between family conflict and depression, or family conflict and other outcomes. Through construct specification, we enhance our understanding of complex relationships and avoid the dangerous practice of attributing excessive importance to a global construct simply because it is broad and encompassing (Rosenberg, 1968).

The third major objective of this research is to examine family support as a factor that may buffer the impact of family conflict on depression. It is expected that caregivers who appear similar regarding their experience of family conflict nevertheless will be different with regard to depressive symptomatology. We submit that this phenomenon may be explained, in part, by the regulating or mediating function of family support. Two types of family support will be examined as mediators of the impact of family conflict on depression: 1) Emotional support from family members; and 2) Instrumental support from family members. Specifically, it is expected that both types of family support will buffer the impact of family conflict upon depression. Any observed buffering effect should be manifested primarily in terms of how it reduces the adverse impact of family conflict upon depression.

Finally, this research seeks to identify the types of family members with whom Alzheimer's caregivers experience family conflict. Caregivers were asked to name the family member(s) with whom they had experienced disagreement on each of our three dimensions of family conflict. The risk of conflict associated with a particular category of family member will be computed and compared for a variety of relatives with whom caregivers interact. Although this analysis is not an identifiable component of our analytic model, it will contribute to our understanding and interpretation of the processes that may underlie both the antecedents of family conflict and the effects of family conflict upon caregivers' well-being. Moreover, this analysis draws our attention to the interactive nature of family conflict. Since norms and expectations are formulated in terms of specific role relationships within the family, it is important to consider how these may lead to differential levels of disagreement and conflict between the caregiver and other family members.

All analyses will be performed separately for spousal and adult children caregivers[1]. The rationale for this decision is detailed in Chapter 3.

Summary of Research Objectives

This research examines family conflict within a general framework of the stress process (see Pearlin et al., 1981; Pearlin et al., 1990). The primary objectives of the study are: 1) to examine social and economic factors and conditions that constitute antecedents or determinants of three conflict dimensions; 2) to assess the interrelationships among three dimensions of family conflict and their independent effects upon depression; and 3) to examine family support as a factor that may buffer the negative impact of family conflict upon depression. In addition, we will identify the types of relatives with whom Alzheimer's caregivers are most likely to experience conflict.

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[1] Adult child caregiver refers to a son or daughter who cares for a parent with Alzheimer's disease. Daughters-in-law and sons-in-law are _not_ included in any of the analyses in this research.

CHAPTER II

BACKGROUND

Significance of Present Research

Alzheimer's disease is the most common form of irreversible dementia (Aronson et al., 1984; Teusink and Mahler, 1984). Although its exact prevalence is unknown, it is estimated that 1.5 million Americans, or five percent of the elderly over age 64, suffer from severe cognitive and behavioral deficits of the Alzheimer's type (Blass, 1987). This number is expected to increase as the age composition of the United States shifts toward older age groups that are most vulnerable to senile dementias (Pearlin, 1987).

Moreover, it is estimated that two-thirds of all elders who suffer from a dementia are cared for at home by a relative (Pratt et al., 1985; Shanas, 1979), most often a spouse or adult child (Cantor, 1983; Johnson and Catalano, 1983). Although life expectancy of Alzheimer's disease patients has not been studied systematically, it is not uncommon for some families to report a history of the disease that spans a period of ten years or longer (Zarit, 1986).

The pervasive nature of caregiving by family members draws attention to this large and ever-growing group of home-care providers. Since past research has consistently documented the stress of caregiving to the chronically ill (Brody et al., 1978; Crossman et al., 1981; Fengler and Goodrich, 1979; Grad and Sainsbury, 1968; Sanford, 1975), caregivers to Alzheimer's patients must be regarded as a group at risk for multiple physical and psychological problems. While systematic studies of Alzheimer's caregiving are still limited in terms of the representativeness of samples and the adequacy of their measurement of the impact of caregiving, the evidence all suggests that the strain on caregivers is considerable. For instance, caregivers to Alzheimer's patients report increased emotional distress (Gilhooly, 1984; Poulshock and Noelker, 1982; Rabins, Mace and Lucas, 1982); lower life satisfaction (George and Gwyther, 1986); and increased stress symptoms (Archbold, 1982; Barnes et al., 1981; Farkas, 1980). In short, the research findings consistently indicate that the demands of caregiving can exert deleterious effects on caregivers' well-being.

In addition to the importance of caregiver well-being in its own right, the economic cost to society is likely to be enormous if the burden of care forces families to seek institutional alternatives for their impaired elders. In an effort to maximize and prolong caregiving in the community, it becomes essential to understand the range of stressors experienced by Alzheimer's caregivers, and to evaluate their individual and collective impact on caregiver well-being. This research focuses on family conflict as one type of stressor which contributes to the complex and dynamic circumstances that affect caregiver well-being, and hence, the continuation of long-term home care.

As noted, family conflict is treated here within the conceptual context of the stress process. This provides the opportunity to assess this specific source of stress in terms of its adverse impact on caregivers' well-being. It will also be feasible to examine its interconnections with other components of the stress process. For example, it is possible to assess the role of social support in buffering and ameliorating the symptoms of ill health that may be brought about by the strain of family conflict experienced in the caregiver role. Placing family conflict within a general framework of the stress process also results in an emphasis on caregivers' personal and social characteristics, and the influence of such characteristics on the stressors they experience and the mediators they are able to mobilize (Pearlin, 1987).

The present study thus plans to examine a myriad of conditions that potentially affect caregivers' experience of family conflict. In addition, the impact of this particular stressor will be examined in relation to depression, and its interrelationships with other components of the stress process will also be assessed. The significance of this study, therefore, derives from its attempt to make a contribution toward our understanding of the total configuration of caregiver stress by focusing upon family conflict as a single, yet potentially potent stressor to which Alzheimer's caregivers may be exposed. The study of family conflict thus falls within the broader objectives of Alzheimer's caregiver stress research.

The Family as a Source of Stress: Family Conflict in Alzheimer's Caregiving

Surprisingly, there has been little attention given to family conflict as a source of stress for Alzheimer's caregivers, despite the fact that this type of stressor is reported frequently in the Alzheimer's caregiving literature (Matthews and Rosner, 1988; Rabins, Mace and Lucas, 1982; Scott et al., 1985; Sluss-Radbaugh, 1983). For instance, in one study it was found that next to the caregiving strain itself, family conflict was the problem most frequently cited by caregivers to Alzheimer's patients (Rabins, Mace and Lucas, 1982). Moreover, the few studies that do address the issue of family conflict in Alzheimer's caregiving consistently fail to delineate its dimensions. Despite this limitation, it is possible to identify in the literature at least six issues that give rise to family conflict in the context of Alzheimer's caregiving.

Family members can vary considerably in their ability to accept the illness, and conflicts sometimes develop when a family member denies the seriousness of the medical problem (Chenowenth and Spencer, 1986; Scott et al., 1985; Steinberg, 1983; Teusink and Mahler, 1984; Zarit et al., 1985). Conflicts also arise over support issues. Typically, caregivers report that infrequent visits, including cessation of normal patterns of interacting, and lack of instrumental support, are disputed issues in the family (Aronson et al., 1984; George and Gwyther, 1986; Niederehe and Fruge, 1984; Rabins et al., 1982; Scott et al., 1985; Zarit et al., 1985). Family conflict is also reported to center on differences between the caregiver and others in the family about expectations around care of the patient, including disputes over institutionalization (Rabins et al., 1982; Scott et al., 1985; Zarit et al., 1985). Other conflictive issues, as reported by caregivers, include inappropriate treatment of the patient by family members (LaBarge, 1981) and unwarranted intervention in the business and financial affairs of the caregiver or patient (Scott et al., 1985). The clinical literature also notes reactivated conflict, or the resurfacing of longstanding interpersonal conflict, as a major source of stress for some caregivers (Aronson et al., 1984; Teusink and Mahler, 1984; Zarit et al., 1985).

Apart from this descriptive information that illuminates some of the issues around which conflict may revolve, the current body of literature reveals little in the way of identifying the extent to which family conflict is experienced within caregiving families. There is some evidence suggesting that over fifty percent of Alzheimer's caregivers experience family conflict to some degree (Matthews and Rosner, 1988; Rabins et al., 1982; Scott et al., 1985). However, in each of these studies the sample size is small and generally biased toward socially and economically advantaged respondents.

Also, it should be noted that no information is available in the literature regarding which family members become involved in conflicts with the primary caregiver.

In summary, the literature on family conflict in Alzheimer's caregiving is limited in scope and sophistication. Few general statements can made with much confidence, and many important issues (e.g., conflict dimensions, intensity, duration, and relatives who are involved) have not been addressed adequately. Moreover, the majority of these studies can be characterized as unsystematic and lacking a sound conceptual base. As a consequence of these limitations, an effort was made to review literature that examines family conflict in situations other than Alzheimer's caregiving.

Family Conflict: A Consideration of Various Dyadic Relationships

Family conflict, as a social phenomenon, has been an area of interest for family scholars throughout many decades (e.g., Burgess and Locke, 1950; Litwak, 1963; Parsons, 1955; Sprey, 1979). Despite ongoing interest in the topic, there has been little progress in terms of explicating the processes and mechanisms that regulate this social phenomenon. To date, the family conflict literature is largely general and descriptive. Researchers have tended to focus on conflict within specific dyadic relationships within the family. Although many family scholars have acknowledged the importance of viewing the family as a system (see Campbell, 1989 for a review), thereby proposing to study the interrelationships among all members, the methodology for accomplishing this goal is underdeveloped, laborious and costly. As a consequence, our knowledge and understanding of family conflict as a social phenomenon is limited. Primarily, it derives from descriptive studies of conflict within the following dyadic relationships: husbands and wives; and parents and children. In only rare instances have researchers considered conflict among siblings and other segments of the extended family.

1) Conflict in Marital Relationships

Marriage in our contemporary culture is viewed as the most exclusive and intimate of all human bonds (Sprey, 1979). The cultural priority given marriage is well documented in at least one large-scale survey of the quality of life in America (Campbell, Converse and Rodgers, 1976). The results of this survey indicates that a happy marriage is rated, along with good health, as one of the two most important values in our society. Other studies have consistently documented that people with spouses are much more likely to enjoy psychological well-being than those without (Blumenthal, 1967; Bradburn, 1969; Briscoe and Smith, 1974; Gurin et al., 1960; Knupfer et al. 1966; Pearlin and Johnson, 1977; Radloff, 1975; Srole et al., 1962). Moreover, those who are not married experience significantly higher mortality rates than those who are married (Berkman and Syme, 1979; Carter and Glick, 1970; Kraus and Lilienfeld, 1959). Presumably, marriage gives married persons the advantage of being able to draw emotional support and concrete assistance from their partners. In fact, studies of confidant relations report that 90 percent of married persons confide in their spouses (Babchuk, 1978; Hoyt and Babchuk, 1983). Taken together, these studies suggest that marriage is a uniquely intense relationship that combines the commitments of kinship, the usual similarities of age peers, and the benefits associated with ready access to various sources of social support.

Despite the advantages of marriage, it has been found that disagreement and conflict are common among married couples (Burgess, 1981). Argyle and Furnham (1983) report that "arguing" is one of the distinctive activities of spouses. Irrespective of these findings, there has been relatively little research directed at understanding the conditions that give rise to conflict between spouses. Pearlin (1983) identified four areas of marital conflict. One involves the lack of reciprocity -- a situation where a husband or wife appraises his/her contributions to the relationship as greater than those of the spouse. This type of conflict revolves around a lack of equity in the marriage -- a sense that in the daily "give and take" of married life, the balance of power is inequitable. A second area involves the lack of affective exchange -- a sense that the relationship is not an affectionate and intimate one. Typically, this type of conflict is found in instances where one partner feels that there is insufficient affection given him or her by the spouse, or that the spouse does not accept affection when offered. A third area of conflict in marriage involves failure of authentication of the self. This is a situation where the desired self-image of a person is not confirmed in the eyes of one's spouse. Pearlin's fourth dimension of conflict is the frustration of role expectations. Marital partners usually have a set of expectations for one another. For example, couples tend to have culturally ideal perceptions of what constitutes a "good" husband or wife. If there is failure on the part of one or both partners to fulfill these expectations, disappointment and conflict may result.

The study of marital conflict must also give consideration to the dynamic nature of the family life cycle. Given its associated sequence of normative structural transformations, one would expect to observe significant life cycle variations in the patterns of marital conflict

(Sprey, 1979). Although there is little research directly addressing this issue, we may draw inferences from studies of life cycle variations in marital satisfaction. In general, this research indicates a U-shaped relationship between age and marital satisfaction, with the young and old expressing greater satisfaction than those in the middle stages of the life cycle (Gilford and Bengtson, 1979; Pineo, 1968; Spanier, Lewis and Cole, 1975). This phenomenon has been attributed to the strains of childrearing (Blood and Wolfe, 1960; Feldman, 1964; Pineo, 1968); however, there is no strong evidence that feelings toward marriage are much affected by the launching of children (Mullan, 1981). Other researchers contend that for both husbands and wives, the assessment of fairness and equity in the performance of marital roles is higher for those couples in the later stages of the life cycle (Schafer and Keith, 1981). There is also evidence that aged spouses tend to be more tolerant and accepting of the other than in their younger years (Clausen, 1972; Lowenthal et al., 1975; Miller, 1976). In a study of three generations, Gilford and Bengtson (1979) found that negative sentiments in marriage (e.g., disagreement, anger) declined with age. Levinger (1974) suggests that the marital relationship is transformed with the passing of time so that the very basis of bonds of affection change. Older couples placed a greater premium on emotional security and loyalty, giving less weight to sexual intimacy, communication, concrete assistance, and play. This finding suggests that role expectations held at earlier life stages may be renegotiated in later life as needs and resources change. "In fact, older persons may lower expectations of their partner in order to avoid disappointment and conflict in their marriage" (Levinger, 1974).

Taken together, these studies suggest that conflict patterns of married couples change over the course of the marriage. Since most conflict in marriages seems to involve confrontations about intimacy and affectionate exchange, challenges to the legitimacy of rules and status privileges, and inequalities, one would expect conflict to be greater in the earlier years of marriage as partners struggle to negotiate the asymmetry of power resources and authority structure. With the passing of time, most couples seem to develop more or less stable patterns in their ways of dealing with each other and conflictive interactions (Cuber and Harroff, 1965; Kantor and Lehr, 1976; Mishler and Waxler, 1968; Rausch et al., 1974; Reiss, 1971). Undoubtedly, this affects the frequency and intensity of marital conflict.

2) Conflict in Parent-Child Relationships: Aging Parents and their Adult Children

The frequency of contact and exchange of assistance between older persons and their adult children has been a topic of much research on intergenerational relations (Adams, 1968; Hill et al., 1970; Kreps, 1965; Lopata, 1973; Rosow, 1967; Shanas, 1967; Sussman, 1965; Sussman and Burchinal, 1962a; Troll, 1971). These studies have demonstrated with much consistency that, in general, contact between generations is high and the extent of mutual aid is substantial. Despite these positive findings, there are reports of family conflict stemming from family members' failure to provide instrumental assistance and failure to maintain an acceptable level of contact. In the study of parent-child relations in adulthood, conflict around failure to provide adequate instrumental assistance flows in both directions; however, there is some evidence that adult children are somewhat more likely to be angered at the limitations of parental helping behavior, especially when it involves babysitting, financial assistance, and money equivalents such as gifts (Fisher et al., 1989). There are also reports of conflict involving the inadequacy of associations or contact between aging parents and their adult children. This type of conflict usually centers on the child's lack of availability or preference for spending time with people other than one's parents. It also encompasses anger directed toward adult children who restrict or limit time spent with grandchildren. Reports of conflict involving parental demands for more contact with adult children are generally low. In many instances where this type of conflict is reported, daughters-in-law receive much of the blame for parents not seeing their sons more frequently (Fisher et al., 1989; Marotz-Baden and Cowan, 1987).

Other researchers have been interested in the more qualitative aspects of the parent-child relationship (e.g., Bengtson and Cutler, 1976; Bengtson and Kuypers, 1971; Hagestad, 1981; Johnson and Bursk, 1977; Quinn, 1983; Rosow, 1967; Steinman, 1979; Troll et al., 1979). Relations between parents and children tend to be dominated by feelings of intimacy and positive concern - feelings that tend to persist over time and override both geographic and socioeconomic mobility, and developmental changes (Troll and Smith, 1978). There is some evidence that the nature of the bond between aged parents and adult children differs to the extent that parents are more likely to express ties of sentiment for their children, whereas children are more likely to report ties of obligation toward their aging parents (Bengtson and Black, 1973). In general, conflict involving failure to provide affectional support (i.e., empathy, love, fairness, respect and trust) is reported infrequently in studies of aging parents and their adult children.

Another type of conflict in parent-child relations revolves around lack of value consensus. In general, studies of intergenerational attitudes and values report a high degree of similarity between parents and their adult children in five general areas including politics, religion, sex roles, work, and lifestyle characteristics (Troll and Bengston, 1982). Beavers (1977) found that family members with different values experience frequent conflict. For example, mothers and daughters who experience conflict in their relationships are most likely to report the source of the conflict as differences in values regarding children and child management practices (Marotz-Baden and Cowan, 1987; Semple, 1985).

Four factors of social differentiation appear to affect the nature of parent-child relations in adulthood. Gender is one such differentiating characteristic. Daughters maintain closer ties to aging parents than do sons (Adams, 1968; Houser et al., 1985; Litwak, 1985; Lopata, 1979; Troll and Bengtson, 1979). They tend to live closer and provide more hands on assistance (Adams, 1968; Hill et al., 1970; Horowitz, 1985; Lopata, 1979; Sussman, 1965), despite the fact that both sexes appear to maintain similar levels of contact, at least while aging parents remain married (Adams, 1968). Other studies report that daughters perceive themselves as emotionally closer to their parents than do sons (Adams, 1968; Jackson, 1971; Johnson and Bursk, 1977). Daughters also express stronger feelings of obligation toward their parents.

Interestingly enough, despite these reports of closeness in parent-daughter relationships, there is some evidence that elderly parents are more likely to experience conflict with daughters than sons. Lehr (1984) found that in early adulthood, sons and daughters did not differ in their reports of conflict with parents; however, as they grew older, men's reports of conflict with parents decreased considerably more than women's. By the time they were in their fifties, daughters' reports of conflict with parents were notably higher than men's.

Marital status is a second characteristic that differentiates the nature of parent-child relations in adulthood. Unmarried offspring, regardless of gender, appear to maintain closer ties with aging parents than do married children. They are significantly more likely to share a residence with aging parents (Clemens and Axelson, 1985; Glick and Lin, 1986), and this type of living arrangement may lead to conflict between the generations.

The marital status of aging parents also plays an important role in the dynamic of intergenerational relations. Married elderly couples, particularly those in good health, tend to function independently of their children and make few demands for assistance (Cicirelli, 1981; Johnson and Bursk, 1977; Neugarten and Hagestad, 1977; Troll, 1971). Seelbach (1978) reports that married elderly respondents are apt to have nucleated (low) expectations for filial aid and support. In contrast, older people who are widowed or divorced tend to have extended (high) expectations for assistance from their offspring. This may reflect parents' tendencies to expect help from their children only during times of crisis. Widowed persons turn to their children for support more frequently than they turn to friends (Bumagin and Hirn, 1982; Glick, Weiss, and Parkes, 1974; Lopata, 1973). Daughters are expected to provide companionship, emotional support, and direct homemaking services (Treas, 1977). The expectations for sons are much lower; they are expected to provide financial support and to assume a role in decision-making (Bahr, 1976; Levav and Minami, 1974; Stoller, 1982; 1983; Treas, 1979).

Social class represents a third characteristic that affects parent-child relations in adulthood. Among the working class, sons appear to maintain strong ties to aging parents (Aldous, 1967; Townsend, 1957; 1963; Young and Willmott, 1957). Hill et al. (1970) found that working-class men engaged in more intergenerational contact than did white-collar males. Cantor (1975) also found that the lower the social class, the greater the extent of supportive relationships, as measured by frequency of contact and the amount of aid given and received by elderly parents. It appears that elderly people with high social class standing are less involved with their adult children. Peers, rather than children, fill the void of more intensive parent-child interactions (Cantor, 1979). Taken together, these findings suggest that the frequency of contact and intensity of relations among working-class families may result in greater levels of conflict between aging parents and their adult children.

The health status of elderly parents is a fourth factor that is known to affect intergenerational relations in families. One of the most consistent findings in the literature is that parents' health is positively associated with feelings of closeness and attachment between parents and their adult children (Baruch and Barnett, 1983; Cicirelli, 1981; Johnson and Bursk, 1977; Mindel and Wright, 1982). Other studies indicate that increased parental dependence, brought about by health problems, reduces positive feelings between the generations. Cicirelli (1983) found that high levels of parental dependency could lead to negative feelings on the part of adult children and conflict between the generations. One reason may be the effect of parents' health on the previously established flow of support. Adult children may have to increase their level of support to previously independent parents, as well as accept a lessening or termination of the parents' provision of support (Suitor and Pillemer, 1983). Litman (1971) reported that parental health problems typically increase the number of contacts between parents and offspring, but these generally fail to engender feelings of closeness and satisfaction between the generations. She noted that adult children were often reluctant and ill-prepared to take on the responsibility of parent care. Meeting the needs and demands of elderly parents may interfere with competing responsibilities. This is most likely to be problematic in cases where adult child caregivers have children of their own, for there exists a strong cultural norm which stipulates that one's responsibilities to aging parents are secondary to those of one's own children, who even as young adults may require considerable personal attention and financial support (Hess and Waring, 1978).

It has also been suggested that increased responsibilities to aging parents may reactivate old conflicts about dependency, achievement and separation (Scherz, 1971). Growing older does not necessarily guarantee that earlier conflicts and problems between parents and children will disappear or be forgotten. In many instances, these earlier conflicts never really get resolved but are dealt with instead through avoidance of sensitive issues (Troll, 1980). Simos (1973) found that the added stress of caring for a formerly independent parent evoked old defensive patterns and effectively contributed to negative feelings and conflict in the parent-child relationship. It has also been noted (Bengtson, 1979) that there are no normative guidelines for the negotiation of crises and conflict in the parent-child relationship of later life. "Unlike the period of adolescence where parent-child conflict is generally anticipated and treated as a matter of normal family process, conflict in later years generates much confusion and guilt for both parties since the guidelines for doing what is right and proper under such circumstances are ill-defined by society".

3) Sibling Conflict in Adulthood

Sibling relationships in adulthood are potentially of great importance, but seldom have been the concern of researchers. In particular, there is a paucity of research that directly addresses the issue of sibling conflict in adulthood. Consequently, we are compelled to explore the issue by extrapolating from general studies of sibling relationships in adulthood. On the basis of this literature, we note that the majority of individuals have living siblings throughout life.

The number of elderly with at least one living sibling is reported to range from 78% (Cicirelli, 1982) to 93% (Clark and Anderson, 1967). It is estimated that only 10 percent of adults have no siblings at all. Contact with siblings has typically been measured by the frequency of visits, telephone calls and letter writing. Adams (1968) reports that the frequency of contact among siblings is high. In his survey, 69 percent of adults with a sibling in the same city saw that sibling at least once a week.

Sibling attachment and dimensions of interpersonal relationships between siblings in later life are interesting topics that have not been investigated adequately. To date, there are equivocal reports on age-related changes in the perceived closeness of siblings (Cicirelli, 1982; Ross and Milgram, 1982). Rosenberg and Anspach (1973) concluded that sibling bonds become less cohesive among older persons. Similarly, Bellin's (1961) survey revealed that when availability and proximity of siblings and adult children were controlled, siblings assumed little importance for older persons with children. At this time, it is unclear whether conflict and closeness/cohesiveness are inversely related; however, it is commonly assumed that conflict increases as closeness and cohesion decrease.

Other studies suggest that feelings of closeness to siblings increase with age. Ross, Dalton and Milgram (1980) investigated closeness in sibling relationships in late adulthood and old age. The majority of respondents felt that closeness to their siblings increased as they grew older, especially when a sibling of the opposite sex was involved. Cumming and Henry (1961) support a similar position. They concluded that the sibling bond is between equals and thus more like close friends. Other studies also report increased feelings of sibling closeness throughout the course of adult lives (Adams, 1968; Laverty, 1962; Manney, 1975). While acknowledging the causally ambiguous relationship between conflict and closeness, these findings may be used to argue that conflict between siblings actually decreases with age as sibling bonds grow stronger and more cohesive.

Research on sibling relations also indicates that individuals who have never married tend to maintain closer relationships with their brothers and sisters than those who marry and have children. Also, persons without children tend to resume closer associations with siblings upon the death of a spouse, but not as close as single persons (Shanas et al., 1968). There is also evidence that sister-sister ties are stronger and closer than those of brothers (Adams, 1968). In fact, sister-sister ties are stronger than either sister-brother or brother-brother ties. Brothers also report more competitiveness, ambivalence and jealousy in their relationships than do any other sibling combination (Adams, 1968). In addition, the relationship between brothers has been observed to be the most conflictive when they are at different occupational levels. On the basis of this research, one might reasonably predict that brothers will have the most conflictual relationships, whereas sisters' relationships will be characterized by notably lower levels of conflict.

In one of a few studies that directly addresses the issue of sibling conflict, Cicirelli (1981) asked a sample of middle-aged adults about the extent of arguments with their siblings. The results indicated an extremely low level of sibling competitiveness and conflict, at least at an overt level. Eighty-eight percent of respondents reported that they argued with siblings rarely or never, and only three percent indicated that they argued frequently or more often. The researchers attributed low levels of conflict to a possible age-related maturity in outlook and limited frequency of contact among siblings. In contrast to Cicirelli's findings, Berezin (1977) observed frequent quarrels among siblings as they discussed the care of their aged parents. She noted expressions of irrational, hostile attitudes and interpreted these as a regression to earlier rivalrous relationships.

From her data, Berezin speculates that sibling ties may strengthen with advancing age, but are likely to be undermined by increased demands for filial responsibility. Matthews and Rosner (1988) suggest that when elderly parents become dependent, their adult children mobilize into a parent-care system that implicates all siblings. As might be expected, sisters assumed primary responsibility for the day-to-day care of a dependent parent. In contrast, brothers were more likely to provide services at their own convenience, or to limit filial activity to a specific task or area of expertise such as household repairs. In over half of the families, conflicts among siblings were reported. Most conflicts were reported to stem from events that had occurred before meeting filial obligations was an issue. In families with more than two siblings, serious conflict was likely to result in one sibling dissociating from the family and from filial responsibility. In families with only two siblings, conflict and tension were usually kept within limits in order to preserve a working relationship.

Matthews and Rosner also report that siblings in their sample tended to view one another as having stable personality characteristics. The authors concluded that the history of relationships within a family appears to have a strong bearing on the way siblings relate to one another within the context of caregiving. However, Matthews and Rosner indicate that issues pertaining to how siblings felt about one another took a back seat to the more important issue of providing adequate care to an elderly parent.

Critical Overview of Family Conflict Literature

The traditional approach to the study of family conflict has been to document the issues around which conflict develops. This line of research has contributed primarily to our understanding of the general categories or dimensions of conflict; however, the majority of studies cited are plagued by a myriad of conceptual and methodological difficulties.

A major problem is the lack of consensus on how "family conflict" should be defined and measured. The term is frequently used without explicit definition. In other instances, researchers have used the construct to refer to phenomena that are conceptualized in very different ways. For example, family conflict is defined in the literature as conflict of interest, interpersonal disagreement, and hostility (Deutsch, 1983; Foss, 1979; Gelles and Straus, 1978; Sheehan and Nuttall, 1988; Sprey, 1979; Straus, 1979). All are closely related yet clearly different phenomena.

A second problem, and one that relates to the first, is the lack of appropriate measures or scales for assessing family conflict, particularly in the context of Alzheimer's caregiving. It is beyond the scope of this review to describe and evaluate the range of instruments that are available to measure conflict in family settings. However, two broad categories of tests will be discussed.

The first category of conflict scales are clinically oriented and were developed in response to the clinician's need for assessing the psychiatric patient's situation within the family (Wells and Rabiner, 1977). The majority are difficult to administer because they require clinical expertise and laboratory-simulated family environments. Despite growing recognition of the need for a broadly applicable, clinical tool for assessing conflict in families, a standardized assessment procedure for obtaining and recording comparable information across family situations is not yet available (Bloch, 1986).

The second category of instruments available to assess conflict is comprised of general family environment scales (Moos and Moos, 1976; Olson, 1982). Most of these scales utilize self-report methods, and purport to measure a variety of dimensions of family interaction. Conflict is typically included as one such dimension, and is assessed by items that are characteristically general and therefore inappropriate for research which explores conflict in a more limited context such as Alzheimer's caregiving.

The extant literature is also limited by the fact that the majority of studies do not examine conflict in relation to stress outcome. As a consequence, it is not possible to evaluate definitively the positive or negative impact of conflict on family members. However, studies of parental conflict indicate that expressed aggression and hostility are pervasive risk factors that predict child disturbance (depression, anger, distress) within intact families (Block et al., 1988; Emery and O'Leary, 1982; Johnson and O'Leary, 1987) and within divorcing families (Hetherington et al., 1982; Johnston, Gonzalez and Campbell, 1987). Studies of family violence have found that high levels of conflict may lead to verbal aggression which in turn has been found to be associated with physical violence (Straus, 1979; Straus et al., 1980). Furthermore, studies of intergenerational relations have shown that conflict between aging parents and adult children leads to an increase in adult childrens' negative feelings connected to helping or providing care for elderly parents (Cicirelli, 1983b; 1986).

Overall, it appears that conflict is likely to be associated with negative outcomes. However, it has also been argued that conflict may have a positive impact on the relationship when it allows differences to be voiced (Kelley, 1979; Lloyd and Cate, 1985). This issue will remain unresolved until empirical studies move beyond mere description of conflict and begin to assess systematically the relationship between conflict and a range of health outcomes.

Another limitation of the research stems from the use of cross-sectional research designs. Without longitudinal data, it is impossible to make reliable statements about the duration or stability of conflict over time. Is duration of conflict related to intensity? A corollary issue is whether long-term conflict, as opposed to isolated instances, is more likely to escalate and become destructive. Stability of conflict issues over time may also be a salient factor. If the same issues are perceived as coming up repeatedly, does this lead to feelings of helplessness and interpersonal ineffectiveness? These are aspects of conflict that can only be assessed with longitudinal data. Without such data, our knowledge and understanding of family conflict will remain incomplete.

The final limitation to be discussed emerges from the failure of researchers to consider the role of mediators in terms of buffering or ameliorating the stressful impact of family conflict. What type of personal resources do people invoke in the face of family conflict? What types of social support are called forth? Moreover, are personal resources and social support effective in terms of mediating the impact of family conflict upon stress outcomes? These are only a few important questions that remain unanswered.

In summary, the current literature on family conflict in relation to individual well-being is both descriptive and aconceptual. A few conceptual and methodological limitations have been discussed. The present research will make a significant contribution to the family conflict literature by addressing some of the identified areas of limitation. It moves beyond mere descriptive research by examining family conflict systematically in relation to a common health outcome (depression). It will also examine the relative importance of three dimensions of family conflict in relation to depression. Finally, this research will evaluate the role of family support in mediating or buffering the impact of family conflict on depression.

CHAPTER III

RESEARCH DESIGN AND METHODS

Sample: Data Source

This research utilizes the first wave of data collected for a large-scale longitudinal study of the Sources and Mediators of Alzheimer's Caregiver Stress (Pearlin et al., 1990). A total of 555 spousal and adult children caregivers (including children-in-law) were recruited to the sample, primarily through membership lists of the San Francisco and Los Angeles chapters of the Alzheimer's Disease and Related Disorders Association (ADRDA), and through the Northern California Alzheimer's Disease Center in Berkeley (NCADC). In addition, advertisements were placed in local newspapers and newsletters. Caregiver support groups were also approached in an effort to recruit participants.

Recruitment procedures differed somewhat between San Francisco and Los Angeles; however, the eligibility criteria were applied uniformly in both locations. To be selected into the sample, the potential respondent had to be the primary caregiver to a non-institutionalized (i.e., community-residing) person afflicted with Alzheimer's disease or a related dementia. Caregivers to victims of major stroke, head trauma, Parkinson's disease, and metabolic or drug-induced dementia were excluded from the sample because the course of these impairments is qualitatively different from that of Alzheimer's disease. The latter is distinctive with respect to the insidiousness of onset and the progressive character of its course. It was assumed, therefore, that over time the experience of Alzheimer's caregivers would be qualitatively different from those caring for patients with other neurological disorders.

Identification of the primary caregiver, and determination of the diagnostic status of the patient, were based on the reports of the caregivers. Only spousal and adult children caregivers (including children-in-law) were eligible for participation in the study. In cases of multiple caregivers to a patient, recruitment preference was given to the spouse over all eligible others.

Sampling Procedure

In the San Francisco Bay area, the initial screening of subjects began with a membership list supplied by the local chapter of ADRDA. A letter explaining the purpose of the study was mailed, with reply card, to approximately 4,000 persons whose name appeared on the membership roster. The reply card was used to identify persons who did not wish to be contacted further regarding the study. Approximately 400 reply cards were returned to the offices of NCADC - 56.5 percent of which were clearly ineligible and the remaining 43.5 percent were refusals. Subsequently, an attempt was made to contact, by telephone, all persons who did not return the reply card. Follow-up calls were made by members of the research team at the University of California, San Francisco (UCSF), and staff at NCADC in Berkeley. A total of 3,723 calls were attempted. Forty-four percent of the persons named on this roster did not have a current telephone listing and an additional 29 percent could not be reached. Approximately 1000 calls were completed. Those who were successfully contacted were screened in a brief telephone interview that served as a check on eligibility for participation in the study. Questions were asked concerning patient diagnosis, the identity and relationship of the primary caregiver to the patient, and determination of the patient's residence in the household. Approximately 54 percent of those screened did not meet the study's criteria for inclusion, and another eight percent were eligible but refused to participate.

A pool of 388 eligible and willing respondents was identified in this first round of telephone screening. These persons were contacted a second time, by a trained interviewer, approximately five months following the initial telephone screening. Interviewers used a pre-coded telephone screener to verify eligibility for participation in the study, to obtain information on household composition, and to schedule an appointment for the Time 1 interview. Of the 388 persons who had responded "yes" to the initial call regarding participation, fifty had become ineligible or had been incorrectly screened, seven could not be located, and thirty-one refused. A total of 300 interviews were completed in the San Francisco Bay area.

In Los Angeles County, the initial screening began with a record of telephone calls received over the past year at the offices of the local chapter of ADRDA. A researcher was hired to select out the names and telephone numbers of callers who were likely candidates for having a relative afflicted with Alzheimer's disease or a related disorder. A list of over 800 names was compiled through this method, and a corresponding number of letters were mailed to these potential respondents. Forty-two reply cards were returned; twenty-seven persons were ineligible and another fifteen were refusals. Trained interviewers then attempted to contact all persons named on the roster, excluding those who returned their reply card. A single telephone interview was used to determine eligibility for participation in the study. If the contact was both eligible and willing to participate in the study, the interviewer further determined household composition, and scheduled an appointment for the Time 1 interview. Eight hundred and fourteen calls were attempted. Two hundred and fifty-five persons agreed to be interviewed, fifty-three refused, and the remainder could not be reached or were ineligible because the patient had died or had been institutionalized. A total of 255 interviews were completed in the greater Los Angeles area.

Data Collection

Before proceeding with interviews, trained interviewers contacted all potential respondents by telephone in order to verify that the study criteria were met by both caregiver and patient. Once this information was verified, an appointment date was made with the caregiver. Interviews were conducted in the caregiver's home, or in an alternate location if requested by the respondent. In the San Francisco Bay area, all interviewers were recruited, trained and supervised by project staff at the University of California, San Francisco. Interviewers in Los Angeles County were trained by project staff at UCSF, but were hired and supervised by the staff of the Survey Research Center at the University of California, Los Angeles (UCLA). Although trained attendants were available to sit with the Alzheimer's patient throughout the interview, no caregivers, in either location, utilized this option.

In both locations, interviewees were assigned to interviewers according to their residential location. A pre-coded interview schedule was used. Interviews on average lasted 1-1/2 to 2 hours. Respondents were asked a series of close-ended questions about a range of problems encountered in their role as caregiver. In addition to collecting background and demographic information, questions were asked about direct caregiver strains, as well as strains in other areas of caregivers' lives including questions about family conflict, economic hardship, and occupational strain. Questions about the impact of caregiving were asked through a series of items concerning loss, gain, and evaluation of performance. The interview schedule also queried caregivers' coping repertoires and their use of formal and informal social supports, personal resources including self-esteem, mastery, and optimism, and two major health outcome variables -- depressive symptomatology and symptoms of physical illness.

Sample Characteristics

The sample is divided almost evenly between the San Francisco Bay Area and Los Angeles County (54% and 46%, respectively). Approximately fifty-nine percent of those interviewed were spousal caregivers (N=326); the remainder were adult children, including sons-in-law and daughters-in-law (N=229). The sample is predominately White (84%), with eleven percent Black, three percent Hispanic, and two percent Asian. This racial distribution is most likely due to the organization-affiliated sample recruitment procedures.

Characteristics of the sample are presented separately for spouses and adult children (see Table 3.1). Among spousal caregivers, 42 percent were male and 58 percent were female. All spouses resided in the same household as the Alzheimer's patient. Spousal caregivers ranged in age from 42 to 94 with a mean age of 70.3 years. There was considerable variability in educational status[2]. Approximately 31 percent of spousal caregivers had completed college and/or professional school; an additional 23 percent had completed some college; 28 percent had completed high school; and 17 percent had less than a high school education. The median income for spousal caregivers is $25,000 per year.

Patients of spousal caregivers ranged in age from 42 to 94 with a mean age of 75 years. Seventy-eight percent were diagnosed with Alzheimer's Disease. All others were diagnosed with dementia (9 percent) or vascular disease (7 percent). Six percent of the sample were undiagnosed at the Time 1 interview. Fifty-five percent of the patients in the sample had been suffering with their disease for less than four years.

Among adult children caregivers, daughters comprised 78 percent of this subsample, thirteen percent were sons, and the remainder were daughters-in-law (9%) and sons-in-law (1%). Sixty-three percent of adult children caregivers resided in the same household as the Alzheimer's patient. The other thirty-seven percent maintained separate households. The majority of adult children caregivers were married (61%). Another 18 percent were divorced or separated; the remainder were never married (13%) or widowed (7%).

[2] Respondents were asked to report highest level of education completed.

Adult children caregivers ranged in age from 29 to 74 with a mean age of 50.6 years. This was a generally well-educated group: thirty-five percent had completed college and/or professional school; an additional 37 percent had completed some college; 20 percent had completed high school; and only 7 percent had less than a high school education. The median income for adult children caregivers is $32,500 per year.

Patients of adult children caregivers ranged in age from 55 to 94 with a mean age of 76 years. Sixty-seven percent were diagnosed with Alzheimer's disease. All others were diagnosed with either dementia (18%) or vascular disease (10%). Five percent of the sample were undiagnosed at Time 1 interview. Sixty-one percent of these patients had Alzheimer's disease or related dementia for less than four years.

It is recognized that a certain sample bias exists as a consequence of our sample recruitment procedures (i.e., organizational affiliation). While this sample may represent only those caregivers who are likely to seek information or assistance, the general variability with respect to sample characteristics gives us confidence that we have been successful in terms of reaching some major social and economic segments of our population of interest. Although similar in many ways to other major studies of caregiving to the elderly (see Stone, Cafferta and Sangl, 1987; Lawton et al., 1989; Pruchno and Resch, 1989), our sample is slightly better educated, has a higher median income, and has fewer minority participants. Although this sample may not be representative of the entire population of caregivers to Alzheimer's patients, it is important to note that little is known about the exact characteristics

TABLE 3.1

DISTRIBUTION OF SAMPLE CHARACTERISTICS OF ALZHEIMER'S CAREGIVERS

Variable		Spousal Caregivers (N=326)	Children Caregivers (N=229)
City	San Francisco	56%	52%
	Los Angeles	44	48
Caregiver Relationship	Wife	58	-
	Husband	42	-
	Daughter	-	76
	Son	-	16
	Daughter-in-law	-	8
	Son-in-law	-	-
Marital Status	Married	100	58
	Div/Sep	-	19
	Widowed	-	8
	Never Married	-	15
Living with AD Person	Yes	99	61
	No	1	39
Race	White	87	80
	Black	7	15
	Asian	2	3
	Hispanic	4	2
Respondent Education	Less than HS	18	6
	High School	29	25
	Some College	22	32
	College Graduate	14	18
	College +	17	19
Respondent Age	Less than 44	1	27
	45-54	5	39
	55-64	17	28
	65-74	45	6
	75-88	32	-
AD Person Age	Less than 44	1	-
	45-54	2	-
	55-64	14	2
	65-74	39	18
	75-84	39	54
	85-94	5	26
Years Caregiving	Less than 1	27	21
	1-2	37	36
	3-5	30	33
	6 or more	6	10

of this population of interest. What is important to recognize here is that the distribution of characteristics in our sample is sufficiently broad to permit the analysis of their associations with other attributes of caregivers and their caregiving environment.

Spousal versus Adult Children Caregivers: A Rationale for Separate Conceptual Models of Family Conflict

As previously indicated, for the purposes of this research, all analyses are performed separately for spousal and adult children caregivers. It is argued here that spousal and adult children caregivers should not be treated as a single group primarily because they do not share certain common life conditions and circumstances that are critical variables in this study. This argument is based on two considerations. First, many of the conditions that structure caregivers' lives differ according to their fundamental status in relation to the Alzheimer's patient. Second, even in cases where life conditions are identical for a spousal and adult child caregiver, the consequences with respect to family conflict may be very different.

To illustrate the first point, we shall consider marital status as a potential antecedent of family conflict. In the present study, spousal caregivers, by definition, all share the same marital status; that is, they are all married. In contrast, the marital status of our adult children caregivers reveals considerable variability. Although the majority are married (61%), 18 percent are divorced or separated, 13 percent are never married and 7 percent are widowed. If, in the context of the present research, one is to examine marital status as a condition that shapes and influences the experience of family conflict, and if in the process, spouses and adult children are pooled together as a single group, it may obscure important differences that distinguish adult children caregivers' experience of family conflict according to variations in marital status.

Similarly, our sample of spousal and adult children caregivers differ according to their place of residence in relation to the Alzheimer's patient. Specifically, all spousal caregivers reside with the patient, whereas almost 40 percent of adult children caregivers maintain their dependent relative in a separate household. Consistent with our earlier argument, if we were to examine patient-caregiver living arrangements as a condition that influences family conflict, and if we were to do so by combining spouses and adult children into a single group, we would then run the risk of obscuring important differences in the experience of family conflict between adult children who live with their impaired relative and those who do not. In summary, the life circumstances of spousal and adult children caregivers, at least in the present sample, diverge in ways that are structurally distinct and therefore comparable only within and not between groups.

The second point focuses on the potential noncomparability of shared life circumstances or conditions of spousal and adult children caregivers with respect to their experience of family conflict and its impact upon their well-being. This point is dramatically illustrated in the comparison of a family and household composition that is identical for a spousal and an adult child caregiver. Let us assume that both the spousal and adult child caregiver are women and that each has a spouse (who in the case of the spousal caregiver is the patient), one daughter, one brother, and one sister-in-law (through marriage to the brother). Furthermore, let us assume that in both cases, the spouse and daughter reside in the same household as the caregiver.

Our fictitious family represents what is called a role set (Merton, 1957), that is, a number of closely interrelated roles. Each role carries with it a set of norms and expectations that govern the specifications of the role and the standards by which behavior is judged (Rosow, 1967). However, normative expectations vary greatly across social roles, and within roles they are subject to change as the individual moves across the life course. Each role has its distinctive pattern of activity, responsibility, authority and privilege -- the combinations of which vary in relation to the roles of others who comprise one's role set, and the point at which one is situated along the life course.

In the above fictitious example, the family and household composition of our two caregivers is likely to have very different consequences in relation to their experience of family conflict. The explanation is straightforward. Even though the family and household compositions are identical, each caregiver will have very different expectations for those family members who occupy parallel positions or roles within their respective family structure. In the case of the spousal caregiver, research on family supports would suggest that this woman would be most likely to turn to her daughter for assistance with her impaired spouse (Johnson, 1983; Seelbach, 1978). In general, children are expected to do all they can for dependent parents, particularly in cases where the other parent is disabled or deceased (Hess and Waring, 1978; Johnson and Bursk, 1977; Lopata, 1973; Quinn, 1983; Seelbach, 1978; Treas, 1977). The norms that govern this daughter's behavior and responsibility within this family would be considered obligatory rather than optional. If there is failure on the part of this daughter to meet expectations and responsibilities as defined by her mother, it is likely that conflict will result.

Turning now to the adult child caregiver, research on family supports would predict that this woman is likely to look to her spouse and/or her brother for assistance. In direct contrast to the spousal caregiver's situation, the daughter of the adult child caregiver would not have the same level of expectations or responsibilities associated with her role in the family structure. Although she stands in the same relationship to the caregiver as the daughter in the first case, she stands in a very different relationship to the patient. She is the granddaughter rather than the daughter of the patient; her history with, and emotional commitment to, the patient is very different from that of a daughter. Accordingly, the expectations regarding her behavior are optional rather than obligatory. As a result, the opportunity structure with respect to conflict between mother and daughter is likely to be significantly reduced within this particular family situation.

Following this line of reasoning, the adult child caregiver is likely to have greater expectations regarding the helping behavior and responsibility of her brother, as compared with the spousal caregiver's expectations for her brother. In the latter case, one generally would not expect a brother to share greatly in the care of his brother-in-law, for in the grand scheme of family relationships, brothers-in-law are considered fairly "distant" relatives. In most cases, they do not have long histories of shared understanding and similarities - features that typically characterize "closer" sibling relationships. Based on this line of analysis, one might predict that spousal caregivers are most likely to experience conflict with their adult children and perhaps a brother-in-law or sister-in-law (i.e., the patient's sibling). It is also reasonable to predict that adult children caregivers will be most likely to experience conflict with their spouse, siblings and perhaps siblings-in-law (i.e., the marital partners of their siblings).

In short, the family composition of spousal and adult children caregivers is not comparable because each represents a different opportunity structure for the occurrence of family conflict. The point of this exercise with the fictitious families has been to illustrate how certain conditions or life circumstances may be structurally identical for a spousal and adult child caregiver; however, the consequences for family conflict may be dramatically different because the caregiver's expectations for other family members are determined to a large extent by the position or role that that person occupies in relation to the Alzheimer's patient. The nature of the role, and the expectations associated with that role, contribute to an opportunity structure that in this research is hypothesized to affect family conflict.

In summary, our conceptual model for the study of caregiver stress needs to be assayed separately for spousal and adult children caregivers. First, the two groups are non-comparable at the level of key structural characteristics. By definition, all spousal caregivers are married and shared a place of residence with the Alzheimer's patient. This is not the case for all adult children caregivers. Therefore, combining the two groups would probably obscure the "true" influence of marital status and place of residence upon the caregiver's experience of family conflict. Second, although spousal and adult children caregivers may share similar life circumstances, the consequences of family conflict may be very different. Caregiving to a spouse and caregiving to a parent call for interactions with different types of family members. In the case of a spousal caregiver, one is most likely to be dealing with vertical relationships (i.e., children) whereas adult children caregivers are most likely to be dealing with collateral relationships (i.e., siblings). These different family relations are made up of people having varied interactional histories and emotional attachments to both the caregiver and the patient.

All of the above suggests that the model for spouses and adult children should be different because conflict with family members is likely to be shaped by the meaning and expectations given the various relationships that revolve around the patient and the caregiver.

CHAPTER IV

CONSTRUCT SPECIFICATION AND MEASUREMENT

Family Conflict Defined

In this research, family conflict[3] is defined as overt interpersonal disagreement, resulting from incompatible or opposing views or actions between the primary caregiver and a family member to whom he or she is related through birth, marriage, or adoption. Disagreements between the primary caregiver and the Alzheimer's patient are excluded from this definition of family conflict.

The presence of conflict is determined by caregivers' subjective reports. This method assumes that much of the psychological adjustment of the caregiver depends not only upon objectively defined interactions with family members, but also - and perhaps primarily - their subjective perceptions of family members and family context.

The Family Conflict Scales

The Family Conflict Scales were developed by this researcher for use in the large-scale longitudinal study of the Sources and Mediators of Alzheimer's Caregiver Stress (Pearlin et al., 1990). Each scale corresponds to one of three dimensions of family conflict. Our three dimensions of family conflict were conceptualized on the basis of a thematic analysis of qualitative data (Miles and Huberman, 1984) collected through in-depth interviews with a sample of 20 primary

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[3] Although this research examines a family phenomenon, the data analyzed represents only one person's subjective view of conflict within their family. The unit of analysis in this research is the individual and not the family system.

caregivers who were recruited through the auspices of the Northern California Alzheimer's Disease Center in Berkeley.

The qualitative interview[4] directed discussion to many areas of potential conflict including: perceived indifference and involvement of family members; family members' actions and attitudes toward the patient; differences in expectations about patient care; and family members' intervention in matters of decision-making. Each qualitative interview was reviewed independently by three readers for the purpose of extracting specific examples of family conflict from each transcript. Inter-rater reliability (Kappa) was high, ranging from 92.9 to 94.4 percent agreement among the three raters.

The three dimensions of family conflict identified from this pilot work include: 1) conflict around definitions of the illness and strategies for care; 2) conflict around family members' attitudes and actions toward the patient; and 3) conflict around family members' actions and attitudes toward the caregiver.

The first dimension of family conflict - <u>conflict over definitions of the illness and strategies for care</u> - encompasses disagreements that are distinctly issue oriented and involve some aspect of either

providing care or defining the patient's physical or mental condition. Each dimension was measured by four items on a 4-point scale ranging from 0 (no disagreement) to 4 (quite a bit of disagreement). Next to each item below are the mean values of responses for spousal and adult children caregivers, respectively. Note that the low mean values are influenced considerably by the 0 to 3 scoring range of the scales.

[4] The qualitative interview guide is presented in Appendix III.

Concerning the first dimension, respondents were asked, "How much disagreement have you had with anyone in your family about the following issues:

A. the seriousness of your (relative's) memory problem (.48;.90)
B. the need to watch out for your (relative's) safety (.24;.66)
C. what things your (relative) is able to do for (him/herself)(.30;.65)
D. whether your (relative) should be placed in a nursing home?(.23;.83)

The second dimension of family conflict - conflict over family members' treatment of the patient - encompasses disagreements that arise over caregivers' perceptions of family members' attitudes and behaviors toward the patient. Respondents were asked, "How much disagreement have you had with anyone in your family because they:

A. don't spend enough time with your (relative) (.44;.92)
B. don't do their share in caring for your (relative) (.35;.92)
C. don't show enough respect for your (relative) (.20;.59)
D. lack patience with your (relative)?" (.27;.70)

The third dimension of family conflict - conflict over family members' treatment of the caregiver - encompasses disagreements that arise over caregivers' perceptions of family members' attitudes and behaviors toward them personally within the context of the caregiver role. Respondents were asked, "How much disagreement have you had with anyone in your family because they:

A. don't visit or telephone you enough (.31;.49)
B. don't give you enough help (.28;.71)
C. don't show enough appreciation for your work as a caregiver(.28;.54)
D. give you unwanted advice?" (.37;.66)

The intercorrelations among the three dimensions are quite high: between the issues and patient scales, r=.55; between the issues and caregiver scales, r=.51; and for the measures of conflict involving the treatment of the patient and treatment of the caregiver, r=.71. Despite their close interrelationships, it is expected that each dimension of conflict will have somewhat different sociodemographic, network and situational predictors, and that the effects of each dimension upon caregivers' depressive symptomatology will be quite different.

Alpha coefficients of reliability (Chronbach, 1951) for each 4-item family conflict scale and the total 12-item scale are reported separately for spousal and adult children caregivers (Table 4.1). In general, the family conflict scales exhibit good internal consistency reliability for both spousal and adult children caregivers. This suggests that the items chosen to represent each of the three underlying theoretical dimensions are good indicators of those dimensions.

TABLE 4.1

Internal Consistency Reliability
of the Family Conflict Scales

	Spousal Caregivers Alpha	Adult Children Caregivers Alpha
Total Family Conflict Scale	.88	.90
Issues Scale	.72	.82
Treatment of Patient Scale	.82	.86
Treatment of Caregiver Scale	.87	.80

Confirmatory Comparison of Factor Structure for Spousal and Adult Children Caregivers

Our a priori three-factor model of family conflict called for the use of confirmatory factor analytic techniques to examine more specific hypotheses about the underlying factor structures. The crucial question in the present analysis is whether the factor structures of the family conflict scales is the same for spousal and adult children caregivers. The confirmatory analysis involved the use of LISREL, a general computer program which estimates parameters in a set of linear structural equations based on one of seven estimation procedures (see Joreskog and Sorbom, 1989, pp.16-22). LISREL consists of two major subdivisions: 1) the structural equation model; and 2) the measurement model. The present analysis focuses on measurement modeling.

The measurement model specifies the relations between observed or measured variables (i.e., indicators) and unobserved or hypothetical (i.e., latent) variables. It is assumed that the observed variance/covariance matrix (S) is generated by underlying causal processes among unobserved or latent concepts (Long, 1983). If our model of family conflict is specified correctly, we should be able to reproduce the observed variances and covariances reasonably well.

The general task is one of fitting the measurement model to the data and then deciding whether or not the fit is adequate. The overall fit of the model to the data is judged by means of a chi-square. Mathematically, determinants of the observed (S) and reproduced (Σ) matrices are used to calculate chi-square with degrees of freedom (df) equal to the number of overidentifying restrictions. A significant (χ^2)

at a prespecified level of (α) leads to the rejection of the null hypothesis, and it is concluded that the model does not fit the data very well. When the observed variance/covariance matrix can be reproduced exactly, the chi-square is zero, which indicates a perfect fit. Conversely, the larger (χ^2) the worse the fit. In short, a good fit is represented by a low value of chi-square and a high probability value such that (χ^2) is _not_ significant.

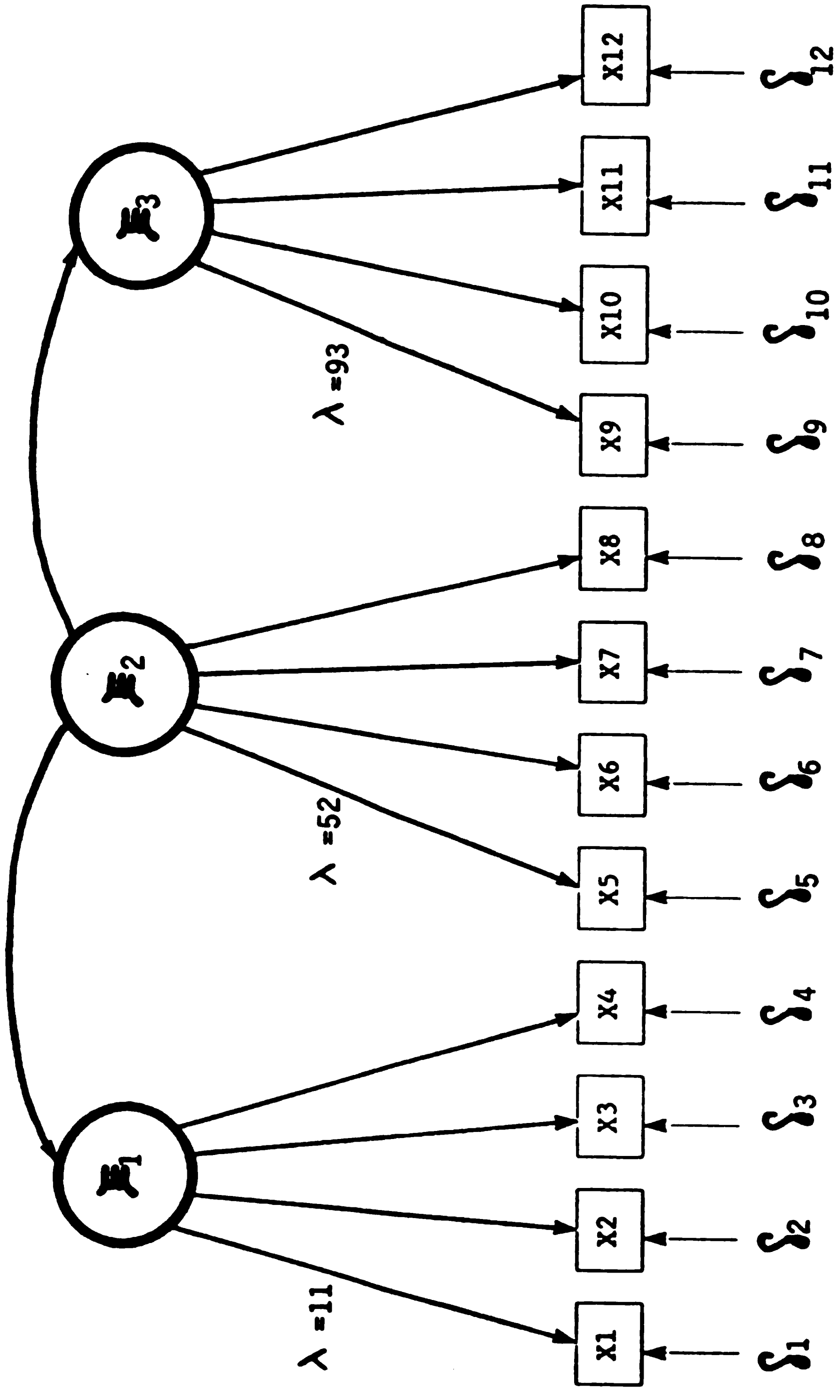
Figure 1 depicts our confirmatory factor model for the measurement of family conflict. The model is composed of three latent factors and twelve observed variables. Each factor is assumed to be measured imperfectly by four variables. The issues dimension of conflict (KSI1) is measured by X1 through X4; treatment of the patient conflict (KSI2) is measured by X5 through X8; and treatment of the caregiver conflict (KSI3) is measured by X9 through X12.

In order to assess the causal effects, it is necessary that the units of measurement in the latent variables be defined. This is accomplished by setting the coefficient of one indicator for each of the latent variables to be equal to 1.00. The metric of the latent variable becomes that of its reference indicator (Schoenberg, 1972). In our model, the reference indicators are X1 for issues; X5 for treatment of the patient; and X9 for treatment of the caregiver.

Although LISREL can handle complex statistical problems, our immediate concern in this research is to determine whether the factor structures for the three family conflict scales is the same for spousal and adult children caregivers. This will be established by using LISREL to test a series of nested models in a multi-sample analysis.

Figure 1

Confirmatory Factor Model for the Measurement of Family Conflict



Nested models allow the researcher to compare the "fit" of a specified model against an alternate one. A model may be considered "nested" if it can be obtained from an alternate model by restricting certain parameters to be zero or equal to other parameters. The difference in the chi-square between the two models (relative to the degrees of freedom lost) may then be used to help evaluate the relative fit of the two models.

Multi-sample LISREL analysis is used here to test whether the covariance matrices of the observed variables are equal for different groups. In this research, it is assumed that the measurement model depicted in Figure 1 holds for both spousal and adult children caregivers. To test the equality of covariance matrices for these two groups, we define certain parameters and then constrain these parameters across the two groups. The form of the analysis is such that data from both groups is analyzed simultaneously in order to obtain estimates of the parameters. We shall estimate three parameters which are assumed to generate (S) the observed covariance matrix: Phi (P); Lambda (L); and Theta (T).

Phi is the variance-covariance matrix of the underlying concepts or latent factors. Lambda is the matrix of regression coefficients which describe how much changes in the latent concept influence the observed indicators. Theta is the covariance matrix among the residual factors or errors in the indicators.

The most popular form of estimation involves the use of maximum likelihood (ML) procedures to analyze the ordinary covariance matrix. An important assumption of maximum likelihood is that the distribution of the variables is multivariate normal. Very little is known about the robustness of maximum likelihood estimation procedures when the assumption of normality has been violated; however, in the case of highly non-normal quantitative variables, the chi-square goodness of fit measure and standard errors may be unreliable (Joreskog and Sorbom, 1989, p.223).

It will be recalled from earlier in this chapter that the distributions of the family conflict scales are highly skewed. As a consequence, we will analyze the matrix of polychoric correlations and its associated asymptotic covariance matrix. The matrix of polychoric correlations assumes that the variables are ordinal (i.e., variables whose attributes are logically rank-ordered; the distance separating those attributes does not have meaning). Polychoric correlations are not correlations computed from actual scores. Rather, they are theoretical correlations of the crude measurement of an underlying unobservable continuous variable (Joreskog and Sorbom, 1989, p.224). These correlations are estimated from the observed pairwise contingency tables of the ordinal variables. The advantage of the polychoric correlation is that it is less sensitive to skewed distributions than is the ordinary Pearson correlation coefficient. The asymptotic covariance matrix is estimated from the matrix of polychoric correlations[5].

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[5] Use of the asymptotic covariance matrix requires a large sample size so that the sample variances and covariances can be estimated accurately. Because our sample size of N=210 for adult children caregivers approaches the lower limit of acceptability, a number of test procedures were conducted in an effort to provide some assurance that our asymptotic covariance matrix for adult children caregivers was estimated accurately. The results of these procedures are reported in Appendix IV.

All elements of the matrix of polychoric correlations are asymptotically correct using a matrix of weights. Analysis of the asymptotic covariance matrix employs Weighted Least Squares (WLS) instead of Maximum Likelihood as the estimation procedure (Joreskog and Sorbom, 1989, p. 223).

In this research, we used PRELIS commands to produce polychoric correlations and asymptotic covariance matrices separately for spousal and adult children caregivers. These matrices were then analyzed by LISREL using multi-sample procedures described earlier.

The first step involved testing the "fit" of our basic measurement model with no parameter constraints, separately for spousal and adult children caregivers. The results are presented in Table 4.2. The following notation is used to indicate parameters estimates and fit functions: L_1 refers to the matrix of lambdas (regression coefficients) for spousal caregivers; L_2 refers to the matrix of lambdas for adult children caregivers. Similarly, P_1 and P_2 refer to the Phi matrices (i.e., variance-covariance matrices of the latent concepts) for spousal and adult children caregivers, respectively. T_1 and T_2 refer to the Theta Delta matrices (i.e., variance-covariance matrices of error terms) for spousal and adult children caregivers, respectively. CHI^2 refers to the chi-square statistic which is used as one method to evaluate the model's overall fit to the data. Degrees of freedom associated with the chi-square statistic are denoted (df). The level of significance associated with the chi-square statistic is denoted (p). CHI^2/df is the ratio of chi-square to degrees of freedom. This fit function is used to help evaluate the overall "fit" of the model. GFI is the goodness of fit index. This is another measure that is used to assess the overall fit of the model to the data. Chi-square change ($CHI^2\Delta$) is the difference in chi-square and associated degrees of freedom between two nested models. The difference in chi-square relative to degrees of freedom may be tested for statistical significance and used as another method for evaluating and comparing the fit of alternate models.

Model A is the basic model for spousal caregivers as depicted in Figure 1. Lambda (L), Phi (P) and Theta Delta (T) are all allowed to be free; thus, we estimated a total of nine lambdas (three for each latent variable KSI); six phis; and twelve error terms. The overall fit of the model to the data for spousal caregivers is very good. Chi-square (χ^2) with 51 degrees of freedom is small (49.7) and not statistically significant (p=.526). The CHI^2/df ratio is .97 which indicates a good

TABLE 4.2

MEASUREMENT MODEL FOR FAMILY CONFLICT

Model	L	P	T	CHI^2	df	CHI^2/df	p	GFI	$CHI^2\Delta$
A (Spouses only)	FREE	FREE	SY	49.7	51	.97	.526	.991	N/A
B (Children only)	FREE	FREE	SY	112.9	51	2.21	.006	.979	N/A
C (Spouses=Children) No Constraints	FREE	FREE	SY	162.6	102	1.59	.001	.991	N/A
D (Spouses=Children)	$L_1=L_2$	FREE	SY	173.3	111	1.56	.000	.977	10.7
E (Spouses=Children)	$L_1=L_2$	$P_1=P_2$	SY	231.0	117	2.74	.000	.972	57.7

SY = Only the diagonals of the theta delta matrix are estimated.

fit (i.e., less than 3 is desirable). The goodness of fit index is .991 (where 1.0 indicates that the observed covariance matrix has been reproduced exactly - a perfect fit of the model to the data). Overall, the three factor model produces a very good fit to the data for spousal caregivers.

Model B is the basic measurement model for adult children caregivers as depicted in Figure 1. The fit of the model to the data is not nearly as good as we observed for spousal caregivers. The chi-square is twice as large (112 versus 49) and it is statistically significant (although not overly so). The CHI^2/df ratio is 2.21. This number falls into the desirable range (i.e., less than 3). The goodness of fit index for model B is good (.979), although lower than the one observed for spousal caregivers. Overall, the three factor model produces a reasonably good fit to the data for adult children caregivers.

Model C is the first in a series of nested models that are used here to evaluate whether or not the factor structures of the family conflict scales are the same for spousal and adult children caregivers. The procedure for a multi-sample LISREL analysis involves defining equality constraints across the two groups and stacking the model cards such that data from both groups is analyzed simultaneously. In Model C the asymptotic covariance matrices for spousal and adult children caregivers are analyzed simultaneously; however, we did not impose any equality constraints across the groups. Both the lambdas and phis were allowed to be free and the diagonal elements of the theta delta matrices were estimated. Without imposing any equality constraints, we estimated

18 lambdas (9x2); 12 phis (6x2); and 24 error terms (12x2). Table 4.2 indicates that the overall fit of the model is acceptable. The chi-square is quite large (162) with 102 degrees of freedom and it is significant at $p=.001$. However, the CHI^2/df ratio is good (1.59) and the goodness of fit index is also good (.991). These latter measures of fit indicate that our three-factor model without any constraints holds reasonably well in each group.

In Model D the asymptotic covariance matrices for spousal and adult children caregivers are analyzed simultaneously; however, we constrained the lambdas for the two groups to be equal. The phis are allowed to be free and only the diagonals elements of the theta delta matrices are estimated. With this one equality constraint imposed in Model D, we estimated 9 lambdas (the lambdas are only estimated once and each group receives the same lambda estimates); 12 phis (6x2); and 24 error terms (12x2). The chi-square with 111 degrees of freedom for Model D is larger than the one observed for Model C (173 versus 162). It is also more highly significant ($p=.000$). The CHI^2/df ratio is good (1.56) and the goodness of fit index is also good (.977). The chi-square change is small (10.7 with 9 df) and statistically insignificant. This suggests that the weights that link the indicators to their underlying concepts are the same in the two groups. In other words, the indicators appear to be measuring the same underlying concepts in both groups.

Model E imposes an additional equality constraint - the phis are constrained to be equal across the two groups. Thus, both the lambdas and the phis are constrained to be equal and only the diagonal elements of the theta delta matrix are allowed to be free. Given these constraints, we estimated 9 lambdas (each group receives the same lambda estimates); 6 phis (each group receives the same estimates for phi matrix); and 24 error terms (12x2). As would be expected, the chi-square with 117 degrees of freedom for Model E is larger than the one observed for Model D (231 versus 173). Chi-square is also statistically significant ($p=.000$). The CHI^2/df ratio is nearing the upper limit of desirability (2.74), yet the goodness of fit index remains reasonably good (.972). The chi-square change (58 with 6 df) is statistically significant. The fit of this model suggests that the variance/covariance matrix for the phis differs somewhat for the two groups. This means that the underlying latent concepts may be slightly different (but not overly so) for spousal and adult children caregivers.

Overall, we may conclude from our LISREL analysis that the factor structures of the family conflict scales are reasonably similar for spousal and adult children caregivers. Of particular importance is our finding that the observed indicators appear to be measuring the same underlying concepts in both groups. Although these latent concepts may be slightly different for spousal and adult children caregivers, the fit of the model with equality constraints imposed on both the lambdas and the phis, is good enough that we feel confident to proceed with our analyses separately for spousal and adult children caregivers.

The Prevalence of Family Conflict

The prevalence of family conflict for our sample of spousal caregivers is surprisingly low. Only fifty-five percent of spousal caregivers reported conflict on any of our three dimensions of family conflict. The remaining forty-five percent of spousal caregivers reported no family conflict on any of the dimensions.

The prevalence of family conflict among adult children caregivers is more in line with our expectations. Eighty-two percent of adult children caregivers reported conflict on at least one dimension of family conflict, whereas only eighteen percent reported no conflict on any dimension.

As seen in Table 4.3, the sheer level of conflict along each dimension of family conflict is modest for both spousal and adult children caregivers. Note that adult children caregivers have higher mean levels of family conflict on each of our three dimensions as compared with spousal caregivers. A t-test for the difference between means indicates that these differences are statistically significant at $p < .001$.

TABLE 4.3

Family Conflict Scales: Means and Standard Deviations

Spousal and Adult Children Caregivers

	Spouses		Adult Children		
Conflict Dimension	Mean	SD	Mean	SD	t value
Issues Conflict	.31	.52	.76	.86	6.7***
Treatment of Patient Conflict	.32	.61	.78	.94	6.3***
Treatment of Caregiver Conflict	.31	.65	.60	.80	4.4***

*** $p < .0001$

Response categories: (3) Quite a bit of disagreement; (2) Some disagreement; (1) Just a little disagreement; (0) No disagreement.

More Concepts and their Measures

The following is a brief description of the remaining variables and measures used in this study. The items that constitute specific scales are presented in Appendix I. Alpha coefficients of reliability (Chronbach, 1951) are reported for all scales.

The following sociodemographic characteristics of caregivers were included in our general model of family conflict: age, gender, education, family income, marital status, and health status of the caregiver. Age is coded in number of years. Gender is a dummy variable coded female (0) and male (1). Education is coded less than high school (1), high school (2), some college (3), college graduate (4), and college+ (5). Family income is coded in thousands of dollars. Marital status is a series of dummy variables in which married, divorced/separated, and widowed caregivers are compared to the never married (the omitted category). Health status of the caregiver is the standardized sum of two self-ratings of physical health. One rating is the caregiver's evaluation of his/her current health status in relation to the time just prior to assuming the caregiver role. The other is a general rating of current physical health status.

Our general model of family conflict also includes the following family network variables: size of family network and geographic proximity of its constituents; composition of family network; and the frequency of face-to-face visits and telephone contact with family members. The size of the caregiver's family network and the geographic location of its members was coded with three variables. The first variable is a summary of the total number of relatives living in the caregiver's household. The second variable is a sum of the total number of family members living within a one hour drive of the caregiver's home. Similarly, the third variable is a sum of the total number of relatives living at distances greater than a one hour drive from the caregiver's place of residence. Together, these three variables add up to a crude[6] estimate of the total size of the caregiver's family network.

Composition of the caregiver's family network was measured by four dichotomous variables that indicate the presence of each of the following relationship categories: Children No (0) Yes (1); Siblings No (0) Yes (1); Siblings-in-law No (0) Yes (1); and Other relatives No (0) Yes (1). The latter is a broad category that includes (where applicable) all living relatives who are not included in the other three categories.

The frequency of contact with family members was captured by two variables. The first variable reflects the caregiver's estimate of the frequency of face-to-face contact with family members on a monthly basis. The second represents the caregiver's estimate of the frequency of telephone contact with family members on a monthly basis.

The next block of variables to be described include the following situational factors or <u>objective conditions of caregiving</u>: number of years since patient diagnosis; patient's level of functional disability; cognitive symptoms; problem behaviors; and whether or not the caregiver lives with the patient.

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[6] Information concerning the number and location of family members was not obtained for the following categories of relatives: nieces, nephews, cousins, and grandchildren.

Number of years since patient diagnosis is coded in years and is based upon the caregiver's estimate of the length of time since their relative was first seen by a doctor for memory problems. To handle missing data (N=29), the number of years since diagnosis variable was regressed on a second variable which provides an estimate of the length of the time since the caregiver first noticed that something was wrong with their relative. The intercept and regression coefficient for the regression equation were used to create a substitute score for cases with missing data.

Patient's Level of Functional Disability is measured by a 15-item scale that assesses the patient's ability to perform basic activities of daily living (e.g., eating, dressing, handling money). Respondents were asked, "How often does (he/she) depend on you for (activity)?" Responses were measured on a 4-point scale ranging from Completely (4) to Not at All (1). The alpha for the scale in this study is .92.

Cognitive Symptoms is measured by an 8-item scale that assesses how difficult it is for the patient to remember recent events, speak sentences, recognize people that (he/she) knows, etc. Responses were measured on a 5-point scale ranging from Not at All (0) to Can't Do At All (4). The alpha for the scale in this study is .86.

Problem Behaviors is measured by a 14-item scale that asks respondents, "In the past week, on how many days did you personally have to deal with the following behaviors of your (relative)?" Examples of problem behaviors include keeping the caregiver up at night, hiding belongings and forgetting about them, swearing or using foul language, threatening people, etc. Responses were measured on a 4-

point scale ranging from No Days (0) to 5/more Days (4). The alpha for the scale in this study is .79.

Caregiver Living with Patient is a simple dichotomous variable, scored No (0), Yes (1).

Our general conceptual model of family conflict (see Figure 2) also includes mastery as one type of personal resource. Mastery is measured by a 7-item scale developed by Pearlin and Schooler (1978). The scale is considered to be a measure of a person's feelings of control over the forces that influence his/her life. Respondents rate each item on a five-point scale ranging from strongly agree to strongly disagree. This scale has been used in many studies, and its psychometric properties are well established. The alpha reliability for the scale in this study is .75.

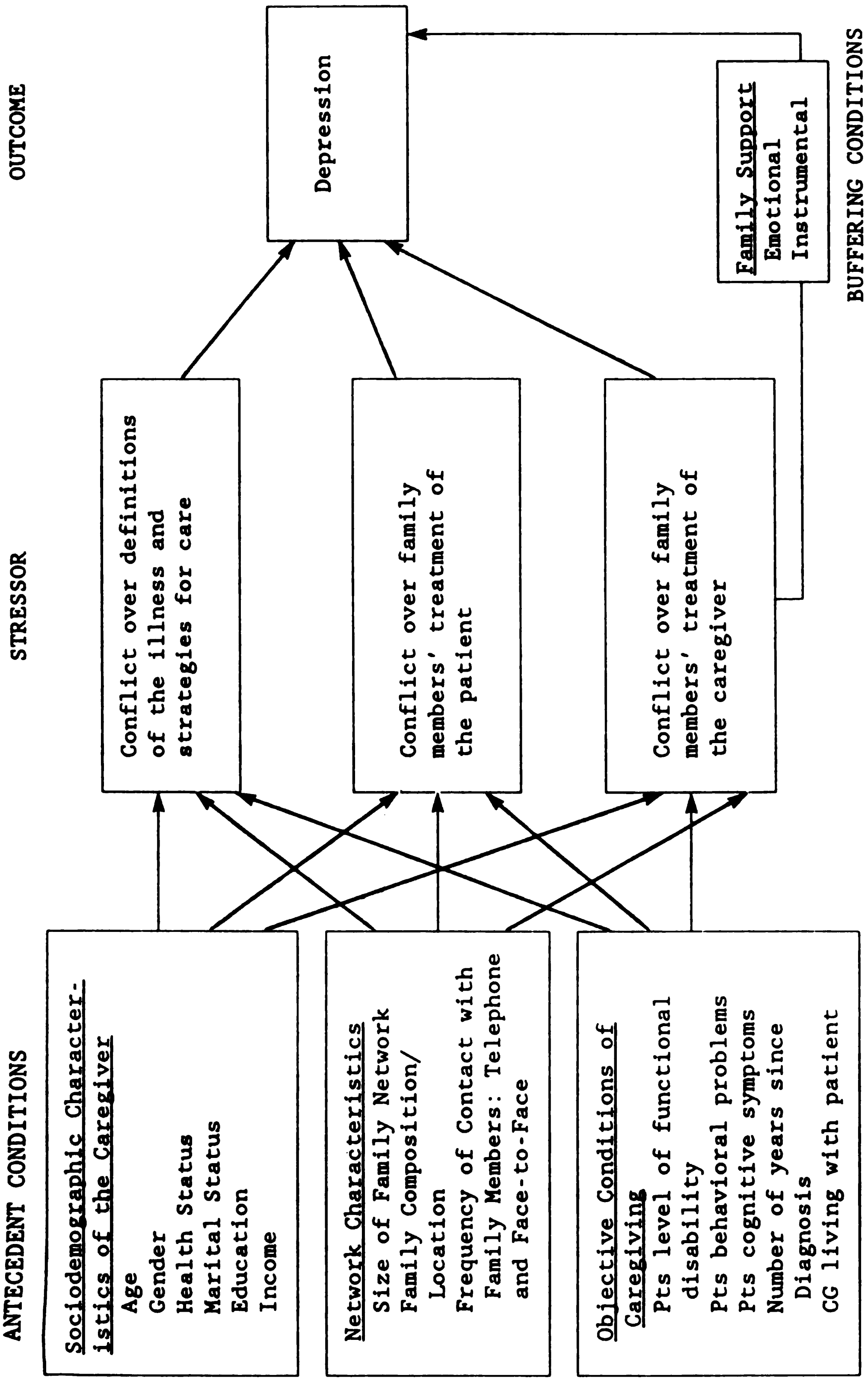
Our conceptual model of family conflict depicts family support as a mediator in the relationship between family conflict and depression. Our measures of social support ask respondents to name the people (family members and friends) with whom they engage in specific social exchanges. The support items and the variables that were created for the purpose of distinguishing between familial and nonfamilial sources of social support will not be discussed here. These items and measures will be presented in a later chapter that addresses the buffering effects of social support.

The primary dependent variable, depression, was measured by seven items borrowed from the Hopkins Symptom checklist. The Hopkins is one of the most popular measures of well-being within the gerontological literature, and its psychometric properties are well established. The alpha reliability for the scale in this study is .86.

Appendix II shows the means and standard deviations of all variables, and the correlations among them, separately for spousal and adult children caregivers.

Figure 2

Conceptual Model for the Study of Family Conflict



CHAPTER V

CONCEPTUAL ORIENTATION

Determinants of Family Conflict

Despite a growing interest in the importance of people's social, personal, and network characteristics in relation to stress outcomes, there has been very little empirical investigation of the determinants of family conflict. The general body of literature is fragmented and draws upon the study of conflict in parent-adult child relationships, and marital and pre-marital relationships. Possible determinants of family conflict will be discussed here, beginning with sociodemographic characteristics of caregivers.

Gender is important in the study of conflict because males and females appear to respond to conflict in different ways. For example, in a study of heterosexual couples, Kelley et al. (1978) describe males as conflict-avoidant and females as conflict-confrontive. They argue that females engage in conflict in order to bring issues out into the open, whereas males find such confrontations uncomfortable. Nowhere is this more apparent than in the study of marital and premarital relations. The research findings support the theory that males and females approach and experience conflict from different perspectives. For example, conflict resolution is reported to be directly important to females and only indirectly important to males. Females actively pursue conflict resolution as a means of enhancing the relationship whereas males commonly experience the pursuit of resolution as "rehashing the same old issue" (Cate et al., 1984; Lloyd, 1987; Peterson, 1983).

Gender differences in the experience of family conflict have been noted also in the study of parent-child relations across the life course. For example, Block (1937) found significant gender differences in the degree of conflict reported between adolescents and their mothers. His findings support the position that females experience higher levels of conflict with parents than do their male counterparts, at least during the period of adolescence. This position is strengthened to some extent by theory and research on parent-child relations in later life. Family scholars report that daughters maintain higher levels of interaction with their aging parents than do sons (Adams, 1968; Houser et al., 1985; Litwak, 1985; Lopata, 1979; Troll and Bengston, 1979). In accordance with Gelles and Straus's (1978) theory that high levels of interaction and intensity among family relations help to explain domestic conflict and violence in the family, it has been argued that these characteristics of the relationship may lead to more frequent conflict among parent-daughter dyads than among parent-son dyads. Lehr (1984) did in fact find that elderly parents are more likely to experience conflict with daughters than sons, and the highest frequency of conflict was between mothers and daughters.

In the case of adult children caregivers, Horowitz (1985) found significant gender differences in the type of assistance provided to elderly parents. Where sons differed from daughters was in their likelihood to involve and depend upon their spouses. Men were significantly more likely to name their wives as the other relative involved in providing care to their parent than were adult daughters to report their husbands' involvement. Men also perceived their spouses to have more supportive attitudes toward their caregiving activities. Men expected and received both emotional support and concrete assistance from their wives. In contrast, women caregivers often voiced appreciation that their husbands remained neutral toward their involvement in parent care.

On the basis of this one study, it appears that men have high expectations for their wives' involvement in parent care; however, it is expected that caregiving conflict will be low for male caregivers because their expectations are usually met. Women, on the other hand, may have lower expectations for their husbands' involvement in caregiving activities, but it is more likely that even low expectations for spousal involvement will go unmet. It is suggested here that unmet expectations will lead to disappointment and conflict in the marital relationship.

Taken together, these studies suggest that gender is likely to be an important determinant of family conflict. In this research, it is generally expected that female caregivers will be more likely to experience conflict with family members than will their male counterparts.

Age is another sociodemographic variable that appears to influence family conflict. While few studies actually examine age variations in family conflict, there is considerable evidence to suggest an inverse relationship. As previously detailed, studies of marriage and family indicate that marital conflict declines with age (Clausen, 1972; Cuber and Harroff, 1965; Gilford and Bengtson, 1979; Levinger, 1974; Rausch et al., 1974; Reiss, 1971). Also, the literature on family violence suggests that physical aggression declines across age groups (Straus et al., 1980; Pillemer and Suitor, 1987).

Studies of parent-child conflict have produced similar findings. In the Berkeley longitudinal data, Clausen and his colleagues found that adolescents were more hostile toward their parents than at any other time in their lives (Clausen, Mussen and Kuypers, 1981). Other studies of parent-child relations have consistently reported conflicts between parents and children to occur most often when children are under 30 years of age (Cicirelli, 1986; Lehr, 1984). Age variations in family conflict have been noted also in studies of marital and premarital relations. In general, the research indicates that those who are under age 30 tend to experience more conflict in the marital relationship than those who are older (Gary, 1986). Age variations in family conflict may be viewed in relation to the social roles that individuals occupy across the life course. For example, as children age they generally assume an array of social roles, many of which are occupied by their parents. In other words, children tend to marry and themselves become spouses and parents. The experience of sharing similar social roles presumably maximizes empathy and leads to more harmonious interpersonal relations, and hence less conflict. In this research, it is expected that caregivers in the upper age ranges will have more "mature" families and therefore will experience less conflict than their younger counterparts with more "youthful" families.

<u>Education</u> is another sociodemographic variable that is expected to influence family conflict. Specifically, it is expected that education will be inversely related to family conflict. This expectation is based on research findings on domestic violence that show both family conflict

and violence to be higher in families whose members are less educated (Straus et al., 1980). It is suggested here that education-related variations in family conflict may be explained, in part, by differences in communication skills, problem-solving abilities, and conflict negotiation strategies. Specifically, individuals with higher levels of educational attainment may have more effective strategies for avoiding conflict, they may be more skilled at communicating a problem that takes the form of discussion rather than argument, and they may be better equipped to take the other's perspective and, in turn, demonstrate empathy toward the opposing party.

Alternatively, we may find that the relationship between education and family conflict is, in fact, a positive one. Studies of working class marriages indicate that less educated couples are more traditional in their role relationships. Husbands and wives of this class tend to assume more segregated roles with less companionship and fewer shared activities (Mullan, 1981). The assumption in traditional role relationships is that women are responsible for the care and nurturing of children and dependent elders. Women are also assumed to have more flexible time in their role as homemakers than do their male counterparts in their occupational roles. Given the distinct manner in which these social roles are organized in working class families, it is plausible that there will be less conflict as compared to middle class families which place a greater emphasis on symmetrical relationships, couple involvement and shared activities (Kohn, 1969).

Family conflict is also expected to be influenced by family resources, specifically income. Seelbach (1978) found that respondents with high incomes were more likely than those with low income to indicate nucleated (low) expectations for aid and support. This is most likely due to the fact that persons with higher incomes have the option of purchasing assistance in almost any form, whereas those with low incomes have more needs and fewer options for meeting those needs. In the case of low income caregiving families, needs and expectations for assistance are most likely to be directed toward family members. If these needs and expectations are unmet, disappointment and conflict is likely to result. Overall, it is expected that caregivers with low incomes will be more likely than those with high incomes to report conflict with family members.

Health Status of the caregiver is another variable that is likely to be a potent antecedent or determinant of family conflict. As previously discussed, studies of intergenerational family relations indicate that parental dependence, brought about by health problems, reduces positive feelings between generations (Cicirelli, 1983a; Hess and Waring, 1978; Litman, 1971; Suitor and Pillemer, 1983). It has been suggested that perceived equity of support plays an important role in the development of negative affect and family conflict (Suitor, 1986). In the case of parents and children, it appears that increased parental demands for support, particularly in the face of competing responsibilities and perhaps the disruption of a previously established flow of support, may leave adult children angry, frustrated and vulnerable to conflictive interactions. Moreover, the dependent parent is likely to experience similar feelings of negative affect toward children who do not respond in an expected way to their increased demands (either implicit or explicit) in a time of need. On the basis of this research, it is not unreasonable to suggest that, in the general case, health status of the caregiver will influence family conflict through its effect on expectations for the behaviors and attitudes of family members. In this research, we anticipate that caregivers who are in poor health will have higher expectations for family support. In turn, high expectations are more likely to go unmet, thereby increasing the likelihood that conflict will occur.

Marital Status (for Adult Children caregivers only) is another variable that is expected to influence family conflict. It is reasoned that divorced and separated caregivers will experience greater levels of conflict than all other categories of marital status including married, widowed and never married.

Despite frequent reports of disagreement and conflict among married couples, studies of marital and family relations consistently indicate that the spouse is by far the greatest source of satisfaction and support for married persons. In a study of parent care, Horowitz (1985) found significant levels of support coming from the spouses of adult child caregivers (as previously noted, men perceived their wives as being more supportive than did women). Where expectations for aid and support are generally met by one's spouse, the likelihood for conflict is expected to be reduced. In cases where expectations for spousal support are not met, it is reasoned that married persons, by virtue of their marital status, are more likely to have a large family network from which alternative sources of support and assistance may be sought, thereby effectively reducing the likelihood of family conflict.

Similarly, widowed adult child caregivers are likely to have large family networks which include grown children. Moreover, researchers have demonstrated that widowed persons receive higher levels of support from their children, especially daughters, than do their married counterparts. It has been suggested that this finding is explained by the fact that parental death evokes strong feelings of obligation on the part of children toward the surviving parent (Adams, 1968). In the case of widowed adult child caregivers, it is expected that grown children will rush in to fill the gap created in the family system by the death of one parent. It is also likely that siblings of the widowed caregiver will provide more support and assistance than they would have had the spouse been alive. Overall, it is suggested here that the match between the widowed person's expectations for receiving support and family members' expectations for giving support will tend to be fairly congruent, thus reducing the likelihood that conflict will occur.

Never married adult children are the family members who most often assume primary responsibility for the care of aging parents (Townsend, 1963; Koller, 1974). Although there are no cultural guidelines or specific norms around parent care, there is an implicit assumption that single persons are better able to assume the caregiver role, since they are without the competing responsibilities of children and marriage. It is suggested that single persons internalize these implicit norms for persons of their marital status, and therefore have lower expectations for assistance and support from other family members, particularly those who are married or have children. Hence, lower expectations are expected to translate into less family conflict for never married caregivers.

As previously mentioned, divorced and separated caregivers are expected to have the highest levels of family conflict as compared with all other categories of marital status. One explanation may be that divorced/separated persons have smaller family networks from which they are actively able to recruit supporters; the reason being that relatives acquired through marriage (i.e., in-laws) are likely to be dropped from one's network once a marriage is dissolved. Moreover, other family members including one's own children may not be very supportive of a parent who has divorced. Hence, caregivers with small family networks are expected to have more needs and thus greater expectations for the few persons available to them. Furthermore, it is not unreasonable to suggest that a small family network is likely to "burn out" quickly and to withdraw from supportive activities. As previously hypothesized, if the caregiver's expectations for support go unmet, we might expect to observe conflict as a plausible outcome. In short, it is expected that adult children caregivers who are divorced or separated will have higher levels of conflict than all other categories of marital status.

We turn now from the sociodemographic characteristics of caregivers to the objective conditions of caregiving. It is expected that the more difficult the conditions the greater the likelihood that the caregiver will experience family conflict. These contextual conditions are discussed below as antecedents or determinants of family conflict.

Number of Years Since Patient Diagnosis is expected to be related to our three dimensions of family conflict in different ways. Specifically, it is expected that the Issues dimension of family conflict will be inversely related to number of years since patient diagnosis, whereas conflict on the Treatment of Patient and Treatment of Caregiver dimensions will be positively associated with number of years since diagnosis. As will be detailed in the next chapter, the Issues dimension of conflict encompasses disagreements that arise out of differences around issues of impairment: beliefs about the patient's physical or mental condition, his or her abilities, and appropriate strategies for care. According to recent research, this type of conflict is typically present in early stages of the disease where family members often deny the illness as a method of coping with the reality of the situation (Chenowenth and Spencer, 1986; Scott et al., 1985; Zarit et al., 1985).

The other two dimensions -- conflict over family members' treatment of the patient and conflict over family members' treatment of the caregiver -- encompass disagreements that are rooted in family members' attitudes and actions toward the patient and the caregiver respectively. As previously indicated, these two dimensions of conflict are expected to be positively associated with the number of years since diagnosis. The rationale for this expectation will be discussed shortly. First, however, it is necessary to describe each dimension in greater detail. Conflict that arises over family members' treatment of the patient is rooted in disagreements over the amount of attention (i.e., frequency of visits and telephone contact) and the quality of attention (i.e., respect, patience) given to the patient by other family members. When one considers the dramatic transformations that occur in the patient over the course of the illness (e.g., problem behaviors, loss of intellect), it is not unreasonable to speculate that some family members will respond by avoiding contact with the patient or by treating him/her in ways that might be perceived negatively by the caregiver. Moreover, given that the disease is of a progressive nature, it is expected that across time, as the patient's deficiencies and problem behaviors increase, the likelihood of avoidance and negative interactions on the part of other family members will also increase, thereby creating more opportunity for conflict with the caregiver to occur. In short, we expect that levels of conflict on the treatment of patient dimension of conflict will increase as the number of years since patient diagnosis increases.

Conflict that arises over family members' treatment of the caregiver is rooted in disagreements over the amount of attention (i.e., frequency of contact, concrete assistance) and acknowledgement (i.e., appreciation) accorded the caregiver by other family members. Studies on family supports to the elderly indicate that concrete assistance and emotional support become eroded over time in the case of severe chronic conditions (Eggert et al., 1977; Johnson and Catalano, 1983). In the case of Alzheimer's caregiving, where the disease is progressive and the psychiatric problems of the patient worsen over time, we would expect that the needs and expectations of the caregiver will increase with the number of years since diagnosis. If in fact other family members are likely to be withdrawing support and assistance with the passage of time, the incongruence in expectations and behaviors is expected to increase the likelihood of conflict occurring. In short, we predict that levels of conflict on the treatment of caregiver dimension of conflict will increase as the number of years since patient diagnosis increases.

The extent of the patient's <u>problem behaviors</u> is another condition that is expected to influence family conflict. Considering the psychotic nature of certain problematic behaviors that characterize Alzheimer's disease (e.g., paranoia, inappropriate sexual behavior, outbursts of anger), it is not unreasonable to speculate that caregivers who are faced with extreme examples of these problems will have high expectations for other family members, particularly with respect to role acknowledgement and emotional support. Problematic behaviors are likely to be one of the most difficult conditions of caregiving because they are highly upsetting, and effective solutions do not come easily.

Similarly, the extent of the patient's <u>cognitive difficulties</u> is expected to be positively related to family conflict. More specifically, caregivers whose relatives exhibit extreme degrees of cognitive and intellectual decline are likely to have high expectations for emotional support from other family members because of the devastating nature of this form of loss. If such expectations for support go unmet, the opportunity for family conflict is expected to increase. Also, caregivers are likely to be especially sensitive to the ways in which the patient is treated by other family members, primarily because it is not always clear whether the patient (especially those who are without speech) is able to understand and interpret the behavior of others. Thus, it may be that the extent of the patient's cognitive difficulties is related strongly to conflict on the treatment of patient dimension.

The extent of the patient's dependence on the caregiver for Activities of Daily Living (ADL) is expected to be related positively to family conflict, particularly conflict on the treatment of caregiver dimension. It is not unreasonable to suggest that caregivers with extremely dependent patients will have greater expectations for family members, primarily with respect to instrumental assistance, than will caregivers with patients who perform well on activities of daily living. It is reasoned that declines in patients' ADLs will be associated with the passage of time. Since we already know that family supports to the elderly decrease over time (Eggert et al., 1977; Johnson and Catalano, 1983), we may hypothesize that the combination of caregivers' high expectations for assistance and the usual withdrawal of family supports in chronic caregiving situations will lead to conflict, particularly on the treatment of caregiver dimension.

The last condition to be discussed here is the caregiver's place of residence in relation to the patient (for Adult Children caregivers only). Specifically, it is expected that caregivers who live with the patient will experience more family conflict than their counterparts who live apart from the patient. It is reasoned that caregivers who live with the patient will be more burdened with responsibility than those who live elsewhere. As a consequence, they will have higher expectations for assistance from other family members. If these expectations are not met, it is likely that conflict will ensue.

There is a paucity of empirical studies that examine the relationship of Network Characteristics to family conflict. However, given previously discussed arguments maintaining that high levels of interaction and intensity of relations among family members help to explain domestic conflict (Gelles and Straus, 1978), it is expected that caregivers who live close to a large number of family members and who interact frequently with those people will be more likely to experience conflict than will caregivers who have infrequent contact with family members. More specifically, it is reasoned that a high volume of face-to-face contact with family members will create opportunities for conflict to occur. For example, family members who visit the caregiver and patient on a regular basis seem more likely to get involved in disputes over the patient's abilities and needs, as well as those of the caregiver. In contrast, caregivers who have limited face-to-face contact with family members may feel that their needs and expectations are also in violation; however, they have limited opportunity to express their disappointment and disapproval. A similar argument may be made with respect to the relationship between the frequency of telephone contact with family members and family conflict. It is expected that caregivers who have a lot of telephone contact with family members will have higher levels of family conflict, simply because there is more opportunity for it to occur.

Moreover, it is expected that the size of the caregiver's family network will be positively associated with family conflict because of increased opportunity structure. When geographic proximity of family network members is considered, it is suggested that family conflict will be positively associated with the number of persons living in the caregiver's household. One may reason that caregivers' expectations for persons living in the household might be greater than for those living elsewhere, because the former would be expected to be more "in tune" with the caregiver's needs since they have greater exposure to that person, and in some cases they actually have significant exposure to the caregiving activities. If in fact the caregiver does have higher expectations for family members who live in their household, and those expectations go unmet, we would expect to see higher levels of family conflict.

If we consider the number of family members living within a one hour drive in relation to family conflict, it is likely that we will note a positive relationship. Once again, it is reasoned that family members who live geographically close to the caregiver will tend to interact more frequently and this increases the opportunity for conflict to occur. Following this line of reasoning, we would expect to observe limited contact between caregivers and family members who live at distances greater than a one hour drive. If this is the case, the relationship between family conflict and the number of relatives who live at long distances is expected to be an inverse one. In short, if a caregiver has very little opportunity to interact with relatives because they live at great distances, we would expect the caregiver to report low levels of conflict with family members.

In summary, a number of variables will be examined as determinative of family conflict in caregiving situations. Three categories of conditions will be examined in relation to caregivers' experiences of family conflict. In general, it is expected that low social status and difficult conditions within the caregiver role will constitute important determinants of family conflict.

Family Conflict and Depression: Possible Conditional Relationships

"In social science, there is no escaping the fact that conditional relationships are often an accurate reflection of social reality" (Rosenberg, 1968, p.107). In this research, we expect that the relationship between family conflict and depression will vary as a function of patterned variations in caregivers' key social characteristics, family network variables, objective conditions of caregiving, and caregivers' personal resources. The primary question we ask is whether the relationship between family conflict and depression differs for certain subgroups of caregivers. As previously indicated, the goal of this analysis will be to specify the conditions under which the original relationship between family conflict and depression may be either strengthened or weakened.

Several test factors that may regulate or condition the relationship between family conflict and depression will be discussed here, beginning with key sociodemographic characteristics of caregivers.

Gender provides an excellent example of what may prove to be an important conditional effect. It is expected that the impact of family conflict upon depression will be strikingly different for men and women. Specifically, it is expected that the relationship between family conflict and depression will be stronger for women than it is for men. This expectation is drawn from a theory of gender-based variations in the strength of commitment and investment in family roles. Women are assumed to have a greater investment and deeper commitment to family as compared to men. This is largely due to the fact that for a majority of women, family roles constitute their major social roles. In fact, family roles are often a woman's primary source of meaning and external validation, whereas men typically have additional external sources of validation (e.g., work). According to this theory, the greater the strength of commitment and investment in the family the more vulnerable the person will be to psychological distress brought about by disruptive events such as the experience of family conflict. It may be argued that individuals with strong and enduring commitments to their family roles (i.e., women) will tend to experience family conflict as a threat to something that is highly valued. Indeed, when the stakes are high, a great deal of stress is likely to be aroused. For women as compared to men, psychological distress is most likely to be manifest in the form of depressive symptomatology. General population studies of depression consistently find women to be more depressed than men at all ages (Blazer and Williams, 1980; Eaton and Kessler, 1981; Frerichs et al., 1981; Murrel et al., 1983; Myers et al., 1984; Romaniuk et al., 1983; Uhlenhuth et al., 1983).

A second and related theory of gender-based differences suggests that perceptions of family conflict are likely to be mediated by sex role orientation. The feminine role is considered expressive and compassionate. Women tend to place a high value on receiving approval. They are more likely than men to internalize conflict by blaming themselves for the problem, or feeling responsible for not being able to successfully control the situation once a conflict is triggered. These feelings of self-blame and helplessness are, in turn, likely to be manifested in the form of depressive symptomatology. In contrast, men are more likely than women to externalize conflict. They tend to blame the opposing party or some external condition or circumstance for the troublesome encounter. As such, anger rather than depression is likely to be the outcome when men experience family conflict (Lazarus, 1984).

<u>Age</u> is another background factor that may condition or modify the observed relationship between family conflict and depression. More specifically, we expect that older caregivers will be more affected by family conflict than will their younger counterparts. Although previous research suggests that rates of depression in the general population are lower for the elderly as compared with young adults (Eaton and Kessler, 1981; Frerichs, Aneshensel and Clark, 1981; Uhlenhuth, Balter, Mellinger, Cisin, and Clinthorne, 1983; Lin et al., 1986; Myers et al., 1984), there is some evidence that older persons place more emphasis on family harmony than do younger persons (Brody, 1970; Cottrell, 1975; Stern and Ross, 1965; Sussman and Burchinal, 1962b). As major social roles are relinquished and physical dependencies increase, the family may become socially and instrumentally more important for the older individual (Carp, 1968; Rosow, 1967; Seelbach, 1978; Shanas and Streib, 1965). Aging typically results in a significant decrease in the size of one's social network (usually a significant loss of non-kin); hence, family may become even more highly valued (Fischer, 1982; Heller and Mansbach, 1985; Marsden, 1987). Thus, an elderly person may be more likely than a younger person to perceive family conflict as a threat to something that is highly

valued (i.e., family harmony and cohesiveness). If such a threat leads to feelings of self-blame and helplessness, depression is likely to follow.

Health Status of the caregiver is another sociodemographic factor that may condition or regulate the relationship between family conflict and depression. Research findings consistently support the assertion that poor health is associated with depression across all ages. However, it appears to play a particularly significant role in late life (Abrahams and Patterson, 1978; Blazer and Williams, 1980; Frerichs et al., 1982; Gurland et al., 1980; Murrel et al., 1983; Raymond, Michals, and Steer, 1980; Romaniuk et al., 1983). In this research, it is expected that caregivers who are in poor physical health will be affected more by family conflict than those who enjoy good health. In general, health and energy are considered pervasive resources in that they are extremely relevant to coping in the face of stressful encounters (Lazarus, 1984, p.159). A person who is frail, sick, tired, or otherwise debilitated has less energy to expend on coping than a healthy, robust person. Therefore, it is not unreasonable to assume that coping with family conflict is easier, and the chances of success greater, when one is feeling well than when one is not. The physically unhealthy person is also likely to be more vulnerable to feeling of self-blame and helplessness in response to conflictive encounters. In turn, these feelings may lead to increased symptoms of depression. The assumed importance of physical well-being in relation to coping with family conflict thus warrants examination of its conditional effect upon the relationship between family conflict and depression.

Another major concern is whether the relationship between family conflict and depression varies by social class. There are, of course, many ways of defining social class. Whether defined by occupation, education or income, there is strong evidence that rates of depression are significantly lower in people of higher social class (Comstock and Helsing, 1976; Steele, 1978; Warheit, Holzer and Arey, 1975). Moreover, this association holds true in late life where the elderly with less education and lower income are at greater risk for depression (Abrahams and Patterson, 1978; Amenson Lewinsohn; 1981; Eaton and Kessler, 1981; Frerichs et al., 1981; Murrel et al., 1983; Romaniuk et al., 1983).

In this research, it is expected that caregivers with high socioeconomic status (high education and high income) will be less affected by family conflict (as measured by levels of depressive symptomatology) than their less fortunate counterparts because the former have the financial resources to seek and obtain non-familial sources of instrumental and emotional support. In addition, those with high levels of education might be expected to have more sophisticated problem-solving abilities and conflict negotiation strategies which would result in lower levels of depression. In contrast, low socioeconomic status caregivers are expected to have fewer personal and financial resources which, in turn, makes them more vulnerable to feelings of helplessness and depression as a consequence of conflictive encounters with family members.

Marital status of the caregiver is another factor that may condition the relationship between family conflict and depression. In this particular sample, the conditioning effect of marital status is a concern for only adult children caregivers because our sample of spousal caregivers, by definition, all share the same marital status.

It is well established that marital status is significantly associated with depressive symptoms (Hirschfield and Cross, 1982), and that separated and divorced persons are more vulnerable to depression than those who are currently married, regardless of age. Widowed persons are also at greater risk for depression than their married counterparts (Amenson and Lewisohn, 1981; Frerichs et al., 1981; Murrel et al., 1983; Romaniuk et al., 1983). As previously discussed, there is also reason to believe that family conflict is more prevalent among persons who are divorced and separated than those who are married and never married. Given these associations, it is expected in this research that the relationship between family conflict and depression will be the strongest among adult children caregivers who are divorced or separated as compared with their counterparts who are married. A sizable and respectable body of research is available to help explain this relationship. Several studies of divorce have demonstrated its negative impact on the individual's self-concept (see Hetherington, 1985). Divorced persons are very sensitive to criticism by their families, and frequent critical comments by relatives may be associated with feelings of inadequacy, helplessness, and depression.

Moreover, divorced and separated persons are less socially integrated than those who are married. In general, married persons experience lower rates of depression and mortality (Blumenthal, 1967; Bradburn, 1969; Briscoe and Smith, 1974; Gurin et al., 1960; Knupfer et al., 1966; Radloff, 1975). It is believed that marriage is a primary indicator of social integration and a crude indicator of social support. Being married appears to have a protective effect on health outcome. Thus, we may speculate that married caregivers who have access to a spouse for support may be less affected by the experience of family conflict as compared with those who are without this potentially valuable source of support. In short, the presence of spousal support may help to maintain one's self-concept and sense of control in the face of negative events, including the experience of family conflict.

In addition to sociodemographic factors that may condition the relationship between family conflict and depression, there are several family network variables that may operate in a similar fashion.

Network size, for example, may have an effect on the relationship between family conflict and depression through its impact on perceived social support. Research that examines the effects of network size on perceptions of social support has shown mixed results. Vaux and Harrison (1985) found that network size is among the most important network factors predicting satisfaction with support, such that the number of potential supporters is positively related to support satisfaction. This finding is supported by the work of Sarason et al. (1983) and Russel et al. (1980). Other studies suggest that the relationship between network size and support is curvilinear, such that middle values of network size are associated with the greatest amount of satisfaction, and both very large and very small networks are associated with the least amount of satisfaction (Stokes, 1983; Polister, 1980).

In this research, we anticipate that the size of one's kin network will have an impact on the relationship between family conflict and depression. More specifically, we expect that the relationship between conflict and depression will be weaker for those caregivers who have small kin networks. It is suggested here that caregivers with small kin networks are likely to compensate for this situation by maintaining a large network of non-kin. When family conflict arises, the caregiver with a small family network may turn to non-kin for support. The social support received from non-relatives may, in turn, be more psychologically rewarding because it is attributable to self-worth, rather than ascribed role obligations.

We also expect that the relationship between family conflict and depression will be stronger for caregivers who have little <u>contact with family members</u>. If a caregiver has frequent contact with family members, it seems likely that any conflict that does occur will have less of an impact. The idea is that frequent contact with other family members will help the caregiver to cope with the experience of conflict, either by trivializing the significance of the encounter, helping the caregiver to understand the other family member's position, or by bolstering the caregiver's feelings of self-worth (i.e., validating one's performance in the caregiver role on a regular basis). In short, the notion is that frequent contact with family members maximizes the opportunity for some positive interactions which, in turn, may help to buffer the adverse impact of conflict.

Next, we shall consider several objective conditions of caregiving as factors that may condition the relationship between family conflict and depression. For example, we may ask ourselves whether the relationship between family conflict and depression varies according to the extent of the patient's problem behaviors. One would expect that the relationship between family conflict and depression will be greatest for caregivers who are faced with a lot of problem behaviors. Problem behaviors are so physically and emotionally draining that they tend to result in increased demands for support and assistance from family members. In fact, caregivers are especially likely to shield their friends, neighbors and other non-family members from these types of behaviors. It is also possible that these informal sources of support dissipate quickly when problem behaviors become frequent or severe. In any event, it is not unreasonable to suggest that caregivers' expectations and demands on family members for both instrumental and expressive support will increase in relation to the number and severity of problem behaviors. If demands for family support are not met, the caregiver is likely to feel inadequate and helpless - feelings that beget depression.

Another concern is whether the relationship between family conflict and depression is conditioned by the extent of the patient's cognitive difficulties. Since the extent of the patient's cognitive difficulties is significantly related to loss of the person for both spousal and adult children caregivers ($r=.46$ and $r=.27$, $p <.001$, respectively), it is not unreasonable to suggest that the relationship between family conflict and depression will be strongest in cases where the patient suffers from severe cognitive difficulties. Perceived loss of the person is functionally similar to death; the caregiver is likely to have gone through or be going through a period of bereavement. And, as in the case of bereavement, there is often a strong reliance upon family members to provide comfort and to help one another deal with the loss. It is a time when family harmony and unity is highly valued and fully expected. Therefore, it is not unreasonable to suggest that the relationship between family conflict and depression will be stronger in cases where cognitive difficulties are severe; where the caregiver is, for all practical purposes, confronting the loss of a valued family member.

Another variable that may condition the relationship between family conflict and depression is the role relationship that exists between the caregiver and the family member with whom the conflict is experienced. Research on family relations suggests that there is great diversity in the quality of relations within the family. Certain relationships are more highly valued than others and are characterized by a striking display of enduring commitment and emotional closeness. For example, the relationship between parent and child is considered of this fabric; it has been described as intimate, intensive and relatively enduring (Gecas, 1981). Theoretically, the spousal relationship is endowed with similar characteristics. Other family relationships are considered more distant and less intensive. For example, aunts, uncles, cousins and in-laws are traditionally considered distant family members. Siblings and grandchildren fall somewhere in the middle on this continuum. Despite a great deal of individually-observed variations on this theme of hierarchical relationships within the family, it is used here to suggest that the relationship between family conflict and depression will be strongest in cases where the relational source of conflict is a person to whom the caregiver feels a high degree of commitment and emotional closeness. In other words, the caregiver is more likely to be adversely affected by family conflict when the conflictive encounter involves a family member from whom they expect understanding, loyalty and support. In the case of spousal caregivers, it is expected that the relationship between family conflict and depression will be strongest when the conflict involves a child. For married adult children caregivers, it is expected that family conflict will have the strongest impact on depression when the conflict is with a spouse. If a spouse is not available, we expect that the relationship between family conflict and depression will be the greatest when the conflict person is a child.

Does the relationship between family conflict and depression vary by the number of years the caregiver has been caring for the patient? It is suggested here that the relationship between family conflict and depression will be strongest for those who are least experienced in the caregiver role. Despite the widespread prevalence of family caregiving, there is very little actual socialization to the caregiver role. Without social norms to govern the specifications of the role and the standards by which it is judged, inexperienced caregivers are at a great disadvantage in terms of knowing what is expected and how to behave in the caregiver role. In fact, an examination of the Alzheimer's caregiving literature reveals that the standards of appropriate behavior are quite open and flexible, and the norms are often limited, weak and ambiguous, particularly during the early years of caregiving. Intuitively, then, one might expect that a caregiver will experience more violations of expectations by family members during their early years as a caregiver as opposed to later on; theoretically, the passage of time facilities the development of new and explicit definitions and expectations of self and others in the role set. In addition, a person who is inexperienced in the caregiver role is less likely to have developed effective strategies for dealing with family conflict. Hence, it is not unreasonable to suggest that family conflict will have a greater impact on the relatively inexperienced caregiver who is likely to encounter more dissension in the family and whose conflict-specific coping skills may be underdeveloped in contrast to the veteran caregiver. Furthermore, we may speculate that the lack of consensus regarding norms and expectations that individuals have for themselves and other family members will decrease the level of cooperation and increase the potential for conflict and depression.

Another objective condition of caregiving variable that may modify the relationship between family conflict and depression for adult children caregiver is the <u>caregiver/patient living arrangement</u>. Indeed, one might expect that the relationship between family conflict and depression will be strongest for caregivers who live with the patient. Caregivers who live with the patient are more likely than those who do not live with the patient to feel that they are in a position of authority when it comes to evaluating the severity of the patient's medical condition and his or her needs for assistance. If there is dissent or protest from other family members that results in conflict, it is likely to have a greater impact on depression because it appears to be such a blatant attack on one's ability to evaluate the caregiving situation and to decide what is best for the patient. In such instances where the caregiver's feelings of competence and self-esteem are threatened, we would expect to see feelings of inadequacy, helplessness, and depression. On the other hand, if the caregiver is not living with the patient, it seems less of a personal affront to the caregiver when others elicit an opposing opinion. Hence, the relationship between family conflict and depression is expected to be attenuated in cases where the adult child caregiver does not live with the patient.

Finally, we shall consider how the impact of family conflict on depression may be conditioned or regulated by mastery - an important personal resource that defines the degree to which people perceive themselves as being in control of the forces that impinge upon their lives (Pearlin et al., 1981). People with low mastery are thought to have an "external locus of control". They are more likely to believe that life outcomes are determined by uncontrollable or unpredictable external forces such as luck, fate, chance or powerful others. In contrast, individuals with high mastery or an "internal locus of control" tend to see a causal relationship between their own behavior and life outcomes (Ross and Mirowsky, 1989).

In this research, it is expected that the relationship between family conflict and depression will be stronger for those caregivers with low mastery or an external locus of control. It seems plausible that people with low mastery may view conflict as determined by the "opposing" party, and active problem-solving is avoided such that the person may not think about its causes or ways to either resolve or head off further conflict. This type of passive acceptance or perceived lack of personal control has been linked to depression (Kohn and Schooler, 1982; Mirowsky and Ross, 1983; 1986; Pearlin et al., 1981; Turner and Noh, 1983; Wheaton, 1980). In contrast, caregivers with high mastery or an internal locus of control are expected to respond actively to conflict in an effort to understand its source and to obtain resolution. This type of control stands as a barrier to depression (Pearlin et al., 1981).

In summary, the relationship between family conflict and depression may be conditioned by key sociodemographic characteristics of caregivers, network characteristics, objective conditions of caregiving, and personal resources. This research will examine each of these broad categories of conditions empirically in an attempt to identify variables that modify, and thus help to clarify, the relationship between family conflict and depression.

The Family as a Source of Social Support in Alzheimer's Caregiving

Families clearly differ in the pattern of help they provide (Zarit, 1986); however, research generally documents the strength of the family support system in relation to Alzheimer's caregiving. The majority of dementia patients are cared for, at home, by a family member (Brody, 1981), and family support has been identified as a major factor in preventing or delaying institutionalization of dementia patients (Bergmann et al., 1978; Niederehe and Fruge, 1984; Ory et al., 1985). Beyond this, little is known about the nature and extent of support provided to Alzheimer's patients by family caregivers (Ory et al., 1985).

There is also a major gap in our understanding of the nature and extent of family supports provided to the primary caregiver. This is explained, in part, by the fact that researchers generally have failed to examine family support independently of support provided by friends and neighbors. Additional research is needed to identify the relationship between family support and caregivers' well-being. The few studies that have attempted to investigate this issue are characteristically descriptive and aconceptual. Nevertheless, based on these studies, there is objective evidence that the level of family support to Alzheimer's caregivers is low (Ory et al., 1985; Zarit, 1986), and subjectively there is a strong perceived need among caregivers for additional assistance from family members (George and Gwyther, 1986; Rabins, Mace and Lucas, 1982; Sands and Suzuki, 1983; Zarit, Todd and Zarit, 1986). The importance of family support in relation to caregivers' well-being is also documented in the clinical literature. The general consensus is that caregivers experience higher levels of stress when they feel unsupported by family members (Aronson et al., 1984; Steinberg, 1983; Teusink and Mahler, 1984; Zarit, Orr and Zarit, 1985).

Moreover, little information is available on the types of support that caregivers receive from other family members. This is largely the result of researchers' failure to specify the various components of social support. The consequence of this practice may have significant implications given evidence that the effects of family support on caregiver well-being vary depending upon the type of support being considered (Barrera, 1981; House, 1981).

The interactional nature of social support also brings into focus the need to identify the donor of social support. To date, very few researchers have considered the donor, despite evidence to the effect that the nature of the interaction will be either constrained or enhanced by the quality of the relationship between the recipient and donor (House, 1981). It is possible that support received from family members to whom one is emotionally close may be more highly valued and perhaps serve as a more powerful mediator in the stress process. Conversely, lack of support from family members to whom one feels emotionally close may have significant deleterious effects on caregiver well-being.

Another issue that has been raised in the social support literature is the problem of examining the type of support received without simultaneously considering how much and from whom. Researchers need to ask the questions, "What kind of help is provided? by which family members? and with what results?" Zarit, Reever and Bach-Peterson (1980) attempted to answer the "with what results" question by using social network variables (e.g., frequency of contact) to assess the consequences of not receiving family support. They found that feelings of caregiver burden were inversely correlated with the frequency of visits paid by relatives. These findings were interpreted as evidence for considering the importance of family support in assessing caregivers' well-being. There is, however, some debate among social support researchers as to how social network variables should be conceptualized. Is "social network" a dimension of social support or is it an independent construct? As the debate continues, the research findings are characteristically inconsistent and inconclusive.

To summarize, our review of the social support literature reveals that the mediating effect of family support in relation to the well-being of Alzheimer's caregivers has not been studied systematically. However, it appears that the intimacy and trust associated with familial relationships may have significant consequences in terms of their ability to mediate or regulate the deleterious effects of stressors. In order to examine the mediating effects of family support, researchers need to specify its various dimensions and then examine each dimension in relation to health outcome.

The present research intends to examine specifically the buffering effect of emotional and instrumental sources of familial support in relation to the impact of family conflict upon caregivers' experience of depression. The buffering hypothesis suggests that social support functions to protect people from the deleterious impact of stress, and therefore is most effective under high levels of stress. Accordingly, caregivers with high levels of family support and high levels of conflict should be less depressed than their counterparts with low evels of support and the same high levels of conflict.

CHAPTER VI

ANTECEDENTS OF FAMILY CONFLICT

As detailed in Chapter 1, family conflict is recognized as a potentially potent stressor in relation to depression. While a detailed understanding of this relationship may have important theoretical and clinical implications, an essential question remains largely unanswered: Who experiences family conflict and under what conditions? Clearly, a true understanding of the relationship between family conflict and depression inevitably requires an understanding of the broader social-structural factors that determine family conflict. Indeed, identification of the factors and conditions that influence family conflict is necessary before we can identify the processes and mechanisms that may underlie the causal linkages between family conflict and depression.

Accordingly, the purpose of this chapter is to examine potential antecedents of family conflict within a hypothesized causal model of family conflict. Figure 2 specifies the possible direct effects of three broad categories of factors and conditions upon our three dimensions of family conflict. The impact of sociodemographic characteristics of the caregiver, network factors, and objective conditions of caregiving upon each of our three dimensions of family conflict was evaluated through multiple regression analyses.

Three general questions are addressed in this analysis: 1) What are the factors and conditions that influence family conflict? 2) Are the conditions associated with family conflict consistent across all three dimensions? and 3) Do the factors and conditions that affect family conflict differ for spousal and adult children caregivers?

The form of the analyses called for each dimension of family conflict to be regressed on all three sets of antecedent factors, simultaneously. The results of the regression analyses are reported separately for spousal and adult children caregivers. A discussion of these results will address the three broad questions outlined above.

Antecedent Factors in the Study of Family Conflict: An Examination of Spousal Caregivers

Step 1: Antecedents of Issues Conflict

In the first regression equation, conflict involving definitions of the illness and strategies for care (issues) was regressed on all three sets of antecedent variables: sociodemographic characteristics, network factors, and objective conditions of caregiving. The eighteen (18) independent variables entered into the regression equation together accounted for eighteen percent of the variance in conflict on the issues dimension. As indicated in Table 6.1, two sociodemographic characteristics of spousal caregivers were significantly associated with conflict on the issues dimension: age of the caregiver; and health status of the caregiver.

Age is negatively associated with conflict on the issues dimension; the younger the spousal caregivers, the more likely they are to experience this type of conflict. There are a number of plausible explanations for this finding. It may be that older spousal caregivers expect younger family members (particularly their offspring) to be involved in matters of decision-making as they pertain to the abilities and care of the patient. In fact, it may be that older spousal caregivers experience less family conflict because they defer to

TABLE 6.1

SPOUSAL CAREGIVERS

Regressions of Conflict Dimensions on Sociodemographic Characteristics, Network Characteristics, and Objective Conditions of Caregiving

	Issues	Treatment of Patient	Treatment of Caregiver
	b	b	b
Sex	-.084	-.015	.058
Age	-.010**	-.014**	-.014**
Education	-.006	-.001	-.017
Family Income	.005	.001	.001
Health Status	-.128***	-.033	-.148***
Number of Family Members in Household	.088	-.070	-.106
Number of Family Members within 1 hour drive	.005	-.058	-.038
Number of Family Members > 1 hour drive	.004	-.051	-.030
Children	.031	.127**	.046
Siblings	.005	.030	-.003
Brothers-in-law and Sisters-in-law	-.004	.052	.006
Other Relatives	-.008	.017	.061
Frequency of Face-to-Face Contact with Family Members	-.004	-.004	-.002
Frequency of Telephone Contact with Family	-.001	.003	.001
Patient's level of Functional Disability	.040	.024	.045
Extent of Patient's Problem Behaviors	.043	.133**	.166**
Extent of Patient's Cognitive Difficulties	-.012	-.090	-.102*
Number of Years Since Dx	-.016	.009	.012
Constant	.674	1.111	1.402
R^2	.180	.109	.144
F(18,291)	3.54***	1.96**	2.72***

*p<.05 **p<.01 ***p<.001

Unstandardized regression coefficients (b) are shown for all IVs.

the opinions of younger family members who are often more formally educated and therefore, perceived as more knowledgeable. This explanation may be especially relevant with respect to conflict on the issues dimension since most of the items pertain to knowledge of the disease process and its medical impact upon the patient's functions and abilities.

It is also highly probable that other family members (especially those who are younger than the caregiver) avoid conflictive interactions with elderly caregivers because of their advanced age. We believe that the behavior of younger persons toward elderly family members is governed to a large degree by a broadly based social norm that specifies the inappropriateness of engaging in conflictive interactions with elderly persons. In essence, the low levels of conflict associated with increased age of the caregiver may be a function of conflict avoidance on the part of younger family members who interact with the caregiver.

Taken together, these two explanations draw our attention to the interactive nature of family conflict. Throughout this study, we must remain cognizant of the fact that conflict behavior (or any lack thereof) is regulated not only by the norms and expectations of the caregiver, but also those of the family members with whom the caregiver interacts.

The <u>health status</u> of the caregiver is the only other socio-demographic factor that is significantly associated with conflict on the issues dimension for spousal caregivers. Health status of the caregiver and conflict on the issues dimension were found to be inversely associated such that caregivers who are in poor health experience more conflict on this dimension than do their healthy counterparts. This finding may be explained by the fact that caregivers' health problems invariably lead to changes in expectations for both the caregiver and the family members with whom the caregiver interacts. The difficulties that inherently exist in the face of changing expectations and shifting standards for behavior are complicated by a sense of immediacy that comes to bear upon decisions and issues around patient care. The caregiver's failing health may effectively change the complexion of issues that formerly were avoided or only vaguely considered. For example, the issue of whether or not to institutionalize the patient may be more likely to result in conflict when there is a sense of urgency or immediacy associated with the decision. The need to make timely decisions about alternative strategies for care is also more likely to result in conflict. In essence, we believe that the sense of immediacy that comes to bear on matters of decision-making, in combination with shifting expectations and standards for appropriate behavior, create a set of conditions that help to explain the negative association between health status of the caregiver and conflict on the issues dimension.

As previously indicated, family network variables were also included in the regression equation along with sociodemographic and objective conditions of caregiving variables. Contrary to expectation, none of the family network variables was found to be significantly related to conflict on the issues dimension. An examination of the impact of each of our objective conditions of caregiving variables revealed a similar pattern. None of the objective conditions of caregiving variables was found to be significantly related to conflict on the issues dimension.

Step 2: Antecedents of Treatment of Patient Conflict

In the second analysis involving spousal caregivers, conflict that centers on family members' attitudes and actions toward the patient (treatment of the patient) was regressed on sociodemographic characteristics of the caregiver, network characteristics, and objective conditions of caregiving. The eighteen independent variables entered into the regression equation together accounted for only 11 percent of the variance in conflict on the treatment of patient dimension of conflict.

As indicated in Table 6.1, age of the caregiver is the only sociodemographic variable that is significantly associated with conflict on this dimension. As hypothesized, the relationship is inverse. Younger spousal caregivers are more likely than their older counterparts to experience conflict on the treatment of patient dimension of conflict.

As previously suggested, the inverse relationship between age and family conflict may be a function of family members' efforts to avoid conflict with elderly caregivers. An alternative explanation focuses on intergenerational differences in family values. Older persons tend to be more traditional when it comes to defining family roles, and associated responsibilities and standards for behavior. For example, a traditional family value places responsibility for the care of an ill spouse almost exclusively upon his/her mate. The normative expectation is that the spouse should meet all of the primary physical and emotional needs of their marital partner. Thus, older more traditional spousal caregivers may effectively avoid or reduce the likelihood of conflict by having low expectations regarding other family members' involvement with the patient. This may be particularly true in the case of married adult children who are not expected to sacrifice their own marriage or family life in order to assist elderly parents. In contrast, a younger spousal caregiver, particularly those faced with the demands of multiple social roles, may feel that it is unrealistic for one person to meet all needs of the patient, and therefore is more likely to have higher expectations for other family members who are perceived as obligated to the patient. The higher expectations of younger spousal caregivers are more likely to be incongruent with the expectations of other family members. This incongruity in expectations may help to explain high levels of family conflict.

As indicated, we also considered the impact of family network characteristics upon our treatment of patient dimension of conflict. Table 6.1 reveals that only one network variable is significantly related to conflict on this dimension. As predicted, the presence of children in the caregiver's family constellation is positively related to conflict on this dimension. This result is consistent with the premise that spousal caregivers are most "at risk" for experiencing conflict with their adult children. It appears that spousal caregivers are highly sensitive to the way children treat their ill parent and the normative expectations or standards for behavior regarding visiting, caring for and interacting with the patient are probably more well-defined for children than they are for any other category of family member. As a result, any violation of the caregiver's expectations concerning the behavior of their children toward the patient is likely to be manifested in the form of conflict.

In the next step of this analysis, we examined the impact of the objective conditions of caregiving variables on our treatment of patient dimension of conflict with both sociodemographic characteristics and family network variables included in the equation. The extent of the patient's problem behaviors was the only objective condition of caregiving variable significantly associated with conflict on this dimension. This association is in the expected direction. Conflict on the treatment of patient dimension increases as the extent of the patient's problem behaviors increase. This result is consistent with the prediction that problem behaviors of the patient are likely to be one of the most difficult aspects of dealing with Alzheimer's disease. Family members are least likely to know how to deal with problem behaviors. There are few, if any, norms that define how family members should behavior toward a group member who exhibits behaviors that are unmanageable and often psychotic in nature. It is understandable or perhaps even to be expected that family members may respond to these behaviors in ways that could be perceived by the caregiver as disrespectful or excessively harsh. It is also plausible that certain family members will deal with the patient's problem behaviors by employing avoidance tactics. For example, they may severely limit or completely stop visiting the patient or they may avoid providing care. In cases where the caregiver views such actions as inappropriate, conflict is likely to ensue.

Step 3: Antecedents of Treatment of Caregiver Conflict

In the final regression analysis involving spousal caregivers, conflict involving family members' actions and attitudes toward the caregiver (treatment of the caregiver) was regressed on sociodemographic characteristics of the caregiver while controlling for both network factors and objective conditions of caregiving. As indicated in Table 6.1, only two sociodemographic characteristics of spousal caregivers were significantly associated with conflict on the treatment of caregiver dimension: age of the caregiver; and health status of the caregiver. Collectively, the eighteen independent variables entered into the regression equation accounted for approximately 14 percent of the variance in conflict on the treatment of caregiver dimension of conflict.

Age of the caregiver was inversely related to conflict on the treatment of caregiver dimension. This result is consistent with the prediction that conflict would decline across age groups. As previously suggested, younger persons may simply avoid conflict with elderly caregivers. It is also plausible that older persons define their role and associated responsibilities as a spouse in such a way that they have lower expectations for assistance and acknowledgment from family members, as compared with their younger counterparts who are more likely to have competing responsibilities and hence greater expectations for family members. It seems reasonable that older persons with low expectations regarding the amount of assistance and acknowledgement accorded to them by other family members will experience less conflict than their younger more socially extended counterparts. It is also plausible that elderly caregivers actually receive more assistance and positive attention from relatives because of their age. In other words, elderly caregivers may be perceived as more "needy" and therefore family members rally around to provide assistance and attention.

Caregivers' self-ratings of <u>health status</u> were also inversely related to conflict on the treatment of the caregiver dimension This finding is consistent with the prediction that caregivers who are considered in poor health would experience more conflict than their counterparts who are in relatively good health.

One explanation for this finding is that poor health, particularly among the elderly, is likely to influence caregivers' expectations regarding the amount of assistance, attention, and acknowledgment that they should be accorded by other family members. It is not unreasonable to suggest that caregivers' expectations regarding other family members' involvement will be greater for those with health problems as compared to those without. From the perspective of other family members, such support may be difficult to provide in the face of social-structural constraints imposed by multiple role demands. In any event, incongruent expectations or the violation of expectations by other family members is likely to increase the potential for conflict within the family.

In the next step of this analysis, we examined the impact of characteristics of the caregivers' family network while controlling for both sociodemographic factors and objective conditions of caregiving. As indicated in Table 6.1, none of the network variables was significantly associated with conflict on the treatment of the caregiver dimension.

Next we examined the impact of our objective conditions of caregiving variables upon the treatment of caregiver dimension of conflict with both sociodemographic and network factors in the regression equation. Two objective conditions of caregiving variables were significantly related to conflict on the treatment of caregiver dimension: the extent of the patient's problem behaviors; and the degree of the patient's cognitive difficulties.

Not surprisingly, the extent of the patient's problem behaviors was positively related to conflict on the treatment of caregiver dimension. The most likely explanation for this finding is that the demands on the caregiver increase as problem behaviors increase. Considering the incorrigible nature of certain problematic behaviors that are characteristic of Alzheimer's patients (i.e., paranoia, inappropriate sexual behavior, swearing, unprovoked outbursts of anger), it is not unreasonable to suggest that caregivers respond by increasing their demands for both attention and assistance from other family members. If, in turn, family members are unwilling or unable to provide the required amount of attention and assistance, it is quite likely that disappointment and conflict will result.

Interestingly, the degree of patients' cognitive difficulties was found to be negatively related to conflict on the treatment of caregiver dimension. This finding is in the opposite direction of that which was originally hypothesized; we had predicted that severe cognitive difficulties would be associated with high levels of family conflict. Given our empirical finding, we must consider an alternative explanation.

To begin, one might speculate that the patient's degree of cognitive difficulties would be a relatively accurate marker of the stage of the illness. Although there is considerable variability in individual rates of patient decline, it is generally the case that extreme cognitive difficulties are most evident at a later stage of the disease process. In this regard, it is useful to note that cognitive difficulties and years since diagnosis are moderately related in the expected direction ($r=.43$, $p < .001$). Given this association, it is possible to argue that conflict on the treatment of caregiver dimension will decrease with the passage of time, such that caregivers will report less conflict in the latter stages of the illness. The most reasonable explanation is that new and inexperienced caregivers are more likely to experience conflict on this dimension because they have yet to work out effective coping strategies for dealing with conflict, or they have not had the time nor the experience to ferret out non-supportive family members and identify alternate sources of support and validation. In contrast, caregivers who have been performing the role for longer periods of time are more likely to have finely-honed strategies for dealing with conflict[7] or perhaps, experience affords them the ability to identify readily available sources of support.

It is also possible that in cases where cognitive difficulties are extreme, family members' expectations for each other may change. For instance, if the patient has become more passive and docile as cognitive difficulties increase, then the caregiver may lower their expectations

[7] A number of coping strategies are described in Appendix V.

for other family members regarding visits, instrumental assistance, and acknowledgement. These changes in the caregiver's expectations may result in more congruence with the expectations of other family members, thereby effectively reducing the likelihood of conflict.

Antecedents in the Study of Family Conflict: An Examination of Adult Children Caregivers

Step 1: Antecedents of Issues Conflict

In the first regression equation created for adult children caregivers, conflict that involves definitions of the illness and strategies for care (issues) was regressed on sociodemographic characteristics of the caregiver, family network variables, and objective conditions of caregiving variables. The twenty-two independent variables entered into the regression equation together accounted for 24 percent of the variance in the issues dimension of conflict.

Only two sociodemographic variables were significantly related to conflict on the issues dimension: age of the caregiver; and gender of the caregiver.

Age was inversely related to conflict such that younger adult children caregivers experience more conflict on the issues dimension than do their older counterparts. As previously reported, adult children caregivers ranged in age from 27 to 71 with a mean age of 50.5 years. A more detailed analysis of the data reveals that 70.3 percent of this subsample are 55 years of age or younger and the remaining 29.7 percent are greater than 55 years of age. Clearly, this is a pre-

TABLE 6.2

ADULT CHILDREN CAREGIVERS

Regressions of Conflict Dimensions on Sociodemographic Characteristics, Network Characteristics, and Objective Conditions of Caregiving

	Issues b	Treatment of Patient b	Treatment of Caregiver b
Sex	-.330*	-.231	-.168
Age	-.031***	-.036***	-.028***
Education	.005	.008	-.027
Family Income	-.002	.003	-.002
Married	.349	.189	.249
Widowed	.202	.435	.038
Divorced/Separated	.208	.487**	.467**
Health Status	-.033	-.038	-.097
Number of Family Members in Household	-.045	-.078	.022
Number of Family Members within 1 hour drive	-.032	.001	.089
Number of Family Members > 1 hour drive	-.058	-.035	.063
Children	.123	.014	-.069
Siblings	.113	.135**	.014
Brothers-in-law and Sisters-in-law	.023	-.007	-.114
Other Relatives	-.040	.076	-.076
Frequency of Face-to-Face Contact with Family Members	-.012	-.014	-.022**
Frequency of Telephone Contact with Family	.001	.011	.008
Patient's level of Functional Disability	.214	.193	.105
Extent of Patient's Problem Behaviors	.078	.098	.133
Extent of Patient's Cognitive Difficulties	-.053	-.112	-.165*
Number of Years Since Dx	-.019	.027	.037**
Caregiver Living with Patient	-.400**	-.289	-.143
Constant	1.891	1.708	1.952
R^2	.236	.291	.330
F(22,175)	2.45***	3.26***	3.92***

*p<.05 **p<.01 ***p<.001

Unstandardized regression coefficients (b) are shown for all IVs.

retirement population and thus we would expect a large percentage of adult children caregivers to be actively employed and perhaps actively parenting. In fact, 60 percent of our sample of adult children caregivers are employed, either full-time or part-time, and 40 percent have children living in their household. To test for age differences on these factors, we divided our sample of adult children caregivers into two groups: those who are 55 years of age or younger; and those who are older than 55 years of age. A t-test for the difference in means reveals that younger caregivers (less than 55 years) are significantly more likely than their older counterparts to be employed ($p < .001$). Moreover, caregivers who are less than 55 years are significantly more likely than their older counterparts to have children living in their household ($p <.01$), thereby suggesting some form of ongoing parenting responsibilities.

Taken together, these data suggest that younger adult children caregivers, as compared to their older counterparts, have a greater number of major social roles and hence more competing responsibilities and demands for their time and energy. It follows that an individual who has these multiple competing responsibilities for work, family, and caregiving may be more vulnerable to the negative consequences of role overload, and this may be manifested in the form of conflict with family members who challenge their ability to evaluate the patient's medical condition and to decide upon the most appropriate strategies for care.

Gender of the caregiver was also significantly related to conflict on the issues dimension such that female adult child caregivers experienced more conflict on this dimension than did their male counterparts. This finding is consistent with our earlier prediction that female caregivers would be more likely than their male counterparts to experience conflict with family members.

If we look closely at the substantive content of the issues dimension, the indicators all involve matters of decision-making and strategies for care (e.g., patient's abilities, safety and placement). It may be that women are more typically second-guessed on these sorts of "instrumental" activities, and this in turn leads to high levels of conflict on the issues dimension.

Next, we examined the impact of family network variables upon our issues dimension of conflict, with both sociodemographic characteristics of the caregiver and objective conditions of caregiving in the regression equation. Contrary to expectation, none of these variables were significantly related to conflict on the issues dimension. However, when objective conditions of caregiving variables were examined, one variable emerged as significant: whether or not the adult child caregiver lives with the patient.

Living with the patient is inversely related to conflict on the issues dimension such that adult children caregivers who do not live with the patient experience more conflict than do their counterparts who live with the patient. A plausible explanation rests on the likelihood that adult children caregivers who live with the patient have a superior claim of authority in instances where the patient's disease status or needs are challenged by other family members. "I know because I live with him/her" invokes a superior argument - a legitimacy of opinion - that effectively regulates any challenges to the caregiver's judgment.

Accordingly, this mechanism is likely to result in lower levels of conflict in families where the patient is living with the adult child caregiver.

Step 2: Antecedents of Treatment of Patient Conflict

Table 6.2 reports the regression of conflict on our treatment of patient dimension on sociodemographic characteristics of the caregiver, family network characteristics, and objective conditions of caregiving. The twenty-two independent variables entered into the regression equation together accounted for 29 percent of the variance in the this dimension of conflict.

Two sociodemographic characteristics of adult children caregivers were significantly related to conflict on the treatment of patient dimension: age of the caregiver; and marital status of the caregiver.

Age of the caregiver is inversely associated with conflict on the treatment of patient dimension such that younger caregivers experience more conflict than do their older counterparts. As previously discussed, a plausible explanation is based on the notion that younger caregivers are likely to have a surplus of competing responsibilities that function to increase their expectations regarding other family members involvement with and treatment of the patient. If other family members are unable to match the caregiver's expectations either because there is an incongruity in their perceptions or they are constrained by the demands and responsibilities of other roles, then we would expect conflict to result.

The marital status of the caregiver was the one other sociodemographic characteristic that is associated with conflict on the treatment of patient dimension. Specifically, divorced and separated adult children caregivers are more likely than their never married counterparts to experience conflict on this dimension. One explanation may be that divorced and separated caregivers are more likely to experience additional chronic strains as a consequence of their marital status. For example, divorced/separated persons have significantly higher mean scores than all other categories of marital status on a question regarding financial strain ($p <.01$). Since the majority of adult children caregivers in our sample are women, it is also likely that these divorced and separated caregivers are faced with the additional strains associated with single parenting. It is not unreasonable to suggest that these types of chronic strains function to raise the caregiver's expectations regarding other family members' involvement with the patient. For example, the divorced or separated caregiver who is juggling the demands of work, family, and caregiving is likely to have high expectations for siblings regarding the frequency of visits and the provision of care to the patient as compared with a never married caregiver who is likely to have fewer demands on their time and energy. Divorced or separated caregiver are also more likely to have suffered significant losses in the size of their family network, which means that they probably have fewer relatives upon whom they can make requests for assistance. This decrease in the size of the caregiver's family network probably increases the likelihood that even greater demands will be made upon the few family members who may be available to assist the caregiver. In short, divorced and separated caregivers probably have high expectations and demands for assistance and attention from other family members who may be highly prone to burn out because of their small numbers. Thus, for divorced and separated caregivers, it is the incongruence between their expectations and demands and other family members' abilities and willingness to respond that we believe is the mechanism by which conflict develops.

When we examined the impact of family network characteristics upon the treatment of patient dimension of conflict, we did so with both sociodemographic characteristics of the caregiver and objective conditions of caregiving variables included in the regression equation. Only one family network variable was significantly related to conflict on the treatment of patient dimension: the presence of siblings. More specifically, adult children caregivers who have siblings are more likely to experience conflict on this dimension than are their counterparts who do not have siblings. This is an anticipated finding given that there is a strong cultural norm that siblings should share in the responsibilities associated with the care of aging parents. Moreover, caregivers' expectations for other family members' involvement with the patient are shaped by their perceptions regarding the degree of emotional closeness and social obligation inherent in the role relationship. For example, the adult child caregiver's expectations for his/her own children regarding involvement with the patient are likely to be minimal. The grandparent-grandchild relationship is deemed to be affectionately close, but standards for behavior are variable and somewhat ambiguous. In contrast, the norms and expectations regarding sibling obligation to aging parents are more clearly defined, and hence their violation is more likely to be of major consequence.

The next step in this analysis was to examine the impact of our objective conditions of caregiving variables upon the treatment of patient dimension of conflict with both sociodemographic and objective conditions of caregiving variables included in the regression equation. Contrary to expectation, none of the objective conditions of caregiving variables were found to be significantly related to conflict on the treatment of patient dimension of conflict.

Step 3: Antecedents of Treatment of Caregiver conflict

In the next analysis, conflict on the treatment of caregiver dimension was regressed on all three sets of antecedent variables: sociodemographic characteristics, family network variables, and objective conditions of caregiving. Together, the twenty-two independent variables accounted for 33 percent of the variance in the treatment of caregiver dimension of conflict.

Two sociodemographic variables were significantly related to conflict on the treatment of caregiver dimension: age of the caregiver; and marital status of the caregiver.

Age was found to be inversely related to conflict on the treatment of caregiver dimension such that younger caregivers experience more conflict than do their older counterparts. As previously discussed, in addition to the demands of the caregiver role, younger adult children caregivers are more likely than their older counterparts to be employed outside the home and to be actively parenting (i.e., children living in the household). Hence, the argument can be made that a younger caregiver is more likely to have high expectations for assistance, recognition, and emotional support from family members, whereas an older caregiver with fewer social roles and responsibilities may be more inclined to "go it alone" with fewer expectations for the involvement of family members. As previously stated, we assume that high expectations are more likely to be violated, and to result in conflict.

The marital status of adult children caregivers was also significantly related to conflict such that divorced or separated caregivers are more likely than their never married counterparts to experience conflict on the treatment of caregiver dimension. Divorced and separated caregivers are similar to the reference group (i.e., never married) in that neither can draw upon the support of a spouse. Therefore, it is unlikely that the relationship between marital status and conflict on the treatment of caregiver dimension can be explained by the fact that divorced and separated caregivers are missing this primary source of support. A more likely explanation for the observed relationship between marital status and conflict on the treatment of caregiver dimension is the one posed earlier regarding marital status and treatment of the patient conflict. Divorced and separated adult children caregivers in our sample have more competing responsibilities and greater financial strain than their never married counterparts. As a consequence, we believe that the former have high expectations for assistance and acknowledgement from family members. Divorce and separation are also likely to result in a disruption of caregiver's family network. The combination of high needs and expectations of the caregiver, and few persons to call upon to satisfy those needs, is likely to result in a mismatch between the caregiver's expectations for other family members and their willingness and abilities to provide that which is needed and expected. As previously detailed, this situation of disparity is considered an important mechanism whereby conflict develops between the caregiver and other family members

In the next step, we considered the impact of family network variables upon the treatment of caregiver dimension of conflict with both sociodemographic characteristics of the caregiver and objective condition of caregiving variables included in the regression equation. Only one family network variable was significantly related to conflict on the treatment of caregiver dimension: the <u>frequency of face-to-face contact</u> with family members. Originally, it was hypothesized that frequent face-to-face contact with family members would be positively related to caregivers' experience of conflict; the idea being that frequent contact would increase the opportunity for conflict to occur. Contrary to this notion, frequency of face-to-face contact with family members was negatively associated with conflict on the treatment of caregiver dimension. More specifically, adult children caregivers who have infrequent face-to-face contact with other family members are more likely to experience conflict on this dimension than are their counterparts who have frequent face-to-face contact. One possible explanation for this pattern is that, at least for adult children caregivers, the face-to-face contact that they have with other family members is likely to entail both instrumental and emotional forms of social support.

Next, we examined the impact of our objective conditions of caregiving variables with both sociodemographic and family network characteristics included in the regression equation. Two variables were significantly associated with conflict on the treatment of caregiver dimension: number of years since diagnosis; and the extent of the patient's cognitive difficulties.

First, consider the number of years since diagnosis in relation to the degree of conflict on the treatment of caregiver dimension. The association is a negative one. The results are consistent with the prediction that conflict would be greatest during earlier stages of the illness. This position is based upon the view that conflicts are most likely to arise in circumstances where expectations and norms governing behavior are not clearly defined. This is most likely to be the case in the early stages of Alzheimer's disease when patient behaviors are often ephemeral and family members frequently deny the existence of a problem. It is only when there is full recognition of the disease as a problem that family members are forced to redefine role relationships, and delineate new expectations and norms for behaviors. It is also likely that over time caregivers develop strategies for dealing with conflict; they may discontinue contact completely or avoid discussion of conflictive issues with certain family members, or they may seek out alternate sources of support. One would expect that the process of cultivating effective coping strategies for dealing with conflict within the context of caregiving would take place over time such that the observed pattern of less conflict in relation to number of years since diagnosis is consistent with a theory of longitudinal change.

The degree of patient's cognitive difficulties was the second objective condition of caregiving variable that was significantly related to conflict on the treatment of caregiver dimension. The relationship was negative such that conflict decreases as the patient's cognitive difficulties increase. This result is diametrically opposed to our original hypothesis regarding the influence of cognitive difficulties upon caregivers' experience of family conflict. The observed relationship probably is explained by the distorting nature of the illness. In the final stages of the illness, cognitive difficulties typically become so extreme that the patient is barely recognizable as the person he/she once was. In anticipation of the imminent loss of the patient, the caregiver's expectations for other family members may decrease, and thereby effectively reduce the likelihood of conflict.

Summary and Discussion

The results presented in this chapter allow us to address three general questions concerning the antecedents of family conflict: 1) What are the factors and conditions that influence family conflict?; 2) Are the factors and conditions that are associated with family conflict consistent across all three dimensions of conflict?; and 3) Do the factors and conditions that influence family conflict differ for spousal and adult children caregivers?

It is evident from our presentation of the empirical data that the factors and conditions that are associated with family conflict vary according to both caregiver type (i.e., spousal versus adult child) and dimension of conflict. A visual summary of major findings is presented in Table 6.3

TABLE 6.3

ANTECEDENT FACTORS & CONDITIONS THAT AFFECT THREE DIMENSIONS OF CONFLICT

ISSUES CONFLICT

Spouses	Adult Children
Age**	Age
Health status	Gender*
	Caregiver Lives w/ patient

TREATMENT OF PATIENT CONFLICT

Spouses	Adult Children
Age**	Age
Problem Behaviors	Marital Status
Children**	Siblings***

TREATMENT OF CAREGIVER CONFLICT

Spouses	Adult Children
Age**	Age
Cognitive Diff.	Cognitive Diff.
Health status	Marital Status
Problem Behaviors	Freq. face-to-face contact
	Number of years since Dx

The question arises as to whether the regression coefficients for the two groups are significantly different from each other. This issue may be addressed by examining the interaction between the categorical variable (caregiver type) and each of the above continuous variables. Interaction terms that were found to be statistically significant are starred. They indicate that the regression coefficients between the two groups are different from each other for that variable. In several instances the interaction term is not significant. Hence, we should treat these differences between the two groups simply as trends in the data. Further analyses are warranted.

In general, the factors and conditions that lead to family conflict are different for spousal and adult children caregivers. Age is the only factor that is significantly related to all three dimensions of conflict for both spousal and adult children caregivers. As discussed throughout this chapter, age of the caregiver may simply be a proxy for life stage. Younger caregivers are more likely to occupy a number of major social roles and therefore have more competing demands for their time and energy. This in turn is likely to raise the caregiver's level of expectations regarding other family members' involvement with themselves and with the patient. We believe that high expectations are more likely to be violated. We also believe that conflict develops when other family members have incongruent expectations or are unable or unwilling to meet the caregiver's needs and expectations.

The extent of the patient's cognitive difficulties is the one other variable that has the same effect upon conflict for both spousal and adult children caregivers. In both cases, the greater the extent of the patient's cognitive difficulties the less conflict experienced on the treatment of caregiver dimension of conflict. This finding was explained by the fact that caregivers may equate severe cognitive difficulties with the imminent death of the patient, and lower their expectations of other family members accordingly.

Apart from the observed relationship between age and all three dimensions of conflict, and cognitive difficulties and the treatment of caregiver dimension of conflict, the antecedents of family conflict take on quite different patterns for spousal and adult children caregivers.

It is apparent from this research that, with the exception of age, the conditions that predict family conflict are not consistent across all three dimensions of conflict. In other words, each dimension of family conflict has a different set of antecedent variables and that pattern is further conditioned by the type of caregiver considered.

Throughout this research, we have made a conceptual distinction between our three sets of antecedent variables: sociodemographic, network and objective conditions of caregiving variables. A logical followup issue concerns whether any one set or block of antecedent variables is more strongly related to conflict as compared with the other two sets of antecedent variables. Since this analysis was not performed in a stepwise fashion, the increment in R-square change was not tested for statistical significance. However, there appears to be a trend in the data that suggests that sociodemographic variables may be more strongly related to conflict than either network variables or objective conditions of caregiving.

Family Conflict and its Antecedents: Toward a General Interpretative Framework

The focus of this chapter has been upon a variety of factors and conditions that affect three dimensions of family conflict. By considering these antecedents separately for spousal and adult children caregivers, we have generated a plethora of research findings, each of which reveals regularities and patterns of conflict behavior within the context of caregiving families. Explanations have been offered for each specific finding, but the results taken as a whole suggest the need for unifying interpretations concerning the social processes that underlie causal relationships in the study of family conflict. Accordingly, it is necessary to offer a more general interpretative framework for the social explanation of family conflict and its antecedents as it applies to Alzheimer's caregivers and their families. The discussion herein should be seen not as a theory but, rather, as a step toward its construction; our "Discussion" chapter will return to the implications of this theoretical framework once further empirical data are presented. Findings presented in the following chapters should also be considered in light of this preliminary theoretical framework for the study of family conflict and its antecedents.

The patterns evidenced by the empirical data suggest the presence of implicit latent norms that govern how family members should or ought to behave under the persistent need to provide care. We will begin with the most general patterns. The low levels of conflict observed in this research point to the existence of a generally shared norm of cooperation among family members in the care of a chronically ill member. This suggests that there is a community effort among family members to discourage conflict or to put it aside during hard times. However, as observed in this research, the interaction of family members in the context of caregiving nevertheless results in conflict in an appreciable number of cases. Our task is to explain family conflict in the language of social roles and associated norms that govern social behavior.

It has been suggested throughout this chapter that a primary explanation for the existence of conflict in the context of caregiving focuses on the match between the caregiver's expectations and the obligations of other family members. It can be assumed that people draw their expectations from an underlying set of social norms; that is, the values and activities that are regarded as appropriate to roles and role sets that exist within the family.

Our theoretical framework assumes that family conflict inheres under four basic conditions, each involving the degree of congruity of social norms and expectations among the caregiver and other family members.

First, family conflict can be a manifestation of flagrant incongruities in social norms among the relevant family members. Such incongruities may exist as a function of different values or ideals. For example, an adult child caregiver and her sister may have completely different norms, leading to expectations on the part of the caregiver that are widely disparate with the felt obligations of the sister. At a minimum, the caregiver may feel that her sister should have some contact their father (i.e., the patient). The caregiver thus expects her sister to visit with their father on a regular basis. Now, let us assume that the sister pursues a lifestyle that gives little priority to family loyalties. Under such conditions, the sister may fail to engage at all in the caregiving situation. Obviously, individuals who adhere to completely different social norms concerning family obligation are inherently susceptible to a disparity in their expectations. It follows that any interaction between these two family members would be expected to result in conflict.

Second, family conflict may arise in circumstances where family members share basic social norms but an incongruity nevertheless exists because of differences in the moral force they attach to the norms. For example, a spousal caregiver and her son may share a basic value that family members should assist one another in times of need. They may even share the same social norm regarding the son's obligation to help out his mother by taking care of household tasks. The incongruity arises when the mother feels that her son <u>must</u> perform this activity regularly and frequently, whereas the son feels that he <u>should</u> only have to help out when it is convenient for him. Clearly, these two family members have a shared recognition of a specific social norm; however, differences with respect to the moral force associated with the norm lead to uncongenial expectations and obligations regarding appropriate behavior. This disparity is very likely to result in conflict.

Third, the patterns of antecedent factors and conditions observed in this research reveal that family conflict can develop in situations where the caregiver and other family members share the same social norms and commitment to them, but the latters' ability to comply with the appropriate standards for behavior is constrained by social-structural aspects of their multiple role activity. For example, a spousal caregiver and her daughter may both agree that the latter should care for her father on a regular basis. The daughter may be eager to share in the care of the patient; however, certain social-structural constraints prevent her from meeting her role obligations. These constraints involve the demands of competing social roles. For example, the daughter may have a husband and children, a job, and community responsibilities to attend. Any norms that are invoked in response to caregiving demands must be reconciled with these other roles. Reconciling the norms of new and old roles often forces the individual into a position of establishing some priority among competing claims. The daughter, although willing to assist her mother, may feel a greater moral pressure to adhere to social norms regarding her responsibility to her own children and spouse. As result, the caregiver's expectations for her daughter's involvement with the patient will be violated, and conflict may ensue.

Fourth, we believe family conflict arises in circumstances where social norms regarding the appropriate behavior for any given social role within the family are ambiguous. When social norms are ambiguous, it means that there are few guidelines by which to structure and give direction to a role. Under conditions where standards for appropriate behavior are weak and confusing, discrepancies in expectations and obligations are likely to abound. In the case of Alzheimer's caregivers, any lack of clarity as to what constitutes appropriate behavior from one's role set is likely to result in shifting standards with respect to norms and expectations held by caregivers and the family members with whom they interact. For example, a spousal caregiver may feel that her son should not have to provide physical care for his ill father because she considers such activity to be a woman's responsibility. The son in turn understands that he is not expected to provide this form of assistance. Confusion arises when the caregiver suddenly invokes a different norm and standard for behavior which specifies that the son should engage in care activities because he has an obligation to his father. If the son does not comply with his mother's revised expectations, she is likely to feel that her expectations have been violated. The son, on the other hand, is at a loss to know what his mother's expectations for him will be at any given moment. Where there is confusion and mixed messages, we expect that frustration, disappointment and conflict will result.

Under all of the above conditions, the social norms to which we refer are quite likely to be latent and implicit. Certainly, in most families, norms regarding obligation and cooperation are not explicated because they are regarded as self-evident. For the most part, they are assumed to represent common understandings that require no overt formulation. The conditions that would activate these norms are rare; thus, they tend to remain implicit and unspoken through most of the life course. However, under chronic caregiving conditions, there is a restructuring of established family role sets. Acquisition of the caregiver role by one family member inevitably alters or modifies the role content and activity of others in the role set. This process of restructuring inevitably entails some "re-writing" of social norms and the modification or displacement of prior expectations for all members of the role set. We believe that family conflict may serve the important function of making implicit social norms explicitly known so that ultimately the restructuring of the family role set will be achieved successfully (i.e., the family remains intact and caregiving is not disrupted).

We also believe that caregivers' expectations and definitions of obligation for family members vary according to specific role relationships within the family. More precisely, differing role relationships are invested either with different social norms, or similar social norms with varying types and degrees of moral authority. For example, a female spousal caregiver will have different normative expectations for her daughter as compared with her sister-in-law. The expectations surrounding the caregiver's daughter are likely to be considerable since her relationship with the patient (i.e., her father) is assumed to be emotionally close and highly obligated. In contrast, there is a much lesser degree of emotional closeness and normative obligation associated with sibling relationships. Thus, we expect conflict risk to be greater for the daughter of the spousal caregiver because high expectations are assumed more likely to lead to disparity or incongruity in expectations. In addition, high expectations are more likely to go unmet largely because of social-structural constraints imposed on other family members. According to our theory, these two conditions are expected to lead to family conflict. This component of our interpretative framework will be considered again in Chapter 11 as we examine the distribution of conflict risk as a method for identifying the family members with whom caregivers are most likely to experience conflict.

As a final note, this preliminary theoretical framework draws our attention to the interactive nature of family conflict. Our discussions concerning the four basic conditions that lead to family conflict embrace an implicit suggestion of a dialectic between the norms and expectations of caregivers and those of the family members with whom they interact. We believe that these interactional processes are key to understanding and explaining social behavior that leads to family conflict.

This section has explicitly set forth our basic assumptions about the unobserved social processes that underlie causal relationships in the study of family conflict and its antecedents. This general theoretical framework will be an invaluable tool for organizing and interpreting the empirical findings that will be presented in successive chapters. We now turn our attention to an examination of the interrelationships among our three dimensions of family conflict and their direct and independent effects upon caregivers' experiences of depression.

CHAPTER VII

AN EXAMINATION OF THE CONFLICT DIMENSIONS AND THEIR EFFECTS UPON DEPRESSION

Thus far, our efforts have been aimed at identifying social-structural factors and conditions that lead to family conflict within the context of Alzheimer's caregiving. The theoretical purpose of our antecedent analysis has been to trace back an extended causal sequence that helps to further our understanding of the processes and mechanisms that may underlie the causal linkages between family conflict and depression. The next logical step in our analytic process is to examine the relationships among our three dimensions of family conflict, and then to assess their independent and direct effects upon depression. To the extent that we are able to identify the determinative aspect(s) of family conflict that is most likely to result in depression, our understanding and interpretation of the larger social process is enhanced.

Accordingly, the goals of this chapter are twofold: 1) to assess the interrelationships among our three dimensions of family conflict; and 2) to examine the independent and direct effects, and the joint effects of family conflict upon depression.

Interrelationships Among Conflict Dimensions and Depression

Table 7.1 and Table 7.2 present the zero-order correlations among our three dimensions of family conflict and depression for spousal and adult children caregivers, respectively. An examination of the zero-

TABLE 7.1

SPOUSAL CAREGIVERS

Zero-order Correlations Among Conflict Dimensions and Depression

	Issues	Treatment of Patient	Treatment of Caregiver	Depression
Issues	1.000			
Treatment of Patient	.354***	1.000		
Treatment of Caregiver	.419***	.720***	1.000	
Depression	.184***	.245***	.329***	1.000

***p < .001

order correlations for both groups reveals that the intercorrelations among our three dimensions of conflict are quite high, ranging from .35 to .72 for spousal caregivers, and from .51 to .70 for adult children caregivers. Note also that all correlations among our three dimensions of family conflict are highly significant at p < .001.

Despite these close interrelationships, it was expected that each dimension of family conflict would be quite different with respect to its independent effect upon depression. As a result, a decision was made to keep the three dimensions of family conflict separate rather than combining them into a single, global measure of family conflict. This decision was made while taking into consideration the potential for problems with multicollinearity in the regression analyses. Multicollinearity is a problem that emanates from high intercorrelations among independent variables, and may lead to difficulties

TABLE 7.2

ADULT CHILDREN CAREGIVERS

Zero-order Correlations Among Conflict Dimensions and Depression

	Issues	Treatment of Patient	Treatment of Caregiver	Depression
Issues	1.000			
Treatment of Patient	.592***	1.000		
Treatment of Caregiver	.506***	.695***	1.000	
Depression	.307***	.273***	.379***	1.000

***p < .001

in the estimation of regression statistics (Pedhazur, 1981 p. 232). Several diagnostic procedures were undertaken in an attempt to assess the extent to which multicollinearity may pose a problem in these analyses. These procedures will be discussed later in this chapter along with the results of the regression analyses. Suffice it to say that the danger of attributing excessive importance to our global measure of family conflict outweighed the potential for dealing with a multicollinearity problem posed by keeping our conflict dimensions separate.

An examination of the zero-order correlations among our three dimensions of family conflict and our outcome variable - depression - yields the following results for both spousal and adult children caregivers: 1) each dimension of family conflict is positively associated with depression; 2) the magnitude of the correlations between each dimension of family conflict and depression is in the range of .2 to .4 with the strongest association noted between treatment of the caregiver conflict and depression; and 3) all correlations among our three dimensions of conflict and depression are highly significant at $p < .001$.

These results suggest that conflict on each of our three dimensions is associated with increased risk for depression. In addition, it appears that conflicts that involve family members' actions and attitudes toward the caregiver (i.e., treatment of the caregiver) are likely to arouse the greatest amount of emotional distress in the form of depressive symptomatology.

The Independent and Direct Effects of Family Conflict Upon Depression

As previously indicated, a major goal of this research is to examine the independent and direct effects of each dimension of family conflict upon our measure of depressive symptomatology. We approached the problem through the use of multiple regression analyses. The analyses, although procedurally identical, were performed separately for spousal and adult children caregivers. We begin with a report on the analytic procedure and findings as they pertain to spousal caregivers.

The dependent variable, depression, was regressed on our three dimensions of family conflict while controlling for the sociodemographic variables, network variables and objective conditions of caregiving variables depicted in our conceptual model (Figure 2). We also controlled for social support for the simple reason that family conflict is sometimes thought of as a proxy for the absence of social support.

And, since social support has been linked with depression in previous research (Barrera, 1981; Brown et al., 1975; Eaton, 1978; Lin et al., 1979; Thoits, 1983), we wanted to be certain that any observed relationship between family conflict and depression is an inherent link and not due solely to the fact that each variable happens to be associated with social support. In other words, controlling on social support helps to guard against any spurious relationship between our conflict dimensions and depression.

Table 7.3 presents the regression results for both spousal and adult children caregivers. The only dimension of family conflict that is significantly related to depression is conflict involving family members' treatment of the caregiver. The unstandardized regression coefficients are in the positive direction indicating that conflict around family members' treatment of the caregiver is associated with increased risk for depression ($b=.18$ for spousal caregivers and $b= .16$ for adult children caregivers). These findings are statistically significant at $p < .05$. Note that the unstandardized regression coefficients are of similar magnitude for both spousal and adult children caregivers. This suggests that the strength of the relationship between conflict involving family members' treatment of the caregiver and depression is similar for the two groups.

Surprisingly, the issues dimension and the treatment of patient dimension of family conflict are not significantly related to depression for either spousal or adult children caregivers. There are probably a number of processes that would help to explain the observed relationship between conflict on the treatment of caregiver dimension and depression, and the lack of relationship between the other two dimensions of conflict and depression. One explanation may be that disagreements that touch upon and threaten one's sense of self-worth and competence as a caregiver are likely to be reflected in negative self-evaluations, feelings of helplessness, and diminishment of self; previous research suggests that each of these characteristics are powerful antecedents or precursors of depression (Beck, 1967; Becker, 1979; Brown and Harris, 1978; Holahan and Holahan, 1987; Lewinsohn et al., 1985; Pearlin et al., 1981). In contrast, conflicts that do <u>not</u> involve the self - namely disagreements over issues and treatment of patient - may be perceived as less threatening and more controllable, and hence do not lead to symptoms of depression. We ought to, however, keep in mind the possibility that conflicts on the issues dimension and the treatment of patient dimension may be related to other forms of emotional distress not considered in this research.

As previously reported, the high intercorrelations among our three dimensions of family conflict create some concerns about multicollinearity. In an attempt to assess the extent of the problem and to pinpoint its location, a number of multicollinearity checks were conducted. First, we examined the correlations among the estimates (i.e., the unstandardized regression coefficients). The presence of high negative correlations (i.e., -.8+) would suggest that multicollinearity is indeed a problem. The highest correlation among the estimates for our three dimensions of family conflict occurs between the treatment of patient and treatment of caregiver dimensions. The correlation among the estimates is -.63 for spousal caregivers and

TABLE 7.3

The Regression of Depression on Family Conflict Dimensions while controlling for Sociodemographic Characteristics, Network Factors, Objective Conditions of Caregiving and Social Support

	Spouses	Adult Children
	b	b
Issues Conflict	.05	.09
Treatment of Patient	.06	.01
Treatment of Caregiver	.18*	.16*
Sex	-.27***	-.37**
Age	-.01	-.02*
Education	-.01	-.03
Family Income	.00	.00
Health Status	-.26***	-.27***
Marital Status		
Married	N/A	.22
Divorced/Separated	N/A	-.19
Widowed	N/A	-.01
Number of Family Members in Household	-.04	-.03
Number of Family Members within 1 hour drive	-.02	-.07
Number of Family Members > 1 hour drive	-.01	-.04
Children	-.03	.10
Siblings	-.06	.10
Brothers-in-law and Sisters-in-law	.02	.00
Other Relatives	-.04	-.03
Frequency of Face-to-Face Contact with Family	.01	.03
Frequency of Telephone Contact with Family	.00	.00
Patient's level of Functional Disability	.07	.06
Extent of Patient's Problem Behaviors	.17**	.18*
Extent of Patient's Cognitive Difficulties	-.01	.00
Number of Years Since Dx	.00	-.03
Caregiver Lives with Patient	N/A	-.02
Emot. Support (Family)	-.03	-.20
Emot. Support (Family and Friend	-.06	-.27
Constant	2.41	3.08
R^2	.383	.465
F(24,283)	7.32***	N/A
F(29, 168)	N/A	5.03***

*p<.05 ** p<.01 ***p<.001 b's are unstandardized regression coefficients

-.51 for adult children caregivers. These correlations are high; however, they are not so high that we are forced to combine the two dimensions into a single dimension of conflict.

A second multicollinearity check involved regressing each dimension of family conflict on the other two dimensions, once with and once without all the independent variables in the regression equation. A large R-square change is indicative of a multicollinearity problem. In our research, the R-square changes were similar in magnitude (i.e., .03) and not large enough to indicate a major problem with multicollinearity.

As a result of these diagnostic procedures, we concluded that although our three dimensions of family conflict are quite highly related, the multicollinearity problem does not appear to be so great that it is necessary to combine two or all three dimensions into a single dimension of conflict. Having performed these diagnostic checks, we are also more certain that the regression coefficients reported in this research are not grossly affected by the high intercorrelations among our three dimensions of family conflict.

The Joint Effects of Family Conflict Dimensions Upon Depression

As indicated earlier in this chapter, a goal of this research is to assess the joint or combined effects of our family conflict dimensions upon depression. Multiple regression analyses were performed separately for spousal and adult children caregivers. For both groups, the dependent variable, depression, was regressed on our three dimensions of family conflict with all independent variables in the model included in the regression equation. The semi-partial correlation coefficients were computed for each dimension of family conflict. For spousal caregivers, the three dimensions entered separately into one regression equation accounted for a total of 1.5 percent of the variance explained in depression. In the second step, the dependent variable, depression, was regressed on a global measure of family conflict (which combines the three single dimensions) with all independent variables included in the regression equation. For spousal caregivers, the combined or joint effect of the three family conflict dimensions accounts for 2.4 percent of the variance explained in depression.

Similarly, for adult children caregivers, the three dimensions of family conflict entered separately into one regression equation accounted for a total of 1.6 percent of the variance explained in depression, whereas their combined or joint effect accounts for 2.9 percent of the variance explained in our dependent variable.

These findings suggest that our three dimensions of family conflict combine to create a global measure of family conflict which is a slightly more powerful predictor of depression as compared with the net effect of the three dimensions treated separately in the regression analyses. However, the additional explanatory power obtained by combining the three dimensions is not so overwhelming that we would be advised to utilize the global measure of family conflict in all of our analyses. Instead, we are left with the option of using either approach. As previously argued, the specification of the separate dimensions offers the potential advantage of pinpointing the precise aspects of family conflict which contribute to a particular outcome.

If, as we suspect, the significance of our three dimensions of family conflict depends upon the outcome under consideration, we are well-advised to avoid use of the global construct. In doing so, we hope to obtain a deeper and more precise understanding of the processes and mechanisms that underlie the relationship between family conflict and caregivers' well-being.

CHAPTER VIII

CONDITIONAL EFFECTS

In the previous chapter we identified the decisive component of family conflict that is most likely to result in depression. Our next analytic task is to establish whether any conditional relationships have a bearing upon our interpretation of the observed relationship between family conflict and depression. The theoretical significance of this analysis is straightforward. To know that the relationship between family conflict and depression varies from one subgroup to another aids in the interpretation and explanation of the original relationship, thereby contributing to the development of an advanced theory about an important social phenomenon.

In this chapter, we will examine intragroup differences in the strength of the relationship between family conflict and depression. The primary question we ask is whether the direct effect of family conflict upon depression is conditioned or modified by caregivers' key sociodemographic characteristics, family network factors, objective conditions of caregiving, and personal resources.

As detailed in the previous chapter, conflict involving family members' treatment of the caregiver is the only dimension of family conflict that is significantly related to depression for both spousal and adult children caregivers. The object of this analysis is to investigate this relationship further by specifying the conditions under which the original relationship is either strengthened or weakened. Through this process, we are able to clarify the "true" strength of the relationship under different conditions. It is also possible that significant relationships between the other two dimensions of family conflict and depression were obscured in the original analysis of independent and direct effects. Such relationships are of a complex sort but will be pursued here because they represent one of the theoretically most fruitful types of conditional relationships.

In Chapter 5, we explicitly stated the conditions that were expected to modify the relationship between family conflict and depression. We may now examine these hypotheses empirically as they apply to the relationships between each dimension of family conflict and depression.

All analyses were performed separately for spousal and adult children caregivers; however, the analytic procedure followed was identical for both groups. We begin with a presentation of the results as they pertain to our sample of spousal caregivers.

Conditional Relationships: Interactive Model for Spousal Caregivers

Procedurally, we employed multiple regression analyses to examine for conditional relationships. A separate regression equation was constructed for each condition examined. Accordingly, the dependent variable, depression, was regressed on the three dimensions of family conflict with all variables in the full model including social support entered simultaneously into the regression equation. In addition to all the independent variables in the full model, we added interaction terms to each regression equation. These interaction terms were formed by multiplying each conflict dimension by the variable hypothesized to have a conditional effect. For example, to examine gender as a conditional variable, we created three multiplicative terms, each one multiplying gender by a single dimension of conflict. Any conditioning or modifying effects are detected by the presence of a statistically significant interaction term.

From these analyses, we successfully identified only one conditional effect for spousal caregivers. The relationship between treatment of the caregiver conflict and depression was found to be conditioned or modified by the extent of the patient's problem behaviors. Table 8.1 presents the unstandardized regression coefficients (b's) for the relationship between treatment of the caregiver conflict and depression, at different levels of problem behaviors.

TABLE 8.1

The Effects of Treatment of the Caregiver Conflict on Depression: Interactive Model for Spousal Caregivers

Modifying Variable	Conditional Effects Interactive Model	b
Problem Behaviors	1 SD above the mean	.238
	At the mean	.104
	1 SD below the mean	.031

As predicted, the relationship between family conflict and depression is significantly stronger for caregivers who are faced with a severe problem behaviors. More specifically, for spousal caregivers who score one standard deviation above the mean on our measure of problem behaviors, the unstandardized regression coefficient which estimates the strength of the relationship between treatment of the caregiver conflict and depression is b=.24, indicating a fairly strong relationship in the expected direction. In contrast, the relationship between conflict on the treatment of caregiver dimension and depression, although positively associated, is fairly weak for spousal caregivers who are not faced with severe problem behaviors (b=.03).

As previously discussed, we believe that conflict over family members' treatment of the caregiver leads to depression through the process of diminishment of self. Persistent arguing with family members over the amount of assistance, acknowledgement and attention that one needs and expects can erode one's sense of self-worth and competence. Under these conditions, caregivers become vulnerable to a loss of self. Such loss, we believe, emerges as an important element in the causal process leading to depression.

How then does the severity of the patient's problem behaviors affect this process of diminishment of self? As previously suggested, problem behaviors are probably one of the most difficult aspects of providing care to an Alzheimer's patient. Problem behaviors are so physically and emotionally draining that they necessarily result in increased demands for assistance and acknowledgement from other family members; they impose on the caregiver a need for mobilization of resources. At the same time, family members may be either unwilling or unable to recognize or respond to the caregivers' changing needs and expectations, and conflict may ensue. Under these conditions of increasing needs, and both physical and emotional strain, the caregiver may become more highly sensitive to the criticisms and neglect of other family members. Also, these circumstances may impair or interfere with the caregiver's strength and ability to cope with this type of conflict that centers on family members' treatment of the caregiver. The net result, we believe, is that caregivers who are faced with severe problem behaviors are more vulnerable to damaged self-concepts, diminishment of self and ultimately, depression. Conversely, spousal caregivers who do not have severe problem behaviors to deal with are probably better able to cope with conflict that centers on other family members' attitudes and actions toward them personally in the caregiver role. As a result, caregivers whose patients do not exhibit severe problem behaviors may be less vulnerable to self-concept damage and diminishment of self. That is not to say that treatment of the caregiver conflict is unrelated to depression for those spousal caregivers who are faced with less severe problem behaviors. This dimension of conflict appears to be so powerfully related to depression that the relationship between treatment of the caregiver conflict and depression does not disappear completely as problem behaviors become less severe; rather, the relationship is only somewhat attenuated under this condition.

Given the number and variety of hypothesized conditional relationships presented in Chapter 5, one may question why so few were discovered in this analysis. Contrary to our expectations, we were unable to identify any sociodemographic characteristics or personal resources of caregivers that condition the relationship between treatment of the caregiver conflict and depression. We found only one variable with conditioning effects, even though we had hypothesized the significance of many variables within these three broad categories of conditions. Moreover, we failed to identify any conditional relationships between depression and either of our other two dimensions of family conflict (i.e., issues and treatment of the patient).

There are two plausible explanations for the lack of significant conditional effects. First, it is possible that the relationship between treatment of the caregiver conflict and depression is truly conditioned by many of these variables; however, we did not have the power to detect significant effects. It will be recalled that our sample size for spousal caregivers is only N=326, and our full model with interaction terms includes a large number of independent variables (18). The large ratio of sample size to number of independent variables may have reduced our power to the point where we were unable to detect significant effects (Cohen and Cohen, 1983, pp. 59-78).

Second, the lack of significant conditional effects may be an accurate reflection of reality. As previously suggested, conflict that involves the self may be so strongly related to depression that there are few exceptions to the general relationship. In other words, the relationship is so powerful that it is obtained under a variety of sociodemographic, situational, and contextual conditions.

Conditional Relationships: Interactive Model for Adult Children Caregivers

We also examined the conditions that were hypothesized to modify the relationship between family conflict and depression for our sample of adult children caregivers. Interaction terms were created and added to the full model for adult children caregivers. All conditioning or modifying effects were identified through statistically significant interaction terms.

From this analysis, we identified only one conditional effect for adult children caregivers. As observed earlier for spousal caregivers, the relationship between treatment of the caregiver conflict and depression was found to be modified by the extent of the patient's problem behaviors.

Table 8.2 shows the unstandardized regression coefficients (b's) for the relationship between treatment of the caregiver conflict and depression at different levels of problem behaviors.

As we observed for spousal caregivers, the relationship between treatment of the caregiver conflict and depression is significantly stronger for adult children caregivers who are faced with a range of severe problem behaviors as compared with their counterparts who have less exposure to severe problem behaviors (b=.337 versus b=.013, respectively).

It is not surprising that this finding applies to both spousal and adult children caregivers. Considering the need for constant vigilance and surveillance of the patient, and the emotionally and physically draining nature of these behaviors, we expect that their impact on the caregiver will be powerful regardless of the caregiver's relationship to the patient.

TABLE 8.2

The Effects of Treatment of the Caregiver Conflict on Depression Interactive Model for Adult Children Caregivers

Conditioning Variable	Conditional Effects Interactive Model	b
Problem behaviors	1 SD above the mean	.337
	At the mean	.162
	1 SD below the mean	.013

As previously suggested, the physical and emotional strain of having to deal with severe problem behaviors, compounded by the experience of conflict with family members over incongruent expectations for assistance and attention, leaves the caregiver vulnerable to self-concept damage, diminishment of self and depression.

As noted earlier in this chapter for spousal caregivers, we failed once again for adult child caregivers to identify empirically the vast array of conditional relationships hypothesized in Chapter 5. With respect to our sample of adult children caregivers, we found that only one variable (i.e., problem behaviors) significantly modified the relationship between conflict on our treatment of the caregiver dimension and depression. While the lack of significant findings may be attributable to insufficient power to detect such effects (i.e., N=210), we believe that our findings are more likely to be an accurate reflection of reality. There are probably a number of processes that would help to explain the powerful and generalizable relationship between conflict on the treatment of caregiver dimension and depression; however, we suggest that conflict with family members who are inattentive or who challenge one's performance as a caregiver, as opposed to acting as an important source of validation and confirmation of one's abilities and competence, are likely to be reflected in negative self-evaluations and diminishment of self, the latter having been causally linked to depression ((Beck, 1967; Becker, 1979; Brown and Harris, 1978; Holahan and Holahan, 1987; Lewinsohn et al., 1985; Pearlin et al., 1981). Moreover, family conflict that touches upon issues of self-worth and competence may further impair or interfere with one's ability to employ coping devices that would otherwise buffer the impact of family conflict upon depression.

CHAPTER IX

FAMILY CONFLICT AS AN INTERVENING VARIABLE: TESTING A CONCEPTUAL MODEL

In the previous chapters, we have examined the relationship between family conflict and depression against the background of caregivers' social and economic characteristics, network factors, and objective conditions of caregiving. We have identified the decisive component of family conflict in relation to depression, and we have revealed one conditional relationship that helps to make our interpretation of the original relationship more exact. We also believe (as depicted in our conceptual model in Figure 2) that family conflict represents a linking mechanism between some of our antecedent factors and conditions and depression. It is our intention to determine the extent to which the effects of these antecedent factors and conditions are channeled through family conflict. The theoretical significance of this analysis is straightforward. If family conflict is established as a significant intervening variable, it becomes an important factor in terms of explaining the causal linkages between caregivers' background characteristics and depressive symptomatology. These linkages would indicate then the practical significance of altering or modifying levels of family conflict in an effort to attenuate the relationship between caregivers' background characteristics and depression.

Accordingly, the primary goal of this chapter is to examine the intervening or linking function of family conflict as portrayed in our conceptual model in Figure 2. This model depicts the direct and indirect effects of our three broad categories of antecedent factors and conditions upon depression. It indicates that all of the sociodemographic factors, family network factors, and objective conditions of caregiving variables shown at the far left of the model are related to depression both directly and indirectly through each of our three dimensions of family conflict. Results from the previous chapters indicate the need to refine this model.

From Chapter 6, it will be recalled that many of our hypothesized antecedent variables were found not to be significantly associated with family conflict. Moreover, the only dimension of family conflict that was found to be significantly related to depression for both spousal and adult children caregivers was conflict involving family members' treatment of the caregiver. Given the logical status of an intervening variable as the consequence of an independent variable and as a determinant of the dependent variable (Rosenberg, 1968), it makes sense to estimate only the path coefficients of those antecedent variables that are known to affect depression indirectly through their association with conflict on the treatment of caregiver dimension. Through estimation of these path coefficients, we will be able to compare the magnitude of the direct versus the indirect effect of these antecedent variables upon depression. We are interested primarily in elaborating upon the conditions under which family conflict serves as an intervening variable in the relationship between depression and the antecedent variables in our model.

The reader is reminded that this analysis is strictly post hoc, and therefore we have no a priori theory to guide our expectations. Therefore, we shall simply report the results of the regression analyses, and make some attempt to integrate our findings with previous research.

Our refined conceptual models for spousal and adult children caregivers are presented in Figure 3 and Figure 4, respectively.

Mediation Model Predicting Depression for Spousal Caregivers

Regression equations were used to estimate path coefficients. Table 9.1 presents the significant standardized regression coefficients (betas) for each path depicted in our conceptual model for spousal caregivers (Figure 3). Table 9.2 presents decomposed zero-order correlations for the mediation model.

Figure 3

Spousal Caregivers

Modified Conceptual Model for the Study of Family Conflict

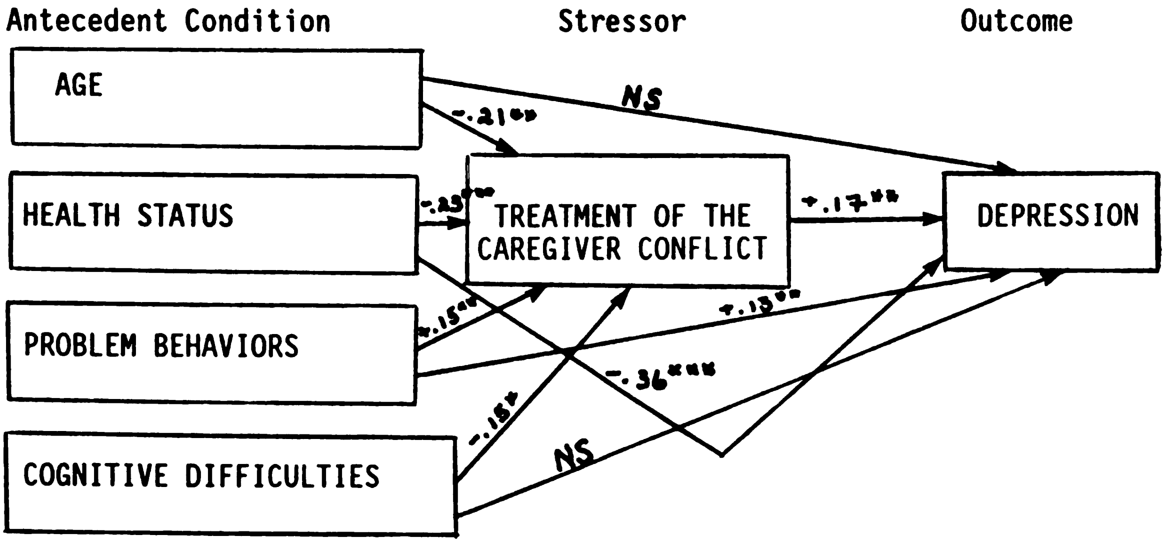


TABLE 9.1

SPOUSAL CAREGIVERS

Regression Coefficients for Mediation Model Predicting Depression

	ISSUES beta	TRTPT beta	TRTCG beta	DEPRESSION beta
Sex	-.078	-.013	.046	-.181***
Age	-.162**	-.209**	-.207**	-.062
Education	-.033	-.006	-.084	-.025
Family Income	.172	.022	.029	-.100
Health Status	-.230***	-.054	-.228***	-.361***
Number of Family Members in Household	.133	-.094	-.137	-.026
Number of Family Members within 1 hour drive	.032	-.316	-.198	.076
Number of Family Members > 1 hour drive	.030	-.337	-.187	-.066
Children	.093	.337**	.116	-.065
Siblings	.017	.095	-.008	-.172
Brothers-in-law and Sisters-in-law	.015	.198	.022	.062
Other Relatives	.021	.041	.142	-.073
Frequency of Face-to-Face Contact with Family Members	-.064	-.052	-.023	.040
Frequency of Telephone Contact with Family	-.016	.055	.013	.004
Patient's level of Functional Disability	.054	.029	.053	-.065
Extent of Patient's Problem Behaviors	.045	.125**	.150**	.134**
Extent of Patient's Cognitive Difficulties	-.020	-.136	-.149*	-.021
Number of Years Since Dx	-.086	.043	.052	.005
Issues Conflict	-	-	-	.040
Treatment of Patient Conflict	-	-	-	.048
Treatment of Caregiver Conflict	-	-	-	.170**
Constant	0.0	0.0	0.0	0.0
R^2	.180	.109	.144	.380
F(18,291)	3.54***	1.96**	2.72***	8.33***

*p<.05 **p<.01 ***p<.001 N=326

Standardized regression coefficients (betas) are shown for all IVs.

As indicated in Table 9.1, the full model for spousal caregivers explains 38 percent of the variation in depressive symptomatology.

Four variables (age, health status, problem behaviors, and cognitive difficulties) display small but significant indirect effects on depression through treatment of the caregiver conflict. Only two of these same variables (health status and problem behaviors) have statistically significant direct effects upon depression.

We begin our discussion with a closer examination of the direct and indirect effects of age upon depressive symptomatology. The indirect effect of caregiver's age upon depression through treatment of the caregiver conflict is at best modest (beta=-.035). However, it remains important for us to consider the mechanism through which treatment of the caregiver conflict intervenes in the relationship between age and depression. As noted elsewhere in this research, family conflict tends to decrease with age. This may be explained at least in part by research which suggests that the family becomes socially and instrumentally more important to older persons as their physical dependencies increase and the size of their non-kin social network decreases (Carp, 1967; Seelbach, 1978; Shanas and Streib, 1965). We believe that the increasing importance of family to the older individual may be accompanied by an increased emphasis on family harmony, and thus avoidance of family conflict. It is also likely that other family members (especially younger persons) avoid conflict with elderly caregivers and give them more positive attention because of their advancing age. Since family conflict is positively associated with depression, the lower levels of conflict among older individuals in

TABLE 9.2

SPOUSAL CAREGIVERS

Decomposed Zero-Order Correlations between Antecedent Variables and Depression: Mediation Model

Antecedent Variable	Direct Effects	Via ISSUES	Via TRTPT	Via TRTCG	r
Sex	-.181***	-.003	.001	.008	-.302***
Age	-.062	-.006	-.010	-.035	-.156**
Education	-.025	-.001	.000	-.014	-.125*
Family Income	-.100	.007	.002	.005	-.170**
Health Status	-.361***	-.009	-.003	-.039	-.474***
Number of Family Members in Household	-.026	.005	-.005	-.023	-.024
Number of Family Members within 1 hr drive	.076	.001	-.015	-.034	.012
Number of Family Members > 1 hour drive	.066	.001	-.016	-.032	-.047
Children	-.065	.004	.016	.020	-.057
Siblings	-.172	.001	.005	.001	-.087
Brothers-in-law and Sisters-in-law	.062	.001	.010	.004	.068
Other Relatives	-.073	.001	.002	.024	-.078
Frequency of Face-to-Face Contact with Family Members	.040	-.003	-.003	-.004	.027
Frequency of Telephone Contact with Family	.004	-.001	.003	.002	.088
Patient's level of Functional Disability	-.065	.002	.001	.009	-.031
Extent of Patient's Problem Behaviors	.134**	.002	.006	.026	.229***
Extent of Patient's Cognitive Difficulties	-.021	-.001	-.007	-.025	-.034
Number of Years Since Dx	.005	-.003	.002	.009	-.021
Issues Conflict	.040	-	-	-	.184***
Treatment of Patient Conflict	.048	-	-	-	.245***
Treatment of Caregiver Conflict	.170**	-	-	-	.329***

*p<.05 **p<.01 ***p<.001 N=326

turn reduce observed levels of depressive symptomatology.

Age, in this study, does not have a significant direct effect upon depressive symptomatology. This is contrary to the findings of several researchers who have demonstrated that rates of depression in the general population decrease with age (Eaton and Kessler, 1981; Frerichs, Aneshensel and Clark, 1981; Lin et al., 1986; Meyers et al., 1984; Uhlenhuth, Balter, Mellinger, Cisin, and Clinthorne, 1983; Weissman and Myers, 1979). Lower rates of depression among the elderly as compared with young adults are often attributed to cohort effects. It has been theorized that older persons who grew up during the economic depression of the 1930's have lower expectations for themselves and their environment. In addition, there is evidence that some of these people developed coping skills that have helped them to deal with hardship and suffering throughout their adult lives (Elder and Liker, 1982).

As we examine the age distribution of our sample of spousal caregivers, it is evident that over ninety percent lived through some part of the economic depression of the 1930's. The lack of variability in terms of caregivers' experiences in relation to the Great Depression may help to explain the absence of a direct effect of age upon depressive symptomatology for our sample of spousal caregivers.

Not surprisingly, the <u>health status of the caregiver</u> has a strong statistically significant direct effect upon depressive symptomatology (beta=-.361***); however, its indirect effect through treatment of the caregiver conflict is weak (beta=-.039).

The direct effect of health status on depression is consistent with findings from general population studies which show that poor health is associated with high rates of depression, across all age groups (Abrahams and Patterson, 1978; Blazer and Williams, 1980; Frerichs et al., 1982; Gurland et al., 1980; Murrel et al., 1983; Raymond, Michals, and Steer, 1980; Romaniuk et al., 1983).

Health status also impacts depression by influencing levels of conflict on the treatment of caregiver dimension of conflict. Because unhealthy persons probably have greater expectations and demands for assistance and acknowledgement from family members, they are also more likely to find themselves involved in conflictive interactions that focus on the manner in which other family members respond to their needs and expectations. And, as reported throughout this research, high levels of conflict on this dimension are associated with increased risk for depression.

The extent of the patient's <u>problem behaviors</u> has a modest, statistically significant direct effect upon depression (beta=.134**). It also has a weak indirect effect through treatment of the caregiver conflict (beta=.026).

The direct effect of problem behaviors upon depression is an expected finding. The uncontrollable and psychotic nature of many of these problem behaviors, in combination with the physical and emotional demands that they place upon the caregiver, is very likely to generate emotional distress in the form of depression.

It is also important to consider the mechanism through which treatment of the caregiver conflict intervenes in the relationship between problem behaviors and depression. We believe that the extremely difficult nature of problem behaviors increases the caregiver's demands and expectations regarding the degree of assistance, attention, and acknowledgement accorded by other family members. We contend that unmet or violated expectations lead to increased conflict on the treatment of caregiver dimension of conflict. This type of conflict, in turn, is associated with increased risk for depression.

Finally, we observe that the extent of the patient's <u>cognitive difficulties</u> has a small indirect and negative effect upon depression, through treatment of the caregiver conflict (beta=-.025). This same factor does not have a significant direct effect upon depression.

As previously suggested, the negative association between cognitive difficulties and treatment of the caregiver conflict may be explained, in part, by the fact that as cognitive difficulties increase (and the patient's state becomes more vegetative), the family unit may become increasingly more important to the caregiver. Thus, in the interest of preserving family harmony, the caregiver may avoid conflict, particularly in the form of demands and expectations regarding assistance and acknowledgement in the caregiver role. Accordingly, a decrease in family conflict is associated with lower levels of depressive symptomatology.

The absence of a direct effect between cognitive difficulties and depression is less easily explained. One would expect that an increase in cognitive difficulties would have a similar effect as problem behaviors, and would lead to feelings of helplessness and depression. Our finding suggests that some factor may be buffering the impact of cognitive difficulties upon depression. As cognitive difficulties increase and death of the patient seems more imminent, it may be that family support and/or coping mechanisms come into play as buffers or mediators of the relationship between cognitive difficulties and depression.

Mediation Model Predicting Depression for Adult Children Caregivers

Table 9.3 presents the significant standardized regression coefficients (betas) for each path depicted in our modified conceptual model for adult children caregivers (Figure 4). Table 9.4 presents decomposed zero-order correlations for the mediation model.

Figure 4

Adult Children Caregivers

Modified Conceptual Model for the Study of Family Conflict

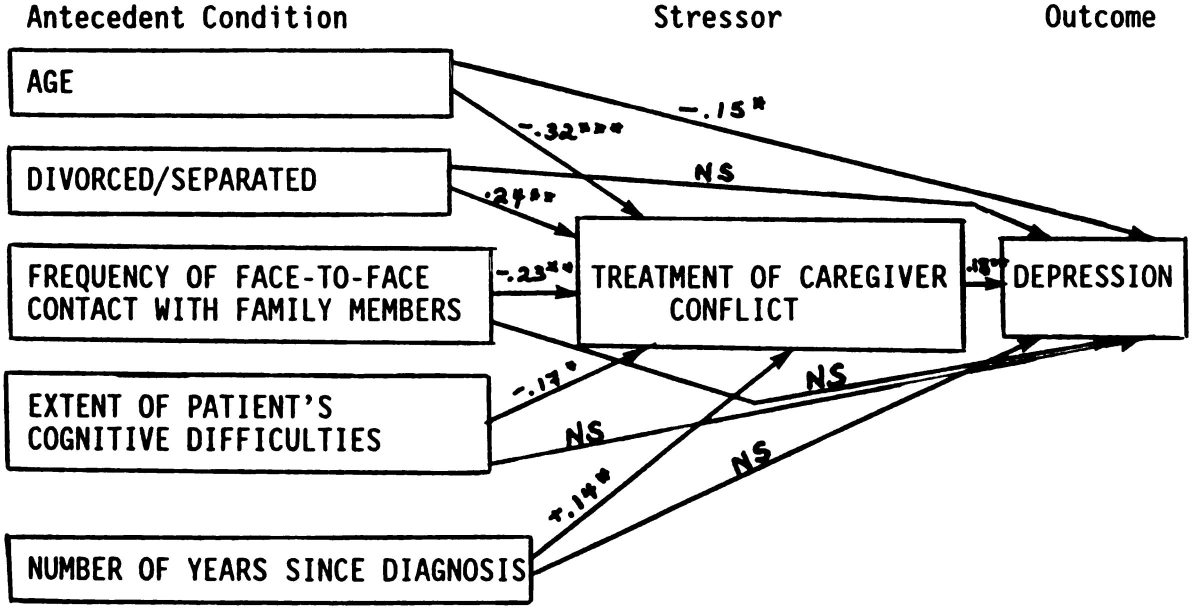


TABLE 9.3

ADULT CHILDREN CAREGIVERS

Regression Coefficients for Mediation Model Predicting Depression

	ISSUES beta	TRTPT beta	TRTCG beta	DEPRESSION beta
Sex	-.143*	-.093	-.078	-.196**
Age	-.334***	-.351***	-.319***	-.153*
Education	.013	.020	-.079	-.086
Family Income	-.060	.078	-.067	-.108
Health Status	-.039	-.041	-.122	-.355***
Married	.200	.100	.153	.065
Divorced/Separated	.098	.213*	.235**	-.137
Widowed	.064	.127	.013	-.026
Number of Family Members in Household	-.065	-.104	.034	-.016
Number of Family Members within 1 hour drive	-.127	.005	.379	-.299
Number of Family Members > 1 hour drive	-.235	-.134	.276	-.202
Children	.276	.030	-.164	.253
Siblings	.235	.261*	.031	.230
Brothers-in-law and Sisters-in-law	.059	-.018	-.310	-.015
Other Relatives	-.055	.100	-.115	.024
Frequency of Face-to-Face Contact with Family Members	-.111	-.128	-.225**	.028
Frequency of Telephone Contact with Family	.003	.130	.089	.005
Patient's level of Functional Disability	.199	.166	.104	-.051
Extent of Patient's Problem Behaviors	.055	.064	.101	.129*
Extent of Patient's Cognitive Difficulties	-.051	-.101	-.170*	-.001
Number of Years Since Dx	-.066	.088	.139*	-.010
Caregiver Lives with Pt	-.224**	-.150	-.086	-.018
Issues Conflict	-	-	-	.078
Treatment of Patient Conflict	-	-	-	.008
Treatment of Caregiver Conflict	-	-	-	.184**
Constant	0.0	0.0	0.0	0.0
R^2	.234	.291	.330	.439
F(22,175)	2.45***	3.26***	3.92***	5.37***

*p<.05 **p<.01 ***p<.001 N=210

Standardized regression coefficients (betas) are shown for all IVs.

As presented in Table 9.3, the full model for adult children caregivers accounts for 44 percent of the variation in depressive symptomatology.

Five variables (age, marital status, frequency of face-to-face contact with family, cognitive difficulties, and number of years since diagnosis) show small but significant indirect effects on depression through treatment of the caregiver conflict. Of these five variables, only age has a significant direct effect upon depression.

Age of the caregiver has a modest indirect effect upon depression through treatment of the caregiver conflict (beta=-.059). As previously suggested, older caregivers may place a higher priority on family harmony, and therefore consciously avoid family conflict. In the case of adult children caregivers, it is also possible that younger caregivers experience more treatment of the caregiver conflict because they have greater expectations for assistance and acknowledgement from other family members. Such expectations, we contend, arise from the level of competing social demands and responsibilities inherent in the social roles that individuals tend to occupy during the early stages of adult development. High levels of conflict on the treatment of caregiver dimension are associated, in turn, with increased risk for depression.

The modest yet significant negative direct effect of age upon depression (beta=-.153*) indicates that younger adult children caregivers experience higher rates of depression as compared with their older counterparts. This may be explained, in part, by cohort effects. The age distribution among our sample of adult children caregivers is such that we may have uncovered differences in expectations and coping

TABLE 9.4

ADULT CHILDREN CAREGIVERS

Decomposed Zero-Order Correlations between Antecedent Variables and Depression: Mediation Model

Antecedent Variable	Direct Effects	Via ISSUES	Via TRTPT	Via TRTCG	r
Sex	-.196**	-.011	-.001	-.014	-.268***
Age	-.153*	-.026	-.003	-.059	-.197**
Education	-.086	.001	.000	-.015	-.191**
Family Income	-.108	-.005	.001	-.012	-.237***
Health Status	-.355***	-.003	.000	-.022	-.425***
Married	.065	.016	.001	.028	-.095
Divorced/Separated	-.137	.008	.002	.043	.040
Widowed	-.026	.005	.001	.002	.049
Number of Family Members in Household	-.016	-.005	-.001	.006	.100
Number of Family Members within 1 hr drive	-.299	-.010	.000	.070	-.016
Number of Family Members > 1 hour drive	-.202	-.018	-.001	.051	.009
Children	.253	.022	.000	-.030	.069
Siblings	.230	.018	.002	.006	.163**
Brothers-in-law and Sisters-in-law	-.015	.005	.000	-.057	-.117
Other Relatives	.024	-.004	.001	-.021	-.006
Frequency of Face-to-Face Contact with Family Members	.028	-.009	-.001	-.041	-.030
Frequency of Telephone Contact with Family	.005	.000	.001	.016	.054
Patient's level of Functional Disability	-.051	.016	.001	.019	.134*
Extent of Patient's Problem Behaviors	.129*	.004	.001	.019	.250***
Extent of Patient's Cognitive Difficulties	-.001	-.004	-.001	-.031	.011
Number of Years Since Dx	-.010	-.005	.001	.026	-.010
Caregiver lives with Patient	-.018	-.017	-.001	-.016	.109
Issues Conflict	.078	-	-	-	.307***
Treatment of Patient Conflict	.008	-	-	-	.273***
Treatment of Caregiver Conflict	.184**	-	-	-	.380***

*p<.05 **p<.01 ***p<.001 N=210

skills based upon differential exposure to the stresses and hardships created by the economic depression of the 1930's. As previously indicated, the cohort of persons who lived through the Great Depression has lower rates of depressive symptomatology which some theorists attribute to their early experiences with hard times.

Marital status (i.e., divorced/separated versus never married) has a weak indirect effect on depressive symptomatology through treatment of the caregiver conflict (beta=.043). Previously, we suggested that the higher levels of treatment of caregiver conflict observed for divorced/separated persons may be explained, in part, by role theory. The absence of the spouse (primarily husbands/fathers in this research) requires that the caregiver assume the additional roles of that person. This extra burden, in combination with the likelihood of significant financial strain, is likely to raise the caregiver's expectations regarding assistance and acknowledgement from other family members. Since high expectations are more prone to violation by others, it is not surprising then that we observe higher levels of conflict for divorced/separated caregivers on this particular dimension of family conflict. These higher levels of conflict are subsequently reflected in high levels of depressive symptomatology.

Surprisingly, marital status does not have a direct impact upon depression. Since divorce is disapproved in our society, one would expect that the social stigma would make the divorced person more vulnerable to feelings of inadequacy and depression. Perhaps the social definition of divorce is changing such that the social stigma no longer has a strong negative impact upon the psychological well-being of divorced persons.

The frequency of face-to-face contact with family members has a weak indirect effect upon depression through treatment of the caregiver conflict (beta=-.041). The relationship between contact and conflict is such that an increase in one is associated with a decrease in the other. It appears that face-to-face contact with family members provides the caregiver with at least some sense of being supported and acknowledged. This process thus reduces the level of conflict, which in turn is reflected in lower levels of depressive symptomatology.

The frequency of face-to-face contact with family members does not have a direct effect on depression. One would expect that frequent contact with family would make the caregiver feel loved and esteemed, and thereby decrease levels of depression. Apparently, such an explanation is overly simplistic. Clearly, it is necessary to examine the components or dimensions of contact and their independent effects upon depression. For example, it may be that frequent contact with especially valued family members is the component that has a direct impact upon depressive symptomatology. In short, the global nature of the construct as used in this research may be obfuscating the independent and direct effects of this network variable.

The extent of the patient's cognitive difficulties also has a small indirect effect on depression through treatment of the caregiver conflict (beta=-.031). As noted with respect to spousal caregivers, it may be that as cognitive difficulties increase dramatically, the caregiver may feel that the patient's death is imminent, and thus conflict on the treatment of caregiver dimension may be avoided or the caregiver's expectations for other family members may be reduced. The lower rates of conflict are, in turn, reflected in lower rates of depression.

As observed for spousal caregivers, the extent of the patient's cognitive difficulties does not have a significant direct effect on depression. As previously suggested, it is possible that the absence of a direct effect may be explained to some extent by the buffering effects of social support and coping resources.

The <u>number of years since diagnosis</u> has a modest indirect effect upon depression through treatment of the caregiver conflict (beta=.026). The positive association between number of years since diagnosis and conflict on our treatment of the caregiver dimension suggests that caregivers' demands and expectations for assistance and acknowledgement increase over time. At first glance, this finding may appear to be inconsistent with our earlier finding regarding the relationship between the extent of the patient's cognitive difficulties and conflict. Generally, one would assume that cognitive difficulties and years since diagnosis would be highly related; however, in this research the variables are only moderately correlated (r=.3). Also, it may be noted that many Alzheimer's disease patients plateau for years with respect to their cognitive status.

Since previous research has demonstrated that family supports are eroded over time (Johnson and Catalano, 1983), it is most likely that observed increases over time in levels of conflict on the treatment of caregiver dimension are a reflection of this phenomenon. And, since family conflict is positively associated with depression, we thus expect the risk of depression to increase accordingly.

The number of years since patient diagnosis does not have a significant direct effect upon depression. We may speculate that the absence of such an effect is a function of mediating resources. It is not unreasonable to suggest that over time, caregivers develop more effective coping strategies and become more efficient at acquiring the types of social support that is needed. The use of these resources may help to ward off depression and thereby emasculate the impact of years since diagnosis upon depressive symptomatology.

In summary, the most dramatic aspect of these findings is the small size of the indirect effects of the antecedent conditions upon depression through family conflict for both spousal and adult children caregivers. We may conclude that although family conflict does have a moderate statistically significant direct effect upon depression, its' mediating function is at best weak. These rather inconsequential intervening effects indicate that any effort to alter the relationship between caregivers' background characteristics and depression by lowering levels of family conflict is not likely be highly productive.

CHAPTER X

THE STRESS BUFFERING FUNCTIONS OF SOCIAL SUPPORT

Our efforts in the previous chapters have been to identify and explain antecedents and consequences of family conflict within the context of Alzheimer's caregiving. Underlying all of our analyses is a basic assumption that the family context of caregiving engenders stress in the form of conflict among group members. The family, however, may be viewed also as a place where individuals can find resources to deal with stress. More specifically, the family constitutes a rich and varied source of social support. The availability, continuity, and quality of family support make it a potentially powerful and unique system for dealing with stress, irrespective of its source. It is almost paradoxical that the family is an arena for both conflict and support. This research provides us with the unique opportunity to examine the processes and mechanisms by which family support may help to explain why it is that caregivers who have seemingly similar experiences of family conflict are affected in dissimilar ways. Specifically, we seek to learn if differences in the source and utilization of social support can account for the fact that caregivers who have similar experiences of family conflict exhibit different levels of depressive symptomatology.

There are two general hypotheses regarding the mechanisms by which social support exerts its influence on health. The <u>direct or main effects hypothesis</u> asserts that support enhances health and well-being irrespective of the level of stress. In other words, people with low levels of stress will benefit from the utilization of social support as much as those who have high levels of stress (see Cohen and Syme, 1985).

The <u>buffering hypothesis</u> argues that social support functions to protect people from the deleterious effects of stress, and therefore is most effective under high levels of stress. Quite simply, the adverse effects of stress on health and well-being should be reduced or attenuated as access to social support increases (see Cohen and Syme, 1985).

As delineated in Chapter 3, this research seeks to examine the buffering effects of social support in relation to the impact of family conflict upon caregivers' experiences of depression. Earlier, we argued against the usefulness of employing a global construct of social support. Therefore, we proposed to examine the buffering effects of two types of social support: emotional and instrumental. The emotional support items were asked as follows: (1) "You just mentioned that there is at least one special person with whom you (want to be with when you are down or discouraged/can really confide in). Who is that person?"; and (2) "Is there another person you (want to be with when you are down or discouraged/or whom you can really confide in)? Who is that person?"

A series of dummy variables was created to represent various sources of emotional support. Caregivers who named family members only on both items, and caregivers who named a family member and friend, are compared with caregivers who name friends only (the omitted category).

There was insufficient detail to classify sources of instrumental support according to our three categories (i.e., family only; friend and family; friends only). Therefore, we were unable to proceed with our original plan to examine the buffering effects of instrumental support. Our analysis was therefore limited to an examination of the buffering effects of emotional support from the variety of sources indicated. We note, however, that there is rather compelling research evidence which suggests that, despite the many aspects of social support, perceived emotional support may be the most important to psychological well-being (Wethington and Kessler, 1986).

In this research, we hypothesize the primacy of familial sources of emotional support (i.e., family only) over non-familial sources (i.e., friends only) in terms of buffering the negative impact of family conflict. There are probably a number of mechanisms through which emotional support from family members operates to buffer the impact of family conflict upon depression. For example, family members may trivialize the importance of the conflictive encounter, or they may provide a rationale for the conflict person's behavior. Friends may utilize these same support-rendering strategies; however, they are unlikely to be as effective because non-kin generally do not have a sufficient level of knowledge (re: the conflict person's personality, life situation, and relationship history with the caregiver) to permit a credible analysis of the conflictive encounter.

Also, emotional support from family members is likely to be a effective buffer against the negative impact of family conflict simply because the caregiver is made to feel valued, loved, and esteemed by persons who are most important to him/her. Family relationships are characterized by certain qualities which furnish them with an import and significance that is distinctive and universal. Family relationships are associated with intimacy, trust, and love. They are intense and relatively enduring. It is these qualities and more that binds family members both socially and psychologically in ways that lead us to believe that family support in the form of love and esteem (i.e., perceived emotional support) will be more effective at buffering the negative impact of family conflict as compared with the same type of support provided by friends.

The Main Effects of Social Support: Additive Model

Before testing the buffering effects of emotional support, we first considered its main effects. Depressive symptomatology was regressed on all variables in the full model including sociodemographic variables, network factors, objective conditions of caregiving and our two dummy-coded emotional support variables. For both spousal and adult children caregivers, the addition of our two emotional support variables to the equation produced very small and insignificant increases in explained variance (R-square change=.002 and .013, respectively).

Moreover, for both spousal and adult children caregivers, it is noted that emotional support regardless of its source does not have any direct bearing upon depression. As indicated in Table 10.1, emotional support from family only (as compared to emotional support from friends only) has an insignificant coefficient in relation to depression for spousal caregivers and adult children caregivers. Similarly, emotional support from the combination of family member and friend (as compared to friends only) is not significantly related to depression for either spousal or adult children caregivers.

TABLE 10.1

Predictors of Depression and the Mediating Functions of Social Support: The Additive Model

	Spouses b	Adult Children b
Sex	-.25***	-.39**
Age	-.01	-.01*
Education	-.01	-.03
Family Income	.00	.00
Health Status	-.26***	-.27***
Married	NA	.19
Divorced/Separated	NA	-.21
Widowed	NA	-.02
Number of Family Members in Household	-.03	-.02
Number of Family Members within 1 hour drive	.02	-.07
Number of Family Members > 1 hour drive	.01	-.05
Children	-.03	.10
Siblings	-.06	.09
Brothers-in-law and Sisters-in-law	.02	.00
Other Relatives	-.04	.02
Frequency of Face-to-Face Contact with Family	.00	.00
Frequency of Telephone Contact with Family	.00	.00
Patient's level of Functional Disability	-.07	-.06
Extent of Patient's Problem Behaviors	.17**	.16*
Extent of Patient's Cognitive Difficulties	-.01	.00
Number of Years Since Dx	.00	-.03
Caregiver Lives with Patient	NA	-.01
Issues Conflict	.05	.09
Treatment of Patient Conflict	.06	.01
Treatment of Caregiver Conflict	.19*	.16*
Emotional Support (Family Only)	-.04 (NS)	-.15 (NS)
Emotional Support (Family & Friend)	-.05 (NS)	-.26 (NS)
Constant	2.39	3.17
R^2	.382	.452
F(284,23)	7.63***	5.19***

*p<.05 **p<.01 ***p<.001

Unstandardized regression coefficients (b) are shown for all IVs.

The Buffering Effects of Social Support: Interactive Model

We employed multiple regression analyses to test the hypothesis that emotional support from family members acts to mediate or buffer the negative consequences of family conflict, specifically treatment of the caregiver conflict. The analyses were performed separately for spousal and adult children caregivers. Six interaction terms were created by multiplying each dimension of family conflict by each category of emotional support. The dependent variable, depression, was regressed on all variables in the full model including sociodemographic variables, network factors, objective conditions of caregiving, our two dummy-coded emotional support variables, and the six interaction terms described above.

Table 10.2 presents the results of the regression analyses for spousal caregivers. As indicated by the statistically significant interaction term, emotional support from a family member and friend (as compared with emotional support from friends only) appears to buffer the impact of treatment of the caregiver conflict on depression. The significance and direction of this relationship indicates that caregivers who experience high levels of conflict on the treatment of caregiver dimension, and who also have emotional support from a family member and friend, have a better chance than those with emotional support from friends only, and similarly high levels of conflict, to escape the increase in depression that is triggered by this type of conflict.

TABLE 10.2

Predictors of Depression and the Mediating Function of Social Support
Interactive Model

	Spouses b	Adult Children b
Sex	-.24**	-.36**
Age	-.01	-.02*
Education	-.01	-.02
Family Income	.00	.00
Health Status	-.25***	-.27***
Number of Family Members in Household	-.05	-.02
Number of Family Members within 1 hour drive	.00	-.07
Number of Family Members > 1 hour drive	.00	-.04
Children	-.02	.07
Siblings	-.06	.10
Brothers-in-law and Sisters-in-law	.03	.00
Other Relatives	-.03	.04
Frequency of Face-to-Face Contact with Family	.00	.00
Frequency of Telephone Contact with Family	.00	.00
Patient's level of Functional Disability	-.05	-.07
Extent of Patient's Problem Behaviors	.16**	.12
Extent of Patient's Cognitive Difficulties	-.03	.02
Number of Years Since Dx	.00	-.02
Issues Conflict	.21	.26
Treatment of Patient Conflict	.03	.01
Treatment of Caregiver Conflict	.14	.17
Emotional Support (Family Only)	-.02	-.44
Emotional Support (Family & Friend)	-.06	-.34
Efamsup x Issuesl	-.14	-.17
Efamsup x Trtptl	-.29	-.10
Efamsup x Trtcgl	-.17	-.13**
Efamfrd x Issuel	-.13	-.22
Efamfrd x Trtptl	-.17	-.02
Efamfrd x Trtcgl	-.10*	-.13
Constant	2.64	3.19
R^2	.419	.495
F(29,278)	6.93***	4.87***

*p<.05 **p<.01 ***p<.001
Unstandardized regression coefficients (b) are shown for all IVs.

In contrast, the results of this regression analysis for adult children caregivers (see Table 10.2) indicates that emotional support from family members only (as compared with emotional support from friends only) buffers the impact of treatment of the caregiver conflict on depression.

It appears that emotional support from family members only benefits adult children caregivers who are most in need. That is, the effectiveness of emotional support from family members in terms of buffering depressive symptomatology is greater among adult children caregivers who experience high as compared to low levels of treatment of the caregiver conflict.

In an attempt to explain these findings, we went back to the data and sought to identify the persons whom caregivers were most likely to name on our two emotional support items. Adult children caregivers who named two family members as their source of emotional support (N=82) were most likely to name a spouse first and a child second. This finding was observed for both male and female adult children caregivers. Adult children caregivers who named a family and a friend as their two sources of emotional support (N=73) were most likely to name a spouse or child first and a same-sex friend second.

Spousal caregivers who named two family members as their emotional supporters (N=158) were most likely to name two children. Finally, spousal caregivers who named a family member and a friend as their two sources of emotional support (N=86) were most likely to name a child first and a same-sex friend second.

This identification procedure may help to explain the mechanisms by which differential sources of emotional support function to buffer the negative impact of treatment of the caregiver conflict. We contend that the effectiveness of emotional support as a buffer against depressive symptomatology is dependent upon two mechanisms or processes. First, the person must feel loved and esteemed by his/her supporter. Second, he or she must feel empathized with and understood, particularly with reference to the conflict situation. Furthermore, our research findings indicate that one without the other is insufficient to buffer the negative impact of family conflict upon depression.

The mechanisms or processes through which love and empathy function as mediators are discussed below. First, given that the nuclear family is the major institutional force of emotional involvement and the focus of affectional life in our culture, we expect that family members (particularly one's spouse and children) act as primary sources of love and esteem. Moreover, the experience of living together (whether past or present) and engaging in vital interactions creates emotional attachments and a group embeddedness which appear to be sustained across the life course.

Second, empathy and understanding are socio-emotional needs that are best satisfied by age peers; that is, people who share a common social frame of reference. The general principle is that similarity of experience within age groups provides a solid bases for friendship, communication and mutual understanding. Since marriages tend to occur between people of comparable social position and similar status characteristics including age, it is expected that a spouse, if available, will be the primary source of empathy and understanding, particularly in relation to the specific conflict situation. However, when a spouse is not available, we would expect people to seek empathy and understanding from their friends rather than their children; the latter having come to maturity at a different time under different social influences.

If we apply this post hoc theoretical analysis to our data, it makes sense that we observe the buffering effects of <u>emotional support from family members only</u> in relation to the impact of treatment of caregiver conflict upon depression for <u>adult children caregivers</u>. In sixty percent of the cases where family members only were mentioned as the adult child caregiver's source of emotional support, a spouse and child were named. We believe that both the child and the spouse satisfy the caregiver's needs for love and esteem. In addition, the spouse provides the empathy and understanding of the family conflict situation as viewed through the eyes of an age peer. Taken together, the availability of both love and empathy as relatively independent mechanisms through which emotional support functions as a buffer in the relationship between family conflict and depression helps to explain the significance of the interaction term -- emotional support (from family members only) x treatment of the caregiver conflict -- as noted for adult children caregivers in this research.

In cases where the adult child caregiver named a family member and a friend (e.g., a spouse and friend <u>or</u> a child and friend), we did not observe any buffering effects. At first glance, this may appear to invalidate our theory; after all, the spouse or child should provide the love and esteem, whereas the friend provides empathy and understanding. However, when we take into account the friend's ability to empathize with the specific conflict situation, it is not surprising that we fail to detect a buffering effect. More specifically, the empathy and understanding that is required by adult children caregivers tends to be in relation to the experience of arguing with a brother or sister over the amount of support and acknowledgement received in the course and scope of acting as the primary caregiver to an elderly parent. As a function of age, friends of the adult child caregiver are unlikely to have had a similar experience and therefore may not be able provide empathy and understanding which is specific to the family conflict situation; hence, we would not expect to observe any buffering effect.

Spousal caregivers who indicated family members only as their source of emotional support were most likely to name two of their children (43 percent). According to our theory, we would not expect to observe any buffering effects from family support because children, even though they are capable of making the caregiver feel loved and esteemed, are unable to empathize with the caregiver's experience of family conflict. More specifically, a child who is born of a different generation encompassing different social values and perceptions of family relations cannot truly understand and identify with the spousal caregiver's experience of family conflict. As previously indicated, our empirical results demonstrate that emotional support from family members only did not buffer the impact of treatment of the caregiver conflict upon depression for spousal caregivers.

Emotional support from the <u>combination of a family member and</u>

friend, however, did buffer the impact of treatment of the caregiver conflict upon depression for our sample of spousal caregivers. As previously stated, spousal caregivers who reported both familial and nonfamilial sources of emotional support were most likely to name a child and a same-sex friend. Theoretically, the child is the one that makes the caregiver feel loved and esteemed, whereas the same-sex friend provides empathy and understanding with respect to the conflict situation. In contrast to the adult child caregiver, the age peer of a spousal caregiver is very likely to have had some experience of conflict with an adult child over issues of support and acknowledgement. Although the circumstances may not have involved caregiving per se, most elderly parents at one time or another have had troubled relations with an adult children who did not treat them according to their expectations. Thus, according to our theory, the love and esteem provided by a child in combination with the empathy and understanding granted by an age peer, may help to explain the buffering effect observed for spousal caregivers in this research.

At this juncture, the question arises as to why siblings and other family members who may be similar in age to the caregiver appear not to function in the same capacity as age peers whom we suggest provide the empathy and understanding that serves as one mechanism whereby emotional support buffers the negative impact of family conflict. Undoubtedly, other members of the caregiver's family network have been exposed to similar social conditions and have internalized the values and beliefs of the caregiver's generation. From our data, we note that less than one-quarter (24.6%) of our sample of spousal caregivers named an age-similar family member (e.g., sibling, cousin, sibling-in-law) as a source of emotional support. There are several plausible explanations. One may be that elderly persons seek emotional support from age peers rather than family members of the same age because chosen relationships are more highly valued than obligatory ones. Also, in the context of caregiving, there may be a reluctance on the part of spousal caregivers to admit to other family members that there is conflict within their nuclear family. Such an admission may be particularly difficult to make within one's extended family network for there may a fear that other relatives will be critical or perceive the caregiver as a unsuccessful parent.

From these analyses, we may conclude that social support does indeed buffer the negative impact of treatment of the caregiver conflict upon depression. Specifically, the data provides only limited support for our hypothesis that familial sources of emotional support function to buffer the negative impact of family conflict (given that this finding was observed for adult children caregivers only). Contrary to expectation, we observed that for spousal caregivers, it is emotional support from the combination of family member and friend (and not family support only) that buffers the impact of treatment of the caregiver conflict upon depressive symptomatology.

CHAPTER XI

WHO ARE THE ADVERSARIES?

To this point, we have addressed the three main analytic questions that derive from our conceptual model for the study of family conflict. We have identified sociodemographic characteristics of caregivers, network factors, and objective conditions of caregiving that influence three dimensions of family conflict. By casting back over the variety of relationships revealed, we were able to develop a generic conceptual framework -- a set of underlying principles that help to organize and explain a plethora of research findings. We also assessed the impact of our three dimensions of conflict upon depression, and we were able to identify the decisive component in relation to depressive symptomatology. This level of specification allowed us to develop hypotheses about the underlying mechanisms by which treatment of the caregiver conflict comes to affect depression. Finally, we have examined the effectiveness of emotional support from family members as a resource which buffers the negative impact of family conflict upon depression. Our hypothesis regarding the primacy of familial sources of emotional support over non-familial sources was demonstrated for adult children caregivers only. For spousal caregivers, we found that emotional support from a combination of family and friends appears to be an effective buffer against the negative impact of family conflict.

The next step in our analyses is to address an issue that is not part of our analytic model, but nevertheless enhances our understanding of relationships observed in this research. Specifically, we will begin to identify the types of family members with whom caregivers are most likely to experience family conflict. In addressing this issue, three general questions are posed: 1) Do spousal and adult children caregivers experience conflict with the same or different categories of relatives? 2) Is the gender of the caregiver a factor in determining which family members are most likely to be named in family conflicts? A corollary issue is whether cross-gender relationships are predictive of conflict between the caregiver and specific types of family members? and 3) Do caregivers tend to experience conflict with the same family members across all three dimensions of conflict, or does the type of family member named vary according to the dimension of conflict under consideration?

As indicated in Chapter 1, for each dimension of family conflict, caregivers were asked to name the family member(s) with whom they had experienced disagreement. Simple frequency counts of the categories of family members named (e.g., son, mother, etc.) on each dimension were generated separately for spousal and adult children caregivers. A further subdivision by gender produced frequencies for male/female adult children caregivers and male/female spousal caregivers. The frequency counts were then used, together with information on family composition (i.e., a breakdown of the number of living relatives in various relationship categories within the caregiver's family network), to calculate the risk associated with having a certain category of family member and experiencing conflict with the same. For example, the risk of experiencing conflict with a daughter is calculated as follows:

$$\text{Conflict Risk} = \frac{\text{Number of caregivers who name a daughter on any conflict dimension}}{\text{Number of caregivers who have a daughter}}$$

The reason for calculating these risk variables is so that we may compare the frequency of conflict across relationship categories. For example, we may compare the risk associated with experiencing conflict with a daughter versus the risk of experiencing conflict with a son. If we were to make these comparisons only using simple frequencies, the results could be misleading. For example, caregivers may name daughters more frequently than sons simply because there are more daughters than sons in the sample. Computation of the risk variables corrects for this problem by controlling for opportunity, thus making it possible to compare across various categories of family members.

Do Spousal and Adult Children Caregivers Experience Conflict with the Same Categories of Family Members?

Table 11.1 summarizes conflict risks for various types of family members. We begin with a discussion of conflict risks for adult children caregivers.

Adult children caregivers are most likely to report conflict with a sibling. This is not surprising since the patient is also their siblings' parent, and there is a strong cultural norm that adult children should share in the responsibilities associated with aging parents. As previously suggested in this research, conflict between the caregiver and a sibling is likely to result from a disparity in the underlying social norms that define appropriate standards for behavior regarding each social actor's responsibilities and obligations to each other and to their aging parent.

Adult children caregivers are also at high risk[8] for experiencing conflict with their mother or father, that is, the living spouse of the Alzheimer's patient. In our sample, there are so few cases where an adult child is the primary caregiver and the spouse of the Alzheimer's patient is alive that this finding would have been overlooked had we not considered conflict risk. It seems reasonable that the spouse of the

TABLE 11.1

CONFLICT RISKS FOR SPOUSAL AND ADULT CHILDREN CAREGIVERS

Relatives with whom conflict Reported	N=326 Spousal Caregivers Conflict Risk	N=210 Adult Children Caregivers Conflict Risk
Son	1 (.34)	5 (.28)
Daughter	2 (.26)	4 (.30)
Spouse	N/A	7 (.20)
Brother	9 (.06)	2 (.57)
Sister	8 (.07)	1 (.64)
Sister-in-law	5 (.15)	8 (.13)
Brother-in-law	6 (.13)	10 (.06)
Mother	5 (.15)	6 (.23)
Father	7 (.08)	3 (.39)
Father-in-law	4 (.21)	11 (.02)
Mother-in-law	3 (.24)	9 (.09)
Son-in-law	11 (.03)	12 (.01)
Daughter-in-law	10 (.04)	12 (.01)
Aunt/Uncle	12 (.01)	7 (.20)
Niece/Nephew	11 (.03)	12 (.01)
Grandchild	12 (.01)	12 (.01)

Rank order with conflict risk in parentheses

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[8] Conflict risks should be considered relative <u>not</u> absolute.

patient, although not the primary caregiver, will figure prominently in the caregiving situation. If the spouse is actively involved in caregiving, conflict is likely to be the consequence of incongruent expectations with those of the adult child caregiver. On the other hand, if the spouse of the Alzheimer's patient is not actively involved, conflict is more likely to be a consequence of violated or unfulfilled expectations, even if there is congruity at the level of shared social norms.

The risk of conflict between adult children caregivers and their aunts/uncles is also quite high. Of course, the aunts and uncles of the adult child caregiver are the sisters and brothers of the Alzheimer's patient. Hence, we anticipate that the caregiver will adhere to certain norms and expectations regarding sibling involvement with the patient and associated caregiving activities. Similarly, the patient's sibling's behaviors will be governed by social norms that may or may not be congruent with those of the primary caregiver. Conflict is most likely to occur when the expectations of the caregiver and those of the patient's sibling are incongruent. This situation may occur often because this particular role relationship probably encompasses significant generational differences in social norms governing definitions of emotionally close relationships and felt obligation.

Thus far, the empirical data provides support for the proposition that adult children caregivers are most likely to experience conflict with family members who are perceived as having ties of emotional closeness and social obligation to the patient. They include the patient's spouse (if alive), patient's other children, and the patient's siblings.

The data also indicates that adult children caregivers are very likely to experience conflict with family members to whom they personally have ties of emotional closeness and social obligation. As reported in Table 11.1, adult children caregivers are indeed at risk for experiencing conflict with persons to whom they probably have their strongest emotional bonds. Specifically, adult children caregivers are at high risk for experiencing conflict with their spouses, sons and daughters. This finding supports the notion that there is a powerful set of social norms that define caregivers' expectations regarding the involvement of their family of procreation in caregiving activities. The relatively high risk of conflict that characterizes these major role relationships suggests that there is not always congruence in the form of expectations and definitions of social obligation within the caregiver's family of procreation.

Conflict risks for spousal caregivers are also presented in Table 11.1. Overall, conflict risks for spousal caregivers are considerably lower than those observed for adult children caregivers. This reflects a general trend toward fewer reports of conflict by spousal caregivers. Like adult children caregivers, spousal caregivers tend to experience conflict with family members whom they are likely to perceive as having ties of emotional commitment and social obligation to either the patient, the caregiver, or both. Conflict risk is highest with sons and daughters of spousal caregivers. This empirical finding is not surprising, particularly since this is an example where the family members (i.e., children) have emotional ties to both the caregiver and the patient. In addition, there are powerful social norms that define childrens' responsibilities and obligations to their elderly parents in times of need or crisis. Spousal caregivers appear to have considerable expectations for their children's involvement in the caregiving (as compared to their expectations for other relatives). We believe that conflict is most likely to occur in parent-child dyads where there are great disparities in social norms and expectations.

In addition, spousal caregivers are also likely to experience conflict with their mothers-in-law and fathers-in-law; that is, the Alzheimer's patient's parents (if alive). This empirical finding is consistent with a theory of emotional investment and social obligation with respect to the patient. We would predict that the patient's parents would be involved, or at least expected to be involved in the caregiving situation, hence creating conflict opportunities.

Sisters-in-law and brothers-in-law are also high on the list of conflict risk persons for spousal caregivers. We assume that these in-laws are the sisters and brothers of the Alzheimer's patient (the data does not permit a conclusive empirical finding on this point, however). Given that brothers and sisters generally have long histories of shared experiences, it might reasonably be assumed that caregivers will have some expectations for the patient's siblings' involvement in the caregiving situation. Of course, the patient's siblings will have their own set of norms and expectations governing their involvement with the patient. Any disparity in relation to the norms and expectations of the caregiver is likely to result in conflict.

A somewhat surprising finding is that spousal caregivers have fairly high conflict risk with their own mothers. This finding may be gender-related and attributable to the fact that mothers and daughters maintain high levels of contact throughout their lives. Research has demonstrated that daughters are known to look to their own mothers as models for caregiving, and tend to turn to her for information, advice and assistance (Adams, 1968; Fischer, 1983; Cohler and Grunebaum, 1981). An examination of conflict risks by gender in this study did in fact reveal that all reports of conflict between spousal caregivers and their mothers are attributable exclusively to the women in the sample.

In summary, it appears that spousal and adult children caregivers do overlap somewhat in the relatives with whom they are likely to experience conflict. Both types of caregivers tend to experience conflict with persons to whom they personally have strong emotional attachments and long histories of shared experience, namely the caregivers' sons, daughters and mothers. Where spousal and adult children caregivers differ with respect to which kin they are likely to experience conflict, these differences correspond to differences in family members' ties of emotional investment and social obligation to the patient. Adult children caregivers have expectations for their siblings, their other parent (if alive), and aunts/uncles. These are the persons who are supposed to share closeness to the patient. Similarly, spousal caregivers have expectations for their mothers-in-law, fathers-in-law, brothers-in-law, and sisters-in-law; again, these are the persons who, in the eyes of the caregiver, should be strongly invested in the patient. In addition, the norms that govern standards for appropriate behavior are specific to each of these role relationships. Both the caregiver and other family members have expectations for one another based on governing social norms. These social norms are not always shared, and we believe that any resulting disparity in expectations and actions, results in conflict.

Is Gender of the Caregiver a Factor in Determining Which Family Members are Likely to Be Named in Family Conflicts?

Table 11.2 summarizes conflict risks for various categories of family members by gender[9] for both spousal and adult children

TABLE 11.2

CONFLICT RISKS FOR SPOUSAL AND ADULT CHILDREN CAREGIVERS BY GENDER

	Spousal Caregivers		Adult Children Caregivers	
Category of Family Member	Male CR	Female CR	Male CR	Female CR
Son	.26	.40	.18	.30
Daughter	.28	.24	.19	.32
Spouse	N/A	N/A	.17	.21
Brother	.05	.08	.53	.58
Sister	.04	.10	.70	.62
Sister-in-law	.12	.17	.09	.14
Brother-in-law	.05	.19	.06	.06
Mother	-	.18	-	.27
Father	-	.13	.17	.45
Father-in-law	-	.33	-	.03
Mother-in-law	.30	.22	-	.12
Son-in-law	.02	.04	-	-
Daughter-in-law	.05	.09	-	-
Aunt/Uncle	-	.03	.01	.18
Niece/Nephew	.01	.04	-	.05
Grandchild	-	.02	-	.02

Differences were not tested for statistical significance.

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[9] Because N=37 for our subsample of male adult child caregivers, these findings should be considered only suggestive of trends in the data.

caregivers. Female adult children caregivers are more likely than their male counterparts to experience conflict with certain categories of family members, including sons, daughters, mothers, fathers, mothers-in-law, and aunts/uncles. This finding may be supportive of a theory that suggests that women have greater involvement in family networks as compared with men. If this characterization of women is correct, we expect women as the "kinkeepers" to be more connected with a wide range of family members because they are more likely than men to have maintained contact with a variety of family members over the years. In other words, women are more likely to have large and active family networks and therefore, greater opportunities for experiencing conflict with a broad range of family members.

The only exception to this general pattern of greater conflict risk for women is in the case of conflict with sisters. Male adult children caregivers appear to have a significantly higher risk of experiencing conflict with sisters, as compared with their female counterparts. One explanation for this finding may be related to the fact that women are socialized into nurturing roles and therefore generally end up assuming primary responsibility for the care of aging parents. If a male adult child takes on the caregiver role involuntarily, it may point to an incongruity in norms and expectations between the brother and sister pair.

Turning now to our sample of spousal caregivers, it is apparent that, once again, women have higher conflict risks for a broader range of categories of family members. Specifically, women have higher conflict risks than men for the following categories of family members:

sons, sisters, sisters-in-law, brothers-in-law, mothers, fathers, and fathers-in-law.

It is interesting that female spousal caregivers are more likely than their male counterparts to experience conflict with a son. A plausible explanation is that female spousal caregivers have high expectations for sons because, quite simply, the "man around the house" has been lost to the disease, and it may seem that there is no better substitute than a male offspring. Sons, however, tend to view their relationship with their mothers as enjoyable, but typically have much less contact and involvement (as compared to daughters) with their mothers (Hagestad, 1974). Therefore, we contend that mothers' expectations for their grown sons often are incongruent with the expectations of their male adult children. When expectations are incongruent and go unmet, conflict may result. Male spousal caregivers, on the other hand, probably have lower expectations for their sons because the latter are not needed to take over traditional male responsibilities and activities. Fathers probably have much higher expectations for their daughters because they require assistance with homemaking activities. Since daughters generally provide the increased attention and assistance (thus decreasing the likelihood of conflict), it is not surprising that male spousal caregivers are no more likely than their female counterparts to experience conflict with daughters.

Female spousal caregivers are also more likely than their male counterparts to experience conflict with their sisters. As previously reported, sister-sister ties are stronger than sister-brother ties. Therefore, it is possible that female caregivers have more frequent interactions and higher expectations for their sisters than do men; hence the increased opportunity for conflict.

Moreover, the fact that female spousal caregivers are more likely than their male counterparts to experience conflict with a living parent is probably indicative of the fact that women tend to maintain closer ties with aging parents. In fact, there is a general social bias toward female-linked networks such that family residence is usually closer to, and interaction greater with, the wife's parents (Adams, 1968; Jackson, 1971; Johnson and Bursk, 1977). This explanation may also be useful in helping to explain the finding that male spousal caregivers are more likely than their female counterparts to experience conflict with their mothers-in-law. Clearly, men are generally more likely to have their mother-in-law living nearby, and given the strength of the mother-daughter relationship throughout life, it is not surprising that male caregivers often encounter difficulties with their mother-in-law (the Alzheimer's patient's mother).

Finally, we note the finding that female spousal caregivers are more likely than male spousal caregivers to experience conflict with brothers-in-law. Assuming that it is the patient's brother to whom they refer, it is not unreasonable to suggest that as a culture we tend to expect more closeness in brother-brother relationships than we do in sister-brother relationships. Presumably, brothers have many parallels in their lives and they have long histories of shared activity and exchange that is believed to foster mutual enjoyment and affection. Apparently, female spousal caregivers who have certain expectations for the relationship between the patient and his brother are often disappointed because the brother has a different set of expectations for that same relationship.

In summary, there appear to be some significant gender differences with respect to the categories of family members who are most likely to be named as caregivers' adversaries. Overall, women are more "at risk" for experiencing conflict with all categories of family members (a few exceptions were discussed). This data also indicates some cross-gender relationships that are important predictors of adversarial relations.

Do Caregivers Experience Conflict with the Same Categories of Family Members Across All Three Dimensions of Family Conflict?

Table 11.3 summarizes conflict risks for spousal and adult children caregivers by conflict dimensions. For both spousal and adult children caregivers, it appears that conflict with a specific category of family member tends to be evenly distributed across all three dimensions of family conflict. For example, a spousal caregiver is as likely to experience conflict with a son on the issues dimension as with a son on the treatment of patient and treatment of caregiver dimensions. A few interesting trends in the data are noted below.

For spousal caregivers, conflict risk with almost every category of family member (sons and daughters excepted) is slightly greater on the issues dimension. One explanation for this phenomenon may be that spousal caregivers have low expectations for the majority of people in their family network because of age considerations. Since the average age of spousal caregivers and their patients is 70 and 73, respectively, we may assume that many members of their family network (i.e., siblings, in-laws, parents) are also in this age range, or even older. Thus, it is not unreasonable to suggest that spousal caregivers will have low-level expectations for older family members (who are more likely to have health problems of their own), especially on the two dimensions of conflict that capture disagreements over the amount and quality of assistance and contact with the patient and the caregiver.

As indicated, the only exceptions to this trend toward higher conflict risk on the issues dimension is noted for sons and daughters. The highest conflict risk for sons is on the treatment of the patient dimension, whereas the highest conflict risk for the daughters is on the treatment of caregiver dimension. It is reasoned that gender may be

TABLE 11.3

CONFLICT RISKS FOR SPOUSAL AND ADULT CHILDREN CAREGIVER BY CONFLICT DIMENSIONS

	Spousal Caregivers			Adult Children Caregivers		
Category of Family Member	Issues	Trtpt	Trtcg	Issues	Trtpt	Trtcg
Son	.18	.20	.18	.13	.14	.11
Daughter	.12	.12	.16	.14	.17	.16
Spouse	N/A	N/A	N/A	.11	.07	.08
Brother	.05	.01	.01	.36	.40	.35
Sister	.06	.03	.04	.46	.51	.41
Sister-in-law	.11	.05	.06	.05	.06	.05
Brother-in-law	.08	.06	.05	.04	.03	.04
Mother	.10	.05	.08	.23	.23	.23
Father	.08	-	-	.36	.25	.21
Father-in-law	.21	.14	.14	-	-	.02
Mother-in-law	.24	.06	.15	.06	.04	.06
Son-in-law	.02	.01	.02	-	-	-
Daughter-in-law	.02	.03	.03	-	-	-
Aunt/Uncle	.01	-	.01	.10	.07	.12
Niece/Nephew	.01	.01	.01	.02	.01	.02
Grandchild	-	.01	.01	-	.01	.01

Differences were not tested for statistical significance.

operating as a factor that is influencing these results. More specifically, it is hypothesized that these findings would hold true for female but not male spousal caregivers. Our results show that women are indeed more likely than men to experience conflict with sons on the treatment of patient dimension, and they are more likely to experience conflict with daughters on the treatment of caregiver dimension. In contrast, male spousal caregivers show similar conflict risks for sons across all three dimensions of conflict, and a similar conclusion holds true with respect to daughters.

Turning now to adult children caregivers, Table 11.3 indicates that the risk of conflict associated with most categories of family members is slightly higher on the treatment of patient dimension, as compared to the other two dimensions of conflict. It is reasoned that adult children caregivers will have larger non-family networks (i.e., friends and co-workers etc.), that is, people with whom they can discuss their problems and receive support and appreciation for their efforts as a caregiver. The fact that most of our adult children caregivers are women lends additional credence to this position given that women tend to place a high value upon support and assistance from friends (Antonucci and Akiyam, 1987; Bell, 1987; Fischer, 1982; Veroff et al. 1983). As a result, it may be that adult children caregivers (especially the women) have lower needs and expectations, and hence less conflict with most categories of family members because they are able to discuss issues and obtain acknowledgment and support from friends.
Our treatment of the patient dimension of conflict, by definition, excludes any non-family involvement since the focus is on the

caregiver's expectations for the actions and attitudes of family members toward the patient. In no way do we expect non-familial involvement with the patient to reduce the caregiver's expectations regarding family members' relationships with the patient. For example, if a non-family member visits regularly, it is unlikely to lower or alter the caregiver's expectations for any family members' involvement and treatment of the patient.

In summary, spousal and adult children caregivers tend to experience conflict with different categories of family members almost equally across our three dimensions of conflict. However, the patterns of conflict are slightly different between the two groups: spousal caregivers are more likely to experience conflict on the issues dimension, whereas adult children caregivers are more likely to experience conflict on the treatment of patient dimension. A few exceptions to this general trend were noted.

Overall, it seems that family conflict functions to explicate what are otherwise implicit norms regarding obligations and expectations associated with specific role relationships within the family role set. These implicit norms appear to vary in relation to the emotional closeness of the relationship and according to both gender and generation. Emotionally "close" and "distant" relationships appear to be culturally defined. Relationships that are defined as "emotionally close" seem to carry with them more social obligation and greater expectations. Also, our findings suggest that conflict arises where there is a disparity between the caregiver's expectations and definitions of obligation and those held by other family members.

CHAPTER XII

DISCUSSION

This research has focused on family conflict as a source of stress among Alzheimer's caregivers. Its primary goal has been to identify and explain antecedents and consequences of family conflict in relation to caregivers' experiences of depression. The analyses of these issues are both extensive and complex, because they address interactional processes in a rich and varied social institution. A plethora of findings has emerged that is not easily amenable to summarization or interpretation. The purpose of this chapter is to highlight and discuss key research findings, theoretical issues, and methodological concerns. We shall not attempt to be exhaustive of all the issues that this research may provoke. Instead, this discussion will be selectively focused on a small number of salient issues, beginning with a discussion of the low levels of family conflict observed in this research.

What accounts for the low levels of family conflict observed in this research?

Previously, we suggested that our empirical findings indicate the presence of a generally shared norm of cooperation among family members in the care of a chronically ill member. The cultural ideal is one of families pulling together and co-existing in harmony throughout difficult periods. We believe that this overarching value or cultural ideal is expressed in the social norms that are operative in families under conditions of chronic caregiving. These social norms appear to have the dual function of both motivating cooperative behavior and controlling conflict behavior. This explanation thus assumes that the low levels of family conflict observed in this research are indeed real and not artifactual.

From an alternative perspective, it can be argued that family conflict is underestimated in this research. It may be that a different set of social norms govern caregivers' willingness to report family conflict. We are socialized to believe that conflict is a negative aspect of family relationships, and in most families conflict is considered a private matter that should be kept within family boundaries. This social norm places limits on the public airing of family conflict; therefore, reporting of family conflict may be socially sanctioned only to the extent that its intensity and significance are minimized. If this explanation is indeed accurate, the low levels of family conflict observed in this research may be attributable, in part, to caregivers' reluctance to report conflict, particularly in cases where disagreement is extreme.

In addition to these socially regulated determinants of family conflict and its reporting, we shall consider three ways in which our methodology may have contributed to the low levels of family conflict observed in this research. First, our family conflict scales were given a narrow focus. It will be recalled that we measured only conflict that occurs within the specific context of Alzheimer's caregiving. We recognize, however, that earlier conflicts and grievances may be reactivated and existing ones intensified under conditions of chronic caregiving. We acknowledge also that the process of caregiving may itself generate a variety of conflicts that are not captured by our family conflict scales. In short, had we the time and resources to query the full range of conflicts that occur both within the context of caregiving and outside of the context of caregiving, we may have found significantly higher levels of family conflict.

Second, the low levels of family conflict observed in this research may be related to our specific definition of family conflict. Family conflict was defined as <u>overt</u> interpersonal disagreement involving the primary caregiver and any family member excluding the patient. This definition draws our attention to an important consideration. We are aware of a certain amount of disagreement that was reported to our interviewers but was not coded because it was considered by the caregiver to be covert as opposed to overt disagreement. Related to this point is the fact that conflict was determined by caregivers' subjective reports. Undoubtedly, many interactions that might have been coded as conflictive by an objective observer were not perceived as such by the caregiver and therefore were not reported in this survey.

Third, our methodology may have yielded low levels of family conflict by placing a burden on caregivers to recall specific events that may have occurred many years earlier. Recall that we asked caregivers to report about conflicts that had occurred throughout all their years as a caregiver. Since the average length of time in the caregiver role approximates 3-1/2 to 4 years for both spousal and adult children caregivers, it is plausible that past conflicts have been simply forgotten and hence, not reported.

The value of dimensionalizing family conflict

We turn now from the general issue of conflict levels to a more specific issue that directly embraces our conceptual model for the study of family conflict. Throughout this research we have emphasized the multidimensional quality of family conflict. Specifically, we have argued that the multidimensional measurement of family conflict is essential in determining the mechanisms and processes by which conflict comes to affect caregivers' health and well-being. It is now time to examine and evaluate the viability of this claim. We do so by asking ourselves one simple question: What have we achieved by dimensionalizing family conflict in this research? The answer to this question is anchored to several key research findings.

First, we found that antecedent factors and conditions relate differentially to our three dimensions of family conflict. This means that conflict is not monolithic; it does not develop under a uniform set of conditions. In order to identify and explain the factors and conditions that lead to family conflict, we must first specify the type of family conflict in which we are interested. For example, the health status of spousal caregivers is related to conflict on both the issues dimension and the treatment of caregiver dimension, but it is not related to conflict on the treatment of patient dimension. If we had failed to dimensionalize family conflict, it would have been an overgeneralization to contend that health status is related to family conflict, for it appears that health status does not have an effect when the conflict is focused on family members' treatment of the patient.

Moreover, clarification of the factors and conditions that differentially affect our three dimensions of family conflict has both clinical and theoretical implications. From a vast array of specific findings, we were able to develop a generic conceptual framework for the study of family conflict. The precise nature of the relationships noted between antecedents and dimensions of conflict helped to shed light on the mechanisms by which social-structural factors come to affect family conflict. The patterns observed in the data have allowed us to assemble the following principles, which, taken together, form the basis of our generic conceptual framework for the study of family conflict.

It is our belief that implicit social norms define caregivers' expectations and definitions of social obligation in relation to other family members. Our theory assumes that family conflict inheres under general conditions involving the degree of congruity in social norms and expectations among the caregiver and other family members. First, conflict may result when there is an incongruity between the operative social norms of the caregiver and those of the family member. Second, conflict may result when there is basic congruity between the operative social norms of the caregiver and those of other family members, but where social-structural constraints function to prevent family members from acting upon felt obligation. Our findings also suggest that social norms vary by gender and generation. We are not surprised by this finding. It is well-recognized that norms vary with social change. And, since cohorts are the bearers of social change, some incongruity in expectations between generations is expected.

To recapitulate, two general principles concerning family conflict and its antecedents have been formulated on the basis of this research: 1) implicit social norms govern all family members' expectations and definitions of obligation within the family context of caregiving; and 2) the degree of congruity between key family members in social norms and associated expectations is the underlying mechanism that determines family conflict. This general conceptual framework is attractive because it provides a parsimonious and integrative explanation for seemingly complex and diverse findings.

From a clinical perspective, these findings are useful in terms of identifying caregivers who may be "at risk" for experiencing a particular type of family conflict. Intervention is indicated in the form of counselling or therapy that attempts to make implicit social norms explicit and to work toward congruity in expectations between the caregiver and other family members. Unlike many other environmental factors that influence health, family conflict can be potentially modified.

Second, we found that conflict over family members' treatment of the caregiver is the only dimension of conflict that is significantly related to depression for both spousal and adult children caregivers. Knowing that a specific type of conflict has a direct effect on caregivers' experience of depression is immeasurably important in terms of shedding light on the mechanisms that link family conflict to health. In this case, we have been able to argue that conflict involving family members' treatment of the caregiver leads to depression through a process termed "diminishment of self" (Pearlin et al., 1981). Specifically, the presence of others who challenge one's performance as a caregiver, as opposed to acting as an important source of validation and confirmation of one's abilities and competence, is likely to be reflected in negative self-evaluations and the diminishment of self. The latter has been causally linked with depression (Pearlin et al., 1981).

The dimensionalization of family conflict also draws our attention to the insignificant findings in this research. We must ask ourselves why two of our conflict dimensions were not related to depression. This question leads us to consider the possibility that our three dimensions of family conflict relate differentially to various health outcomes. When this hypothesis was tested empirically (Semple, 1990), we did in fact find that in this same sample of Alzheimer's caregivers, both our issues dimension and our treatment of the patient dimension of conflict were significantly related to anger as the outcome variable, whereas our treatment of caregiver dimension of conflict dropped out of significance when anger was considered the dependent variable. Had we not dimensionalized family conflict, we may have failed to consider its relationship to other health outcomes. As a consequence, we may have missed the complexities involved in the study of family conflict in relation to caregivers' health and well-being. Further research efforts must attend to this complexity.

How does past history of family conflict relate to present patterns of conflict?

Any study that focuses exclusively on current levels of family conflict is bound to generate questions concerning the role of past conflict in influencing the results. There is little doubt that some of the conflict that we have observed around caregiving may be an expression of conflicts that have arisen earlier and have been brought forth under conditions of chronic strain. However, past history of conflict is only relevant in this research to the extent that it would account for the patterns of relationships observed. For example, past history of conflict would not help to account for the relationship between age and family conflict nor health status and family conflict. In other words, the patterns of family conflict observed in this research are not likely to change even if we included a measure of past conflict levels in our analytic model. However, we do believe that future research should endeavor to examine the relationship between family conflict and health outcome while controlling for past history of conflict.

We turn now to a consideration of a few methodological issues that arise from this research. First, we shall consider the utility of our family conflict scales.

How well did our family conflict scales perform in this research?

The family conflict scales were designed as a tool to answer specific questions about family conflict in the context of Alzheimer's caregiving. We believe that the development of these scales was imperative for understanding the complexity of relationships between this multidimensional construct and health outcome. The family conflict scales allowed us to examine the multidimensional nature of family conflict. We were able to provide clear answers to our questions concerning the antecedents and consequences of our three dimensions of family conflict. Most importantly, we learned that family conflict is not monolithic; in order to capture accurately the dynamics of family life, researchers must treat family conflict as a multidimensional construct. It is widely recognized that the utility of any measurement instrument depends upon its match to the research questions posed. On the basis of this criterion, we may conclude that our family conflict scales performed very well in this research.

The utility of any measurement instrument depends also on its psychometric properties. Our family conflict scales demonstrate good internal consistency reliability. This attribute increases our confidence that we are estimating accurately the relationship between family conflict and its antecedents, and family conflict and health outcome. In addition, our LISREL analyses provide some assurance that the indicators for each of our three dimensions of family conflict are reasonable measures of the underlying latent constructs that we are interested in understanding and explaining.

Our major concern with the scales stems from the shape of their distributions in this research. All three family conflict scales were highly skewed in the expected direction (i.e., the majority of caregivers reporting no conflict). The shape of the distributions may call into question the appropriateness of employing certain statistical techniques that assume normal or multivariate normal distributions. In this research, we have used multiple regression in most of our analyses. Although MRC assumes multivariate normality, the technique has been found to be fairly robust in cases where this assumption has been violated. Therefore, we are confident that our estimates of relationships in this research are reasonably accurate. We caution, however, that users of the family conflict scales must consider the robustness of all statistical technique(s) that will be applied to any data collected through use of these scales. If a statistical technique is highly sensitive to skewed data, an alternative method of analysis should be considered.

The issue of causality

Another important methodological issue in this research concerns the difficulty in establishing causal direction in the conflict-depression relationship. Indeed, we expect that there is a reciprocal link. It is possible that depression may lead to changes in caregivers' expectations concerning the appropriate behavior of other family members. For example, depressed caregivers may increase their expectations for attention and assistance and acknowledgment from other family members. In cases where the caregiver's expectations increase and those of other family members remain stable, the resulting disparity is likely to increase the potential for conflict. For purposes of this study, we can do no more than raise the issue of causality; longitudinal data is required in order to assess the reciprocal links between family conflict and depression.

Another causally ambiguous relationship in this research concerns the one between family conflict and frequency of contact with family members. This relationship is very likely to be reciprocally related. Indeed, family conflict may determine to some extent the frequency of contact with family members. When there is disagreement in a family, those involved often avoid one another for varying periods of time. In cases of extreme disagreement, it can result in an absolute termination of contact for extended periods of time. In this research, we have considered frequency of contact with family members as an antecedent rather than a consequence of family conflict. Although we recognize that the relationship may be reciprocally intertwined, we are fairly confident that our measurement of contact ameliorates the problem to some extent because our measure involved an averaging of contact with all family members. The problem of reciprocal relationships would be much greater if we had considered frequency of contact with specific family members separately as antecedent conditions. In this latter case, we would expect that changes in one would lead to changes in the other.

Directions for Future Research

This research identifies antecedents and consequences of family conflict in relation to depression for a sample of spousal and adult children caregivers to Alzheimer's disease patients. Our findings provide a more detailed and comprehensive understanding of the processes that influence family conflict and those that underlie the relationship between family conflict and health. This research also provides us with many valuable directions for future research, especially directions that sidestep some of the problems discussed here.

This research is limited by the use of cross-sectional data. As previously indicated, we are not able to assess reciprocal links between certain variables and we are not able to deal with change over time. Future research efforts should address both of these issues with the use of longitudinal data. What happens to conflict over time? Does it get worse? Does it get worked out? Is it stable over time? Is change dependent upon the dimension of conflict considered? Is the outcome of change dependent on the context of caregiving? What happens to family conflict when the caregiver institutionalizes the patient or the patient dies? These are just a few of the questions that arise when we consider the duration or stability of family conflict over time and caregiving transitions.

Longitudinal data are also essential for ultimately understanding and explaining the processes by which family conflict comes to influence depression. We have contended throughout this research that conflict over family members' treatment of the caregiver comes to affect depression through a process called "diminishment of self". This hypothesis is not testable with cross-sectional data because we are unable to deal with several possible reciprocal links including the relationships between self-esteem and conflict, self-esteem and depression, and conflict and depression. With longitudinal data, however, we would be able to quantify changes in self-esteem over time, and then examine these changes in relation to family conflict and depression.

Researchers must also consider family conflict in relation to a variety of health outcomes. Does family conflict have an impact on physical health? Does it have an impact on anxiety or anger? Will our three dimensions of family conflict relate differentially to each of these outcomes? Moreover, it may be useful to examine our three dimensions of family conflict in relation to quality of care or the decision to institutionalize. If any links are discovered, we must then focus on the processes that underlie these relationships. The multidimensional nature of family conflict points to the complexities that must be attended to in future research.

Another limitation of this research stems from our failure to consider caregivers' experiences of conflict that exist around issues that are unrelated to caregiving. For example, a spousal caregiver could experience a considerable amount of conflict with a daughter who is about to divorce her husband (i.e., an event unrelated to caregiving). Future research efforts should aim to incorporate this notion of non-caregiving related conflict into our analytic models. It would be productive to sort out the effects of role specific conflict versus more global varieties of family conflict. In addition, it would be useful to assess the joint effects of these two broad domains of family conflict.

Finally, future research efforts should aim to address directly the interactional processes that characterize family conflict. In this research, we relied solely upon caregivers' subjective perceptions of family conflict. As a consequence, we were forced to make some assumptions about the behaviors and motivations of other family members. For example, we have assumed throughout this research that there are many family members who are unable to meet caregiver's expectations because of certain social-structural constraints such as occupational or parental responsibilities. Although such an assumption is perfectly reasonable, we could be more confident in our conclusions if we were able to collect data on background characteristics and conflict perceptions of other family members who interact with the caregiver. It is our position that significant advances in the understanding of family conflict-health relationships will occur only if future studies incorporate the interactional perspective of conflict into their research design and conceptual models.

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APPENDIX I

Study Measures

MEASURES

A. Cognitive Difficulties (alpha =.86)

Now, I'd like to ask you some questions about your (relative's) memory and the difficulty (he/she) may have doing some things. How difficult is it for your (relative) to:

A. Remember recent events (2.8)
B. Know what day of the week it is (3.0)
C. Remember (his/her) home address (2.4)
D. Remember words (2.0)
E. Understand simple instructions (2.2)
F. Find (his/her) way around the house (1.3)
G. Speak sentences (1.7)
H. Recognize people that (he/she) knows (1.5)

Response categories: (4) Can't do it all; (3) Very difficult; (2) Fairly difficult; (1) Just a little difficult; (0) Not at all difficult.

B. Problem Behaviors (alpha = .79)

In the past week, on how many days did you personally have to deal with the following behavior of your (relative)?
On how many days did (she/he):

A. Keep you up at night (1.8)
B. Repeat questions/stories (2.6)
C. Try to dress the wrong way (2.1)
D. Have a bowel or bladder "accident" (1.9)
E. Hide belongings and forget about them (2.3)
F. Cry easily (1.6)
G. Act Depressed or downhearted (2.1)
H. Cling to you or follow you around (2.4)
I. Become restless or agitated (2.6)
J. Become irritable or angry (2.3)
K. Swear or use foul language (1.6)
L. Become suspicious, or believe someone is going to harm (him/her) (1.8)
M. Threaten people (1.3)
N. Show sexual behavior or interests at wrong time/place (1.1)

Response categories: (4) 5/more days; (3) 3-4 days: (2) 1-2 days; (1) No days.

C. Depressive Symptomatology (alpha = .86)

Here I'd like to ask you about your health and how you've been feeling these days. In the past week, on how many days did you have any of these feelings? Was it:

A. Lack of enthusiasm for doing anything
B. Feel bored or have little interest in things
C. Cry easily or feel like crying
D. Feel downhearted or blue
E. Feel slowed down or low in energy
F. Have your feelings hurt easily
G. Feel that everything was an effort

Response categories: (4) 5/more days; (3) 3-4 days: (2) 1-2 days; (1) No days.

D. Activities of Daily Living (alpha = .92)

I'd like to ask you about your (relative's) ability to perform some daily activities. I'm going to read from a list and ask you how much your (relative) depends upon you personally for help. Does (he/she) depend on you:

A. Eating
B. Bathing/showering
C. Going to the bathroom
D. Dressing/undressing
E. Brushing teeth/hair
F. Cooking/preparing food
G. handling money
H. Getting in/out of bed
I. Walking around the house
J. Driving or taking the bus to where (he/she) needs to go
K. Going for a walk in the neighborhood
L. Taking medications
M. Using the telephone
N. Doing housework like sweeping floors/dusting
O. Getting going in an activity

Response categories: (4) Completely; (3) Quite a bit; (2) Somewhat; (1) Not at all; (0) Not applicable.

E. Mastery (alpha =.75)

We all have different thoughts about the kind of people we are and I would like to ask you how you see yourself as a person. How strongly do you agree or disagree with each of the following statements as they describe you personally?

A. There is really no way I can solve some of the problems I have
B. Sometimes I feel that I'm being pushed around in life
C. I have little control over the things that happen to me
D. I can do just about anything I really set my mind to do
E. I often feel helpless in dealing with the problems of life
F. What happens to me in the future mostly depends on me
G. There is little I can do to change many of the important things in my life

Response categories: (4) Strongly agree; (3) Agree: (2) Disagree; (1) Strongly disagree.

F. Health Rating (alpha =.59)

Think of the time before you were taking care of your (relative). Compared to that time is your health now:

Response categories: (5) Much better than it was; (4) Somewhat better; (3) About the same; (2) Somewhat worse; (1) Much worse than it was.

In general, would you describe your physical health as:
Response categories: (4) Excellent; (3) Good; (2) Fair; (1) Poor.

APPENDIX II

Correlation Tables for Spousal and Adult Children Caregivers

TABLE 1. Zero-Order Correlations between Variables in the Original Model for Spousal Caregivers

	Depressl	Famdisl	Trtcgl	Trtptl	Issuesl	Age	Sex
Depressl	1.00						
Famdisl	.31***	1.00					
Trtcgl	.33***	.89***	1.00				
Trtptl	.24***	.86***	.72***	1.00			
Issuesl	.18***	.69***	.42***	.35***	1.00		
Age	-.16**	-.22***	-.12*	-.20***	-.24***	1.00	
Sex	-.30***	-.11*	-.04	-.09	-.15**	.32***	1.00
Educl	-.12*	.01	-.04	.06	.01	-.07	.10
Incomel	-.17**	.06	-.01	.03	.13*	-.07	.15**
Zhlthl	-.47***	-.20***	-.22***	-.07	-.22***	.01	.14**
Visfam	.03	-.03	.00	-.02	-.05	-.07	.02
Telfam	.09	.05	.04	.08	.01	-.05	-.15**
Hsesize	-.02	.06	-.03	.04	.17**	-.26***	-.06
Wthnhr	.01	.05	.01	.05	.06	-.15**	-.03
Gthour	-.05	.00	-.06	.01	.07	-.19***	-.04
Kidl	-.06	.12*	.04	.14*	.13*	-.15**	-.03
Sibl	-.09	-.06	-.09	-.07	.04	-.14*	-.02
Siblawl	.07	.00	-.07	.02	.07	-.25***	-.03
Othrell	-.08	.02	.01	.01	.04	.03	-.03
Probsl	.23***	.16**	.15**	.12*	.11*	-.13**	-.07
Adltotl	-.03	-.05	-.02	-.08	-.03	.16**	.20***
Cogdiffl	-.03	-.11*	-.09	-.13**	-.05	.10	.10
Rcyrsdxl	-.02	-.04	.01	-.02	-.10	-.02	.06
Masteryl	-.49***	-.22***	-.26***	-.18**	-.09	-.02	.11*
Esteeml	-.43***	-.18**	-.22***	-.11*	-.11*	.03	.12*
Efamsup	-.06	-.10	-.10	-.07	-.07	.14**	.11*
Efamfrd	-.05	-.04	-.01	-.01	-.04	-.09	-.05
Mean	1.82	.31	.31	.32	.31	69.76	.42
Standard deviation	.70	.49	.65	.61	.52	8.99	.49
Minimum	1.00	0.00	0.00	0.00	0.00	35.00	0=Female
Maximum	4.00	3.00	3.00	3.00	3.00	88.00	1=Male

*p<.05 **p<.01 ***p<.001 N=326

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl= Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 1. Zero-Order Correlations between Variables in the Original Model for Spousal Caregivers

	Educl	Incomel	Zhlthl	Visfam	Telfam
Educl	1.00				
Incomel	.49***	1.00			
Zhlthl	.11*	.09	1.00		
Visfam	-.18**	-.07	.01	1.00	
Telfam	-.04	.02	-.04	.35***	1.00
Hsesize	-.06	-.04	.05	.07	-.05
Wthnhr	-.16**	-.06	.01	.33***	.25***
Gthour	.01	-.02	.05	-.13**	-.09
Kidl	.00	-.01	.07	.16**	.13*
Sibl	-.22***	-.10	.02	.03	.00
Siblawl	-.01	-.02	-.03	.03	.03
Othrell	-.08	-.06	.11	.18**	.12*
Probsl	-.15**	-.13	-.11*	.06	.06
Adltotl	-.06	-.09	-.07	.13	.01
Cogdiffl	-.04	-.09	-.07	.20***	.04
Rcyrsdxl	.12*	-.03	-.03	.09	.02
Masteryl	.16**	.14**	.34***	.05	.02
Esteeml	.21***	.19***	.34***	.01	.08
Efamsup	-.04	-.04	.03	.15**	.17**
Efamfrd	.08	.05	-.09	.02	.12*
Mean	13.55	30.93	-.01	7.17	13.08
Standard deviation	3.03	19.93	.98	8.52	9.60
Minimum	8.00	2.00	-2.71	0.00	0.00
Maximum	20.00	82.50	2.57	26.00	26.00

*p<.05 **p<.01 ***p<.001 N=326

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 1. Zero-Order Correlations between Variables in the Original Model for Spousal Caregivers

	Hsesize	Wthnhr	Gthour	Kidl	Sibl
Hsesize	1.00				
Wthnhr	.02	1.00			
Gthour	-.06	-.16**	1.00		
Kidl	.14**	.14**	.31***	1.00	
Sibl	.02	.61***	.61***	.08	1.00
Siblawl	.06	.53***	.53***	.07	.34***
Othrell	.06	.27***	.27***	.68***	.11
Probsl	.15**	.00	.05	-.01	.05
Adltotl	.02	-.02	.00	-.09	-.02
Cogdiffl	-.01	.01	-.02	-.06	.03
Rcyrsdxl	-.02	.03	-.11	-.08	-.09
Masteryl	.06	.13*	-.02	.13**	.02
Esteeml	.02	.14**	-.01	.12*	.04
Efamsup	.11*	.22***	-.01	.12*	.09
Efamfrd	-.10	-.03	-.02	-.02	-.02
Mean	1.25	3.54	5.43	2.50	2.10
Standard deviation	.79	3.24	3.95	1.56	1.93
Minimum	0.00	0.00	0.00	0.00	0.00
Maximum	8.00	20.00	20.00	9.00	9.00

*p<.05 **p<.01 ***p<.001 N=326

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 1. Zero-Order Correlations between Variables in the Original Model for Spousal Caregivers

	Siblawl	Othrell	Probsl	Adltotl	Cogdiffl	Rcyrsdxl
Siblawl	1.00					
Othrell	.10	1.00				
Probsl	.06	-.03	1.00			
Adltotl	.10	.01	.20***	1.00		
Cogdiffl	.03	-.02	.10	.66***	1.00	
Rcyrsdxl	.02	-.04	-.09	.33***	.43***	1.00
Masteryl	.00	.11*	-.10	.06	.14**	.07
Esteeml	.03	.10	-.02	.07	.13*	.06
Efamsup	.09	.17**	-.02	.09	.01	.04
Efamfrd	-.09	-.01	.10	.00	.03	.02
Mean	2.66	1.60	1.92	2.65	2.07	3.77
Standard deviation	2.25	1.42	.55	.72	.89	2.76
Minimum	0.00	0.00	1.00	1.00	0.00	0.00
Maximum	12.00	9.00	4.00	4.00	4.00	15.00

*p<.05 **p<.01 ***p<.001 N=326

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 1. Zero-Order Correlations between Variables in the Original Model for Spousal Caregivers

	Masteryl	Esteeml	Efamsup	Efamfrd
Masteryl	1.00			
Esteeml	.58***	1.00		
Efamsup	.04	.02	1.00	
Efamfrd	.11*	.16**	-.49***	1.00
Mean	2.73	3.20	.48	.20
Standard deviation	.47	.47	.50	.40
Minimum	1.00	1.00	0.00	0.00
Maximum	4.00	4.00	1.00	1.00

*p<.05 **p<.01 ***p<.001 N=326

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 2. Zero-Order Correlations between Variables in the Original Model for Adult Children Caregivers

	Depress1	Famdis1	Trtcg1	Trtpt1	Issues1	Age	Sex
Depress1	1.00						
Famdis1	.37***	1.00					
Trtcg1	.38***	.85***	1.00				
Trtpt1	.27***	.89***	.69***	1.00			
Issues1	.31***	.82***	.51***	.59***	1.00		
Age	-.19**	-.33***	-.29***	-.28***	-.28***	1.00	
Sex	-.27***	-.15*	-.13*	-.11	-.15*	-.08	1.00
Educ1	-.19**	-.07	-.13	-.01	-.04	-.12	.08
Income1	-.24***	-.05	-.12	-.01	-.01	-.10	.13*
Zhlth1	-.42***	-.12	-.17*	-.09	-.06	-.07	.09
Marstat1	-.09	-.07	-.11	-.11	.03	.06	-.05
Divsep1	.04	.17**	.22**	.17*	.07	.05	-.15*
Widow1	.05	.01	-.05	.04	-.02	.17**	-.05
Visfam	-.03	-.03	-.09	.01	-.02	.01	.05
Telfam	.05	.14*	.10	.18**	.08	.07	-.13
Hsesize	.10	.02	.00	-.04	.09	-.22**	-.03
Wthnhr	-.02	.18**	.13	.19**	.13*	.04	.05
Gthour	.01	.00	-.01	-.02	.02	.03	-.13
Kid1	.07	.05	.00	.01	.11	.21**	-.18**
Sib1	.16*	.30***	.27***	.31***	.20**	-.22**	.07
Siblaw1	-.12	.00	-.04	-.01	.05	-.06	.02
Othrel1	-.01	-.06	-.06	-.02	-.08	.34***	-.16*
Probs1	.25***	.15*	.15*	.13	.12	.06	-.11
Adltot1	.13*	.06	.05	.05	.06	.09	-.07
Cogdiff1	.01	-.06	-.08	-.05	-.02	.08	-.05
Rcyrsdx1	-.01	.06	.11	.08	-.03	.07	-.05
B9c74	.11	-.10	-.03	-.10	-.13	-.02	-.07
Mastery1	-.54***	-.26***	-.32***	-.23**	-.14*	.09	.19**
Efamsup	-.01	-.05	-.08	-.08	.00	-.07	-.04
Efamfrd	-.09	-.08	-.03	-.07	-.12	-.09	-.05
Mean	1.87	.71	.60	.78	.76	50.56	.18
Std. dev.	.78	.74	.80	.94	.87	9.16	.38
Minimum	1.00	0.00	0.00	0.00	0.00	27.00	0=Female
Maximum	4.00	3.00	3.00	3.00	3.00	71.00	1=Male

Depress1=Depression; Famdis1=Global Family Conflict; Trtcg1=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issues1=Issues Conflict; Zhlth1=CG Std. Health Rating; Marstat1=Married vs all others; Divsep1= Divorced/Separated vs all others; Widow1=Widowed vs all others; Visfam=Freq. of Face-to-Face Contact with Family; Telfam=Freq. of Telephone Contact with Family; Hsesize=No. of Family in Household; Wthnhr= No. of Family Within 1-Hr Drive; Kid1=Children; Sib1=Siblings; Siblaw1= Siblings-in-law; Othrel1=Other Relatives; Probs1=Problem Behaviors; Adltot1=Activities of Daily Living; Cogdiff1=Cognitive Difficulties; Rcyrsdx1=Yrs Since Diagnosis; B9c74=CG Lives With Patient; Efamsup= Emotional Support (Family only); Efamfrd= Emot.support (Family + Friend)

TABLE 2. Zero-Order Correlations between Variables in the Original Model for Adult Children Caregivers

	Educl	Incomel	Zhlthl	Marstatl	Divsepl	Widowl
Educl	1.00					
Incomel	.35***	1.00				
Zhlthl	.12	.28***	1.00			
Marstatl	.03	.52***	.22**	1.00		
Divsepl	-.11	-.28***	-.05	-.56***	1.00	
Widowl	-.05	-.17**	-.24***	-.32***	-.15*	1.00
Visfam	-.04	.08	.10	.23***	-.07	-.12
Telfam	-.03	.04	.00	.20**	-.06	.02
Hsesize	-.07	.18**	.02	.35***	-.16*	-.14*
Wthnhr	-.24***	.04	.05	.30***	-.06	-.06
Gthour	-.02	.06	.06	.26***	-.04	-.06
Kidl	-.23***	.12	.06	.39***	-.01	-.02
Sibl	-.19**	-.17**	-.03	-.14*	.17	-.04
Siblawl	-.03	.09	.09	.36***	-.16*	-.11
Othrell	-.20**	-.03	-.03	.26***	-.04	-.02
Probsl	-.10	-.18**	-.17**	-.10	.07	.11
Adltotl	-.20**	-.22**	-.26***	-.17**	.07	.15*
Cogdiffl	-.14*	-.07	-.14*	.01	-.03	.11
Rcyrsdxl	-.03	.00	-.13	.07	-.12	.10
B9c74	-.12	-.31***	-.17**	-.26***	.05	.06
Masteryl	.09	.25***	.42***	.14*	-.01	.10
Esteeml	.12	.25***	.38***	.18**	-.04	.02
Efamsup	-.04	.14	-.12	.30	-.15	-.06
Efamfrd	-.04	-.15*	-.02	-.36***	-.04	-.03
Mean	14.43	38.35	.04	.54	.21	.08
Standard deviation	2.41	24.46	1.02	.50	.41	.27
Minimum	8.00	0.00	-2.71	0.00	0.00	0.00
Maximum	20.00	82.50	2.57	1.00	1.00	1.00

*p<.05 **p<.01 ***p<.001 N=210

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Marstatl=Married vs all others; Divsepl= Divorced/Separated vs all others; Widowl=Widowed vs all others; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; B9c74=CG Lives With Patient; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 2. Zero-Order Correlations between Variables in the Original Model for Adult Children Caregivers

	Visfam	Telfam	Hsesize	Wthnhr	Gthour	Kidl	Sibl
Visfam	1.00						
Telfam	.47***	1.00					
Hsesize	.05	-.01	1.00				
Wthnhr	.46***	.44***	-.01	1.00			
Gthour	-.01	.08	.07	-.06	1.00		
Kidl	.21**	.30***	.27***	.46***	.45***	1.00	
Sibl	.19**	.18**	.04	.36***	.31***	.05	1.00
Siblawl	.18**	.17**	.16*	.41***	.57***	.24***	.26***
Othrell	.19**	.22**	.07	.43***	.28***	.59***	-.05
Probsl	.08	.12	.08	.06	-.06	.10	-.01
Adltotl	.00	-.06	.21**	-.08	.00	.02	.08
Cogdiffl	-.09	-.12	.19**	-.06	.00	.02	.00
Rcyrsdxl	-.06	-.03	.07	.01	-.04	.00	.06
B9c74	-.13	-.16**	.25***	-.27***	.05	-.10	.09
Masteryl	.04	-.04	-.06	.07	.00	.02	-.06
Esteeml	.09	.07	.00	.09	.04	.11	-.07
Efamsup	.32***	.26***	.16*	.25***	.21**	.37***	.15*
Efamfrd	-.09	.00	-.03	.00	.00	-.11	-.07
Mean	5.73	11.54	1.95	3.82	3.39	2.22	1.69
Standard deviation	8.17	10.41	1.23	3.43	3.48	1.93	1.83
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	26.00	26.00	7.00	16.00	17.00	9.00	11.00

*p<.05 **p<.01 ***p<.001 N=210

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Marstatl=Married vs all others; Divsepl= Divorced/Separated vs all others; Widowl=Widowed vs all others; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; B9c74=CG Lives With Patient; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 2. Zero-Order Correlations between Variables in the Original Model for Adult Children Caregivers

	Siblawl	Othrell	Probsl	Adltotl	Cogdiffl	Rcyrsdxl
Siblawl	1.00					
Othrell	.09	1.00				
Probsl	-.09	.16*	1.00			
Adltotl	-.06	.03	.29***	1.00		
Cogdiffl	-.06	.05	.00	.61***	1.00	
Rcyrsdxl	-.08	.03	-.03	.24***	.32***	1.00
B9c74	-.12	.04	.15*	.56***	.33***	.10
Masteryl	.12	-.09	-.10	-.15*	-.07	-.02
Esteeml	.09	.05	-.12	-.06	.00	.03
Efamsup	.12	.24***	.09	.03	.04	-.09
Efamfrd	.11	-.05	-.09	-.11	-.02	-.02
Mean	2.08	.85	2.04	2.56	2.19	3.49
Standard deviation	2.21	1.22	.61	.81	.83	2.98
Minimum	0.00	0.00	1.00	1.00	1.00	.08
Maximum	11.00	6.00	4.00	4.00	4.00	15.00

*p<.05 **p<.01 ***p<.001 N=210

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Marstatl=Married vs all others; Divsepl= Divorced/Separated vs all others; Widowl=Widowed vs all others; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl= Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; B9c74=CG Lives With Patient; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

TABLE 2. Zero-Order Correlations between Variables in the Original Model for Adult Children Caregivers

	b9c74	Mastery	Esteem	Efamsup	Efamfrd
B9c74	1.00				
Masteryl	-.17**	1.00			
Esteeml	-.11	.67***	1.00		
Efamsup	-.09	-.11	.09		1.00
Efamfrd	-.04	-.03	.04	-.58***	1.00
Mean	.61	2.93	3.19	.39	.35
Standard deviation	.49	.53	.50	.49	.48
Minimum	0.00	1.00	1.00	0.00	0.00
Maximum	1.00	4.00	4.00	1.00	1.00

*p<.05 **p<.01 ***p<.001 N=210

Depressl=Depression; Famdisl=Global Family Conflict; Trtcgl=Treatment of Caregiver Conflict; Trtpt=Treatment of Patient Conflict; Issuesl=Issues Conflict; Zhlthl=CG Standardized Health Rating; Marstatl=Married vs all others; Divsepl= Divorced/Separated vs all others; Widowl=Widowed vs all others; Visfam=Frequency of Face-to-Face Contact with Family; Telfam=Frequency of Telephone Contact with Family; Hsesize=No. of Family Members in Household; Wthnhr=No. of Family Members Within 1-Hour Drive; Kidl=Children; Sibl=Siblings; Siblawl=Siblings-in-law; Othrell=Other Relatives; Probsl=Problem Behaviors; Adltotl=Activities of Daily Living; Cogdiffl=Cognitive Difficulties; Rcyrsdxl=Yrs Since Diagnosis; B9c74=CG Lives With Patient; Esteeml=Self-esteem; Efamsup=Emotional Support (Family only); Efamfrd= Emotional support (Family + Friend)

APPENDIX III

Qualitative Interview Guide

INTERVIEW GUIDE

We know from past research that caring for a person who suffers from problems of memory loss can be very difficult. What we would now like to begin to understand is the effect that this type of condition has upon caregivers' activities and their relationships, particularly with other family members.

General: Let me start by asking you a few questions about ________'s present condition. From your point of view, how is s/he doing?

Probes: How is his/her physical condition, spirits?

Are there things that s/he no longer does for her/himself that s/he used to do? What are they?

How much care does s/he need?

General: Based on your experience as a caregiver, what is it about __________'s illness that is most difficult for you personally?

General: Not let me ask you about your family. Do you have children or stepchildren?

Probes: IF YES, Ask sex, age, marital status, residential proximity, and frequency of contact (face-to-face and telephone) for each child and children-in-law.

IF CONTACT LESS THAN ONCE PER WEEK: Do you ever wish that you could see or speak with your children (in-law) more often than you do now?

General: Sometimes an illness such as __________'s can lead to changes in family relations. Have you noticed any changes in your family?

Probes: Have there been any changes in your relationship with your children (in-law) since ____________ became ill? How have things changed in your family?

Probes: Have there been any changes in the way your children (in-law) get along with each other since ___________ became ill? How have things changed?

General: Do your children ever disagree or argue with each other over matters than involve __________?

Probes: What type of things have they disagreed upon? Do these disagreements ever involve childre n-in-law?

What do you do about these disagreements? Do you ever get involved? Do you stay out of it?

General: Do you try to keep your children (in-law) informed on everything going on at home or are there things that you prefer to keep to yourself?

Probes: Can you tell me why you feel this way?

General: Currently, do any of your children (in-law) doubt or exaggerate the seriousness of ___________'s illness?

Probes: Do you ever argue about the seriousness of his/her illness?

General: Sometimes family members disagree over the best way to care for the patient. Do you and your children (in-law) have differences of opinion about caring for _________ at home?

General: Sometimes caregivers feel that no one really understands how difficult it is caring for a person with _________'s type of problem. Do you feel that your children (in-law) understand and appreciate how much time and energy you give to the care of ____________?

Probes: IF CHILDREN NOT MENTIONED, Do any of your children (in-law) help out with the care of ____________? Which children help out? What kind of help does s/he provide? Is this the kind of help that you need?

Do you expect your children (in-law) to help out? What kind of help do you expect? IF NO, Is it that you don't need help or do you prefer to do it yourself?

IF CHILDREN MENTIONED, Which children (in-law) help out? What kind of help does s/he provide?

Is this the kind of help that you need? IF NO, What kind of help would make things a bit easier for you?

General: Sometimes people who give the most advice help the least. Does this happen in your family?

Probes: When your children give advice do you generally find yourself following it or do you tend to do things your own way?

General: IF LITTLE OR NO CONFLICT, Things seem to be running smoothly in your family with no hard feelings or major disagreements. Is there anything that you do to keep things running smoothly?

Probes: IF YES, What is it that you do? IF NO, Is there something about your family that has always made it relatively easy to get through difficult times without having arguments or disagreements? IF YES, What is it? IF NO, Do you have any words of advice for families who are having arguments or disagreements as a result of their _________'s illness?

General: IF CONFLICT PRESENT, You have indicated a few times throughout the interview that there has been some strain in your family that stems from ___________'s illness. How do you cope with some of the situations that we have talked about? What do you do to make these situations less difficult for you personally?

APPENDIX IV

LISREL Test Procedures

As indicated in Chapter 4, use of the asymptotic covariance matrix requires a large sample size so that the sample variances and covariances can be estimated accurately. Because our sample size of N=210 for adult children caregivers approaches the lower limit of acceptability, we were concerned about the accuracy of the estimates for the asymptotic covariance matrix computed for our sample of adult children caregivers. As a precautionary measure, we tested the same series of nested models as presented in Chapter 4, using 11 (as opposed to 12) items from the family conflict scales. The use of 11 items in our model improved the items to subjects ratio, thereby increasing our confidence that the elements of the asymptotic covariance would be estimated accurately. We compared the results from these additional analyses with those reported in Chapter 4. Note that the patterns are very similar. This finding suggests that the 12 item asymptotic covariance matrix was calculated correctly. Table 1 below presents the results from an 11-item analysis with one item dropped from the issues scale (i.e., placement of patient). Table 2 presents the results from another 11-item analysis with one item dropped from the treatment of patient scale (i.e., lack patience with your relative). These items were excluded on the basis of an exploratory factor analysis which demonstrated their tendency to load on multiple factors.

TABLE 1

11-ITEM MEASUREMENT MODEL FOR FAMILY CONFLICT

Model	L	P	T	CHI^2	df	CHI/df	p	GFI	CHI$^2\Delta$
A (Spouses only)	FREE	FREE	SY	34.7	41	.85	.744	.993	N/A
B (Children only)	FREE	FREE	SY	67.7	41	1.64	.006	.986	N/A
C (Spouses=Children) No Constraints	FREE	FREE	SY	102.4	82	1.24	.063	.986	N/A
D (Spouses=Children)	$L_1=L_2$	FREE	SY	111.5	90	1.23	.062	.986	9.1
E (Spouses=Children)	$L_1=L_2$	$P_1=P_2$	SY	159.3	96	1.65	.000	.981	47.8

SY = Only the diagonals of the theta delta matrix are estimated.

TABLE 2

11-ITEM MEASUREMENT MODEL FOR FAMILY CONFLICT

Model	L	P	T	CHI^2	df	CHI/df	p	GFI	CHI$^2\Delta$
A (Spouses only)	FREE	FREE	SY	42.4	51	1.04	.407	.992	N/A
B (Children only)	FREE	FREE	SY	76.8	41	1.87	.001	.985	N/A
C (Spouses=Children) No Constraints	FREE	FREE	SY	119.3	82	1.45	.004	.985	N/A
D (Spouses=Children)	$L_1=L_2$	FREE	SY	128.8	90	1.43	.005	.984	11.5
E (Spouses=Children)	$L_1=L_2$	$P_1=P_2$	SY	173.8	96	1.81	.000	.979	45.0

SY = Only the diagonals of the theta delta matrix are estimated.

APPENDIX V

Coping with Family Conflict

Coping with Family Conflict

In our pilot interviews, a group of spousal caregivers were asked how they attempt to deal with family conflict when it occurs. Their responses can be organized around the conceptual distinctions of the three functions of coping: (1) to change or manage the situation; (2) to change or manage the meaning of the situation; and (3) to manage the symptoms of stress (Pearlin and Schooler, 1978). Coping responses that function to manage the situation are aimed at altering or eliminating the very source of strain. One such coping mechanism involves negotiation of family conflict ("Of course my daughter and I have our differences about the way he should be cared for, but we've been able to sit down and work it out"). Advice seeking is another coping strategy that functions to manage or control the situation. Caregivers reported attendance at family or individual counseling sessions, or discussed family conflicts with a close friend, a member of the clergy, or a family physician ("I discussed our problem with my doctor and he told me to stop telling my son every little detail because he never believes me anyway"). In circumstances where coping does not succeed in changing the situation, the stressful impact of the problem may be assuaged through responses that function to manage the meaning of the situation in ways that reduce its threatening quality. Caregivers reported the use of two cognitive and perceptual devices aimed at reducing the threatening meaning of the situation. One such device involves the making of positive comparisons. Here a very difficult situation is judged as relatively benign when juxtaposed with the situation faced by another ("I guess our fights are pretty mild compared to some of the stories I hear at my support group"). Positive comparison may also be evoked across time references ("We argue quite a bit but nothing like we did when she was a teenager"). Selective ignoring is another coping device, and one that functions to trivialize the importance of that which is noxious and magnifies the importance of that which is gratifying ("Oh, our fights don't mean much. He's always been a wonderful son"). An entirely different set of coping responses are those that function primarily for the management and control of the stress symptoms. There is a vast array of responses that have the potential to serve this function. Virtually any behavior that assists the caregiver to eliminate or reduce awareness of the distress can be regarded as having the function. Among the behaviors caregivers reported is emotional discharge. This refers to expressive ventilation of feelings as a way of handling family conflict ("I yelled at them. I said, there is no way you're taking over my finances"). Another of this type of coping response is referred to as passive forbearance. Here, caregivers described containment of feelings and avoidance of conflict ("I didn't say anything to her. I just kind of stayed away from her for a while"). A third type of response portrays open recognition of problems in moving toward conflict resolution. This coping response is called self-assertion ("I stuck to my guns and told her that I would never change my mind about putting him away"). Another type of coping response that aims to manage the stress symptoms is called helpless resignation. In the case of spousal caregivers, the adult child is proclaimed as beyond parental influence ("They cause trouble sometimes but what's a person to do. They're all grown up now"). In direct contrast to helpless resignation is a coping response that is called parental potency. Here the parent feels a sense of power and control over children as expressed through ownership of family assets and resources ("I was so upset that he would act that way that I just cut him out of my will"). In summary, a considerable range of coping response were identified. However, it is likely that there exists a much richer array of responses directed at coping with family conflict. It is also useful to recognize that coping is not unidimensional. Caregivers are likely to adopt a number of strategies that serve the various functions of coping described. Future research needs to address the buffering effects of these coping strategies. The primary question is whether or not the strength of the relationship between family conflict and negative health outcome is attenuated by the use of coping strategies that are specific to the stressor.