AN ABSTRACT OF THE THESIS OF

Laura L. Jones-Aust for the degree of Doctor of Philosophy in Human Development and Family Sciences presented on October 9, 1992

Title: Decision-Making Influence Strategies and Relationship Quality Among Elderly Mothers and Their Caregiving Daughters

Abstract approved: Redacted for Privacy
Clara C. Pratt

It is well established that family members, particularly adult children, are involved in their frail parents' decision making. It remains unclear however, how intergenerational decision-making influence is exercised and how it relates to personal and relationship characteristics. This study examined the impact of decision-making strategies and a mother's level of dependence on her daughter on perceived relationship quality as measured by intimacy.

The purposive sample consisted of 64 pairs of elderly mothers and their caregiving daughters. Face-to-face interviews explored the connections of various decision-making influence strategies, demographic characteristics, and relationship quality. Mother's level of dependence on her daughter for assistance was measured by a list of 53 caregiving tasks and activities. A series of four multiple regression analyses was used to predict relationship quality from the decision-making influence strategies (i.e., option-seeking, overt negative, covert negative, positive) used by

elderly mothers and their caregiving daughters and mother's level of dependence on her daughter.

The factors that were most predictive of mothers' perceived intimacy were: (a) mothers' reported use of positive decision-making strategies (e.g., asking partner how she feels, imagining her feelings) and mothers' reported use of fewer covert negative strategies (e.g., ignoring the need for a decision, withholding support); and (b) daughters' reported use of fewer overt negative strategies (e.g., showing anger, irritation, criticizing).

The factors that were most predictive of daughters' perceived intimacy were: (a) daughters' reported use of fewer overt negative strategies (e.g., showing anger, irritation, criticizing); (b) daughters' reported use of positive influence strategies (e.g., asking partner how she feels, imagining her feelings); and (c) mothers' reported use of positive strategies (e.g., asking how she feels, trying to imagine her feelings).

Mother's level of dependence on her daughter was not found to be predictive of mothers' or daughters' perceived intimacy. These results as well as recommendations for future research and practice are presented.

Decision-Making Influence Strategies and Relationship Quality Among Elderly Mothers and Their Caregiving Daughters

by

Laura L. Jones-Aust

A THESIS

submitted to

Oregon State University

in partial fulfillment of the requirements
for the degree of

Doctor of Philosophy

Completed October 9, 1992

Commencement June 1993

APPROVED:

Redacted for Privacy

Professor of Human Development and Family Sciences in charge of major

Redacted for Privacy

Professor and Head of Department of Human Development and Family Sciences

Redacted for Privacy

Dean of Gra

Date thesis was presented October 9, 1992

Typed by Laura L. Jones-Aust

ACKNOWLEDGEMENTS

Many people contributed to the development of this research project. My sincere thanks, in particular, to all of the mothers and daughters who participated in this study.

I want to thank my major professor and mentor, Dr. Clara Pratt for her support and encouragement over the past five years. Her guided questions, thoughts, and input provided me with much intellectual stimulation, which, in turn, led to the development and refinement of this research study.

I would also like to acknowledge and thank the members of my committee, Dr. Anisa Zvonkovic, Dr. Alexis Walker, Dr. Margaret Smith, and Dr. Arlene Holyoak, who were so supportive. I will always be grateful for having benefitted from their guidance. Special thanks to Dr. Darren Pennington for his friendship and statistical consultation.

Thanks are also given to my fellow graduate students, Sally Martin, Glenda Madden and Linda Ladd for their friendship, support, and suggestions throughout my graduate work.

I am grateful for the generosity of the Wood/Foster Fellowship, Schild-Nicholson Graduate Scholarship, and the Professional Home Economics Scholarship which provided funds to help me survive the last few years of commuter schooling between California and Oregon.

Loving thanks to my best friend and husband, Ken, who shared and endured the rewards and pain of my graduate work and encouraged me through it all. I could not have completed this without his support and understanding. Also to our daughter Caroline, whose easy-going nature made it easier to study and who helped me with greater understanding of the mother-daughter relationship.

Finally, I would like to pay tribute to my parents who instilled in me a desire to learn. A special thanks to my father for never doubting that I could succeed, and to my late mother whose acceptance, love, and encouragement has provided me with a strong base in which to live my life.

TABLE OF CONTENT

LIST OF TABLES

Decision-Making Influence Strategies and Relationship Quality Among Elderly Mothers and Their Caregiving Daughters

I. INTRODUCTION

Family members, particularly adult children, are involved not only in their frail elders' care but also in their decision making (Buchanan & Brock, 1989; High, 1988; Horowitz, Silverstone, & Reinhardt, 1991, Jecker, 1990; Pratt, Jones, Shin, & Walker, 1989; Townsend & Poulshock, 1986). It remains unclear, however, how intergenerational decision-making influence is exercised and how it relates to personal and relationship characteristics.

Two areas of study were reviewed to address the issue of intergenerational decision making within the caregiving context. These areas are: (a) Intergenerational family caregiving (Brody, 1985; Horowitz, Silverstone, & Reinhardt, 1991; Johnson & Catalano, 1983; Stoller, 1983; Townsend & Poulshock, 1986; Walker & Pratt, 1992); and (b) Decision making within a family (High, 1988; Pratt, Jones, & Pennington, 1992; Pratt, Jones, Shin, & Walker, 1989; Scanzoni & Polonko, 1980; Scanzoni & Szinovacz, 1980; Spiro, 1983).

Family Caregiving to the Elderly

It is estimated that 80% of all care required by the frail elderly is provided by family members (Brody, 1985; Morris & Sherwood, 1983-84). When the spouse is

unavailable, an adult child provides for the emotional, social and/or physical needs of an aging parent (Stone, Cafferata & Sangl, 1987). While the type and intensity of assistance needed varies from person to person, adult children caring for their elderly parent(s) can now expect to provide more care and more arduous care for longer periods (Brody, 1986).

The majority of adult child caregivers are middle-aged women who may face competing demands (Hess & Waring, 1978; Johnson, 1983) and declining health, energy, and finances (Sheehan & Nutall, 1988). Care receivers are typically unmarried women (Abel, 1986) who are over the age of 75 (Stone, Cafferata, & Sangl, 1987). While some elderly are frail, in poor health, and need a great deal of assistance (Abel, 1986; Seccombe, Ryan, & Austin, 1987), others are in good health and need little assistance (Stoller, 1983; Walker & Pratt, 1991).

Parental caregiving involves adult children providing assistance which is ". . .necessary in that it fulfills needs that could not be met by the mother on her own" (Walker & Pratt, 1991, p. 9). It is an intensification of lifelong interdependence between generations. Parental caregiving is determined by the needs and resources of each family member (Bromberg, 1982-83; Hess & Waring, 1978). In a parent-caring relationship, adult children may provide assistance with personal care (e.g., bathing, dressing),

instrumental activities (e.g., house cleaning, cooking, shopping, transportation), emotional support, and bureaucratic mediation (Brody & Schoonover, 1986; Walker et al., 1991).

Elderly parents may reciprocate by providing financial and/or emotional assistance (Mancini & Blieszner, 1989; Walker, Pratt & Oppy, 1992). Research also indicates that elderly parents and their caregiving children exchange decision making assistance (Horowitz, Silverstone, & Reinhardt, 1991; Pratt, Jones, & Pennington, 1992; Pratt, Jones, Shin, & Walker, 1989; Smerglia, Deimling, & Barresi, 1988; Townsend & Poulshock, 1986) in several areas including daily care, routine and major health, routine and major financial, and housing.

Family Decision Making

Early research on decision making concentrated on who made decisions (Safilios-Rothschild, 1969). Contemporary decision making theorists view decision making between family members as involving three dimensions: the context of the decision (focusing on the importance of personal characteristics), the process of the decision, and the outcome of the decision (Huston, 1983; Scanzoni & Szinovacz, 1980). Furthermore decision making involves a cyclic, reciprocal process in which an action of one partner leads to an action on the part of the other (Hill & Scanzoni, 1982; Huston, 1983; Scanzoni & Szinovacz, 1980).

The decision-making process includes the use of influence strategies to change the affect, cognition, and/or behavior of another family member (Huston, 1983; Kranichfeld, 1988). Examples of influence strategies include verbal persuasion, competitive-coercive actions that are active (e.g., anger, crying) or passive (e.g., "clam up," leave), and violence (Scanzoni & Szinovacz, 1980).

The outcome of decision making has been widely investigated by researchers interested in the marital dyad (Scanzoni & Szinovacz, 1980), consumer spending habits (Davis, 1976; Spiro, 1983), and long-term care placement (Moody, 1985; Pace & Anstett, 1984; Townsend, 1986; Wetle, 1985a). While the outcome of decision making does not provide complete information on how decisions are made, it may provide further insight on the extent to which an actor's influence strategies are successful (Szinovacz, 1990).

Decision Making in Aging Families

Few guidelines exist to assist families in decision making concerning elderly members (Pratt, Schmall, & Wright, 1987). Families may struggle between paternalism, in which younger members attempt to protect their elderly family members, and personal autonomy in which family members highly value the elders' freedom to make their own choices (Horowitz, Silverstone, & Reinhardt, 1991; Pratt, Schmall, & Wright, 1987).

The concept of "consultive autonomy" has also been described as common in aging families (Cicirelli, 1988; Pratt, Jones, Shin, & Walker, 1989; Townsend & Poulshock, 1986). Consultive autonomy describes the family's involvement in elders' decisions and occurs when the elderly person consults other family members before making decisions.

Intergenerational Relationship Quality and Decision Making

Relationship quality is a multidimensional construct encompassing such terms as affection, getting along, and closeness. Walker and Thompson (1983) used factor analysis to develop a measure of relationship quality that consisted of several separate constructs. One of these constructs was intimacy.

Family decision making is recognized as related to families' interpersonal relationships (Horowitz, Silverstone & Reinhardt, 1991; Paolucci, Hall, & Axinn, 1977; Townsend & Poulshock, 1986). Yet decision making and relationship quality involving elderly parents and their caregiving children has received little research attention. One recent study by Pratt, Jones, and Pennington (1992) has identified an association between perceived ease of the relationship and the influence strategies used in intergenerational decision making. Through a factor analysis, they found the influence strategies used by elderly mothers and their caregiving daughters included positive strategies, overt negative strategies, covert negative strategies, and option-

seeking strategies. Their results reveal that women who perceive their relationship as "easy" reported similar amounts of positive influence strategies as women who perceived their relationship as "difficult." However, women who perceived their relationship as being more difficult reported higher use of negative influence strategies.

Summary

Decision making includes at least three dimensions: the decision context (i.e., personal characteristics); the decision process (i.e., influence strategies); and the decision outcome (Scanzoni & Szinovacz, 1980). Most research on decision making has focused on decision outcomes and who is involved rather than on how decisions are made. It is well established (Horowitz, Silverstone, & Reinhardt, 1991; Pratt, Jones, & Pennington, 1992; Smerglia, Deimling, & Barresi, 1988; Townsend & Poulshock, 1986) that family members are involved in their elders' decision making and that in most cases, the elder retains the "final say" in the decision outcome. However, more information is needed to understand the decision-making influence strategies among elderly mothers and their caregiving daughters and how these strategies relate to personal characteristics and relationship quality.

Purpose of the Study

This study examined the association of influence strategies used in decision making, personal characteristics (i.e. generation, mother's level of dependence on her daughter for assistance), and the quality of the mother-daughter relationship. In recognition of the importance of both individuals' perceptions of decision making, both elderly mothers and their caregiving daughters served as respondents. Self-report measures of relationship quality, decision-making influence strategies, and caregiving characteristics were studied.

II. REVIEW OF THE LITERATURE

Family Caregiving to the Elderly

It is estimated that 80% of the care provided to the elderly in need of assistance is provided by family members (Brody, 1985; Morris & Sherwood, 1983-84). This section reviews family caregiving to the elderly with emphasis on: (a) the caregiving characteristics of the caregiver and care receiver, and (b) the mother/daughter bond as it relates to family caregiving.

Overview of Family Caregiving To The Elderly

Caregiving has become a normative life experience. People can now expect to provide some level of assistance to one or more elderly family members at some point in their lifetimes (Brody, 1986). Several circumstances have contributed to the increased occurrence of caregiving. The first and most dramatic influence is the increase in longevity (Brody, 1986; Mancini & Blieszner, 1989; Riley, 1983; Stueve & O'Donnell, 1984). A century ago, one or both parents were likely to have died before their children were adults (Riley, 1983).

Life expectancy has increased due to reduced mortality and life-saving medical technology (Treas, 1977). Acute diseases, which once accounted for most deaths early in the century, have been supplanted by chronic diseases (Brody, Poulshock, & Masciocchi, 1978). Most chronic disease can be

well-managed, but with advancing age there often is an increase in need for assistance for those afflicted.

Providing care to an elderly parent most often involves shopping and errands, transportation, meal preparation, personal care, financial assistance, home maintenance, emotional support, and/or service arrangement (Brody & Schoonover, 1986; Stoller, 1983; Troll, 1971; Walker & Pratt, 1991). Helping the elderly parent may also involve giving advice and making major and minor decisions (Hansson et al., 1990; Mancini & Blieszner, 1989; Pratt, Jones, Shin, & Walker, 1989). The result of increasing disability and need for assistance in the elderly is that ". . .adult children now provide more care, and more difficult care to more elderly parents over much longer periods of time than ever before in history" (Brody, 1986, p. 177).

It is conservatively estimated that 5 million adult children are providing assistance to an elderly parent at any given time (Brody, 1985). In contrast to the care that is provided to a small child, parent caregiving involves sustained or increasing dependence on the caregiver for physical and emotional assistance (Archbold, 1982).

Caregiving Characteristics

A family caregiver is a family member who provides for the physical, emotional, and social needs of a chronically ill or frail spouse, parent, or relative (Stone, Cafferata, & Sangl, 1987). While the spouse of an elderly person in need of care is frequently the care provider, children or

other relatives become caregivers if the spouse is not available (Shanas, 1979; Soldo & Myllyluoma, 1983). Caregiving to a unmarried elderly person is most often provided by a daughter (Brody, 1986; Lang & Brody, 1983; Morris & Sherwood, 1984; Seccombe, Ryan, & Austin, 1987; Stoller, 1983; Troll, 1971). If a daughter is not available, caregiving is provided most often by a daughter-in-law. Besides gender, other criteria to influence who will provide care to the elderly parent. According to one study, the caregiving child will be the eldest, the closest in geographical proximity, the most responsible, and the most free of other family obligations (Archbold, 1980).

As stated before, the typical adult-child caregiver is a married woman with children (Archbold, 1982; Brody, 1981; Lang & Brody, 1983; Stueve & O'Donnell, 1984; Stone, Cafferata, & Sangl, 1987). Half are aged 40 to 59, with approximately 10% aged 60 and over. Between 40% and 60% work outside the home and one-third are the sole providers of care. Two-thirds of family caregivers live in households separate from that of the care receiver. While a majority of caregivers describe their current health as good, the young-old (age 55 to 74) children caring for their old-old parents (age 75 and over) may also be faced with their own declining health, energy, and finances (Brody, 1986; Sheehan & Nutall, 1988; Treas, 1977).

Care receivers, according to Lang and Brody (1983) and Stone, Cafferata, and Sangl (1987), are typically female

with a mean age range between 76 and 81. Approximately 20% are 85 or older. Most are unmarried and live alone. While often faced with an increasing chance of chronic disease and disability, most older people report their health as good.

Walker and Pratt (1991), in comparing aid given by adult daughters to self-sufficient elderly mothers to aid given by adult daughters to dependent elderly mothers found that both groups of daughters gave aid to their mothers in the same areas (e.g., indoor maintenance, food preparation). However, daughters with dependent mothers reported more frequent and more time spent in aid-giving. This aid pattern suggests that caregiving is a continuation of pre-existing aid-giving which develops over time in female intergenerational relationships.

Mother/Daughter Bond and Caregiving

Research findings suggest that there is an enduring bond between mothers and their daughters (Boyd, 1989; Bromberg, 1982-83; Hess & Waring, 1978; Stueve & O'Donnell, 1984; Troll, 1987). Considerable research has been devoted to the role of daughters as primary care providers to elderly mothers (Abel, 1986; Archbold, 1982; Brody & Schoonover, 1986; Bromberg, 1982-83; Pratt, Jones, Shin, & Walker, 1989; Troll, 1987; Walker & Allen, 1991).

The predominance of women as caregivers in our society results from the socialization of women to be nurturers (Gilligan, 1983; Troll, 1987) and the "special relationship" felt between mothers and daughters (Bromberg, 1982-83; Hess

& Waring, 1978; Troll, 1987). Brody and Lang (1982, cited in Troll, 1987) found that older mothers ". . .wanted the affection and emotional support that only women could give" (p. 295). In reviewing intergenerational relationships through the life span, Troll (1987) found significant gender differences. Over the adult years, daughters strengthen their vertical ties with their parents while sons transfer these ties to their wives or wife substitutes. As a result it is the daughter who most often takes on the primary responsibility for assisting and caring for her aging parents.

In examining the parent/child relationship in later life, Hess and Waring (1978) found that continued socialization, norms of reciprocity, and enduring rewarding relationships preserve intergenerational relationships in later life. While growing old does not mean that past conflicts and problems disappear, most research suggests that elderly parents and their adult children do maintain some form of positive relationship throughout their lives (Brody, 1985; Hess & Waring, 1978; Shanas, 1979; Thompson & Walker, 1984; Troll, 1971).

Stueve and O'Donnell (1987) stated that the bond between the adult child and elderly parent is best envisioned as an extension of the relationship which developed early in the life cycle. Walker and Pratt (1991) support this, describing caregiving as an intensification of the earlier life cycle assistance evident in female

intergenerational relationships. In summary the mother-daughter bond appears to be important in intergenerational caregiving.

Family Decision Making

Three important concepts emerge from the literature on family decision making. First, decision making involves at least two people who work in joint action. Second, there are common patterns of decision making between partners that remain fairly constant across all decision-making areas. Third, decision making is multi-dimensional with three distinct domains: the context, the process, and the outcome of the decision.

Early research on decision making often excluded the decision-making process and focused on the context and outcome of the decision. Current research more often focuses on the process of decision-making in order to understand how decisions are influenced and made (Huston, 1983; Godwin & Scanzoni, 1989a, 1989b; McDonald, 1980; Scanzoni & Szinovacz, 1980; Spiro, 1983). This text will summarize research on the context and outcome of decisions, followed by current work on decision-making processes.

Decision Making Context and Outcome

Early research on decision making identified a variety of resources used to influence another person's decisions. Based on social exchange theory, personal characteristics, as well as the availability of resources, are critical in

understanding the decision making context (McDonald, 1980; Scanzoni & Polonko, 1980; Scanzoni, 1979; Scanzoni & Szinovacz, 1980). While the resource names vary according to author, their composition remains roughly the same. The five most commonly mentioned resources are tangible resources, intangible resources, bargaining power, affective resources, and mutuality. Tangible resources include a person's education, job status, and income (Scanzoni & Polonko, 1980; Scanzoni & Szinovacz, 1980; Huston, 1983). Intangible resources involve personal characteristics including a person's self-concept, perceptions, personality, skills, and age (Huston, 1983; McDonald, 1980; Scanzoni & Szinovacz, 1980; Spiro, 1983). Bargaining power involves the nature of the decision including the importance of the issue (Scanzoni & Polonko, 1980; Spiro, 1983).

The last two resources, affective resources and mutuality, are both relevant to the personal relationship between the decision makers. Affective resources include the level of involvement of the pair and the degree of emotional dependence of one person on the other (McDonald, 1980). Mutuality involves feelings of cooperation, trust, fairness, and empathy (Scanzoni & Szinovacz, 1980). Perceptions of mutuality result from decision-making interactions, and, through these perceptions, prior decision-making experiences affect current decision-making experiences (Scanzoni & Szinovacz, 1980).

Research on decision-making outcomes has also received much attention and has most often examined who has the final say in the decision (Safilios-Rothschild, 1970). Scanzoni and Szinovacz (1980) have criticized this outcome approach, arguing that outcomes are more complex than just who has final say. Decision-making outcomes range from a mutual solution agreement to one person dominating the will of the other. Much of the early research on decision-making outcomes, however, focused on one member of the decision-making dyad and assessed decision making by a single-item measure (i.e., who made the decision). Researchers now realize that decision making cannot be reduced to a single instantaneous event such as who decided; rather it is a sequence of events (Scanzoni & Szinovacz, 1980).

Decision-making Processes and Influence Strategies

During the past decade considerable research has focused on the third dimension of decision making, that is, the processes of interpersonal influence during decision-making. By definition, influence in decision-making involves the interactional techniques people employ in their attempts to gain control. Some of these techniques include assertiveness, negotiation, persuasion, and other direct and indirect acts to modify decision-making processes (McDonald, 1980; Scanzoni & Szinovacz, 1980). In short, influence involves the affective, cognitive, and/or behavioral attempts that one person uses to influence another person (Huston, 1983).

Individuals show consistent patterns of influence attempts across decision-making areas (Hill & Scanzoni, 1982; Scanzoni & Szinovacz, 1980). Research also shows that current decisions are influenced by past decision-making techniques and outcomes (Davis, 1976; Scanzoni & Szinovacz, 1980). Simply put, exchanges occurring early in the relationship form patterns that are reported by family members over their lifetimes (Scanzoni & Szinovacz, 1981).

People employ various strategies to influence those around them; these strategies have been described in various ways. Some authors use dichotomous terms to describe influence strategies such as overt/covert (Safilios-Rothschild, 1970), intentional/unintentional (Huston, 1983), and direct/indirect (McDonald, 1980). Others have used descriptive terms such as verbal persuasion (Davis, 1976; Scanzoni & Szinovacz, 1980) and coercion (Godwin & Scanzoni, 1989a; Scanzoni & Szinovacz, 1980). Unfortunately, these terms often leave the reader with more questions than answers in trying to understand the concept of influence strategies. For example, the terms overt and covert behavior or action as used by Safilios-Rothschild (1970) could confuse readers. A reader might equate overt and covert with other dichotomous terms such as positive and verbal for overt and negative and nonverbal for covert. Imprecise terms such as these can lead to misunderstanding and misinterpretation of data. Scanzoni and Szinovacz

(1980) state that descriptive phrases conceptualizing influence strategies may be most useful.

Decision Making in Aging Families

Past decision-making research concerning the elderly often examined the ethics of autonomy and competence of the elderly (Buchanan & Brock, 1989; Lynn, 1985; Thomasma, 1984). While early studies failed to explore the role of family involvement in decision making, some recent studies have explored the role of the family in aiding and making decisions for elderly family members (Buchanan & Brock, 1989; High, 1988; Horowitz, Silverstone, & Reinhardt, 1991; Jecker, 1990; Pratt, Jones, Shin, & Walker, 1989).

Decision-Making Context and Outcome

Research conducted on the context in which the elderly make decisions reveals the presence of family decision-making networks (Smerglia, Deimling, & Barresi, 1988; Townsend & Poulshock, 1986). Analyzing the decision-making and support networks of impaired elders within the family caregiving context, Townsend and Poulshock (1986) found that the personal networks in which decisions were made were smaller than the caregiving networks. Data from 101 impaired elders, 182 adult children, and 39 spouses revealed all subjects agreed that immediate family members aided in decision making about the elders' lives. In this same study differences in decision-making networks were found by marital status. While widowed elders were less likely than

married elders to delegate primary influence to anyone, most widowed elderly said their child(ren) had an influence in decision making. Married elders were less likely to stress the role of the adult child than were the adult children. Adult children were also more likely than their parents to include more people in the decision-making network than their impaired parents. Townsend and Poulshock (1986) also found that parents and their adult children most often reported the elderly parent(s) as the most important decision-maker. Smerglia, Deimling, and Barresi (1988) reported similar results in their study which explored racial differences in helping and decision-making networks.

Studies conducted by Cicirelli (1988) and Pratt, Jones, Shin, and Walker (1989) support the findings of Townsend and Poulshock (1986) and Smerglia, Deimling, and Barresi (1988). Cicirelli's (1988) research on decision making and helping relationships reveals that decision-making interactions between elders and family caregivers often involve "consultive autonomy" in which elderly family members consult with other family members about decisions, but the elder retains the final say in the decision outcome.

Pratt, Jones, Shin, and Walker (1989) also found that a majority of mothers and daughters said the mothers had the final say in decision-making. There was, however, a significant association between the mothers' final say and the type of decision being discussed. Both mothers and daughters reported that mothers were more likely to have the

final say in routine health and financial decisions and less likely in major health and financial decisions. This high level of involvement of the elderly person in decision making reveals the ". . .respect that elderly people themselves and their families give to self-rule in decision making" (Pratt, Jones, Shin, & Walker, 1989, p. 796).

Decision-making investigations conducted in medical settings have indicated that families are often involved in decisions that are made concerning their elderly members (Coulton et al., 1982; High & Turner, 1987; Jecker, 1990; Moody, 1987; Thomasma, 1985; Townsend, 1986; York & Calsyn, 1977). Furthermore, medical decisions are typically made within the family context (High, 1988), and many investigators recommend that family members should be involved in the decision-making process whenever possible (High & Turner, 1987; Paolucci, Hall, & Axinn, 1977; Van Meter & Johnson, 1985).

In summary, the context in which decisions are made and decision outcomes remain important in understanding decision making in aging families. However, it is evident that to understand family decision making thoroughly, the complex process of influence strategies used in decision making must be further examined.

Decision-making Processes

A number of investigators have examined the steps involved in decision making. Three steps have been identified: (a) recognizing that decisions need to be made

(Guttman, 1978; Scanzoni & Szinovacz, 1980; Van Meter & Johnson, 1985); (b) identifying and weighing the alternatives (Aroskar, 1980; Meeker, 1971; Van Meter & Johnson, 1985); and (c) selecting the best option (Paolucci, Hall, & Axinn, 1977; Van Meter & Johnson, 1985).

Decision making, however, does not always occur in such systematic order. Some research indicates that older people and their caregivers move back and forth among steps in this rational, linear process (Aroskar, 1980). Van Meter and Johnson (1985), interviewing elderly nursing home patients and their families, found that most people did not follow a rational decision-making process in making the decision for the elder to enter a nursing home. Plagued by doubt, fear, worry, and guilt, the study participants reported that they did not take the time to analyze the situation thoroughly, thus making a hasty decision with the belief that it was "good enough."

Furthermore, research conducted in long-term care settings reveals that frail elderly patients were often not consulted in decisions involving them (Wetle et al., 1988). Instead, families wanting to protect the elder from further stress and difficulties "paternalistically" made ad hoc decisions concerning their elder (American Health Care Association, 1982). Based on the ageist assumption that being old equals being incompetent, the practice of paternalism often involves coercion and deception (Wetle, 1985a). At its worst, paternalism is employed even if the

person is capable of making decisions. Paternalism can lead to learned helplessness and dependency (Wetle, 1985b) and an internalized sense of incompetence (Kuypers & Bengtson, 1973).

In contrast, autonomy is the individual's right to self-determination, the right to make his or her own choices (Wetle, 1985c). It involves decisions which are ". . . voluntary and intentional, and not the result of coercion, duress, or undue influence" (p. 30). Few decisions made by the elderly are fully autonomous (Wetle, 1985a).

For families involved in an elder's decision making, there are few guidelines as to whom should participate and when paternalism is justified (Pratt, Schmall, & Wright, 1987). In addition, ". . .it is sometimes hard to be clear when (decision-making) intervention is paternalistic and when (an elder's) autonomy is actually being respected" (Moody, 1985, p. 7). As a result many families may struggle between paternalism and respecting their parent's personal autonomy.

Parents and children develop their own mutual understandings and idiosyncratic strategies over the course of their lifetimes (Stueve & O'Donnell, 1984). When others must make decisions for them, virtually all elderly prefer family members to carry out surrogate decision making (Pratt, Jones, Shin, & Walker, 1989; Townsend & Poulshock, 1986). As such, family members make a substitute judgment based on their knowledge of the incompetent person's values

and preferences, rather than what the decision-maker may believe is "best" for that incompetent person (High & Turner, 1987; Jecker, 1990). High (1991) found that, as a group, "the elderly are less concerned with whether decisions will be made on the basis of substitute judgment or best interest. . .than they are concerned that family members serve as the surrogates" (p. 616).

If a family member does not have decision-making responsibility for the elder, he or she may try to influence the elder. One strategy to influence a decision-making elder that has received much research attention in the past is giving advice. Starting early in the individual's life, Riley (1983) found that family members have a continuing need for advice and emotional support to cope with our ever-changing society. While the presence of advice-giving occurring between generations cannot be denied, the degree and amount of this advice is less clear.

For example, an early study by Streib (1965) of 291 elderly men and adult children found that both parents and children reported equal amounts of advice were given by each to the other. Conversely, Bromberg (1982-83), in her study of 75 mother/daughter pairs, found that while almost all the daughters in her study reported they had assisted their mothers in making important decisions, the mothers disagreed. In addition, while mothers reported giving little advice to their daughters, daughters reported receiving considerable advice.

Explanations for the differences in these studies are difficult to find. Neither study describes its sample well. Differences could be explained by dissimilar samples. The twenty year span of time between the studies may also have contributed to the different findings. These studies might also reflect gender differences since elderly men were interviewed by Streib and elderly women were interviewed by Bromberg. Furthermore, advice-giving was not the central focus of either study.

While advice-giving is one way to influence another's decisions, Pratt, Jones, and Pennington (1992) found decision-making influences include option-seeking strategies (i.e., suggesting different options), overt negative strategies (i.e., showing anger or irritation), covert negative strategies (i.e., withholding support if decisions are made with which you disagree) and positive strategies (i.e., giving relevant information). Results from this study revealed intergenerational differences existed in the use of various influence strategies. Specifically, daughters were more likely than mothers to use option-seeking strategies and overt negative strategies. Daughters were also more likely to perceive that their mothers used negative decision-making strategies than visa versa. Furthermore, daughters were more influential when mothers were less involved in their own decision making, had less confidence in their own decision-making abilities, and were

more dependent for care (Pratt, Jones, Shin, & Walker, 1989).

In summary, research on decision making and aging families reveals the central role of involvement of family members and elderly in decision making about elders' lives. Both adult children and their elderly parents report that the elders often retained the final say in decisions that involved them (Cicirelli, 1988; Pratt, Jones, Shin, & Walker, 1989; Townsend & Poulshock, 1986). While family members reported that they often did not have final say, their involvement in the decision-making process took the forms of consultive autonomy and attempts to influence decisions through various strategies.

Intergenerational Relationship Quality

Over several years, research published on family relationships has explored a myriad of variables in order to understand factors that contribute to relationship quality. While strong emotional bonds are not necessary for adult children to provide care to elderly parents, some authors have found that the act of caregiving draws the elderly parent/adult child dyad together emotionally (Abel, 1986; Horowitz & Shindelman 1983). Similarly, Cicirelli (1983b) has reported that the greater the attachment behaviors (i.e., frequency of contact and dependency), the greater the amount of assistance given.

The construct of relationship quality has been defined by different authors as an array of singular and multiple variables, including intimacy (Jecker, 1990; Troll, 1971; Walker & Thompson, 1983), attachment (Bromberg, 1982-83; Cicirelli, 1983b; Thompson & Walker, 1984; Troll, 1987), frequency of contact and aid (Hess & Waring, 1978; Mancini & Blieszner, 1989), getting along (Cantor, 1983), and perceived similarity through identification (Cicirelli, 1983b).

In an effort to achieve a more complete understanding of relationship quality, Walker and Thompson (1983), factor analyzed responses to fifty (50) items. The analysis revealed intimacy as a central factor in relationship quality. As defined by Walker and Thompson (1983), intimacy is a multidimensional construct measuring elements of emotional closeness. In examining the relationship between intimacy and intergenerational aid and contact among mothers and daughters, Walker and Thompson (1983) found that giving and receiving intergenerational aid was related to individual perceptions of intimacy; however, intimacy was not related to frequency of contact.

Theoretical Concepts Linking Decision Making and Relationship Quality

A theoretical concept developed by Scanzoni and Szinovacz (1980) to explore family decision making is useful in understanding the possible connections between decision-

making influence strategies and relationship quality. A major component in this theoretical concept, mutuality, describes the interaction of relationship history and current decision making. Issues of cooperation, fairness, trust, and empathy provide the basis for evaluation of the partner's current behavior. When decision making partners disagree, this theoretical concept posits that each person's reaction depends on mutuality. For example, persons with high mutuality, feeling high levels of cooperation, fairness, trust, and empathy, may perceive their partners as needing additional time to decide. Persons with low mutuality are more likely to perceive their partners as stalling, thus indirectly saying no.

Intergenerational Relationship Quality and Decision Making

Few researchers have investigated the connection between relationship quality and decision making. However, the studies that do exist support their interdependence. High and Turner (1987) argued that the moral bond between family members justified familial decision making. Jecker (1990) agreed, stating that intimacy "ultimately provides the moral basis" for surrogate decision making (p. 68). Horowitz, Silverstone, and Reinhardt (1991) reported that elders, even in times of family conflict, feel secure in their family's knowledge of their desires and give priority to maintaining the relationship with family caregivers. For these elders, the priority of the family relationship takes precedence over retaining control in decision making.

In their study of intergenerational decision making, Pratt, Jones, and Pennington (1992) found that one-third (33%) of the female respondents reported that their relationship with their intergenerational partner (i.e., mother/daughter) was "sometimes" to "always difficult" while two-thirds (67%) reported their relationship to be "usually" to "always easy." Those women who perceived their relationship to be difficult and those who perceived their relationship as easy reported similar use of positive strategies to influence their partner's decision making. However, women in difficult relationships reported higher use of option-seeking strategies and overt and covert negative decision-making strategies. In addition, they perceived their intergenerational partner to use negative decision-making strategies more often and positive decision-making strategies less often.

These results should be viewed with caution. While respondents' reports of their actual behaviors and their partners' perceptions of respondents' behavior are related to relationship quality, the study is limited by the use of bivariate analysis and a single-item measure of relationship quality. To achieve more definitive results, a measure must reflect relationship quality's multi-dimensional nature.

In summary, intergenerational relationships are continually negotiated and redefined (Aquilino & Supple, 1991; Fischer, 1981). While past conflicts and problems do not necessarily disappear, most mother/daughter

relationships endure (Bromberg, 1982-83; Hess & Waring, 1978; Troll, 1987). It is these relationships which ultimately provide the moral basis for aiding in elder's decision making (Jecker, 1990).

Personal and Situational Factors Affecting Relationship Quality and Decision Making

A variety of personal and situational variables have been found to be related to decision-making influence strategies and/or relationship quality of elderly parents and their caregiving children. In the next sections, the variables generation, mother's age, health, and level of dependence will be reviewed. Other variables, including mother's and daughter's education, income, marital status, and length of caregiving were used only for descriptive purposes.

Generation

It is well-established that there are generational differences in perceptions of relationship quality. In studying three generations of women, Thompson and Walker (1984) found that mothers reported greater attachment than did their daughters. Studies involving elderly parents and their caregiving daughters found that mothers rated the quality of their relationship at least as high or higher than daughters did (Johnson & Bursk, 1977; Pratt, Jones, & Pennington, 1992; Thompson & Walker, 1984; Walker et al., 1989).

Investigating the perceived relationship quality of elderly mothers and their caregiving daughters in relation to decision-making influence strategies, Pratt, Jones, and Pennington (1992) found daughters were more likely than mothers to use option-seeking (i.e., getting information from professionals) and overt negative strategies (i.e., showing anger or irritation, criticizing suggestions, getting upset). Daughters were also more likely to perceive their mothers as using negative strategies. As related to relationship quality, daughters more often than mothers rated their relationship as difficult as opposed to easy. Thus, generation has been shown to relate to both decision-making strategies and relationship quality.

Age, Health, and Level of Dependence

A common assumption is that people change in predictable ways as they age (Kart, 1985). In reality, age is multidimensional in nature and encompasses chronological age (i.e., years of life), biological age (i.e., physical maturation), psychological age (i.e., intellectual function), and sociological age (i.e., social roles). Chronological age (hereafter referred to simply as age) is most often used as a demographic variable and is only a very crude indicator of biological, psychological, or sociological age.

Nevertheless, age has been found to be related to health, level of dependence (Walker, Martin, & Jones, 1992), and the degree of influence adult caregiving daughters have

over their elderly mothers' decisions (Pratt, Jones, & Pennington, 1992). Age in and of itself, however, has not been found to relate to relationship quality (Pratt, Jones, Shin, & Walker, 1989; Walker & Allen, 1991; Walker et al., 1991).

Mothers' poor health has been related to an increase in their reliance on family for assistance (Stoller & Earl, 1983), feelings of helplessness (Walker, Martin, & Jones, 1992), family involvement in decision making (Hansson et al., 1990), and the degree of influence of adult caregiving daughters over their elderly mothers' decisions (Pratt, Jones, Shin, & Walker, 1989). Researchers disagree on the relationship between mothers' health and relationship quality. In a study on the costs and benefits of caregiving, Walker, Martin, and Jones (1992) found that mothers' health was not significantly correlated with mothers' or daughters' perceived intimacy. In addition, Walker and Allen (1991) found mothers' health status was not significantly related to relationship quality. In contrast, Hess and Waring (1978) and Johnson and Bursk (1977) found that mothers' health was related to relationship quality. That is, the better the elderly parents' health, the better the relationship between the elderly and their adult children.

A few investigations have assessed the association between mothers' level of dependence and relationship quality. Research findings suggest that both caregivers and

care receivers report strain and conflict in their relationships (Cantor, 1983; Johnson & Catalano, 1983; Montgomery, Skull & Borgatta, 1985). Furthermore, studies by Cicirelli (1983b) and Rakowski and Clark (1985) suggest intergenerational relationship quality decreases as the elders' level of dependence increases. Contrary to these findings, Walker and Allen (1991), in their analysis of 21 elderly mother/adult caregiving daughter pairs, found that relationship type (i.e., intrinsic, ambivalent, conflicted) was not related to mother's age, health, or level of dependence. These relationship types, however, were based on mother/daughter relationship themes and patterns rather than on measures of relationship quality. Further, these results might have been affected by the small number of subjects.

In short, age, health, and level of dependence have been demonstrated by some studies to relate to decision making and/or relationship quality (Hansson et al., 1990; Hess & Waring, 1978; Johnson & Bursk, 1977; Pratt, Jones, Shin, & Walker, 1989). Inclusion of all of these variables in the current study is problematic because they may be closely related. Inclusion of too many closely-related variables decreases the power to detect effects (Kraemer & Thiemann, 1987). Several factors support the selection of mothers' level of dependence as proxy for mothers' age and health. First, research indicates that age, health, and level of dependence are interrelated (Hansson et al., 1990;

Johnson & Bursk, 1977; Walker, Martin, & Jones, 1992). Second, mothers' level of dependence is the only variable that focuses on the relationship characteristics rather than on the mothers' personal characteristics. Third, mothers' level of dependence can be fully assessed by using a multi-dimensional measure.

Compared to age or health status alone, mothers' level of dependence has stronger research support relating level of dependence to decision making and relationship quality (Cicirelli, 1983b; Rakowski & Clark, 1985; Walker, Martin, & Jones, 1992). In the proposed study, level of dependence will be measured by a list of 53 caregiving tasks and activities.

Literature Review Summary

Decision making is multi-dimensional (Huston, 1983; Godwin & Scanzoni, 1989a; McDonald, 1980; Scanzoni & Szinovacz, 1980; Spiro, 1983) and involves (a) the context in which decisions are made; (b) the decision-making process including the use of strategies to influence another's decisions; and (c) the outcome of the decision.

Family members are involved in decisions concerning their elderly relatives (High, 1988; Pratt, Jones, & Pennington, 1992; Pratt, Jones, Shin, & Walker, 1989; Smerglia, Deimling & Barresi, 1988; Townsend & Poulshock, 1986; Townsend, Silverstone, & Reinhardt, 1991). Often family involvement in elders' decisions consists of

"consultive autonomy." Consultive autonomy occurs when the elderly consult other family members but retain the final say in the decision outcome (Cicirelli, 1988; Pratt, Jones, Shin, & Walker, 1989; Townsend & Poulshock, 1986).

Various strategies are employed to influence other family members during decision making. Pratt, Jones, and Pennington (1992) found elderly mothers and their caregiving daughters used option-seeking strategies, overt negative strategies, covert negative strategies, and positive strategies to influence one another in decision making. Related to relationship quality, mothers and daughters who reported their relationship as easy and those who reported their relationship as difficult reported equal use of positive strategies. However, women in difficult relationships used negative influence strategies more often than women who perceived their relationship with their partner as easy. Thus it appears that relationship quality and influence strategies are related.

Weaknesses in the Literature

A review of the caregiving and decision-making literature reveals several research weaknesses. Evident in the literature is the practice of interviewing just one member of the dyad (Archbold, 1982; Baruch & Barnett, 1983; Brody, Poulshock, & Masciocchi, 1978; Lang & Brody, 1983). When exploring the conceptual and methodological issues of

the dyad, Thompson and Walker (1982) stress the need for collecting data from both partners in the relationship.

Another common weakness is that information is often gathered using single-item measures. While single-item measures are easy to administer, several researchers stress the importance of using multi-dimensional measures to explore and explain the nature of such multi-dimensional constructs as relationship quality (Thompson & Walker, 1984; Walker & Thompson, 1983) and decision-making strategies (Pratt, Jones, & Pennington, 1992).

A further weakness is that the research on family caregiving often focuses on elderly who are very frail and physically and cognitively disabled (Cantor, 1983; Johnson, 1983; Soldo & Myllyluoma, 1983). This segment of the aging population is over-represented in family caregiving studies (Pratt, Walker, & Jones, 1989). Conclusions are therefore skewed and any application to the elderly population as a whole is misguided.

The final major shortcoming of the literature is that a majority of the research gathered on decision making involves marital dyads (Hill & Scanzoni, 1982; Huston, 1983; Scanzoni & Polonko, 1980; Spiro, 1983). When intergenerational dyads are studied the focus usually involves the context (i.e., network) in which decision making occurs (Smerglia, Deimling, & Barresi, 1988; Townsend & Poulshock, 1986) rather than the process through which decisions are made. A few such studies have been conducted.

One study that did investigate the process through which decisions are made supports the association between decision-making strategies and relationship quality of elderly mothers and their caregiving daughters (Pratt, Jones, & Pennington, 1992). While provocative, generalizations based on these results should be made with caution. First, the study used a single-item measure to assess relationship quality. It is unknown if the single item used, perceived ease of the relationship, adequately measures relationship quality. Second, the analysis was bivariate. Thus it did not address the possible interrelatedness of a respondent's decision-making strategies.

This study addresses some of the weaknesses found in other studies. Specifically, data were collected from both elderly mothers and their caregiving daughters. The measures used were multi-dimensional and represent relational variables. Finally, data were analyzed using multivariate methods.

III. METHODS

Using a sample of community dwelling elderly mothers and their caregiving daughters, this study examines the relationship between influence strategies employed in decision making and intimacy, a dimension of relationship quality. Because mothers' level of dependence may be associated with relationship quality and age and health status, the mothers' level of dependence was used as a proxy variable for mothers' age and health status. Separate analyses were performed for mothers and daughters to compare the influence of generation.

Sample

Sixty-four pairs of elderly mothers and their caregiving daughters from Western Oregon and Western Montana served as respondents. All mothers were 64 or older, single (i.e., widowed, divorced, or separated), and free of cognitive impairment. Daughters were age 30 or older, provided some form of support or aid to their mothers (i.e., daily activities & household chores, shopping & errands, transportation, and/or financial support), and lived within 45 miles of their mothers. Table 1 lists selected demographic characteristics for the elderly mothers and their caregiving daughters.

Table 1

Selected sociodemographic characteristics of elderly mothers and their caregiving daughters.

Characteristics	Mothers n	Mothers %	Daughters n	Daughters %
Age				
30 - 39			11	17.2
40 - 49			21	32.8
50 - 59			20	31.3
60 - 69	10	15.6	12	18.8
70 - 79	23	35.9		
80 - 89	26	40.6		
90 and above	5	7.8		
Race				
Caucasian, Non-Hispanic	61	95.3	61	95.3
Other	3	4.7	3	4.7
Marital Status				
Never married			8	12.5
Married			42	65.6
Separated/divorced	12	18.8	11	17.2
Widowed	52	81.2	1	1.6
Education				
Grade school	19	29.7	1	1.6
High school diploma	22	34.4	25	39.1
2 yrs. college	15	23.4	12	18.8
College degree	6	9.4	16	25.0
Advanced degree	1	1.6	10	15.7
Income				
Less than $10,000	28	43.8	10	15.6
$10,001 to $20,000	31	48.4	9	14.1
$20,001 to $30,000	2	3.2	18	28.1
$30,001 to $40,000			8	12.5
Above $40,000			19	29.7

Characteristics of the elderly mothers

The mean age of mothers was 78.5 years with ages ranging from 65 to 103 years. All were single with most being widowed (81.2%). Almost a third (29.7%) completed grade school only, with an additional third (34.4%) completing high school. Almost a quarter (23.4%) completed two years of college. Over two-fifths (43.8%) of the mothers' annual incomes were less than $10,000, while nearly half (48.4%) earned $10,001 to $20,000 per year. Nearly all (93.6%) rated themselves as "very healthy" or "pretty healthy." However, the average number of diagnosed health problems per respondent was 3.5. These problems included arthritis (62.5%), blood pressure problems (39.1%), heart disease (32.8%), osteoporosis (28.1%) and diabetes (9.4%). Most (81.2%) of the mothers lived alone, while slightly over one-tenth (12.5%) lived with their daughters. Five percent of mothers lived with other relatives.

Mothers' level of dependence was assessed using a measure of caregiving tasks and activities. These were organized into eight categories of instrumental aid: shopping/errands (e.g., grocery shopping; clothes shopping); indoor maintenance (e.g., making bed; doing laundry); financial tasks (e.g., writing checks); food preparation/clean-up (e.g., fixing breakfast; washing dishes); outdoor maintenance (e.g., mowing the lawn; making repairs to the outside of the house); personal care (e.g., eating; dressing); financial aid (e.g., paying for

groceries, paying for housing); and bureaucratic mediation (e.g., getting information ; completing forms). Daughters' first were asked to count the total number of tasks within each category with which her mother needed assistance. Next, daughters' were asked to count the number of tasks she personally performed for her mother. Table 2 shows the results by caregiving assistance category. It should be noted that only seven categories were included in the analysis as outdoor maintenance was not applicable to all mothers' living arrangements.

Characteristics of the caregiving daughters

The mean age of caregiving daughters was 49.5 years with ages ranging from 30 to 78 years. Nearly two-fifths (39.1%) of the daughters had completed high school; one-quarter (25.0%) completed a four-year college degree. Nearly one-third (29.7%) of the daughters' annual family incomes were less than $20,000, and nearly three in ten (29.7%) earned more than $40,001 a year. Over two-thirds (69.0%) were currently married and over three-fifths (62.5%) were employed outside the home. Although the majority (90%) of the daughters had living siblings, daughters in this study provided over 80% of all assistance received by the mothers and thus can be characterized as "primary caregivers." The duration of care provided to mothers by their daughters ranged from 0 to 18 years, with a median duration of 5.4 years.

Table 2

Percentage of mother's receiving any assistance in each task/activity and percentage of mother's who received any needed assistance from their daughter.

CAREGIVING TASK AND ACTIVITY CATEGORY	PERCENTAGE OF MOTHER'S RECEIVING ANY ASSISTANCE IN EACH TASK/ACTIVITY	PERCENTAGE OF MOTHER'S WHO RECEIVED ANY NEEDED ASSISTANCE FROM THEIR DAUGHTER
SHOPPING & ERRANDS (grocery or misc. shopping and errand running)	96.9%	98.4%
INDOOR MAINTENANCE (cleaning, laundry, home repairs)	82.8%	82.8%
FINANCIAL TASKS (paying bills, budgeting)	35.9%	96.9%
FOOD PREPARATION (preparing meals, clean-up, baking)	37.5%	87.5%
PERSONAL CARE (feeding, bathing, dressing)	20.3%	98.4%
FINANCIAL CONTRIBUTION (financial assistance)	21.9%	100.0%
BUREAUCRATIC MEDIATION (arranging services, getting information)	71.9%	98.4%

Procedures

The purposive sample of elderly mothers and caregiving daughters was recruited using two methods. The first method involved contacting professionals of community services agencies or residential apartment facilities. The second method involved recommendations made by other elderly mothers and caregiving daughters involved in a separate longitudinal caregiving study.

As names were collected, each potential participant was telephoned and told the purpose and procedures of this research project. Mothers and daughters who expressed interest were assessed according to the recruitment criteria. Mothers had to be single (i.e., widowed, divorced, or separated), age 64 or older, free of cognitive impairment, and had to live within forty-five miles of their daughter. Daughters who were interested had to provide support or aid to their mothers in one or more of the following areas: (a) daily activities and household chores, (b) shopping and errands, (c) transportation, or (d) financial support. Both members of the intergenerational pair were required to participate to be included in this study. Sixty-four (94.1%) out of the sixty-eight mother-daughter pairs who met the criteria agreed to participate.

Of the mothers and daughters participating, over two-fifths (44 %) lived within a forty-mile radius of Corvallis, Oregon (pop. 42,000). An additional one-fifth (17%) lived in the vicinity of Portland, Oregon (pop. 420,000), the

remaining two-fifths (39%) resided in Missoula, Montana (pop. 60,000).

Mothers and daughters were interviewed separately in their homes by one of three trained graduate research assistants from Oregon State University. Interviews lasted about one hour and focused on the processes of decision making in the intergenerational pair. The interview consisted of an initial review of the purpose and procedures, followed by having the participant sign an agreement to participate which included a consent form in accordance with Human Subjects protocol at Oregon State University. Each participant was then paid $10.00 for her time and assistance.

As a part of a larger research study, participants were given a variety of questions in the following areas: caregiving tasks and activities (daughters only); mother's health status in terms of number of diseases/conditions present overall (daughters only); decision-making processes (i.e., who is involved in the decision, who is influential in the decision, who makes the decision) in the areas of: daily care (e.g., what to eat; what to wear); routine health (e.g., when to go to the doctor); major health (e.g., whether to have surgery); routine financial (e.g., banking; paying bills); major financial (e.g., when to sell a home; what kind of insurance to buy); and housing decisions (e.g., where to live); a review of an actual decision that was made in the past year; a review of daughter's role in mother's

decision making; decision-making influence strategies (i.e., option-seeking, overt negative, covert negative, and positive); relationship quality; costs and benefits of caregiving; and demographic information.

As a part of the interview procedure, whenever a response scale was used, an enlarged bold print copy of the response categories was put on the table or held up to assist the respondent. When paper-and-pencil measures were given, respondents could choose to fill them out themselves or have the interviewer read the form aloud and fill it out.

Research Design

The independent (predictor) variables examined in this study were each of the four decision-making strategies (i.e., option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies) and mothers' level of dependence on her daughter for assistance. The dependent (outcome) variable was relationship quality as determined by a measure of intimacy. Multiple regression analyses were used to assess the impact and magnitude of the predictor variables on the outcome variable, intimacy.

Independent Variables

Respondents' decision-making strategies. To assess the perceived decision-making influence strategies of elderly mothers and their caregiving daughters, both mothers and daughters completed a 20-item measure of respondents'

decision-making strategies (Appendix A). Measurement items were generated through an extensive review of literature concerning possible strategies used in family decision making (Pratt, Jones, & Pennington, 1992). These included positive and negative communication and competitive-coercive strategies (Scanzoni & Szinovacz, 1980).

Respondents' rated how often each influence strategy was used in decision-making interactions with their intergenerational partner. Response categories ranged from Never (0) to Always (4). Examples of respondents' decision-making strategies included: "Give your mom (daughter) things to read that are relevant to the decision," "Ask questions about what she thinks," and "Withhold help if decisions are made with which you disagree."

A principle components factor analysis was performed on the respondents' decision-making strategies to identify scale factors and to assess construct validity. After a varimax rotation, six factors emerged with Eigenvalues greater than 1.0. A scree test was utilized to eliminate minor factors (Kim & Muellon, 1978). The test indicated that factors 1 through 4 should be retained (Appendix B).

For each factor, mothers' and daughters' responses were summed separately and divided by the total number of scale items to yield a mean factor score. Higher scores indicated greater use of that influence strategy. Factor 1 represents OPTION-SEEKING STRATEGIES. Examples of these strategies are getting information from banks, professionals, and agencies,

and suggesting different ideas and options based on this information.

Factor 2 represents OVERT NEGATIVE STRATEGIES. Examples of these strategies are showing anger and irritation, criticizing suggestions, acting worried and upset, and telling partner exactly what to do.

Factor 3 represents COVERT NEGATIVE STRATEGIES. Examples of these strategies are ignoring the need for a decision, withholding help if decisions are made with which respondent disagrees, postponing or delaying decisions, and telling partner that "I'll take care of it."

Factor 4 represents POSITIVE STRATEGIES. Examples of these strategies are giving partner things to read that are relevant to the decision, asking partner how she feels emotionally, asking partner questions about what she thinks, and trying to imagine how partner feels.

Chronbach's alpha was utilized to determine the internal consistency (reliability) of each factor resulting in: option-seeking (.76); overt negative (.72); covert negative (.79); and positive (.76). These four factors explain 49.7% of the total variance in mothers' and daughters' perceptions of their own decision-making strategies.

Mother's level of dependence on her daughter for assistance. In order to assess the mother's level of dependence, daughters were given a list of caregiving tasks and activities (Walker et al., 1991), and asked "Which of

the following activities did you do for your mother or arrange for her?" (Appendix C). The eight categories were shopping/errands, indoor maintenance, financial tasks, food preparation/clean up, outdoor maintenance, personal care, financial contributions, and bureaucratic mediation. Outdoor maintenance was excluded from analysis because it was not applicable for all mother's living arrangements. Each of the remaining seven categories used a list of specific tasks and activities that varied from three to fourteen items.

Initial analysis involved creating Z-scores for each caregiving category so comparisons could be made across the caregiving areas. The technique of standardizing variables is used to ". . .give each variable equal importance" (Jackson, 1983, p. 116). Items in each category were summed and a level of dependence mean score obtained for each mother. Higher scores reflected greater dependence.

Demographic information including mother's and daughter's education, income, marital status, and duration of caregiving was gathered from each respondent through the use of single-item questions (Appendix D and E, respectively). These items were used for descriptive purposes only and were excluded from the regression analysis in order to limit the number of predictor variables. Including too many predictor variables, particularly those closely related to one another, will decrease ". . .the

power to detect any effects at all or necessitate greatly increased sample size" (Kraemer & Thiemann, 1987, p. 65).

Dependent Variable

Relationship quality was assessed with 26 items measuring intimacy and attachment (Thompson & Walker, 1984; Walker & Thompson, 1983) (Appendix F). This study used only the 17 items that reflect intimacy.

Intimacy scale reliabilities were assessed by Walker and Thompson (1983) and ranged from .91 to .97 across mother-daughter relationship reports. Examples of intimacy scale items included: "She always thinks of my best interests," "She is important to me," and "We want to spend time together." Response choices ranged from not true (1) to always true (5). Items were summed and divided by the total number of items to which the respondent would respond to obtain a mean intimacy score. Higher scores reflect greater intimacy.

Data Analysis

The Statistical Package SAS was used to analyze all data on a personal computer. Descriptive statistics were generated in the initial data analysis. Intercorrelations of independent and dependent variables were computed for both mothers and daughters. The specific data analysis used to examine the research questions was simple multiple regression. In a simple multiple regression all of the

independent variables are entered into the equation at once to determine the contribution of a group of independent variables on the dependent variable (Tabachnick & Fidell, 1983).

In this study, data were analyzed to examine the impact of respondents' decision-making strategies and the mothers' level of dependence on their daughter for assistance, on respondents' perceived intimacy. Two regressions were run using mothers' perceived intimacy as the dependent variable. In the first, mothers' decision-making strategies and mothers' level of dependence on their daughters for assistance served as independent variables. In the second, daughters' decision-making strategies and mothers' level of dependence on their daughters for assistance served as independent variables. Two parallel regression analyzes were computed using daughters' perceived intimacy as dependent variables. Specifically, four research questions were addressed:

Research Question #1: Which of the following independent variables (mothers' option-seeking strategies, mothers' overt negative strategies, mothers' covert negative strategies, mothers' positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of mothers' perceived intimacy?

Research Question #2: Which of the following independent variables (daughters' option-seeking strategies, daughters' overt negative strategies, daughters' covert negative strategies, daughters' positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of mothers' perceived intimacy?

Research Question #3: Which of the following independent variables (daughters' option-seeking strategies, daughters' overt negative strategies, daughters' covert negative strategies, daughters' positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of daughters' perceived intimacy?

Research Question #4: Which of the following independent variables (mothers' option-seeking strategies, mothers' overt negative strategies, mothers' covert negative strategies, mothers' positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of daughters' perceived intimacy?

IV. RESULTS

The purpose of this study was to ascertain the ability of decision-making strategies and mother's level of dependence on her daughter for assistance to explain perceived relationship intimacy as reported by a sample of elderly mothers and their caregiving daughters. Self-report measures of relationship intimacy, respondents' decision-making strategies, and mothers' level of dependence were examined.

As part of the initial data analysis, correlations were generated to assess the relationships among the various dependent and independent variables. Table 3 lists the correlation coefficients, means, and standard deviations for mothers' data. Table 4 lists the correlation coefficients, means, and standard deviations for daughters' data.

Mothers' level of dependence on their daughter for assistance was found to be significantly related to mother's age ($r = .30$, $p < .05$) and mother's age was found to be significantly related to her perception of her health ($r = -.24$, $p < .05$). However, the perception of mother's health as reported by mothers and their daughters was not significantly related to mother's level of dependence on her daughter. Due to the relational nature of mother's level of dependence on her daughter and the correlations among mother's age, perceived health status, and mother's level of

Table 3

Means (M), standard deviations (SD), and intercorrelations of Independent and Dependent Variables for Mothers

	1.M's age	2. M's health	3.D's M's health	4.M's level of depend	5.Months of care	6.M's option-seeking	7.M's overt negative	8.M's covert negative	9.M's positive	10.M's intimacy
1.										
2.	-.24*									
3.	-.03	-.59****								
4.	.30*	.08	-.22							
5.	.22	-.26*	.21	.15						
6.	-.24	.11	-.11	.31*	.07					
7.	-.43***	.13	-.07	-.17	-.09	.22				
8.	-.36**	.28*	-.16	-.01	-.00	.42***	.66****			
9.	.16	-.17	.14	.08	-.08	.25*	.13	-.04		
10.	.38**	-.22	.17	.05	.10	-.19	-.37	-.52****	.26*	
M	78.45[a]	1.70[bc]	3.06[ad]	0[a]	73.73[a]	1.07[a]	1.04[a]	1.23[a]	2.24[a]	4.57[a]
SD	8.34	.63	.92	4.81	51.24	.96	.75	.85	.92	.62

Note: D = Daughters; M = Mothers.

a Higher number indicates higher level of the variable (e.g., greater level of dependence)

b Higher number indicates lower level of the variable (e.g., poorer health)

c M's health represents mothers' perception of her own health.

d D's M's health represents daughters' perception of her mother's health.

* p < .05, ** p < .01, *** p < .001, **** p < .0001

Table 4

Means (M), standard deviations (SD), and intercorrelations of Independent and Dependent Variables for Daughters

	1.M's age	2.M's health	3.D's M's health	4.M's level of depend	5.Months of care	6.D's option-seeking	7.D's overt negative	8.D's covert negative	9.D's positive	10.D's intimacy
1.										
2.	-.24*									
3.	-.03	-.59****								
4.	.30*	.08	-.22							
5.	.22	-.26*	.21	.15						
6.	.13	-.06	-.10	.50****	.07					
7.	-.29*	.12	-.26*	.03	-.16	.28*				
8.	-.06	.06	-.24*	.01	-.00	.39***	.52****			
9.	-.06	.01	-.12	.16	-.13	.50****	.15	.13		
10.	.05	-.16	.23	-.04	.67	-.20	-.57****	-.38**	.18	
M	78.45[a]	1.70[bc]	3.06[ad]	0[a]	73.73[a]	1.76[a]	1.54[a]	1.06[a]	2.49[a]	4.14[a]
SD	8.34	.63	.92	4.81	51.24	.89	.71	.59	.74	.59

Note: D=Daughters; M = Mothers.

[a] Higher number indicates higher level of the variable (e.g., greater level of dependence)

[b] Higher number indicates lower level of the variable (e.g., poorer health)

[c] M's health represents mothers' perception of her own health.

[d] D's M's health represents daughters' perception of her mother's health.

* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

dependence on her daughter, only mother's level of dependence on her daughter was entered into the multiple regression analysis.

Other significant correlations for mothers (Table 3) include mother's age and mothers' perceived intimacy (r = .38, p < .01) with older mothers reporting greater perceived intimacy. Mother's age also was found to be significantly correlated with two of the respondents' decision-making strategies. Older mothers reported using overt negative strategies (r = -.43, p < .001) and covert negative strategies (r = -.36, p < .01) less often. Mothers in poorer health also reported using covert negative strategies (r = .28, p < .05) less often. Significant correlations were also found between the respondents' decision-making strategies. Mothers who used overt negative strategies were likely to also use covert negative strategies (r = .66, p < .0001). Mothers who used option-seeking strategies were likely to also use positive strategies (r = .25, p < .05).

Significant correlations for daughters (Table 4) include daughters' reported use of overt negative strategies with mother's age (r = -.29, p < .05). Daughters whose mothers were older reported using overt negative strategies less often. Daughters' reported use of overt negative strategies was also correlated with daughters' reported use of option-seeking (r = .28, p < .05); daughters who reported using overt negative strategies were also inclined to report the use of option-seeking strategies. Additionally,

daughters who reported the use of covert negative strategies were likely to report the use of overt negative (r = .52, p < .0001) and option-seeking strategies (r = .39, p < .001). Daughter who reported the use of option-seeking were also likely to report the use of positive strategies (r = .50, p < .0001). Daughters' perceived intimacy was negatively correlated with reported use of overt negative strategies (r = -.57, p < .0001) and reported use of covert negative strategies (r = -.38, p < .01). Thus daughters who reported greater use of both overt and covert negative strategies perceived less intimacy with their mothers.

Before simple multiple regressions were computed, the correlations among variables were assessed for problems with multicollinearity. It is through the absence of perfect multicollinearity that multiple regressions can produce the most unbiased estimates. One guideline for detecting multicollinearity is to examine the bivariate correlations for coefficients of .8 or larger (Lewis-Beck, 1980). Because all of the variable correlations fell below this cut-off, all independent variables were included in the initial multiple regressions. However, for each research question a second multiple regression was computed using a more conservative approach by omitting variables at .5 or larger. The results of all of these regressions follow.

Research question #1. Which of the following independent variables (mothers' option-seeking strategies, overt

negative strategies, covert negative strategies, positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of mothers' perceived intimacy?

Results of the first multiple regression analysis (Table 5) indicated that the overall regression equation was significant ($F(5, 58) = 5.94$, $p < .0002$, adjusted $R^2 = .28$) explaining 28% of the variance in mothers' perceived intimacy. Mothers' option-seeking strategies, overt negative strategies, and mothers' level of dependence on their daughters were not significantly associated with mothers' perceived intimacy. The other two decision-making strategies were significantly associated with mothers' perceived intimacy. Mothers who used fewer covert negative strategies ($t = -2.45$, $p < .02$) and more positive strategies ($t = 2.39$, $p < .02$) reported greater perceived intimacy with their daughters.

In a second model, mothers' overt negative strategies was removed from analysis to reduce multicollinearity problems. Recall from Table 3 that mothers' covert negative strategies positively correlated with mothers' overt negative strategies at $r = .66$ ($p < .0001$). However dropping mothers' overt negative strategies from the multiple regression analysis did not increase the amount of variance accounted for in mothers' perceived intimacy ($F(4, 59) = 7.27$, $p < .0001$, adjusted $R^2 = .28$).

Table 5

Regression model for mother's intimacy regressed onto mother's decision-making strategies and mother's level of dependence on her daughter.

Dependent variable. . . . . mother's intimacy

Multiple R-Square 0.3387
Adjusted R-Square 0.2817

Analysis of Variance

	Sum of Squares	Df	Mean Square	F Ratio	p(tail)
Regression	8.1063	5	1.6213	5.940	0.0002
Residual	15.8300	58	0.2729		

Variable	Coefficient	Std. Error	T	P (2 tail)
Mother's level of dependence on daughter	0.0026	0.0148	0.173	0.86
Mother's option-seeking strategies	-0.0156	0.0301	-0.517	0.61
Mother's overt negative strategies	-0.0244	0.0284	-0.859	0.39
Mother's covert negative strategies	-0.0992	0.0405	-2.450	0.02
Mother's positive strategies	0.0451	0.0188	2.391	0.02
Intercept	4.7952			

Research Question #2. Which of the following independent variables (daughters' option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of mothers' perceived intimacy?

The overall regression equation predicting mothers' intimacy from daughters' option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies, or mothers' level of dependence on their daughters for assistance was not significant ($F(5, 58) = 2.15$, $p < .07$, adjusted $R^2 = .08$)(Table 6). Of the four decision-making strategies used by daughters, only daughters' overt negative strategies was found to be significantly related to mothers' perceived intimacy ($t = -2.58$, $p < .01$). Lower use of overt negative strategies was predictive of higher mothers' perceived intimacy. However, because the overall equation was not significant, little confidence can be placed in this finding.

In a second model, daughters' covert negative strategies was removed from the analysis to reduce multicollinearity problems. Recall from Table 4 that daughters' covert negative strategies and daughters' overt negative strategies were correlated positively at $r = .52$ ($p < .0001$). While this change resulted in a statistically significant model ($F(4, 59) = 2.72$, $p < .04$, adjusted $R^2 =$

Table 6

Regression model for mother's intimacy regressed onto daughter's decision-making strategies and mother's level of dependence on her daughter.

Dependent variable. . . . . mother's intimacy

Multiple R-Square 0.1564
Adjusted R-Square 0.0837

Analysis of Variance

	Sum of Squares	Df	Mean Square	F Ratio	p(tail)
Regression	3.7432	5	0.7486	2.150	0.0721
Residual	20.1930	58	0.3482		

Variable	Coefficient	Std. Error	T	P (2 tail)
Mother's level of dependence on daughter	0.0146	0.0185	0.793	0.43
Daughter's option-seeking strategies	-0.0220	0.0374	-0.588	0.56
Daughter's overt negative strategies	-0.0796	0.0308	-2.583	0.01
Daughter's covert negative strategies	0.0114	0.0471	0.242	0.81
Daughter's positive strategies	-0.0060	0.0295	-0.203	0.84
Intercept	5.2037			

.10), the amount of variance explained by the model increased only one percent.

Research Question #3. Which of the following independent variables (daughters' option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of daughters' perceived intimacy?

The regression equation predicting daughters' intimacy was significant (F 5, 58) = 9.051, $p < .0001$, adjusted R^2 = .39) and explained 39% of the variance in daughters' perceived intimacy (Table 7). Two independent variables significantly predicted daughters' perceived intimacy. Daughters who use fewer overt negative strategies (t = -4.62, $p < .0001$) and more positive strategies (t = 3.23, $p < .002$) reported greater perceived intimacy. Daughters' option-seeking, covert negative strategies, and mother's level of dependence on her daughter for assistance were not found to be predictive of daughters' perceived intimacy. Mother's level of dependence on her daughter for assistance also was not found to be predictive of daughters' perceived intimacy.

In a second model, daughters' covert negative strategies was removed from the analysis to reduce multicollinearity problems. Recall from Table 4 that

Table 7

Regression model for daughter's intimacy regressed onto daughter's decision-making strategies and mother's level of dependence on her daughter.

Dependent variable. . . . . daughter's intimacy

Multiple R-Square 0.4383
Adjusted R-Square 0.3899

Analysis of Variance

	Sum of Squares	Df	Mean Square	F Ratio	p(tail)
Regression	9.5839	5	1.9168	9.051	0.0001
Residual	12.2833	58	0.2118		

Variable	Coefficient	Std. Error	T	P (2 tail)
Mother's level of dependence on daughter	0.0034	0.0144	0.234	0.82
Daughter's option-seeking strategies	-0.0462	0.0292	-1.585	0.12
Daughter's overt negative strategies	-0.1110	0.0240	-4.622	0.0001
Daughter's covert negative strategies	-0.0156	0.0368	-0.424	0.67
Daughter's positive strategies	0.0743	0.0230	3.226	0.002
Intercept	4.4720			

daughters' covert negative strategies and daughters' overt negative strategies were correlated positively at r = .52 ($p < .0001$). However, dropping daughters' covert negative strategies increased the amount of variance explained by only one percent ($F(4, 59) = 11.43$, $p < .0001$, adjusted $R^2 = .40$).

Research Question #4. Which of the following independent variables (mothers' option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies, or mother's level of dependence on her daughter for assistance) are significant predictors of daughters' perceived intimacy?

The regression equation predicting daughters' perceived intimacy from mothers' option-seeking strategies, overt negative strategies, covert negative strategies, positive strategies and mothers' level of dependence on their daughters for assistance was significant ($F(5, 58) = 2.71$, $p < .03$, adjusted $R^2 = .12$) explaining 12% of the variance (Table 8). Of the five independent variables, only mothers' positive strategies was found to predict daughters' perceived intimacy ($t = 3.01$, $p < .004$). The more mothers used positive decision-making strategies, the greater the daughters' perceived intimacy with their mothers.

In a second model, mothers' overt negative strategies was removed from the analysis to reduce multicollinearity

Table 8

Regression model for daughter's intimacy regressed onto mother's decision-making strategies and mother's level of dependence on her daughter.

Dependent variable. . . . . daughter's intimacy

Multiple R-Square 0.1894
Adjusted R-Square 0.1195

Analysis of Variance

	Sum of Squares	Df	Mean Square	F Ratio	p(tail)
Regression	4.1406	5	0.8281	2.710	0.0287
Residual	17.7265	58	0.3056		

Variable	Coefficient	Std. Error	T	P (2 tail)
Mother's level of dependence on daughter	-0.0032	0.0157	-0.205	0.84
Mother's option-seeking strategies	-0.0506	0.0319	-1.587	0.12
Mother's overt negative strategies	-0.0235	0.0301	-0.781	0.44
Mother's covert negative strategies	-0.0074	0.0429	-0.173	0.86
Mother's positive strategies	0.0601	0.0200	3.011	0.004
Intercept	4.0103			

problems. Recall from Table 3 that mothers' covert negative strategies and mothers' overt negative strategies were correlated (r = .66, p < .0001). Dropping mothers' overt negative strategies from the analysis only increased the amount of variance explained by one percent (F (4, 59) = 3.26, p < .02, adjusted R^2 = .12).

V. DISCUSSION

This study used a sample of 64 mother-daughter pairs to examine the ability of influence strategies used in decision making to explain the quality of relationships between elderly mothers and their caregiving daughters. In addition, mothers' level of dependence on their daughters for assistance was used as an independent variable. This study used the relationship quality scale for intimacy developed by Walker and Thompson (1983) and a researcher-designed scale to measure respondents' decision-making influence strategies. A discussion of the results and recommendations for future research and practice are presented here.

Factors Most Predictive of Mothers' Intimacy

Research questions 1 and 2 explored the predictive value of mothers' decision-making strategies and daughters' decision-making strategies on mothers' intimacy. The results revealed that two out of the four strategies used by mothers to influence their daughters' decisions and one of the four strategies used by daughters to influence their mothers' decisions predicted mother's intimacy.

For mothers, the use of covert negative strategies (e.g., ignoring the need for a decision, withholding support) was negatively related to their own perceived intimacy. That is, the fewer covertly negative decision-making strategies reported by mothers, the greater the

intimacy they felt with their daughters. This finding supports the work of Pratt, Jones, and Pennington (1992) in which women who perceived their relationship with their intergenerational partner as difficult (as opposed to easy) reported higher use of negative influence strategies.

Mothers' reported use of positive decision-making influence strategies was also found to predict mothers' intimacy. Thus, mothers who reported using more positive strategies (e.g., asking partner how she feels, imagining her feelings) reported greater intimacy in their relationship with their daughter. The use of positive strategies supports the concept of mutuality discussed by Scanzoni and Szinovacz (1980) in which persons who report high levels of cooperation, empathy, fairness, and trust also report a greater degree of mutuality (i.e., intimacy) with their partner. In particular, issues of cooperation and empathy are reflected in the use of positive influence strategies as measured in this study.

The only decision-making strategy used by daughters that was found to predict mothers' intimacy was overt negative strategies (e.g., showing anger, irritation, criticizing). Daughters who reported using fewer overt negative strategies had mothers who reported greater intimacy with their daughters. These findings support Hill and Scanzoni's (1982) findings in their study of marital decision-making processes. They found that defensiveness to spouse related to a reduction in the spouse's current

satisfaction in the relationship. Applying these findings to this study, it is not surprising that a daughter who shows less anger and irritation toward her mother has a mother who reports greater intimacy.

Mothers' lower use of covert negative strategies and mothers' use of positive strategies accounted for over one-fifth (28%) of the variance in mothers' perceived intimacy. In a separate regression, daughters' behavior, specifically her overt negative strategies (e.g., showing anger, irritation, criticizing) contributed somewhat (8%) to the variance in mothers' perceived intimacy. This cross-sectional analysis could not address the cyclical, bi-directional nature of decision-making influence strategies and relationship quality. It is possible that when intimacy is lower, greater use of negative strategies may occur. What is clear is that negative decision-making strategies, while relatively infrequently used, are associated with lower intimacy.

Factors Most Predictive of Daughters' Intimacy

Research questions 3 and 4 explored the predictive value of daughters' decision-making strategies and mothers' decision-making strategies on daughters' perceived intimacy. The results revealed that daughters who reported fewer overt negative strategies (e.g., showing anger, irritation, criticizing) perceived greater intimacy with their mothers. This supports the research of Pratt, Jones, and Pennington (1992), that women who perceive their relationship with

their intergenerational partner as difficult (as opposed to easy) report higher use of negative decision-making strategies. Furthermore, in this study there appears to be a pattern similar to that found by Walker, Martin, and Jones (1992) in their sample of 141 elderly mothers and their caregiving daughters. Their results indicated that perceptions of intimacy were negatively related to the daughters' feelings of frustration and anxiety. These feelings, if displayed outwardly during decision-making interactions, could be conceptualized as overtly negative.

Daughters' reported use of positive strategies also predicted daughters' perceived intimacy. Thus, daughters who used more positive strategies (e.g., asking how her mother feels, trying to imagine her feelings) with their mothers perceived greater intimacy in their relationship with their mothers. This supports the study of Walker, Martin, and Jones (1992) in which perceived caregiving costs for daughters (e.g., anxiety, impatience, irritation) are reported less frequently when there are good relationships.

Only one decision-making strategy used by mothers was found to predict daughters' perceived intimacy. This was the use of positive strategies (i.e., asking how she feels, trying to imagine her feelings). Thus, the more positive influence strategies mothers reported, the greater the daughters' perceived intimacy. The use of positive strategies supports the theoretical concept of mutuality (Scanzoni & Szinovacz, 1980). High levels of mutuality have

been found to be associated with high levels of cooperation, empathy, fairness, and trust. The factor of positive strategies used in this study reflected both cooperation and empathy.

Daughters' lower reported use of overt negative strategies and higher reported use of positive strategies accounted for almost two-fifths (39%) of the variance in daughters' perceived intimacy. Mothers' positive decision-making strategies contributed 12% to the prediction of daughters' perceived intimacy.

Other Findings

Among the findings of this research study was the absence of the predictive value of mothers' level of dependence on their daughters for assistance on either mothers' or daughters' perceived intimacy. These results contradict the findings of Cicirelli (1983b) and Rakowski and Clark (1985) which suggest that intergenerational relationship quality decreases as the elders' level of dependence increases. They support the Walker and Allen (1991) findings that the type of relationship (i.e., intrinsic, ambivalent, conflicted) reported by elderly mothers and their caregiving daughters was not related to mother's age, health status, or level of dependence.

The mother's cognitive status may explain why mothers' level of dependence on their daughter for assistance was not found to be predictive of mothers' or daughters' perceived intimacy. First, the criteria for participation in this

study required respondents to be free of cognitive impairment. Relationship quality may be more difficult to maintain with a cognitively impaired person. Further, this criterion may have selected out the most dependent of the elderly population, thus eliminating a group of care-receiving mothers with some of the greatest levels of dependence. In particular, few of these mother's needed extensive personal care which is more common among the cognitively impaired.

The higher level of assistance with instrumental activities of daily living (IADLs) compared with personal care (ADLs) is characteristic of those elderly with needs for assistance (Stone, Cafferta, & Sangl, 1987). This study sample's rate of required assistance with personal care (ADLs) is similar to rates of women over age 75 across different living situations (Spitze & Logan, 1989).

Another possible reason is the possibility of stability of relationship quality between mothers and daughters regardless of the mother's level of dependence. This possibility was addressed by Walker and colleagues (1987) in their study of perceptions of dependence and relationship quality. This is supported by a series of correlations reported by Walker, Martin and Jones (1992) that revealed that the relationship between intimacy and mother's need for care was non-existent (i.e., .01 for mothers and .03 for daughters).

Limitations of the Present Study

Like all research, there are limitations to the present study. The first limitation involved the study sample. The sample of elderly mothers and their caregiving daughters was small. A larger sample would allow the inclusion of additional independent variables without decreasing statistical power. In addition, the sample was purposive in nature. As a result all respondents were self-selected volunteers required to meet a list of participation criteria which included being free of cognitive impairment. Selecting only respondents free of cognitive impairment limits the generalizations that can be made. In addition, a majority of the respondents in this study were non-Hispanic Caucasians and are not representative of other ethnic/racial populations. The importance of looking at race was demonstrated by Smerglia, Deimling, and Barresi (1988) in their study contrasting the differences in decision making about elders' lives between black and white families. Furthermore, the findings of this study cannot be generalized to all intergenerational caregiving pairs including those involving caregiving sons, care-receiving fathers, and mixed-gender intergenerational dyads.

The second group of limitations result from the use of interview rather than observational data. Much can be learned from the actual observation of the decision-making process used by intergenerational pairs. In addition, because this study was cross-sectional rather than

longitudinal, it is impossible to determine the causal connections between the various decision-making influence strategies and relationship quality as measured by intimacy. Similar to most other aspects of family caregiving, decision making is a cyclic, reciprocal process in which an action of one partner leads to an action on the part of the other. Such a dynamic, reciprocal process cannot be fully captured by looking at a single moment. Longitudinal designs are needed to determine how decision-making strategies affect relationship quality or how relationship quality affects decision-making strategies.

Recommendations for Future Research

This study represented a small portion of a larger research project. There exists a large amount of additional data on elderly mother and caregiving daughter decision making which were not analyzed for this study. For example, data were gathered on specific decision-making areas (i.e., health, financial, housing) as well as information on the perceived amount of influence others have on mother's decision making as well as decision-making quality and confidence. Future research might analyze how such variables relate to mothers' and daughters' decision-making strategies and/or their perceived intimacy. Further studies should be undertaken to examine the associations among daughters' influence on their mother's decisions and both mothers' and daughters' decision-making strategies and their perceived intimacy.

Future research designed to gather additional data in the area of intergenerational decision making could correct some of the limitations discussed earlier. For example, longitudinal designs with larger samples could support causal modeling of decision-making strategies and relationship quality. This may provide a great deal of information on the reciprocal nature of decision making and how it affects, and is affected by, relationship quality. Future research should also investigate a greater variety of respondents including those of different ethnic/racial groups and disability levels and explore how these demographic variables relate to the process of decision making.

Recommendations for Practice

This study demonstrates that elderly mothers and their caregiving daughters use a variety of strategies to influence their partners in decision making. In addition, results from this study reveal that these decision-making strategies can predict perceived intimacy for mothers and daughters.

Research supporting the association between decision-making strategies and relationship quality can be useful for intervention approaches for both elderly mothers and their caregiving daughters. It is well-established that communication patterns are learned and thus can be changed. In addition, research conducted by Hill and Scanzoni (1982) on marital decision making has found that a person's

communication style (i.e., sociable, directing, defensive) is the strongest predictor of their partner's response.

Therefore, educators and counselors who work with individuals involved in the giving or receiving of care can stress the importance of using positive strategies and minimizing negative strategies to influence another individual's decision making. Given the number of families who aid in their elders' decision making, intervention aimed at improving decision-making processes are vital. Teaching effective decision-making strategies appears to be critical not only in supporting the autonomy of the elder, but also in improving intergenerational relationships in later life.

REFERENCES

Abel, E. K. (1986). Adult daughters and care for the elderly. Feminist Studies, 12(3), 479-492.

American Health Care Association. (1982). Questionably competent long term care residents. Washington, DC: AHCA.

Archbold, P. G. (1982). An analysis of parent caring by women. Home Health Care Services Quarterly, 3, 5-26.

Archbold, P. G. (1980). Impact of parent caring on middle-aged offspring. Journal of Gerontological Nursing, 6, 78-85.

Aroskar, M. A. (1980). Anatomy of an ethical dilemma: The theory. American Journal of Nursing, 80, 658-663.

Aquilino, W. S., & Supple, K. R. (1991). Parent-child relations and parent's satisfaction with living arrangements when adult children live at home. Journal of Family Relations, 53, 29-42.

Atkinson, J., & Huston, T. (1984). Sex-role orientation and division of labor in early marriage. Journal of Personality and Social Psychology, 46, 330-345.

Baruch, G., & Barnett, R. C. (1983). Adult daughters' relationships with their mothers. Journal of Marriage and the Family, 45, 601-60.

Boyd, C. J. (1989). Mothers and daughters: A discussion of theory and research. Journal of Marriage and the Family, 51, 291-301.

Brody, S. J., Poulshock, S. W., & Masciocchi, C. F. (1978). The family caring unit: A major consideration in the long-term support system. The Gerontologist, 18, 556-561.

Brody, E. M. (1985). Parent care as a normative family stress. The Gerontologist, 25, 19-29.

Brody, E. M. (1986). Filial care of the elderly and changing roles of women (and men). Journal of Geriatric Psychiatry, 14, 175-200.

Brody, E. M., & Schoonover, C. B. (1986). Patterns of parent-care when adult daughters work and when they do not. The Gerontologist, 26, 372-381.

Bromberg, E. M. (1982-83). Mother-daughter relationships in later life: Negating the myths. Aging, 340, 15-20.

Buchanan, A. E., & Brock, D. W. (1989). Deciding for others: The ethics of surrogate decision making. New York: Cambridge University Press.

Cantor, M. H. (1983). Strain among caregivers: A study of experience in the united states. The Gerontologist, 23, 597-604.

Cicerelli, V. G. (1983a). A comparison of helping behavior to elderly parents of adult children with intact and disrupted marriages. The Gerontologist, 23, 619-625.

Cicirelli, V. G. (1983b). Adult children's attachment and helping behavior to elderly parents: A path model. Journal of Marriage and the Family, 45, 815-825.

Cicirelli, V. (1988, November). The helping relationship of adult children and care decision-making. Paper presented at the meeting of Gerontological Society of America, San Francisco, CA.

Coulton, C. J., Dunkle, R. E., Goode, R. A., & MacKintosh, J. (1982). Discharge planning and decision making. Health and Social Work, 7, 253-261.

Davis, H. L. (1976). Decision making within the household. Journal of Consumer Research, 2, 241-260.

Fischer, L. R. (1981). Transitions in the mother-daughter relationship. Journal of Marriage and the Family, 43, 613-622.

Gilligan, C. (1983). In a different voice: Psychological theory and women's development, Cambridge, MA: Harvard University Press.

Godwin, D. D., & Scanzoni, J. (1989a). Couple decision making: Communalities and differences across issues and spouses. Journal of Family Issues, 10, 291-310.

Godwin, D. D., & Scanzoni, J. (1989b). Couple consensus during marital joint decision-making: A context, process, outcome model. Journal of Marriage and the Family, 51, 943-956.

Guttmann, D. (1978). Life events and decision making by older adults. The Gerontologist, 18, 462-467.

Hansson, R. O., Nelson, R. E., Carver, M. D., NeeSmith, D. H., Dowling, E. M., Fletcher, W. L., & Suhr, P. (1990). Adult children with frail elderly parents: When to intervene? Family Relations, 39, 153-158.

Hess, B. B., & Waring, J. M. (1978). Parent and child in later life: Rethinking the relationship. In R.M. Lerner & G.B. Spanier (Eds), Child influence on marital and family interaction (pp. 241-273). New York, NY: Academic.

High, D.M. (1988). All in the family: Extended autonomy and expectations in surrogate health care decision-making. The Gerontologist, 28, 46-51.

High, D.M. (1991) A new myth about families of older people? The Gerontologist, 31, 611-618.

High, D. M., & Turner, H. B. (1987). Surrogate decision-making: The eldery's familial expectations. Theoretical Medicine, 8, 303-320.

Hill, W., & Scanzoni, J. (1982). An approach for assessing marital decision-making processes. Journal of Marriage and the Family, 44, 927-941.

Horowitz, A., & Shindelman, L. W. (1983). Reciprocity and affection: Past influences on current caregiving. Journal of Gerontological Social Work, 5, 5-20.

Horowitz, A., Silverstone, B. M., & Reinhardt, J. P. (1991). A conceptual and empirical exploration of personal autonomy issues within family caregiving relationships. The Gerontologist, 31, 23-31.

Huston, T. L. (1983). Power. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, E. McClintock, L. A. Peplau, & D. R. Peterson (Ed), Close relationships (pp. 169-219). New York: W. H. Freeman & Co.

Jackson, B. B. (1983). Multivariate data analysis: An introduction. Homewood, IL: Richard D. Irwin, Inc.

Jecker, N. S. (1990). The role of intimate others in medical decision making. The Gerontologist, 30, 65-71.

Johnson, C. L. (1983). Dyadic family relations and social support. The Gerontologist, 23, 377-383.

Johnson, E.S., & Bursk, B. J. (1977). Relationships between the elderly and their adult children. The Gerontologist, 17, 90-96.

Johnson, C. L., & Catalano, D. J. (1983). A longitudinal study of family supports to impaired elderly. The Gerontologist, 23, 612-618.

Kart, C. S. (1985). The realities of aging. Boston,MA: Allyn and Bacon, Inc.

Kim, J., & Muellon, C. W. (1978). Factor analysis: Statistical methods and practical issues. Beverly Hills, CA: Sage.

Kraemer, H. C., & Thiemann, S. (1987). How many subjects? Statistical power analysis in research, Newbury Park, CA: Sage.

Kranichfeld, M. L. (1988). Rethinking family power. In N. D. Glenn & M. T. Coleman (Ed.) Family relations: A reader (pp. 230-241). Chicago: The Dorsey Press.

Kuypers, J. A., & Bengtson, V. L. (1973). Social breakdown and competence. Human Development, 16, 181-201.

Lang, A. M., & Brody, E. M. (1983). Characteristics of middle-aged daughters and help to their elderly mothers. Journal of Marriage and the Family, 45, 193-202.

Lynn, J. (1985). Ethical issues: Equitable distribution and decision making. In M.B. Kapp, H.E. Pies, & A.E. Doudera (Eds), Legal & ethical aspects of health care for the elderly (pp. 15-23). Ann Arbor, MI: Health Ad. Press.

Mancini, J. A., & Blieszner, R. (1989). Aging parents and adult children: Research themes in intergenerational relations. Journal of Marriage and the Family, 51, 275-290.

McDonald, G. (1980). Family power: The assessment of a decade of theory and research. Journal of Marriage and the Family, 42, 841-854.

Meeker, B. F. (1971). Decisions and exchange. American Sociological Review, 36, 485-495.

Montgomery, R. J., Skull, D. E., & Borgatta, E. F. (1985). Measurement and the analysis of burden. Research on Aging, 7, 137-152.

Moody, H. R. (1985). Ethics & aging: Old answers, new questions. Generations, 10, 5-9.

Morris, J. N., & Sherwood, S. (1983-84). Informal support resources for vulnerable elderly persons: Can they be counted on, why do they work? International Journal of Aging and Human Development, 18, 81-98.

Pace, W. D., & Anstett, R. E. (1984). Placement decisions for the elderly: A family crisis. The Journal of Family Practice, 18, 31-46.

Paolucci, B., Hall, O. A., & Axinn, N. (1977). Family decision making: An ecosystem approach, New York, N.Y.: John Wiley & Sons.

Perreault, W. D., & Miles, R. H. (1978). Influence strategy mixes in complex organizations. Behavioral Science, 23, 86-98.

Pratt, C. C., Jones, L. L., & Pennington, D. (1992). Decision-making influence strategies of caregiving daughters and their elderly mothers. (Submitted for publication.)

Pratt, C. C., Jones, L. L., Shin, H., & Walker, A. (1989). Autonomy and decision making between single older women and their caregiving daughters. The Gerontologist, 29, 792-797.

Pratt, C., Schmall, V., & Wright, S. (1987). Ethical concerns of family caregivers to dementia patients. The Gerontologist, 27, 632-638.

Pratt, C. C., Walker, A. J., & Jones, L. L. (1989). Sampling bias in family caregiving. Paper presented at the meeting of Gerontological Society of America, Minneapolis, MN.

Rakowski, W., & Clark, N. M. (1985). Future outlook, caregiving, and care-receiving in the family context. The Gerontologist, 25, 618-623.

Riley, M. W. (1983). The family in an aging society. Journal of Family Issues, 4, 439-454.

Safilios-Rothschild, C. (1969). Family sociology or wives' family sociology? A cross-cultural examination of decision-making. Journal of Marriage and the Family, 31, 290-301.

Safilios-Rothschild, C. (1970). The study of family power structure: A review 1960-1969. Journal of Marriage and the Family, 32, 539-551.

Scanzoni, J. (1979). Social processes and power in families. In W.R. Burr, R. Hill, F.I. Nye, & Reiss, I.L. (Eds), Contemporary theories about the family (pp. 295-316), New York: Free Press.

Scanzoni, J., & Polonko, K. (1980). A conceptual approach to explicit marital negotiation. Journal of Marriage and the Family, 42, 31-44.

Scanzoni, J., & Szinovacz, M. (1981). Family Decision-making. Beverly Hills, CA: Sage Publication.

Seccombe, K., Ryan, R., & Austin, C.D. (1987). Care planning: Case managers' assessment of elders' welfare and caregivers' capacity. Family Relations, 36, 171-175.

Shanas, E. (1979). The family as a social support system in old age. The Gerontologist, 19, 169-174.

Sheehan, N. W., & Nuttall, P. (1988). Conflict, emotion, and personal strain among family caregivers. Family Relations, 37, 92-98.

Smerglia, V., Deimling, A., & Barresi, C. (1988). Black/white family comparisons in helping and decision-making networks of impaired elderly. Family Relations, 37, 305-309.

Soldo, B. J., & Myllyluoma, J. (1983). Caregivers who live with dependent elderly. The Gerontologist, 23, 605-611.

Spiro, R. L. (1983). Persuasion in family decision-making. Journal of Consumer Research, 9, 393-402.

Spitze, G., & Logan, J., (1989). Gender differences in family support: Is there a payoff? The Gerontologist, 29, 108-113.

Stoller, E. P. (1983). Parental caregiving by adult children. Journal of Marriage and the Family, 45, 851-858.

Stoller, E. P., & Earl, L. L. (1983). Help with activities of everyday life: Sources of support for the noninstitutionalized elderly. The Gerontologist, 23, 64-70.

Stone, R., Cafferata, G. L., & Sangl, J. (1987). Caregivers of the frail elderly: A national profile. The Gerontologist, 27, 616-626.

Streib, G. F. (1965). Intergenerational relations: Perspectives of the two generations on the older parent. Journal of Marriage and the Family, 27, 469-476.

Stueve, A., & O'Donnell, L. (1984). The daughter of aging parents. In G. B. Barach & J. Brooks-Gunn (Eds). Women in midlife (pp. 203-225). New York, NY: Plenum.

Tabachnick, B. G., & Fidell, L. S. (1983). Using multivariate statistics. New York: Harper & Row.

Thomasma, D. C. (1984). Freedom, dependency, and the care of the very old. Journal of the American Geriatrics Society, 32, 906-914.

Thomasma, D. C. (1985). Personal autonomy of the elderly in long-term care settings. Journal of the American Geriatrics Society, 33, 225.

Thompson, L., & Walker, A. J. (1982). The dyad as the unit of analysis: Conceptual and methodological issues. Journal of Marriage and the Family, 44, 889-900.

Thompson, L., & Walker, A. J. (1984). Mothers and daughters: Aid patterns and attachment. Journal of Marriage and the Family, 45, 313-322.

Townsend, A. L. (1986). Family caregivers' perspectives on institutionalization decisions. Paper presented at the National Conference on Ethical Issues in the Health Care of the Elderly, Memphis, TN.

Townsend, A. L., & Poulshock, S. W. (1986). Intergenerational perspectives on impaired elders' support networks. Journal of Gerontology, 41, 101-109.

Treas, J. (1977). Family support systems for the aged. The Gerontologist, 17, 486-491.

Troll, L. E. (1971). The family of later life: A decade review. Journal of Marriage and the Family, 33, 263-290.

Troll, L. E. (1987). Mother-daughter relationships through the lifespan. In S. Oskamp (Eds), Family processes & problems: Social psychological aspects (pp. 284-305). New York: Sage Publication.

Van Meter, M. J., & Johnson, P. (1985). Family decision making and long-term care for the elderly: Part II: A review. Journal of Religion & Aging, 1, 59-73.

Walker, A. J., & Allen, K. R. (1991). Relationships between caregiving daughters and their elderly mothers. The Gerontologist, 31, 389-396.

Walker, A. J., Martin, S. K., & Jones, L. L. (1992). The benefits and costs of caregiving and care receiving for daughters and mothers. Journal of Gerontology: Social Sciences, 47, S130-139.

Walker, A. J., & Pratt, C. C. (1991). Daughters' help to mothers: Intergenerational aid versus caregiving. Journal of Marriage and the Family, 53, 3-12.

Walker, A. J., Pratt, C. C., Martell, L. K., & Martin, S. K. (1991). Perceptions of aid and actual aid in intergenerational caregiving. Family Relations, 40, 318-323.

Walker, A. J., Pratt, C. C., & Oppy, N. C. (1992). Perceived reciprocity in family caregiving. Family Relations, 41, 82-85.

Walker, A. J., & Thompson, L. (1983). Intimacy and intergenerational aid and contact among mothers daughters. Journal of Marriage and the Family, 45, 841-848.

Wetle, T. (1985a). Ethical issues in long-term care of the aged. Journal of Geriatric Psychiatry, 18, 63-73.

Wetle, T. T. (1985b). Ethical aspects of decision making for and with the elderly. In M. B. Kapp, H. E. Dies, & A. E. Doudera (Eds). Legal & ethical aspects of health care for the elderly (pp. 258-267). Ann Arbor, MI: Health Ad. Press.

Wetle, T. (1985c). Long term care: A taxonomy of issues. Generations, 10, 30-34.

Wetle, T., Levkoff, S., Cwikel, J., & Rosen, A. (1988). Nursing home resident participation in medical decisions: Perceptions and preferences. The Gerontologist, 28, 32-38.

York, J. L., & Calsyn, R. J. (1977). Family involvement in nursing homes. The Gerontologist, 17, 500-505.

Zweibel, N., & Lydens, L. A. (1990). Incongruent perceptions of older adult/caregiver dyads. Family Relations, 39, 63-67.

APPENDICES

APPENDIX A

RESPONDENTS' DECISION-MAKING STRATEGIES QUESTIONNAIRE

In general, when decisions are made people use many different strategies to influence those decisions. Here is a list of things that people sometimes do when making decisions in families. Please indicate how OFTEN you do each of these things in DECISION-MAKING WITH YOUR MOTHER. CIRCLE THE NUMBER THAT DESCRIBES HOW OFTEN YOU DO THESE THINGS FROM NEVER (0) TO ALWAYS (4).

	NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS
1. Give your mom things to read that are relevant to the decision.	0	1	2	3	4
2. Tell her exactly what to do.	0	1	2	3	4
3. Suggest different ideas or options.	0	1	2	3	4
4. Ask questions about what she thinks.	0	1	2	3	4
5. Show anger or irritation.	0	1	2	3	4
6. Postpone or delay decisions.	0	1	2	3	4
7. Say you'll take care of it.	0	1	2	3	4
8. Criticize suggestions.	0	1	2	3	4
9. Ask her how she feels emotionally.	0	1	2	3	4
10. Listen carefully to your mother.	0	1	2	3	4
11. Ask other family members for opinions.	0	1	2	3	4
12. Get information from banks / agencies.	0	1	2	3	4
13. Get information from professionals.	0	1	2	3	4
14. Get worried or upset.	0	1	2	3	4

15. Ignore the need for a decision.	0	1	2	3	4
16. Present only the information that supports your position.	0	1	2	3	4
17. Follow through on decisions.	0	1	2	3	4
18. Withhold help if decisions are made with which you disagree.	0	1	2	3	4
19. Try to imagine how she feels.	0	1	2	3	4
20. Tell her to take care of it.	0	1	2	3	4

APPENDIX B

FACTOR LOADINGS: RESPONDENTS' DECISION-MAKING INFLUENCE STRATEGIES

Item	Factor 1: Option-seeking strategies	Factor 2: Overt negative strategies	Factor 3: Covert negative strategies	Factor 4: Positive strategies
Eigenvalues	4.7298	2.1637	1.6901	1.3600
Chronbach's Alpha	.76	.72	.79	.76
Get info. from professionals	.896			
Get info from banks or agencies	.805			
Suggest ideas and options	.608			
Show anger & irritation		.806		
Criticize suggestions		.765		
Get worried or upset		.561		
Tell partner what to do		.520		
Ignore need for decision			.735	
Withhold support if disagreeing with decision			.654	
Postpone/delay decision			.560	
Say you'll take care of it			.550	
Give relevant readings				.783
Ask emotional feeling				.762
Ask thoughts				.511
Imagine partner's feelings				.514

How often do you do each of the following in decision-making with your mother (daughter)?
(0=never, 1=rarely, 2=sometimes, 3=frequently, 4=always)

APPENDIX C

CAREGIVING TASKS AND ACTIVITIES*

Now I'm going to ask about the kinds of things your mother may need assistance with on occasion and which things you may help her with. In each section tell me which of the tasks your mother gets help with and which you help her with, if any.
CALCULATE RESPONSES:
A = NUMBER OF TASKS ASSISTED
B = NUMBER OF TASKS DAUGHTER ASSISTS WITH
NA = NOT APPLICABLE

_____1A. SHOPPING AND ERRANDS
_____1B.

DO HER GROCERY SHOPPING
RUN ERRANDS FOR HER (TO BANK, CLEANERS, GAS STATION)
DRIVE HER WHERE SHE WANTS OR NEEDS TO GO
SHOP FOR HER HOUSEHOLD SUPPLIES
SHOP FOR HER CLOTHES
SHOP FOR EXPENSIVE ITEMS FOR HER (TV, FURNITURE)

_____2A. INDOOR MAINTENANCE
_____2B.

MAKE HER BED
CHANGE HER BED
STRAIGHTEN UP HER HOUSE, PUT THINGS AWAY
CLEAN HER HOUSE (MOP, WAX, DUST, VACUUM)
TAKE OUT HER GARBAGE
DO HER LAUNDRY
IRON HER CLOTHES
DECORATE HER HOUSE, ARRANGE FURNISHINGS
DO REPAIRS AROUND HER HOUSE

_____3A. FINANCIAL TASKS
_____3B.

PAY HER BILLS
WRITE HER CHECK
BUDGET, PLAN, OR REVIEW HER EXPENSES

_____4A. FOOD PREPARATION / CLEAN UP
_____4B.

MAKE HER BREAKFAST
MAKE HER LUNCH
MAKE HER DINNER
DO (WASH AND DRY) HER DISHES
BAKE OR CAN FOR HER

_____5A. OUTDOOR MAINTENANCE
_____5B.

GARDEN (WEED, PLANT VEGETABLES, ETC.)
REPAIR HER CAR OR OTHER VEHICLE
WASH AND WAX HER CARE OR OTHER VEHICLE
MAKE HOME IMPROVEMENTS (CARPENTRY, ROOFING, STORM WINDOWS)
MOW LAWN, RAKE LEAVES, OR SHOVEL SNOW FOR HER

_____6A. PERSONAL CARE
_____6B.

FEED MOTHER
CHANGE OR DRESS
BATHE
PUT HER TO BED FOR THE NIGHT
HELP HER USE THE TOILET OR BED PAN
HELP HER EXERCISE
COMB HER HAIR
HELP HER TAKE HER MEDICATION
HELP HER IN AND OUT OF BED
HELP HER WALK
PUT ON HER MAKE-UP
HELP HER GO UP OR DOWN STAIRS
CHANGE HER DIAPERS
HELP HER GET IN AND OUT OF CHAIRS

_____7A. FINANCIAL CONTRIBUTIONS
_____7B.

PAY FOR HER GROCERIES
PAY FOR HER UTILITIES (GAS, WATER, SEWAGE, ELECTRIC, PHONE)
PAY FOR HER HOUSEHOLD SUPPLIES
PAY FOR HER CLOTHES
PAY FOR OTHER ITEMS FOR HER
PAY HER RENT / MORTGAGE

_____8A. BUREAUCRATIC MEDIATION
_____8B.

GET INFORMATION FOR HER (BANK, TAXES, ETC.)
MAKE APPLICATIONS FOR HER
ARRANGE FOR SERVICES FOR HER
FILL OUT FORMS FOR HER
TALK WITH DOCTORS FOR HER

*(Adapted from Atkinson & Huston, 1984)

APPENDIX D

MOTHER'S DEMOGRAPHIC QUESTIONNAIRE

1. What is your current marital status?
   _____1. Widowed
   _____2. Divorced
   _____3. Deserted

2. How many times were you married? _____

3. How many years were you married altogether? _____

4. In what year did you become a widow (divorced or deserted)? _____

5. What is your date of birth? _____

6. Were you ever employed during your adult life?
   _____1. No (go to question 7)
   _____2. Yes
   What was your most recent occupation? _____
   Did you work:
   _____1. Full-time
   _____2. Part-time
   Altogether, how many years did you work outside the home? _____

7. How would you describe your own health?
   _____1. Very healthy
   _____2. Pretty healthy
   _____3. Not too healthy
   _____4. Fairly ill
   _____5. Severely ill

8. How religious would you say you are?
   _____1. Very religious
   _____2. Pretty religious
   _____3. Somewhat religious
   _____4. Not too religious
   _____5. Not at all religious

9. What is your racial background?
   _____1. White
   _____2. Black
   _____3. Native American
   _____4. Asian
   _____5. Hispanic
   _____6. Other: _____

10. What was the highest grade you earned to in school?
_____1. Grade school
_____2. High school
_____3. 2 years of college
_____4. Bachelors degree
_____5. Masters degree
_____6. Doctoral degree

11. Please answer the following questions about your late (or former) husband.
What was his occupation? _____
While you were with your husband how well-off were you financially? Would you say you were:
_____1. Very well-off
_____2. Pretty well-off
_____3. Just ok
_____4. Not very well off
_____5. Not at all well-off

12. How would you describe your present financial circumstances?
_____1. Very well-off
_____2. Pretty well-off
_____3. Just ok
_____4. Not very well-off
_____5. Not at all well-off

13. What is your approximate annual income?
_____1. Less than $4,000
_____2. $4,001 - $6,000
_____3. $6,001 - $8,000
_____4. $8,001 - $10,000
_____5. $10,001 - $12,000
_____6. $12,001 - $14,000
_____7. $14,001 - $16,000
_____8. $16,001 - $18,000
_____9. $18,001 - $20,000
_____10.Over $20,001

14. Please indicate which of the following is a source of income for you.
_____1. Your wages
_____2. Your social security
_____3. Your spouse's social security
_____4. Veteran's benefits
_____5. Employee pension plan
_____6. Money from savings
_____7. Money from interest
_____8. Money given to you by others
_____9. Welfare
_____10.Other: _____

15. Do you have any living sisters or brothers?
_____1. No (go to question 16)
_____2. Yes
What are their ages? _____
How many live within 45 miles of you? _____

16. What is your current living arrangement?
(Mark all that apply)
_____1. Live with daughter
_____2. Retirement home
_____3. Apartment
_____4. Single-family dwelling
_____5. Duplex
_____6. Live with a relative other than mother
_____7. Live alone
_____8. Other: _____

APPENDIX E

DAUGHTER'S DEMOGRAPHIC QUESTIONNAIRE

1. What is your current marital status?
   _____1. Single-never married
   _____2. Married- First marriage
   _____3. Separated
   _____4. Divorced
   _____5. Deserted
   _____6. Married-Second marriage
   _____7. Widowed
   _____8. Other:_____

2. For how long have you been in this marital status? _____

3. What is the date of birth? _____

4. Are you currently employed?
   _____1. No (go to question 5)
   _____2. Yes
   What is your occupation? _____
   How many hours per week do you work on average?_____

5. Are you currently seeking employment?
   _____1. No (go to question 6)
   _____2. Yes (go to question 7)

6. Are you currently retired?
   _____1. No
   _____2. Yes (If yes, in what year did you retire? _____

7. Have you been employed during your adult life?
   _____1. No (go to question 8)
   _____2. Yes
   What was your most recent occupation?_____
   How long ago did you stop working? _____

8. How would you describe your own health?
   _____1. Very healthy
   _____2. Pretty healthy
   _____3. Not too healthy
   _____4. Fairly ill
   _____5. Severely ill

9. How religious would you say you are?
_____1. Very religious
_____2. Pretty religious
_____3. Somewhat religious
_____4. Not too religious
_____5. Not at all religious

10. What is your racial background?
_____1. White
_____2. Black
_____3. Native American
_____4. Asian
_____5. Hispanic
_____6. Other:_____

11. What was the highest degree you earned in school?
_____1. Grade school
_____2. High school
_____3. 2 years of college
_____4. Bachelors degree
_____5. Masters degree
_____6. Doctoral degree

12. How would you describe your present financial circumstances?
_____1. Very well-off
_____2. Pretty well-off
_____3. Just ok
_____4. Not very well off
_____5. Not at all well-off

13. What is your approximate income?
_____1. Less than $10,000
_____2. $10,001 - $20,000
_____3. $20,001 - $30,000
_____4. $30,001 - $40,000
_____5. $40,001 - $50,000
_____6. $50,001 - $60,000
_____7. Over $60,000

14. Please mark any of the following that is a source of income for you.
_____1. Your wages or salary
_____2. Spouse's wages or salary
_____3. Social security
_____4. Veteran's disability
_____5. Employee pension plan
_____6. Money from savings
_____7. Money from interest
_____8. Money given to you by others
_____9. Welfare
_____10.Other _____

15. Do you have living children?
_____1. No (go to question 16)
_____2. Yes
What are their ages? _____
How many, if any, of your children are financially dependent on you? _____

16. Do you have any living sisters or brothers?
_____1. No (go to question 17)
_____2. Yes
What are their ages? _____
How many live within 45 miles of your mother?_____

17. What is your current living arrangement?
(Mark all that apply)
_____1. Live with mother
_____2. Live with relative other than mother
_____3. Live alone
_____4. Single-family dwelling
_____5. Duplex
_____6. Apartment
_____7. Other: _____

APPENDIX F

RELATIONSHIP QUALITY QUESTIONNAIRE*

We'd like to take a closer look at your relationship with your mother (daughter). In this series of questions, you will be asked to rate your relationship with her. The rating scale, ranging from "not true" to "always true" is the same throughout and appears at the top of each page.

NOT TRUE	SOMETIMES TRUE	TRUE ABOUT 1/2 THE TIME	MOSTLY TRUE	ALWAYS TRUE
1	2	3	4	5

_____1. SHE ALWAYS THINKS OF MY BEST INTEREST. (I)**

_____2. OUR LIVES ARE BETTER BECAUSE OF EACH OTHER. (I)

_____3. WE NURTURE EACH OTHER.

_____4. WHEN WE ANTICIPATE BEING APART, OUR RELATIONSHIP INTENSIFIES.

_____5. SHE SHOWS THAT SHE LOVES ME. (I)

_____6. THERE'S A GREAT AMOUNT OF UNSELFISHNESS IN OUR RELATIONSHIP. (I)

_____7. WE LOVE EACH OTHER. (I)

_____8. WE LIKE EACH OTHER. (I)

_____9. SHE ALWAYS MAKES ME FEEL BETTER. (I)

_____10. WE ENJOY THE RELATIONSHIP. (I)

_____11. I'M SURE OF THIS RELATIONSHIP. (I)

_____12. I'M LUCKY TO HAVE HER IN MY LIFE. (I)

_____13. SHE IS CLOSER TO ME THAN OTHERS ARE.

_____14. I FEEL LIKE I WANT TO SUPPORT HER.

_____15. SHE IS IMPORTANT TO ME. (I)

_____16. WE WANT TO SPEND TIME TOGETHER. (I)

_____17. SHE CARES ABOUT THE WAY I FEEL. (I)

NOT TRUE	SOMETIMES TRUE	TRUE ABOUT 1/2 THE TIME	MOSTLY TRUE	ALWAYS TRUE
1	2	3	4	5

_____18. WE CAN ACCEPT EACH OTHER'S CRITICISM OF OUR FAULTS AND MISTAKES. (I)

_____19. WE ANTICIPATE EACH OTHER'S MOODS.

_____20. WE'RE HONEST WITH EACH OTHER. (I)

_____21. WE'RE DEPENDENT ON EACH OTHER.

_____22. WE'RE EMOTIONALLY DEPENDENT ON EACH OTHER.

_____23. OUR BEST TIMES ARE WITH EACH OTHER.

_____24. WE ANTICIPATE EACH OTHER'S NEEDS.

_____25. WE RESPECT EACH OTHER. (I)

_____26. WE FEEL LIKE WE'RE A UNIT. (I)

*(Walker and Thompson, 1983)

**(I) indicates intimacy item