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**Support given by women to their mothers and mothers-in-law  
and relationship quality over time**

**by**

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in partial fulfillment of the requirements for the degree of  
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## ABSTRACT

This study investigates relationship quality of women with their mothers and mothers-in-law and how relationship quality is affected by providing instrumental support. This longitudinal study extends the research by exploring the effects of support giving over time on the daughter/mother relationship and on the daughter-in-law/ mother-in-law relationship.

Based upon social exchange theory and role theory, the central hypothesis for this study is instrumental support given and perceived demands will erode relationship quality over time. As support giving increases, social exchange theory suggests that the support giver feels an imbalance in rewards verses costs and this perception negatively affects the relationship. Role theory also makes the argument that as demands of a particular role increase, role overload from that one role can occur. The resulting stress can negatively affect relationship quality over time.

Subjects were 252 white, married women, drawn from three waves of a larger ongoing research project, The Iowa Youth and Families Project conducted at Iowa State University. The women were members of families with children, living in rural Iowa.

Using t-tests, means of mother related variables were compared with means of mother-in-law related variables. Change in relationship quality over time with both mothers and mothers-in-law were also assessed. Pearson product moment correlations were used to determine the direction and strength of the relationships between variables. Ordinary least

squares regression was used to estimate coefficients for path analyses.

Results indicated that although subjects provided mothers with more instrumental support than they did mothers-in-law, mothers were not perceived as any more demanding than mothers-in-law. While relationship quality with mothers was higher at both times than relationship quality with mothers-in-law, relationship quality with mothers and mothers-in-law were stable over time.

Giving instrumental support did not affect relationship quality with mothers nor with mothers-in-law over time. However, demands of both mothers and mothers-in-law were associated with declining relationship quality over time. Giving instrumental support to mother was unexpectedly associated with lower relationship quality with mother-in-law. This implies the occurrence of scapegoating of mothers-in-law. The data strongly suggest that it is *not* the amount of support given, but rather the perception of demands made by support recipients that adversely affects relationship quality over time.

## **CHAPTER 1**

### **INTRODUCTION**

#### **Purpose of the Study**

The primary purpose of this study is to investigate how mid-life women perceive their relationships with their mothers and mothers-in-law and how this perception is affected by providing social support to their mothers and mothers-in-law. Previous research in the area of social support has focused on positive effects for the support recipient and how to best utilize these supports (Mercier & Powers, 1984, Russell & Cutrona, 1991 ), or factors affecting instrumental support (Whitbeck, Hoyt, & Huck, 1994; Silverstein, Parrot & Bengtson, 1995). Much caregiving research has focused on stress involved for spousal or daughter caregivers (Brody, 1981; Chappel, 1990; Franks & Stephens, 1992). This study seeks to extend previous literature by examining the effect of giving social support on the relationship quality of women with their mothers and mothers-in-law over time..

Gerontological research has provided clear evidence that the family has been and continues to be the main source of support for elderly people (Litwak, 1986; Riley & Riley, 1993). Demographic changes which have impact on family support giving are numerous. Twelve percent of the population is over age 65 (U.S. Bureau of the Census, 1989). The fastest growing segment of this elderly population consists of men and women over age 85, half of whom require assistance with personal care or activities of daily living (Hooyman & Kiyak, 1995). Decreasing fertility rates are another important demographic change. As the

older population, especially the old-old, increases, they will require more assistance. Smaller family size means fewer adult children for elderly parents to rely on. This could mean heavy reliance on only one family member. Another trend is the increasing labor force participation of women. Over 58% of adult women were employed in 1991 (U.S. Bureau of Labor Statistics, 1994). There are concerns voiced by the elderly and by the community that because women are more likely to be employed, demands for support could be overwhelming for these women (Brody, 1985). Overwhelming demands in their role as support giver may lead to stress and have negative affects on the relationship of mid-life women with the support recipient.

## Definitions

### Social support

In order to study the causes and effects of social support the concept itself must be clearly defined. This has been a problem in past studies. The concept of *social support* is vague and has been defined and measured in various ways. Early definitions of social support seem to focus on emotional or psychological aspects. Kaplan, Cassel, and Gore (1977) define support as "the relative presence or absence of psychosocial support resources from significant others".

More current definitions of the concept agree to some extent that social support has more than just an emotional aspect. Most would concede that social support "enable the

recipient to meet their goals and deal with their environmental demands” (Antonucci, 1985). House & Kahn (1985) divide the concept of social support into four components. The first, emotional support, concentrates on feeling loved, liked and empathy. The second, instrumental assistance, focuses on services and goods received from another. The third centers on information received about the environment. Lastly, is appraisal, or information relevant to self-evaluation.

Examining House and Kahn's (1985) definitions it is recognized that only two components are truly necessary. One deals with providing information, services or tangible goods. Examples would include care when ill, material aid, assistance with transportation and offering knowledge or advice. This component is termed by Peters, Hoyt, Babchuk, Kaiser and Iljima (1987) as *help supporting*. The other component focuses on social-psychological concerns such as giving of affection or empathy. Peters et al., (1987) called this component *affectual*. Help supporting is the component of social support that will be examined in the current study.

### Relationship quality

*Relationship quality* as a concept has been less well defined than the concept *social support*. Relationship quality is an important dimension of intergenerational relationships. In a bicultural sample of young adult women, their mothers, and their grandmothers relationship quality was found to be a primary predictor of well-being for each generation

(Levitt, Guacci & Weber, 1992). In this study relationship quality is defined as an overall sense of happiness with the relationship in question.

### Need for the Study

Although there are a variety of family members who provide support to elderly relatives, it is often middle-aged daughters who become caregivers of their elderly parents, second only to spousal caregivers (Chappell, 1990). In addition to outside employment, the average women will spend eighteen years caring for children and perhaps even more years caring for aged parents (Hooyman & Kiyak, 1995). Women who delay childbearing may still be raising children when an elderly parent also requires support. Because the majority of middle-aged women are now working outside the home and may still have children in the home, significant questions are raised regarding potential work and family conflict due to the multiple roles these women carry out (Stone, Cafferata, & Sangl 1987). This group of women has been referred to as "women in the middle" (Brody, 1981) and the "sandwich generation" (Franks & Stephens, 1992).

Numerous studies (Brody, 1981; Chappel, 1990; Franks & Stephens, 1992) have shown that when an elderly parent requires assistance, it is indeed the daughter who most often provides this support. Since women have a longer life span than men and because daughters are the ones to provide the assistance, most literature dealing with caregiving of an elderly relative has focused on the mother-daughter dyad. The type of caregiving that sons are likely to provide fall in the realm of instrumental support. Sons are more likely to

provide transportation, moving of heavy objects, repair of appliances or vehicles, and provide physical labor for seasonal jobs, such as taking storm windows down in the spring.

However, if a married man's mother requires personal care, Merrill (1993) suggests that his wife, (his mother's daughter-in-law) may provide it.

The decreasing fertility rates discussed earlier, may also affect daughters-in-law.

Fewer children mean fewer daughters on whom mothers can rely on for personal care. In the future, daughters-in-law may be called on more often for this kind of assistance by their mothers-in-law.

Very little attention has been accorded the mother-in-law/daughter-in-law relationship in family research. Research conducted on this particular relationship has been of cross-cultural nature, focusing on negative aspects of the relationship (Fischer, 1983). Cross-culturally, attitudes toward mother-in-law are represented as "nasty" or "cruel" (Adler, 1989). Social distance scales show "Mother" elicits close spacing while "Mother-in-law" emits large interpersonal distance by the respondents. Research in American and other Western cultures on this in-law relationship has been neglected or has been negative (Fischer, 1983).

Women tend to be the kin keepers across generations. Fischer (1983) sees striking similarities in the mother / daughter relationship and the mother-in-law / daughter-in-law relationships. They are both intergenerational bonds made up of females, and bound by kinship networks. In contrast, the daughter / mother relationship is marked by a long, continuous, shared history, while the relationship of daughter and mother-in-law lacks this type of history. Their common link is through the man who is the son of the mother and

husband of the daughter-in-law. This suggests that they are somehow attached, however, this attachment is not well-defined in our culture. While there are no clear norms regarding this female in-law relationship, a positive bond between mothers- and daughters-in-law could be one more link in their social support networks (Sussman, 1988).

This study will add to existing research in its comparison of these female relationships over time. It addresses the effects of giving support on the relationships of women with their mothers and mothers-in-law. In practical terms, this research may help to alleviate relationship problems by helping women to better understand their relationships with their mothers and mothers-in-law.



## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Mothers and Daughters**

Mother-daughter relationships have received considerable attention in the last few decades. Much of this attention has focused on the time when the daughter is a child or an adolescent or when the mother is frail and dependent on the daughter for care. Yet, little is known about the long span of years during which the daughter is mature adult and the mother is not frail or in need of care (Fischer, 1983). Given women's longer life span compared to men's, the mother-adult daughter relationship constitutes a potentially extended and meaningful relationship in the support networks of both women.

#### Identification with mother

According to feminist psychoanalytic theory, women are seen as relationally oriented. Chodorow (1990; 1978) states that women are more likely than men to maintain certain portions of their relationships with their mothers. The mother is the early caregiver and primary source of identification for both sons and daughters in early life. However, the daughter's identification with her mother continues throughout life, while the son's identification switches to his father. The mother-daughter relationship thus intensifies, while the mother-son relationship becomes more distant. The mother has in the past, been more available to her children, than has the father. Therefore, the daughter will have a more

intense relationship with her mother than with her father. Accordingly, the daughter will also have a stronger relationship with her mother than the son will have with his father.

A girl's identification with her mother will continue throughout life. Because of this prolonged identity, daughters often perceive themselves as being more like their mothers, than boys perceive themselves to be like their fathers. This identification becomes even stronger when the daughter becomes a mother herself. Eichenbaum and Orbach (1983) focus on a identification of women with both their mothers and their daughters. They suggest that not only do daughters identify with their mothers, but that they also identify with their own daughters.

According to Eichenbaum and Orbach (1983), there are four major activities that shape the mother-daughter relationship. First, the mother identifies with her daughter because of their common gender and that the mother has, in essence, reproduced herself. Second, the mother projects feelings she has about herself onto her daughter. Third the mother behaves toward her daughter as she internally acts toward the daughter part of herself. Lastly, a mother through her daughter also lives her own mother's identity.

Gilligan (1982) suggests that women are raised to identify with their primary caregiver and develop a strong, bonding relationship that is the model for their lives. From their identification with their mother, women learn to value the preservation of relationships with others. The mother-daughter relationship has typically been idealized because of this relational orientation that *both* women experience.

Following this idea of identification with the mother, Fischer (1981, 1983, 1986) shows how shared roles in the family, especially the role as mother, makes for a special bond between mother and adult daughter. Their place in the family structure allows them to share, not only the same tasks and responsibilities, but also the emotional experiences that only a mother can know.

Fischer (1981, 1986) engaged in qualitative research that provided information from 43 daughters and 39 mothers through extensive interviews. A convenience sampling procedure was used to obtain a cross-section of daughters: married with children, married without children and single. The purpose behind her comprehensive interviews was to discover how daughters' transitions to marriage and motherhood would impact their relationship with their mothers. If, according to Chodorow (1990; 1978), daughter's identification with mother is cause for a strong relationship tie, then shared experiences should act to strengthen that relationship.

In fact, this is what Fischer (1981) found to be true. The daughter's wedding served as a transition point in her relationship with her mother. Daughters were then concerned about demonstrating their adult status through accomplishment of domestic skills. Their mother's evaluation of their housekeeping, cooking and other domestic skills was very important for newly married women.

When the daughter herself became a mother, another transition was made in her relationship with her mother. Symbolically, these young mothers began reorientation toward their mothers, in terms of their interpretation and evaluation of their mother's previous

mothering behavior. A common comment was: "Now that I have children myself I realize what she must have gone through" (Fischer 1981:618). To some extent daughters' reorientation toward their mothers is derived from occupying a similar status, with retrospective understanding.

Positive feelings expressed by adult women toward their mothers may be interpreted as dependency and lack of maturity. This is what Baruch and Barnett (1983) found in their study of 171 women with whom they conducted intensive interviews. Using multivariate techniques, they discovered that although the adult daughters felt it unfashionable to express their positive feelings, they did indeed enjoy the relationship they had with their mothers. In contrast to Fischer (1981), similar status as mother was negatively related to their rating of the relationship they had with their mother. The authors are quick to point out that this may actually be a result of the high rate of single parenthood among the daughters in the study. Overall, the daughters in this study said that their relationship with their mothers changed positively over time. The daughters began to empathize more with their mothers as they themselves aged.

In an interview intensive research project, with 70 married London women, O'Connor (1990) also found that daughters' relationship with their mothers changed when they married. Like Fischer's study (1981), their mothers' opinion of their domestic and parenting skills are important to married daughters. However, this did not come through as having a positive effect on their relationship. They tended to see an intimate relationship with their mothers as undermining the relationship they were cultivating with their husbands. Western ideology

stresses the importance of the marital relationship as paramount of all interpersonal relationships. A continued bond with one's parents can hinder the establishment of the new family unit which begins with the marital relationship (Marotz-Baden & Cowan, 1987).

In a more recent study, Fischer (1991) advances an important question that reflects our rapidly changing society. Fischer argued in 1981 and 1986, that status similarity and continuity in women's roles strengthens the bond between mother and daughter. To the extent that daughters enter the work world and/or opt to remain childless, the role disparity between mothers and daughters will widen, thus weakening that bond. She felt that their relationship would become less close, more like the father-son relationship. Fischer (1991) takes a feminist perspective in trying to predict what will happen to mother-adult daughter relationship. Currently, women are more and more likely to be employed. Their young daughters are see the struggle their working mothers have in maintaining their careers and their families. From this perspective Fischer predicts that as the daughters become women themselves, they can develop a fuller relationship with their mothers because they are potential allies in a sisterhood.

Suitor (1987) studied mother-adult daughter relationships when the married daughters return to college. She conducted face-to-face interviews at the beginning of the first year and again after the first year. Daughters whose mothers were college educated perceived that their mothers were more affectively positive toward them than did daughters with lesser educated mothers.

This suggests another answer to the question posed by Fischer (1991). Perhaps this positive effect of status similarity between mothers and daughters has implications for the future, as many young girls today have employed mothers. These young girls will experience a different kind of relationship with their mothers than did the adult daughters in the studies previously discussed. What effect these early relationships have on future mother-adult daughter relationships will continue to be explored.

#### Mother-daughter relationship over time

Whitbeck, Simons, and Conger (1991) examined the effect of adult children's early relationship with their parents on current parent-child relationship. In a sample of rural Iowans, adult child's perception of the parent's harshness of discipline, parental rejection and parental monitoring were measured. The quality of the current relationship, and assistance to parent were also assessed by the degree of help provided with housework, meals and the like. Health and age of the elder parent were added to the model to control for their effects on the current relationship and on levels of assistance.

Using path analysis, the researchers compared four dyadic relationships, mother-adult daughter, father-adult daughter, mother-adult son, father-adult son. There were differences and similarities found among these dyads. Parental rejection had the strongest and most consistent and negative effect on later life parent-child relationship regardless of sex of either child or parent. Parental rejection was the only variable found to be negatively related to the mother-adult daughter's current relationship.

In a landmark study Rossi and Rossi (1990) also compared the four possible dyadic parent-child relationships over time. They used probability sampling from the Boston Standard Metropolitan Statistical Area to obtain their sample of over 1300 adult children ages 19 to over 70. Retrospective data were utilized in ratings of the parent-child relationships over time. Adult child respondents rated how close their relationship was to their mother and to their father at three points in the past (at ages 10,16 and 25) and currently. These specific points were chosen to gauge the extent of the impact of adolescent years on the relationship. As expected, the average retrospective ratings of affective closeness at age sixteen for all adult children took a plunge, in comparison to ratings at age ten. Affective ratings recovered at the third point in time for all dyads. However, the mother-daughter dyad had the highest rating of affective closeness at this third point in time and continued at a higher level than all other dyads. The average father-adult daughter affective closeness, though not as high as in the mother-adult daughter relationship, was also higher than the average son's relationships with either parent. Whether a mother or daughter provided the rating of the mother-daughter relationship, both showed the higher intimacy than all other dyads. The authors cautiously pointed out that it is socially desirable for women to be more intimate in their relationships, and thus there is a tendency for some women to avow greater intimacy in all their relationships.

Bromberg (1988) conducted a qualitative study of 75 Jewish American mothers and daughters. She found that mothers tended to view the past mother-daughter relationship more positively than did adult daughters. Using Bengtson and Kuyper's (1971) concept of

"developmental stake" this makes perfect sense. One of the developmental stakes of daughters in adolescence is to separate from their mothers and become independent. This separation may be fully expected and desired by the mothers, although causing conflict that is more salient to the daughter. The developmental stake of the elderly mother may include life review. Having positive memories of their relationships with their daughters would therefore be more important to mothers than to adult daughters.

### Intergenerational support and assistance

Interaction in extended families in later life has become largely a matter of choice. Studies ( Baruch & Barnett, 1983; O'Connor, 1990; Fischer, 1991) have shown that geographic proximity is necessary but not sufficient, for exchange of mutual aid. Bromberg (1983) showed that types of assistance may very well change from on-site help to financial assistance and advice giving, for example, but that assistance levels were consistent over time. However, even when geographic locality changes, positive feelings of closeness between mother and daughter are not affected.

Research describing what extended family members do for each other has focused mainly on what adult daughters do for their parents. More research is now being focused on patterns of mutual aid between the generations. One reason this is so is related to the growth of women in the work force. Older mothers of employed young mothers have been acting as stand-in baby-sitters when necessary (Spieker & Bensley, 1994). Young-old mothers also assist their employed daughters through running of errands. Older mother to daughter



assistance seems to be more closely tied to affection, concentrating in gift giving, tension reduction and visiting (Bromberg, 1983), while daughters assist mothers instrumentally and affectively.

Fischer (1986) found five types of relationship patterns existed between mother and adult daughter while the mother was not yet frail. These five include: 1) Responsible mother/dependent daughter; 2) Responsible daughter/dependent mother; 3) Peer-like friendships; 4) Mutual mothering and 5) non-involved. The norm of reciprocity differs depending on the type of relationship. First of all, it is important to note that the norm of reciprocity among relatives is a different type of reciprocity one would expect from a friend or peer. With relatives, reciprocity implies a give and take over time. As applied to giving of support to elder parents, this may especially be true.

The first type of relationship is a pre-transitional one, involving single daughters without children. The mother obviously still feels a sense of responsibility toward the daughter. There is a low level of reciprocity on the daughter's part.

Type two, the responsible daughter/ dependent mother type, usually involved a severe emotional problem on the part of one of the parents. The daughter feels a need to protect the passive mother. This is generally a situation of high enmeshment and role confusion between the two.

Peer-like relationships between mother and adult daughter are idealized, but rare. In this type of relationship there is high involvement in each other's lives but also high independence for both parties. There is reciprocal concern while supporting each other's

autonomy.

The fourth type of mother-daughter relationship, mutual mothering, was the most common found by Fischer (1991). This relationship involves a mutuality of responsibility toward each other. Unlike the peer-type relationship, women in this type of relationship supervise each other's activities. The giving and receiving of nurturance, assistance and advice is mutual. This type of relationship may not be one completely sustained out of affection, but also out of a sense of duty. However, Whitbeck et al., (1991) found that when current relationships were affectively positive, assistance levels were also higher.

Women's traditional roles in our society have evolved to include a marked tendency for nurturance, empathy, and intimate social bonds. Family care to the elderly is often assumed to be women caring for the elderly, because historically women have been assigned responsibility for caregiving duties within the family (Dwyer & Seccombe, 1991). With the current rise in the number of frail elderly, elder care has become an important form of family labor. The health of the mother and the health of daughter not only affect instrumental support extended to the other, but in some cases also affected feelings of closeness (Baruch & Barnett, 1983; Barnett, Marshall, & Sayer, 1991; Fischer, 1991). Baruch and Barnett (1983) developed a three item scale, called "maternal rapport" which measured enjoyment of mother's companionship, getting along smoothly with mother, and having mother as a good role model. Although most adult daughter respondents indicated that maternal rapport increased over time, poor health of the mother was associated with lower maternal rapport scores.

The effects of a caregiver/care recipient relationship are not necessarily negative.

Walker, Shin, and Bird (1990) wanted to discover the impact the caregiving situation had on the relationship of the two parties involved. Some family caregivers report positive outcomes as a result of this experience. Favorable effects on the relationships of 133 daughter caregivers and their mothers were found to be a result of the caregiving situation. Over 50% of caregivers and 45% of their mothers experienced positive impacts on their relationships. Walker and her colleagues (1990) admitted that the volunteer nature of the sample may have over represented positive relationships or under represented more negative ones.

In a longitudinal study, Stollar and Pugliesi (1989) gathered data from 135 pairs of elderly people and their female caregivers. They found that more hours the caregivers gave, the higher was their burden, however they experienced an increased sense of well-being. This points to the cultural norm of filial responsibility. Stollar and Pugliesi, (1989) attributed this to the societal expectation of women to provide care and nurturance for family members. Because they were fulfilling their societal expectations, these women experienced a heightened sense of satisfaction and well-being.

#### Summary of mother-daughter relationships

The literature review indicates that as women age, mother-adult daughter relationships go through several transitions. The conflicts experienced in adolescence give way to increased feelings of closeness as the daughter ages. There was continuity in felt

affection over time. As a daughter experiences similar statuses as her mother, she may begin to empathize with her mother and feel closer. This was especially true with transitions of marriage and motherhood. Research also indicates that mutual assistance is experienced by both members of the dyad, even into old age. However, when the mother becomes frail and dependent, she begins to receive more assistance than she gives. If patterns of assistance over time are examined, this does not contradict the norm of reciprocity.

### Mothers and Daughters-in-law

Research on the mother-in-law / daughter-in-law relationship is very sparse. This lack of research is surprising since most of Americans marry and therefore most have mothers-in-law. Most research that has been conducted has been cross-cultural (Fischer, 1983). Both men and women across cultures consider relationships with mothers-in-law to be characterized by tension (Duvall, 1954, Fischer, 1983, Adler, 1989). Cross-cultural studies conducted in Mid-Eastern and Eastern countries using social distance scales show "Mother" elicits close spacing while "Mother-in law" emits large interpersonal distance by the respondents (Adler, 1989; Miao, Adler, & Takooshian, 1993). Research on this in-law relationship in Western cultures has also been neglected or has had a negative slant to it (Fischer, 1983). In spite of this lack of empirical data, the stereotype is that relationships with mothers-in-law are troublesome.

There are several explanations for this negative attitude toward the mother-in-law / daughter-in-law relationship . Radcliffe-Brown (1952), taking a structural-functional

approach, discusses how in-law avoidance results from rigid status relationships which simultaneously involve cooperation and competition. The cooperation and competition result from the shared relationship with the son-husband. This common link indicates that the two women are somehow attached, although there are no clear roles involving in-laws (Sussman, 1988). Western ideology states that the marital tie should supersede ties of the extended family (Marotz-Baden & Cowen, 1987). This shared tie may be perceived by the daughter-in-law or by the mother-in-law as being in direct competition for the son-husband's time and affections (Fischer, 1983).

In a review of the literature, Kieren, Henton and Merotz (1975) discovered that the husband's kin were more frequently considered to be the source of conflict than were the wife's kin, that more women than men reported trouble with kin, and that female kin were the most troublesome. This implicates the mother-in-law / daughter-in-law relationship.

#### Daughter-in-law / mother-in-law relationship over time

In-law relationships appear to be most stressful for young married couples until they have developed their own autonomous relationship (Duvall 1954). Duvall (1954) developed a model to help explain kin conflict based on a national study of over 5,000 American men and women. According to this model, every married couple belongs to three different families. There are both his and her family of origin and then the new family they are creating with their marital union. Duvall (1954) suggests that it is of extreme importance that

the marital unit as a family becomes a stronger family unit than either of their families of origin. Interference by in-laws can hinder the development of the new family unit.

The perspective of the daughters-in-law is different than the mothers-in-law. Duvall (1954) found that daughters-in-law are more critical of mothers-in-law, seeing them as meddlesome, interfering, old-fashioned, critical, and dominating. Parents-in-law felt they criticized their children-in-law much less. Again, the application of Bengtson and Kuypers' (1971) concept of developmental stakes is appropriate. It is important at this stage in their lives for the adult son and his wife to develop a relationship that is autonomous from the parents, interference from the older generation hinders that. As the couple's relationship becomes established over time, it would seem likely that the relationship between in-laws improves as well.

Another reason development of in-law relationships is problematic is the geographic dispersion of American families. Nydigger (1986) points out that in-law relationships are problematic because the parties are relatively unknown to each other at the onset of their relationship and this relationship develops very slowly, with sporadic visits at holiday times. It is difficult to develop the caring, trusting relationship characterized by parents and children at annual or biannual get-togethers. Daughters-in-law often complain of feeling like outsiders (Fischer, 1983). They feel as if they are in a foreign culture. In addition, in-law contact tends to favor the wife's parents. The amount of contact married couples have with their parents tend to favor wives' parents at the expense of contact with the husbands' parents.

### Identification with mother-in-law

Women tend to be the kinkeepers across generations and between affinal as well as consanguine kin. There are important similarities between the mother / daughter relationship and the mother-in-law / daughter-in-law relationships. They are both intergenerational, asymmetrical bonds made up of females, and bound by kinship networks. Daughters-in-law share gender specific roles with mothers-in-law. In contrast though, the relationship of daughter and mother-in-law lacks the lengthy, shared, continuous history that is typical of the mother-daughter relationship (Fischer, 1983).

Although the literature suggests that similar status brings mothers and daughters closer together, the opposite may be true for women and their mothers-in-law. Cotterill (1994) conducted an in-depth qualitative study of twenty-seven working class British women and their relationships with their mothers-in-law. The similar status as wife and homemaker caused many young wives to be fearful of their mothers'-in-law criticism. The criticism they receive from mothers-in-law, then is cause for them to turn to their mothers for support thus strengthening their relationship with their mothers and further weakening their relationship with their mothers-in-law.

Fischer (1983) also found that the attitude of daughters-in-law toward mothers-in-law to be more negative than mothers-in-law's attitude toward daughters-in-law. This particular study discussed earlier, showed that the greatest source of conflict revolved around issues of child-rearing. Although the young mothers became closer to their own mothers after the birth of their child, turning to them for advice, the opposite effect was found for mothers-in-

law. In fact, advice giving by mothers-in-law, was viewed as meddling, as criticism, and as attempts to subvert the young mothers' child rearing practices.

### Intergenerational support and assistance

When an elderly parent requires assistance, it is indeed the daughter who most often provides this assistance (Brody, 1981; Chappel, 1990; Franks & Stephens, 1992). Rossi and Rossi (1990) find that consanguineous kin evoke higher feelings of filial obligation than do affinal kin. Yet, if a married man's mother requires assistance, there is evidence that his wife, (his mother's daughter-in-law) may provide it (Merril, 1993). Feelings of obligations toward in-laws are higher than toward more distant relatives. The gender of the giver and receiver of assistance also plays a role. If both are female, the likelihood of obligation is greater.

Riley and Riley (1993) suggest that certain demographic changes (increasing number of elderly, lower fertility rates, and geographic mobility) may cause family boundaries to be blurred; so that who is considered family and who is not is less distinguishable. Fewer children also mean fewer daughters on whom mothers can rely for personal care. In the 1982 National Long Term Care Survey, 51% of women who assisted mothers-in-law, provided care for elders who had no living daughter (Merrill, 1993). This may be true especially for widows who have no husbands to turn to. The support network of widowed elderly is more diverse than the non-widowed (Goetting, 1990). Heinemann (1983) found that the role of



mother-in-law was one of the three most salient roles for elderly widows. This role may give an elderly woman one more link in her social support network.

In a study using the 1982 National Long Term Care Survey, Merrill, (1993) found that daughters and daughters-in-law provided similar types of assistance. Both assisted with activities of daily living and instrumental activities of daily living. Although they provided as broad a range of assistance, daughters-in-law contributed fewer hours of assistance, six fewer hours a week than did daughters. Daughters-in-law were an important source of support. Twelve percent of non-spousal caregivers were daughters-in-law. In the future daughters-in-law may be called on more often by their mothers-in-law for assistance and support. In addition, more women may be caring for their own parents and their parents-in-law simultaneously.

### Theoretical Perspectives

#### Social exchange theory

Several studies have used social exchange theory to explain interpersonal relations between adult children and their elderly parents (c.f. Mutran & Reitzel, 1984; Walker et al., 1990 ).

Social exchange theory in its basic form, as developed by George Homans, (1961) states that social exchange occurs when there is interaction between two or more people. That interaction occurs because it benefits all individuals involved in the exchange. There is also a cost to each individual. Homans saw the actor as rational and self-interested. He also

perceived actors as reward-seeking and punishment-avoiding. Thus, each actor seeks to keep the costs of an exchange below its rewards. Those activities that have higher rewards than costs will be repeated, while those activities whose costs are above the rewards will be discontinued (Ritzer, 1988).

Thompson and Walker (1984) extended their earlier (1983) study to look at mutual assistance patterns between mothers and daughters. They found that where there were high and symmetrical material exchanges, the mother-adult daughter relationship displayed higher feelings of affectively positive attachment. When assistance patterns were not reciprocal, the giver reported more negative feelings and less attachment toward the receiver.

Mutran and Reitzes (1984) address intergenerational support and well-being among the elderly from the perspective of both social exchange and symbolic interactionism. Both theories recognize, first, the individual's assessment of the situation, secondly, the value of rewards as being relational and dependent on the definition of the situation and lastly, that roles and role outcomes are not fixed. Mutran and Reitzes (1984) point out that social structure has an impact on family interactions. The influence of subjective factors and self-motives on interaction is obvious when emotional as well as tangible rewards received by the caregiver are considered.

Elderly parents who gave much when they had young children, may expect emotional as well as tangible support from their adult children. The norm of reciprocity can carry over time, so that the adult daughter feels an obligation to assist their aging parents. Clark, Mills and Powell (1986) explain that close and long lasting relationships do not require immediate

reciprocity because continuity in the relationship is assumed and reciprocity can be achieved over time. Antonucci (1985) describes this phenomenon as a "support bank". She suggests that "deposits" are made earlier in life with one's children in expectation of future needs or "withdrawals". This approach as applied to mothers-in-law and daughters-in-law suggest that if one of the motivating factors for providing support is to reciprocate for past care and support, daughters-in-law would be less likely to provide support and more likely to feel that demands for support are great (Merrill, 1993).

### Role theory

In addition to her support giving responsibilities toward her elder relative, a middle-aged woman may have many other vocational, marital, parental, and social obligations as prescribed by societal norms and personal values (Scharlach, 1987). Role theory can help explain potential conflict between these areas. A role is an integrated set of social norms that can be distinguished from other sets of norms that constitute other social roles (Biddle, 1979). Social norms are cultural expectations about the behavior that is appropriate for people who occupy various statuses. These cultural expectations are transmitted through the process of socialization. The cultural expectation of filial obligation towards one's elderly relative is very strong. Filial obligation may be strong enough to over-ride a negative relationship in the giving of support to an elderly relative.

When examining women's relationship with their mothers-in-law, their relationship history, although not as long or as strong as a mother-daughter relationship, could also play a

role in the amount of instrumental support they give their mother-in-law and their current relationship. Women who perceive their mother-in-law as a positive person, may be willing to provide more support to their elderly mother-in-law. A sense of filial obligation may cause women who do not have good relationships with their mothers-in-law to give support when it is needed. However, those who have a history of a strained relationship, may well experience greater stress when giving support to their elderly mother-in-law.

The self is comprised of a number of statuses, each of which corresponds to a role enacted by the person. Roles that one enacts may be more or less compatible with the self. The more compatible the role is with the self, the stronger the identity is with that role. This compatibility is referred to as saliency. The more salient a role is to a person, the more involved that person will be in that role, the greater the expectations they will have for themselves in that role (Turner, 1978). For example, a woman's role as daughter may be more salient than her role as daughter-in-law. She will therefore, have greater expectations of herself in her role as daughter.

A status exists only in relationship to another status. Statuses have varying degrees of consensus of role expectation. This refers to how much the role expectations of the individuals in the relationship agree or disagree. Low consensus of role expectation may result in conflict between individuals. In the support giving situation, if the recipient of support expects more of the support giver than the support giver can give, criticism, conflict, and stress in the relationship can result.

Role theory also states that role conflict can produce poor role performance and a negative emotional state called role strain (Sarbin & Allen, 1968). To the extent that demands from other roles conflict with the perceived responsibilities as a support giver, a person is likely to experience role strain. Two types of strain seem likely to affect a support giver of the elderly. These are role overload and perceived role inadequacy. Role overload occurs when the demands from one or more roles becomes too difficult for an individual to cope with because of insufficient time or energy. Role overload may be particularly likely among women who are caregivers for an elderly parent in addition to their other responsibilities as employee, wife and/or mother (Scharlach, 1987).

In an effort to discover the association between daughter role strain and the quality of the daughter's relationship with her mother and mother's well-being, Scharlach (1987) interviewed forty women (aged 38-62) and twenty-four of the respondents mothers who could also respond. For the daughter respondents amount of assistance given, perceived role overload, perceived role inadequacies, role strain and relationship quality were measured. The Bradburn Affect-Balance Scale was used to assess elderly mother's well-being.

The types of assistance most often given by daughters were emotional reassurance, telephoning, visits, and transportation. Relationship quality was found to be negatively related to role demand overload and positively related to role inadequacy. When mothers' well-being scores were high, daughters' report of relationship quality was also higher.

The presence of role strain also depends on an individual's perception of congruence between his/her self-concepts and role demands as defined by societal norms or individual

values. This is referred to as role adequacy (Franks & Stephens, 1992). If a person feels she is living up to the demand, she will have a better self-concept and less role strain. If filial responsibilities are perceived as unrealistically high, given the caregiver's other responsibilities, support stress may result. Support stress, in turn can negatively impact the relationship with the status set partner (Frank & Stephens, 1992). Pertaining to the support giving situation, this means that if demands of the elderly relative are perceived by the caregiver to be high, the quality of the relationship of the caregiver with the care recipient may be reduced.

Lawton, Kleban, Moss, Rovine, & Glicksman (1989) examined how the amount and type of support an elderly person required contributed to caregiver stress. From a solicited sample, caregivers of Alzheimer's patients were interviewed. Among adult children caregivers more than 88% were female. An interesting finding was discovered. More caregiving was associated simultaneously with greater caregiver satisfaction and greater caregiver burden. This indicates that it is not the sheer amount of tasks that accounts for role stress, but rather the interpretation of that role.

### Hypotheses and Conceptual Model

Because of the complexity of the path models, hypotheses regarding differences in instrumental support given to the two groups, mothers and mothers-in-law, and perceived demands of the two groups of women are first presented. Then, hypotheses concerning differences in initial relationship quality and time three relationship quality between groups

of mothers and mothers-in-law will be discussed. Hypotheses relating to within group differences of relationship quality at time one and time three for each group, mothers and mothers-in law are proposed next. Following these hypotheses pertaining to differences, the basic conceptual model will be presented with hypotheses indicating direction of relationship between variables.

#### Instrumental support given and perceived demands

The literature shows that second to spouses, daughters most often give support to their mothers (Kivett, 1985; Chappell, 1990). According to social support models (Peters, et al., 1987), older women with daughters would not turn to their daughters-in-law for support until they had exhausted consanguine support. This is true from both social exchange and role theoretical perspectives. According to social exchange theory, mid-life women who earlier benefited from maternal support will have a sense of obligation to support their mother when she is now the party who need assistance.

Daughters have a longer history with mothers than with mothers-in-law. This longer history included the receiving of much support, emotional and instrumental. The norm of reciprocity carries over time with communal relationships (Clark, Mills & Powell, 1986). Daughters-in-law are related to their mothers-in-law simply through marriage. In the time that she has been married to her mother-in-law's son, the amount of support received is less and therefore the norm of reciprocity is not as strong as with her mother. The norm of reciprocity, lacking in strength for the daughter-in-law / mother-in-law relationship, predicts

not only less support given, but also that the support given will more likely to be perceived as excessive.

Role theory explains that the saliency of the role enacted positively affects the involvement with that role (Turner, 1978). Because of her life long relationship with her mother, an adult woman is likely to see her role of daughter as more salient than the role of daughter-in-law. Consequently, giving support to her mother may be seen as something expected more of a daughter than of a daughter-in-law.

Steinmetz (1988) found that caring for a mother-in-law was perceived to involve more tasks and to be more stressful than caring for a mother. Demands perceived as a result of giving support to a mother-in-law are expected to be greater for mothers-in-law. These demands are what erodes relationship quality over time.

Hypotheses comparing instrumental support given to mothers and mothers-in-law and perceived demands from these support recipients follow.

H1: Mid-life women will give significantly more support to their mothers than to their mothers-in-law.

H2: Mid-life women will perceive demands from their mothers to be less excessive than demands from their mothers-in-law.

### Relationship quality

The relationship of women with their mothers has been shown to be a closer, more enduring relationship than other intergenerational family relationships (Rossi & Rossi, 1990).



There is no reason to believe that relationship quality with mothers-in-law will be higher than relationship quality with mothers.

H3: Relationship quality of mid-life women with their mothers will be significantly higher at both times one and at time three than relationship quality with their mothers-in-law.

Relationship quality has been found to be relatively stable over time (Whitbeck, et al., 1991). Any differences in relationship quality at time one and time three, for both mothers and mothers-in-law, are hypothesized to be non-significant.

H4: Relationship quality of mid-life women with their mothers will not be significantly different from time one to time three.

H5: Relationship quality of mid-life women with their mothers-in-law will not be significantly different from time one to time three.

### Conceptual model

The general conceptual model for this study (Figure 1) is based upon the literature on mother/daughter relationship quality, mother-in-law/daughter-in-law relationship quality and social support provided by family members. The central hypothesis for this study is instrumental support given and perceived demands will erode relationship quality over time.

As support giving increases, social exchange theory would suggest that the support giver feels an imbalance in rewards verses costs and negatively affect the relationship. Role theory also makes the argument that as demands of a particular role increase, role overload from that one role can occur. Excessive demands from one role can cause conflict with

demands from other roles. As more women are balancing careers and motherhood, demands from the role of support giver can impinge on demands from their other roles.

The literature concerning the effects of giving of support on relationship quality pertain mainly to the daughter-mother relationship. Scharlach (1987) and Walker and her colleagues (1990) both found negative effects on mother/daughter relationship quality. The overall hypothesis is that instrumental support and perceived demands will erode relationship quality with the support recipient over time when selected sociodemographic variables are controlled for. These apply to both the daughter / mother relationship and the daughter-in-law / mother-in-law relationship.

H6: Instrumental support given will erode relationship quality of mid-life women with their mothers and mothers-in-law over time (Figure 1, Arrow A).

H7: Perceived demands will erode relationship quality of mid-life women with their mothers and mothers-in-law over time (Figure 1, Arrow B).

### Sub-hypotheses

The following sub-hypotheses will also be tested:

Hypotheses 8 through 10 concern the effect of relationship quality at time one. Social exchange theory would predict that although filial norms may cause a mid-life woman to give support to her mother or mother-in-law, in the absence of a close relationship, a better relationship will be conducive to giving to more support. Relationship quality at time one will be positively related to instrumental support given. Relationship quality with mothers at

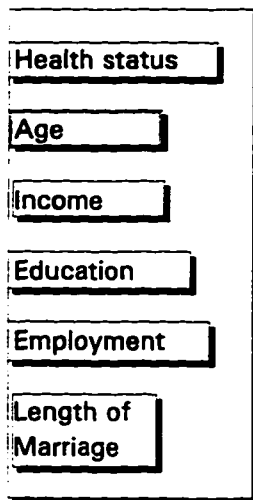
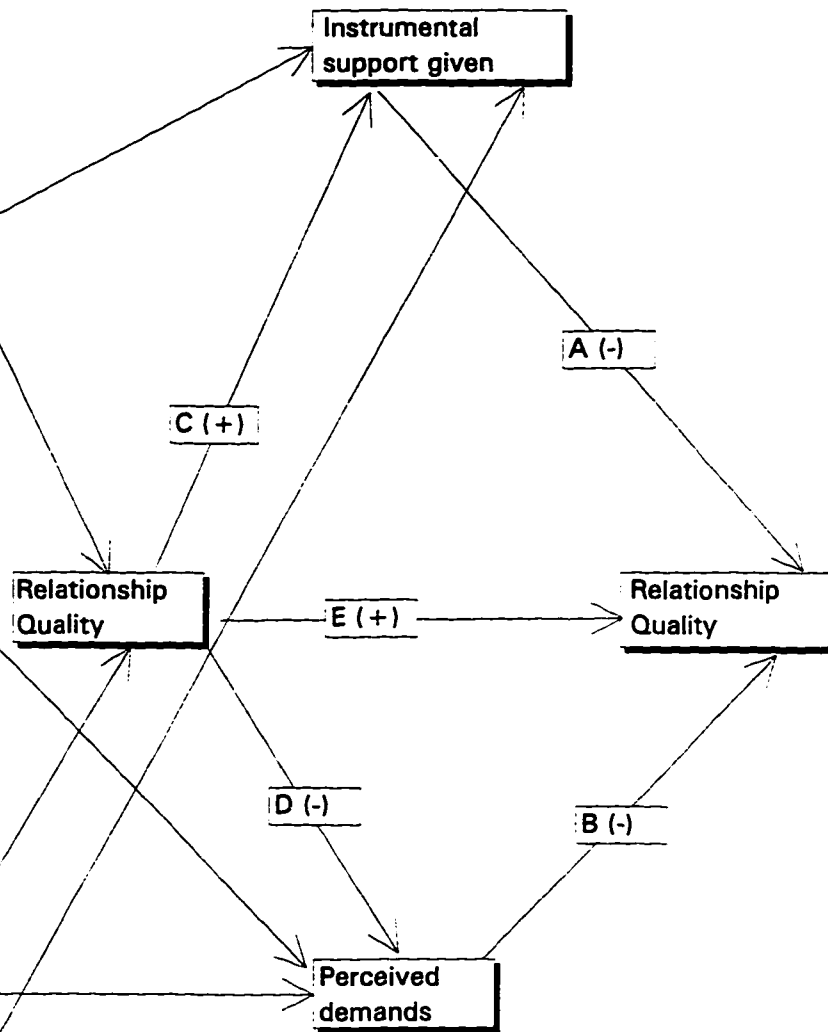
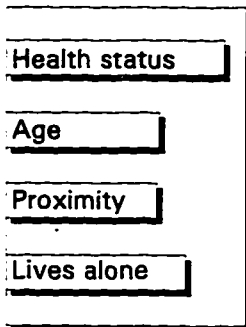
Time oneTime twoTime threeSupport giver  
characteristicsSupport recipient  
characteristics

Figure 1. Conceptual path model

time one, will be negatively related to perceived demands at time two. If a relationship is perceived as being negative, demands from that role partner will be more likely to be perceived as excessive. Hypotheses 8 and 9 are based on social exchange theory and the literature. Hypothesis 10 is based on the literature that has shown relationship quality to be very stable over time (Whitbeck et al., 1990).

H8: Relationship quality at time one is hypothesized to be positively related to instrumental support given mothers and mothers-in-law. (Figure 1, Arrow C)

H9: Relationship quality with one's mother or mother-in-law at time one will be negatively related to perceived demands. (Figure 1, Arrow D)

H10: Relationship quality at time one will be positively related to relationship quality at time three. (Figure 1, Arrow E)

### Control variables

The model will control for the effects of support giver characteristics and support recipient characteristics at time one, relationship quality at time one, and instrumental support and perceived demands at time two.

### Support giver characteristics

**Health** Health status of the support giver has been found to adversely affect the psychological well-being of the support giver. (Cicerelli, 1990). This may, in turn, negatively affect relationship quality between the support giver and receiver. The health of

the support giver may also affect the amount of support that she is able to give. If the support giver's health is poor she may also see demands made by an elderly relative as being excessive.

**Age** Age of the support giver is an indicator of status similarity. The older the support giver is, the more likely she will identify with the support recipient (Fischer, 1986) This increased level of identification may increase the quality of their relationship.

**Socio-economic status** Income and education are variables that indicate socio-economic status. Socio-economic status has been shown to affect the type, but not the amount of support given. Middle and upper-class members give more financial assistance, while working and lower class members are more likely to give instrumental assistance. This study is examining instrumental support, therefore it is expected that lower socio-economic status will be associated with higher levels of instrumental support given. According to role theory, the more one is engaged in a role, the more salient that role becomes. The more salient the role, the greater the expectations one has of one's self in that role. As the role of support giver becomes more salient to the support giver, the more likely she will be to feel stress and role overload, as her expectations of herself in that role increases.

**Employment status** Employment status as an independent variable is one that has contradictory effects. If a woman is employed full time outside her home, she will likely

have more role demands than one who is not. This may decrease her relationship quality with her elderly support recipient and may increase her perception that the elder woman is making excessive demands. On the other hand, an employed woman may also have a larger support network than a homemaker. This support network may increase her coping resources and lower perceived demands. Her identification with her occupation may also act as a buffer to the stress in her role of support giver.

**Length of Marriage** When a woman is married for a long period of time, her attachment to her mother is transferred to her husband (Duvall, 1954). This lessening attachment affects her relationship with her mother and may affect the amount of support given to her mother. Length of marriage may actually have the opposite effect on the woman's relationship with her mother-in-law and amount of support given. As ties to her husband become stronger, ties to his family also increase in strength (Duvall, 1954).

#### Support recipient characteristics

When considering the effects of support recipient characteristics, age, health status, geographical proximity, and living alone are salient independent variables.

**Age and health** An elderly woman's poor health and advanced age are expected to increase her need for support and increase perceived demands for support. Poor health and

advanced age may also affect relationship quality with the support giver due to impaired social interactions.

**Proximity** Closer geographic proximity has been shown to increase the amount of support given but not relationship quality of daughters and mothers (Fischer, 1981). Elderly women will be more likely to call on daughters or daughters-in-law for support in the absence of a husband (Cantor, 1994). This fact may also increase the sense of demandingness on the part of the daughter. Living alone could also affect relationship quality at time one in either direction. Interaction may increase, and thus either conflict or development of a closer relationship are possible.

## **CHAPTER 3**

### **METHODOLOGY**

#### **Sample Characteristics**

Data for this study were collected as part of the second, third, and fourth waves of the Iowa Youth and Families Project conducted at Iowa State University (Human Subjects Committee approval number M1361). Beginning in 1989, this longitudinal project has collected data on families in the different areas of family processes, intergenerational relationships, life stresses, health, and the like. The original families consisted of white, two-parent families, each with a target 7<sup>th</sup> grade adolescent and a sibling within four years of age of the target child. Families lived in one of eight neighboring counties in Iowa. All of these families lived in a rural setting: 54% lived in a small town with the population under 6,500, 34% lived on farms, while 12% lived in rural areas but not on a farm. Of the eligible families recruited through local school systems, approximately 79% agreed to participate in the project. Families received \$250 to compensate for participation. Eighty-eight percent of the original sample was still participating in the study in the third year.

Because this study examines effects on relationship quality for adult intergenerational relationships, the original sample was reduced to include only mothers in the families. Furthermore, only families in which the original marital relationship was intact for all three years were included to avoid any confounding effects of marital dissolution on the relationship quality of women with their mothers-in-law. This research was based on the



reports of 252 middle-aged women who participated in all three waves of the panel study who have both a mother and mother-in-law still living. The elder generation of women, mothers and mothers-in-law, were not included as respondents in this study. The analysis was based on married middle-aged women's reports regarding their relationship with their mothers and mothers-in-law. Husbands of respondents provided some of the information pertaining to their mothers, the respondents' mothers-in-law. Interviews were conducted with each family in their homes in each of the years, 1990, 1991, and 1992.

## Measures

### Dependent variable

In this study, the main dependent variable is relationship quality with mother and with mothers-in-law at time three. This variable was also measured at time one. It was measured both times by the response to the question: "How happy are you with your relationship with (target person)?" Responses ranged on a scale of 1 "very unhappy" to 4 "very happy". Most middle-aged women reported a very happy relationship (a score of 4) with their mothers and a happy relationship (a score of 3) with their mothers-in-law at both times one and three. The mean score for relationship quality with mothers was 3.54 at time one, with a standard deviation of .77. At time three, the mean score for relationship quality with mothers was 3.50, with a standard deviation of .75. For relationships with mothers-in-law, the mean score at time one was 3.16, with a standard deviation of .87. At time three the mean score for relationship quality with mothers-in-law was 3.06 with a standard deviation of .86.

Support giver socio-demographic variables

**Health** The health of the respondents was determined by asking the respondents how they would rate their overall health. Potential responses were 1 = excellent, 2 = very good, 3 = good, 4 = fair, and 5 = poor. These were reverse coded so that the better one's health was rated, the higher the rating. Thus, "excellent" health was given a rating of 5, "very good" was rated 4, and so on. The mean rating of overall health was 4, and the standard deviation was .80. Most respondents, 69.8%, rated their health as good or very good.

**Age** Age was assessed by directly asking respondents how old they were. The age of the respondents varied from 30 years to 50 years. The mean age was 38, the standard deviation was 3.63. Mid-life women who were between the ages of 30 and 40 made up 75% of the sample, while those between 41 and 50 made up 25% of the sample.

**Income** Total annual family income had a range from 0 to \$110,000. The mean income was \$28,276.55, and the standard deviation was \$17,180.40. This suggests that a very few high incomes skew the distribution, and indeed this is the case, with 99.2% of the sample reporting incomes of \$64,000 or less and only two families with an annual income of \$100,000 or more. The median income was \$30,000. Dividing the range into quartiles, 25% of the sample had incomes of \$15,500 or less, 50% \$29,920 or less, while the top 25% had incomes of \$38,800 or more.

**Education** Level of education was operationalized by the years of education which the respondents had completed. All respondents had completed elementary school. Two percent had less than high school education, 40% of respondents were high school graduates. An additional 39% had attended college or vocational school and 15% had completed a college degree. Three percent had some graduate work or had completed more than a college degree.

**Employment status** To measure employment status, respondents were asked "In a typical week during the past year, how many hours per week did you work at your job?" Responses ranged from 0 to 84, with the mean being 30.67, and a standard deviation of 17.0. Only 24 women, or 9.5% did not work at a job at all in a typical week during the past year. Forty-five percent of women worked at their jobs 35 hours per week or less, while 54.5% worked 40 hour per week or more.

**Length of Marriage** To assess how long the respondents were married, they were asked in which month and year they were married. This figure was then subtracted from the current year, 1996. The number of years married ranged from 19 to 37. The mean number of years married was 24.6, and the standard deviation was 2.77.

### Support recipient socio-demographic variables

**Health status** The health of respondents' mothers was determined by asking the respondents how they would rate their mother's overall health. The health of respondents' mothers-in-law was asked of the husband of the respondent. Again, potential responses were 1 = excellent, through 5 = poor. These too, were reverse coded so higher ratings reflected better health. The mean rating of overall health of mothers was 3.76, and the standard deviation was .85. For mothers-in-law, the mean rating of overall health was 3.71 and the standard deviation was .82.

**Proximity** Geographic proximity was assessed by asking "how far do you live from your mother?" and "how far do you live from your mother-in-law?" responses were then categorized. Possible response categories were:

1: we live together; 2: within 5 miles of each other; 3: within 5-25 miles of each other; 4: within 25-50 miles of each other; 5: within 50-150 miles of each other; 6: with 150-250 miles of each other, and 7: more than 250 miles from each other.

The mean for proximity to mothers was 4.17 and the standard deviation was .11. Mother-in-law proximity had a mean of 4.53, with a standard deviation of 1.66. More mid-life women were likely to live near their mothers than their mothers-in-law. Forty-three percent lived within 50 miles or less of their mothers, while 35% lived that close to their mothers-in-law.

**Living alone** To determine if respondents' mothers lived alone or not, the respondents were asked who their mothers live with. Respondent's husbands were asked the same question to learn if respondents' mothers-in-law lived alone or not. This variable was categorized as a dichotomous variable, the elderly mother lives alone or does not. Twenty-six percent of mothers-in-law lived alone compared to 19% of mothers. This may be a function of age and a greater likelihood of being widowed, as mothers-in-law were somewhat older than mothers.

**Age** To assess the age of respondents' mothers and mothers-in-law, respondents were asked how old their mothers were, while respondent's husbands were asked the same question of their mothers. The range of ages for mothers was 47 to 85, for mothers-in-law the range was 47 to 87. The mean age for mothers was 63.62 and the standard deviation was 7.84. Mothers-in-law tended to be slightly older, with a mean of 66.35 and the standard deviation was 7.23. Ninety-two percent of the mothers and 85% of mothers-in-law of the women in the sample, would be considered to be in the age group of "young-old" (ages 65 to 74).

**Instrumental support** Instrumental support provided to mothers was computed by summing the responses to the question "do you provide any of these following types of help or support to your mother". The same question was asked of respondents with mothers-in-law as the recipient of help or support. The possible responses for types of help provided

were emotional support, transportation or shopping, housework or meals, help when sick, and personal care.

The alphas for the construct, instrumental support given, were .632 for transportation and/or shopping; .676 for housework and meals and only .482 for sick care. One other support variable, personal care, was left out of the equation because of the low factor loadings. So few women gave personal care (e.g., bathing and feeding) to their relatively young mothers and mothers-in-law.

Instrumental help given ranged from 0 to 3. The mean of instrumental support given mothers was .6 with a standard deviation of .9. For mothers-in law, the mean was .3 with a standard deviation of .7. This also reflects the young-old age group of many of the mothers and mothers-in-law of the women in the sample.

**Perceived demands** Perceived demands were assessed with the question "how often do you feel that (target person) makes too many demands on you?" Potential responses were on scale of 1 to 4, ranging from 1, "never" to 4, "often". Most women did not see their mothers or mothers-in-law as demanding. The mean categorical response was 1.80 for mothers and 1.77 for mothers-in-law. The standard deviation for mothers' demandingness was .87, for mothers-in-law, .84.

### Analytic Procedures

Several types of statistical analyses were used in this study. Frequency analysis provided the descriptive statistics (means and standard deviations). T-tests were employed to compare the means of amount of instrumental support provided to mothers with amount provided to mothers-in-law; to compare means of perceived demands of mothers with perceived demands of mothers-in-law; to compare means of relationship quality at time one with relationship quality at time two for both mothers and for mothers-in-law; and to compare relationship quality with mothers to relationship quality with mothers-in-law.

T-tests are instrumental in assessing whether the differences are due to chance or if the differences are significant. A significance level of less than .05 indicates that the probability that the observed difference is due to chance is only 5%. This is the accepted level of significance in most social research (Vogt, 1993).

Pearson product moment correlations were used to determine the direction and strength of the relationships between variables. The presence of multicollinearity between the independent variables was detected through Pearson correlations also. This is a necessary step in selecting variables to enter into the resulting path model.

Ordinary least squares regression was utilized to estimate coefficients for the path analyses. Path analyses was the statistical technique employed to analyze the relationships between the independent and dependent variables. The magnitude of the relationship between variables can be estimated and those estimations can then be used to provide information about causality. Exogenous variables are assumed to have causes outside of the

model, while endogenous variables are assumed to have causes within the model. Path analysis has an advantage over ordinary multiple regression in that both direct and indirect effects can be calculated (Vogt, 1993).

Path coefficients are calculated in the form of standardized regression coefficients, beta. Beta values indicate the relative strength of the association between variables, while controlling for other variables in the model. The coefficient of multiple determination or R squared, is a measure of the proportion of the total variance in the dependent variable that is explained by the simultaneous predictive power of all the independent variables in the model. (Agresti & Finlay, 1986) The variance unexplained by the model, or the residual variation, is calculated as the square root of one minus the multiple correlation (Bollen, 1989).

In this study, two fully recursive models were examined first using ten exogenous variables, and four endogenous variables. The variables were entered in stages. For example, the exogenous variables were regressed on relationship quality at time one, then the exogenous variables and relationship quality at time one were regressed on perceived demands. The variables for the final models were chosen based on Pearson correlation results, literature and theory.



## **CHAPTER 4**

### **RESULTS**

In this chapter, the results of the conceptual model are presented and discussed. First, the differences between the means of mothers' and mothers-in-law's characteristics are shown through the results of t-tests. Differences in instrumental support given to the two groups, and perceived excessive demands of the two groups of women are examined next. Then, differences in initial relationship quality and time three relationship quality between groups of mothers and mothers-in-law are presented. The last t-test results, within group differences of relationship quality at time one and time three for mothers and for mothers-in-law are then submitted. After the t-test analyses, the degree of linear relation between the variables is indicated by Pearson product moment correlations matrices. Last, the results of the path analyses are discussed, first for mothers and then for mothers-in-law.

#### **T-tests Results**

Table 1 gives the results of t-test comparing the means for the variables between the two groups, mothers and mothers-in-law. The table displays the means, the standard deviations, and the t-values for each variable compared, as well as showing whether the differences are significant. Table 2 shows the difference in relationship quality over time for mothers and then for mothers-in-law.

Table 1. T-test between groups

<u>Variable</u>	<u>Mother</u>		<u>Mother-in-law</u>		<u>T-value</u>
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Health	3.77	.85	3.71	.82	.93
Proximity	4.17	.11	4.54	1.76	-2.76**
Lives alone	.19	.40	.27	.44	-1.95*
Age	63.62	7.84	66.35	7.23	4.78**
Instrumental support	.54	.87	.33	.67	-3.32**
Perceived demands	1.78	.87	1.76	.84	.34
Relationship quality: time 1	3.53	.66	3.16	.78	6.11**
Relationship quality: time 3	3.50	.75	3.06	.86	6.75**

\*significant at .05 level

\*\*significant at .01 level

Table 2. Frequencies for relationship quality with mothers at time one and time three

<u>Variable</u>	<u>Value</u>	<u>f</u>	<u>Valid %</u>	<u>Cum.%</u>
Relationship quality: time 1				
1. "poor"		3	1.2	1.2
2. "fair"		14	5.7	5.7
3. "good"		77	31.3	38.2
4. "very good"		152	61.8	100.0
Relationship quality: time 3				
1. "poor"		7	2.8	2.8
2. "fair"		18	7.2	10.0
3. "good"		69	27.5	37.5
4. "very good"		157	62.5	100.0

### Health status of support recipient

Health status for both groups of women tended to be quite similar. Mid-life women rated their mothers' health on a scale of 1 to 5, with 1 being poor and 5 being excellent. Most women, 84%, rated their mother's health as "good" (3) or "very good" (4). The health ratings for mothers-in-law, as provided by the elderly women's sons, were comparable. Eighty-seven percent of mothers-in-law received a "good" or "very good" health rating. The mean health rating for mothers was 3.77, not significantly higher than the mean health rating for mothers-in-law, which was 3.71. The t-test for health status of the two groups of women show that the difference between them in health rating is not significant.

### Proximity to support recipient

The t-test for the proximity variable shows that although the means for the two groups seem comparable, the differences in the standard deviation are quite high. More mid-life women lived nearer to their mothers than to their mothers-in-law, although the means were similar, the variation in proximity to mothers-in-law was greater. Forty-three percent lived less than fifty miles from their mothers while only 35% lived that close to their mothers-in-law. This mean difference between proximity to mothers and proximity to mothers-in-law is also significant with a t-value of -2.76.

### Support recipient living alone

While more mothers-in-law were more likely to live alone than were mothers, this difference just reached the significance level with an alpha of .05. The critical t-value is actually  $\pm 1.96$ , while the t-value for this variable is 1.95.

### Age of support recipient

While the ranges of ages for mothers and mothers-in-law were comparable, 47 to 85 for mothers and 47 to 87 for mothers-in-law, mothers tended to be slightly younger. The mean age for mothers was 63.62, while the mean age for mothers-in-law was over 66 years. Women tend to marry men who are somewhat older than they are, it follows that their mothers-in-law would also be older. This difference is also significant, at .01 alpha level, with a t-value of 4.78.

### Instrumental support given

Instrumental support given ranged from 0 to 3, with higher numbers reflecting more types of support given. The t-tests showed that the difference between instrumental support given to mothers was significantly higher than the amount given to mothers-in-law.

Hypothesis 1 is accepted.

### Perceived demands

It is interesting to note then that perceived demands did not differ significantly between mothers and mothers-in-law. Hypothesis 2 is rejected. However, although mid-life women gave more instrumental support to their mothers than their mothers-in-law, they did not perceive their mothers to be significantly more demanding than their mothers-in-law.

### Relationship quality with support recipient

Relationship quality of mid-life women with their mothers compared with relationship quality with their mothers-in-law are significantly different at both times one and at time three. The mean of relationship quality with mother at time one is 3.53 on a scale of 1 (very unhappy) to 4 (very happy). For mothers-in-law the mean at time one is 3.16. Both relationship quality with mothers and mothers-in-law decline by time three. Relationship quality at time three with mothers is significantly higher than relationship quality at time three for mothers-in-law also. Thus, hypothesis 3 is supported.

### Relationship quality with mothers over time

By time three, the number of women rating relationship quality with their mothers as "good" fell. The number of responses in the "very good" category increased by 5, while

"fair" and "poor" ratings also increased by 4 each. This means that while some women's relationship quality with their mothers improved over time, for others there was an erosion of relationship quality (see Table 2). This difference in relationship quality at time one and time three was not significant, however, as seen in Table 3. Hypothesis 4 is accepted.

#### Relationship quality with mothers-in-law over time

The numbers of women reporting relationship quality with mothers-in-law in the categories of "good" and "very good" fell, while numbers reporting relationship quality as "poor" and "very poor" rose (Table 4). This within group relationship quality change was also non-significant (Table 3). Hypothesis 5 is a null hypothesis, stating that there will be no change in relationship quality of daughters-in-law with mothers-in-law over time. The t-test was a two-tailed test since prediction of increasing or decreasing relationship quality was not made. This hypothesis is thus accepted with the cautionary note in interpretation of the resulting t score.

Table 3. T-test within groups, relationship quality times one and three

	<u>Time one</u>		<u>Time three</u>		<u>T-value</u>
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Mothers	3.53	.66	3.50	.75	.70
Mothers-in-law	3.16	.78	3.06	.86	1.86

Table 4. Frequencies for relationship quality with mothers-in-law at times one and three

Variable	Value	<i>f</i>	Valid %	Cum. %
Relationship quality: time 1				
1. "poor"		11	4.5	4.5
2. "fair"		24	9.8	14.2
3. "good"		126	50.0	65.4
4. "very good"		85	33.7	100.0
Relationship quality: time 3				
1. "poor"		18	7.1	7.1
2. "fair"		30	12.0	19.1
3. "good"		121	48.0	67.3
4. "very good"		82	32.7	100.0

#### Pearson Correlation Results

Pearson product moment correlation coefficients for all pairs of variables in the proposed models were computed. Correlations were computed separately for mothers and then for mothers-in-law of the mid-life women (Tables 5 and 6). Because the respondent is answering as a daughter and as a daughter-in-law, correlations between mother and mother-in-law variables, relationship quality times one and three, amount of instrumental support given and perceived demands, were also were computed (Table 7).

The correlation matrices were examined for possibility of multicollinearity. This condition exists when two or more independent variables are highly correlated, making it difficult to determine their separate effects on the independent variable (Vogt, 1993).

Problems with multicollinearity occur when correlations are in the range of .80 to 1.0

(Agresti & Finlay, 1986). In this study, the range of correlation between independent variables is from 0 to .72. All the correlations are below .5 except for those age related variables, such as age and mother's age, and age and years married. This is taken into consideration when discussing any significant effects of age on the endogenous variables.

#### Correlations results: Mothers as support recipients

In the analysis, relationship quality with mothers at time one was moderately correlated (.25) positively with mother's health (Table 5). This is in the expected direction. Relationship quality with mothers at time one was negatively correlated to mother living alone. This is a dichotomous variable. If the mother lives alone, the rating is 1 and zero if not. This means that if mother lived alone, her relationship with her daughter was poorer.

Instrumental support given to mothers was correlated with several independent variables. The length of the daughter's marriage was weakly (.13), but significantly correlated with instrumental support given mother. This variable, as noted above, was fairly strongly correlated with age of the daughter. Age of daughter was also positively and weakly correlated (.13) with instrumental support given mother at a comparable level as length of marriage, but non-significantly.

Mother's health was negatively related to the instrumental support given. This significant correlation was of fair to moderate strength at -.18. The poorer mother's health the more likely the daughter provided support.



Table 5.  
Correlation results of all variables with mothers as support recipients

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Health status	1													
2 Age	.04	1												
3 Income	-.08	.12	1											
4 Education	.12	.30**	.17*	1										
5 Hours worked	-.12	.08	.20**	.17*	1									
6 Years married	.04	.72**	.11	.07	.12	1								
7 Mother's health	.25*	-.04	-.05	.13*	-.11	-.03	1							
8 Proximity	.05	-.07	-.17**	-.19**	-.02	.01	-.01	1						
9 Mother lives alone	.00	.09	.03	-.02	.03	.05	-.08	.07	1					
10 Mother's age	.03	.60**	.05	.25**	-.04	.40**	.00	.02	.18**	1				
11 Relationship quality: T1	.07	.06	-.08	.08	.06	.04	.19*	.00	-.15*	.02	1			
12 Mother's demands	-.05	-.01	-.03	-.06	-.03	-.02	-.26**	.16*	.20**	-.01	-.31**	1		
13 Instrumental support	-.07	.13	.05	.00	.01	.13*	-.18**	.24**	.30**	.12	.02	.20**	1	
14 Relationship quality: T3	.17*	.08	.00	.08	-.03	.10	.15*	.00	-.13*	.07	.46**	-.37**	.02	1

\* Significant at .05 level

\*\* Significant at .01 level

Proximity was positively and moderately linked to instrumental support given to mothers. Associations between amount of instrumental support given and mother proximity was .24. The closer the mother lived to her daughter the more support she received from her daughter.

Mother living alone was the independent variable most strongly associated with instrumental support given mothers (.30). Filial obligation to mother may become especially strong if she is widowed or divorced. Interestingly, mother living alone is also significantly and positively correlated with age.

Perceived demands of the mother was also moderately and positively related to amount of instrumental support given for mothers at .20. Instrumental support given was not correlated with relationship quality at time one. This indicates that regardless of relationship quality with mother, when one's mother is in need of support, one is apt to give it.

The variable, perceived demands of the mother, was correlated with several independent variables. Mother's health was significantly, negatively and moderately associated with perceived demands (-.26). If mothers are in poor health their daughters perceive that demands from their mothers are higher. Proximity to mother was also related to higher levels of perceived demands of mother (.16). If mother lived alone, the levels of perceived demands were higher (.20). Recall that relationship quality at time one was not correlated with instrumental support given at time two. Interestingly, relationship quality at

time one is associated with perceived demands at time two. In fact relationship quality at time one is the strongest variable correlated with demands at time two (.31).

Relationship quality is very stable over time (Whitbeck et al., 1990). This was found to be true for the relationships of daughters with their mothers. Relationship quality at time three is most strongly associated with relationship quality at time one for mothers. Health of the daughter and the health of the mother at time one is positively related to relationship quality at time three (.18 and .15 respectively). This reflects the literature which indicated that health of both parties is important to their relationship quality (Cicerelli, 1990).

Perceived demands of the support recipient is strongly and negatively correlated with relationship quality with mothers at time three (-.37). For all correlations with relationship quality at time three, excluding the correlation of relationship quality at time one, the association with perceived demands is the strongest. The more demanding one perceives the support recipient, the lower the relationship quality becomes. There is not an association between amount of instrumental support given and relationship quality with mothers at the later date.

#### Correlations results: Mothers-in-law as support recipients

Relationship quality with mothers-in-law at time one was not correlated with any independent variables (Table 6). Education was positively correlated with amount of instrumental support given to mother-in-law. This is difficult to explain. Mid-life women

Table 6.  
Correlation results of all variables with mothers-in-law as support recipients

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Health status	1													
2 Age	.04	1												
3 Income	-.08	.12	1											
4 Education	.12	.30**	.17*	1										
5 Hours worked	-.12	.08	.20**	.00	1									
6 Years married	-.04	.71**	.11	.07	.12	1								
7 Mother-in-law's health	.06	-.03	-.10	.05	-.09	-.05	1							
8 Proximity	.07	-.14*	-.31**	-.05	.00	-.05	.02	1						
9 Mother-in-law lives alone	-.08	.16*	.08	-.08	-.03	.10	.17*	-.06	1					
10 Mother-in-law's age	.01	.53**	-.07	.17**	.05	.37**	.14*	.01	.24**	1				
11 Relationship quality: T1	.00	.06	-.08	-.06	.08	-.03	.06	.11	.01	-.04	1			
12 Demands	-.03	-.03	-.03	-.04	-.05	-.03	.10	.06	.11	.12	-.15*	1		
13 Instrumental support	.07	.12	-.04	.17*	.10	.06	-.04	.24**	.23**	.21**	.06	.21**	1	
14 Relationship quality: T3	.12*	.02	.03	.00	.04	-.01	.02	.05	-.09	-.09	-.51**	-.20**	-.06	1

\* Significant at .05 level

\*\* Significant at .01 level

with more education may have a better understanding of the needs of elderly women, and go on to give more help to mothers-in-law.

Relationship quality with mothers-in-law at time one was the only time one variable associated with perceived demands at time two (-.15). This was a weak association, but nevertheless, significant at the alpha level of .05. Instrumental support given mothers-in-law at time two was also correlated with perceived demands at time two (.21). This is a moderately strong link which was significant at  $p < .01$ .

The strongest association with relationship quality at time three was with relationship quality at time one (.51). Again, relationship quality as a stability index is observed. Relationship quality with mothers-in-law at time three was correlated with one exogenous variable, health of daughter-in-law. This is a weak correlation (-.12) that just reaches the significant criterion of  $p < .05$ . The expected correlation with relationship quality at time three is that with mothers-in-law's demands (-.20). This is a negative association, which indicates as mother-in-law's demands increase, relationship quality decreases. Mid-life women who perceive their mothers-in-law as demanding also perceive declines in relationship quality.

#### Correlations between mother and mother-in-law dependent variables

Because each respondent is answering as a daughter and as a daughter-in-law, correlations between mother and mother-in-law variables were computed (Table 7). Some interesting interaction of relationships with mother and relationship with mother-in-law

Table 7. Correlation results of mother and mother-in-law variables

	1	2	3	4	5	6	7	8
1 Relationship quality with mother: T1	1							
2 Relationship quality with mother-in-law: T1	.13*	1						
3 Mother's demands	-.31**	.01	1					
4 Mother-in-law's demands	-.19**	-.15*	.39**	1				
5 Instrumental support given mother	.02	-.08	.20**	.06	1			
6 Instrumental support given mother-in-law	-.03	.06	-.10	.21**	.28**	1		
7 Relationship quality with mother: T3	.46**	-.04	-.37**	-.21**	.02	-.01	1	
8 Relationship quality with mother-in-law: T3	.04	.51**	-.03	-.20**	-.19**	-.06	.21**	1

\* Significant at .05 level

\*\* Significant at .01 level

were discovered. Relationship quality with mothers and relationship quality with mothers-in-law are positively related at both time one and time three. This may reflect a "type of person" argument. That those who report good relationships with one person will report good relationships with others as well.

The significant negative correlation between perceived demands of mothers-in-law and relationship quality with mother was not predicted. In fact, perceived demands of mother-in-law had a slightly higher negative correlation with relationship quality with mother than with relationship quality with mothers-in-law. Perhaps women who perceive demands as high, are pessimistic in their outlook and so perceive relationships as more negative.

There was also an unexpected dimension of relationship quality with mothers-in-law. Amount of instrumental support given to mother was negatively and significantly related to relationship quality with mother-in-law, but not with relationship quality with mother. Giving more support to mother may cause stress that is somehow attributed to the mother-in-law.

### Path Analyses

This section discusses results of the proposed path models. Path analysis was conducted by a series of ordinary least squares (OLS) regressions. First, a discussion of the analysis of the full model for mothers will be presented. Then, a discussion of the reduced model with mothers as support recipients will follow. Path analysis for mothers-in-law as support recipients will be discussed next, proceeding in the same way. The reduced models,

showing the standardized regression coefficients are presented in Figures 2 and 3 for relationship quality over time for mothers and mothers-in-law respectively. To test variables entered into the models, the significance level of  $p < .05$  was the criterion employed.

The variables entered into the path analysis were chosen based on correlation results, literature and social exchange and role theories. The regression analyses were performed with hierarchical inclusion of variables in the causal order as specified in the proposed path models. Ten variables were exogenous variables: six variables are support giver socio-demographic variables while four are support recipient socio-demographic variables. Support giver's socio-demographic variables include health status, age, educational level, family income, employment status, and length of marriage. Support recipient socio-demographic variables include health status, proximity to support giver, living alone, and age.

The first step was the regression of relationship quality at time one on the socio-demographic variables. Next, instrumental support given, was regressed on the exogenous variables and relationship quality at time one. The third step was the regression of perceived demands on the exogenous variables, relationship quality at time one, and instrumental support given at time two. The last step was to regress relationship quality at time three on the exogenous variables, relationship quality at time one, instrumental support given, and on perceived demands. This was performed first with mothers as support recipients, then with mothers-in-law as support recipients. The F-value was examined to determine if the multiple linear model was significant.



### Path analysis with mothers as support recipients

After testing the full models with all ten exogenous variables, only four exogenous variables remained in the reduced model with mothers as support recipients. Table 8 shows the results of the regression for the full path model. The remaining significant exogenous variables for the reduced model with mothers as support recipients are health of support giver, health of support recipient, proximity and mother living alone. Table 9 presents the results for the reduced path model with mothers as support recipients. The reduced model with mothers as support recipients, showing the standardized regression coefficients is presented in Figure 2. Only those variables found to have significant beta weights will be discussed.

### The reduced model for relationship quality with mothers over time

The results of the regression equations for the reduced model for relationship quality with mothers over time is shown in Table 9, the path model can be viewed in Figure 2. The first endogenous variable to be tested in the path model is relationship quality at time one. No support giver (daughter) variables were significantly related to relationship quality at time one. Two support recipient (mother) variables were significant. The results show that mother's health (.18) and mother living alone (-.13) had significant effects on relationship quality at time one. Mid-life women whose mothers who are in better health enjoy an enhanced relationship with their mothers. When mothers live alone, on the other hand,

Table 8. Regression analysis for full path model with mothers as support recipient

Exogenous variables	Relationship quality: time one		Instrumental support		Perceived demands		Relationship quality: time three	
	Beta	t	Beta	t	Beta	t	Beta	t
<u>Daughter vars.</u>								
Health	.03	.40	-.05	-.84	-.06	-.93	.12	2.08*
Age	.07	.59	.04	.37	.04	.67	-.04	-.44
Family income	.00	.02	.07	1.08	-.04	-.58	.04	.70
Education	.05	.67	.05	.71	.03	.42	.02	.28
Hours worked	.10	1.43	-.05	.72	-.03	-.51	-.06	-.98
Marriage length		.01	.07	.81	-.04	-.44	.10	1.20
<u>Mother vars.</u>								
Health	.18	2.61**	-.17	-2.60**	-.19	-3.01**	-.01	-.15
Proximity	.01	.18	.24	3.83**	.16	2.51**	.03	.46
Lives alone	-.14	-2.11*	.28	4.44**	.15	2.38*	-.05	-.82
Age	.00	.02	-.01	-.08	-.05	-.66	.03	.44
<u>Endogenous Vars.</u>								
Rel. qual: time one			.100	1.57	-.25	-4.04**	.37	6.01**
Instrumental support							.06	1.00
Perceived demands							-.25	-3.88**
R2	.08		.19		.19		.3	
Adjusted R2	.03		.15		.15		.26	
df	10 and 225		11 and 224		11 and 224		13 and 222	
F	1.85*		4.82**		4.81**		7.24**	

\*Significant at  $p < .05$ \*\*Significant at  $p < .01$

Table 9. Regression analysis for reduced path model with mothers as support recipients

Exogenous variables	Relationship quality: time one		Instrumental support		Perceived demands		Relationship quality: time three	
	Beta	t	Beta	t	Beta	t	Beta	t
<u>Daughter vars.</u>								
Health							.12	2.21*
<u>Mother vars.</u>								
Health	.18**	2.81**	-.16	-2.60**	-.19	-3.01**		
Proximity			.22	3.58**	.15	2.53**		
Lives alone	-.13	-2.06*	.27	4.45**	.14	2.29*		
<u>Endogenous Vars.</u>								
Rel. qual: time one					-.25	-4.15**	.37	6.28**
Perceived demands							-.22	-3.44**
R2	.05		.16		.18		.28	
Adjusted R2	.05		.15		.15		.27	
df	2 and 223		3 and 232		4 and 231		2 and 231	
F	6.58**		14.66**		12.93**		22.55**	

\*Significant at  $p < .05$ \*\*Significant at  $p < .01$

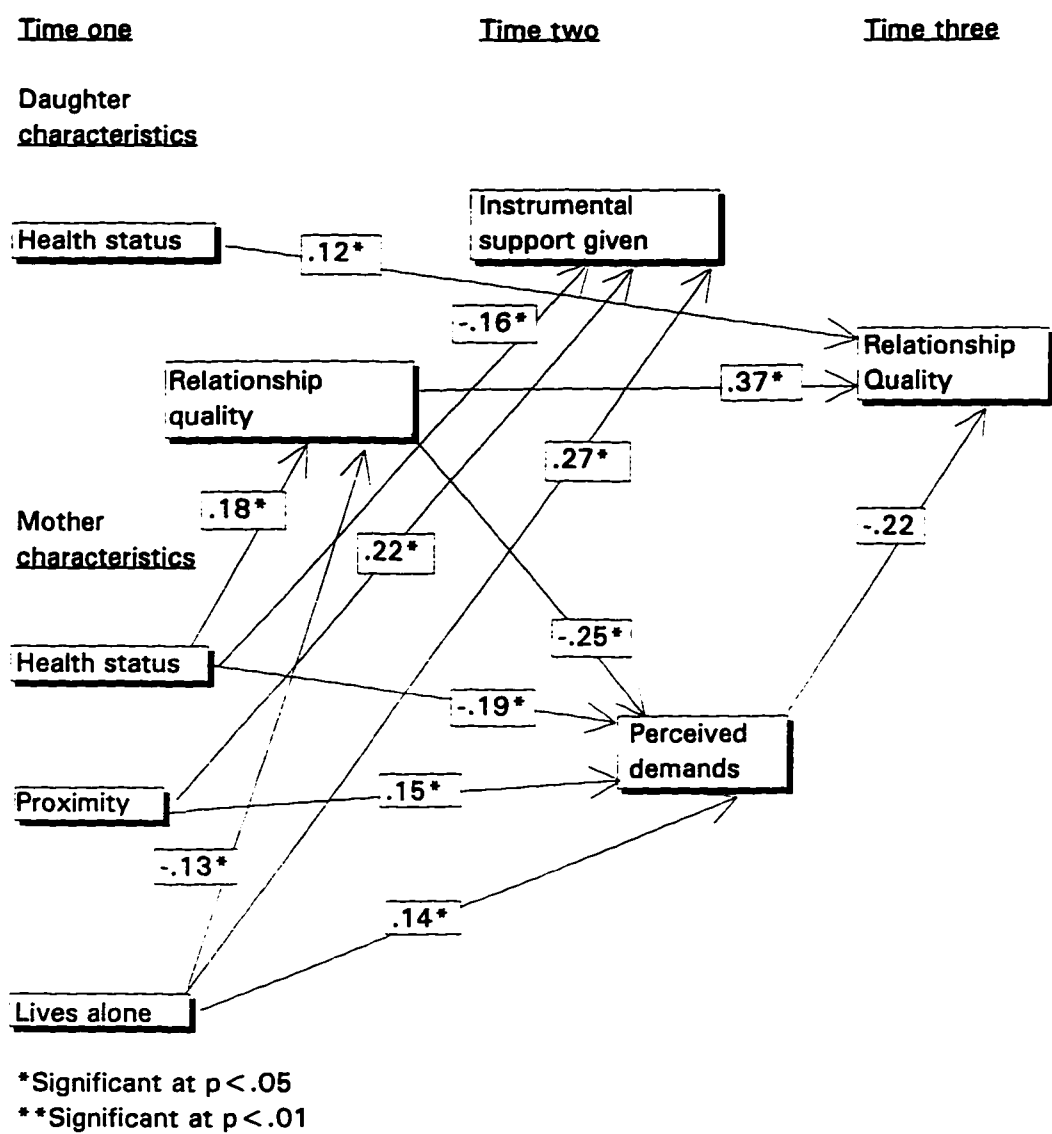


Figure 2. Path Model: Relationship quality of women with their mothers over time.

relationship quality is negatively affected. The adjusted R<sup>2</sup> for this regression explains .05% of the variance with a F value of 6.58, which is significant at  $p < .01$ .

In the regression of instrumental support given on the exogenous variables, and on relationship quality at time one, only mother variables, health, proximity, and living alone were significant. Health of mother (-.16) was negatively related to instrumental support given. Proximity (.22) and mother living alone (.27) both positively affected amount of instrumental support given to mother. This indicates that if a mid-life woman's mother is in poor health, lives near by, and lives alone, she is more likely to give instrumental support to her mother. Since instrumental support given to mother is not contingent on relationship quality at time one, hypothesis 8 with mothers as support recipients, is rejected. The removal of non-significant exogenous variables did not change the adjusted R<sup>2</sup> very much. The adjusted R<sup>2</sup> for this regression equation indicates that this reduced equation explains 15% of the variance. The F value is 14.66 and this is significant at  $p < .01$ .

The results of the regression of perceived demands on the exogenous variables and relationship quality at time one, revealed the same mother variables; health, proximity, and living alone, along with relationship quality at time one to be significant. Health (-.19) and relationship quality at time one (-.25) were negatively related to perceived demands. Mother's good health and a good relationship with mother decreases the perception that she is demanding. Proximity (.15) and living alone (.14) increased perceived demands. If a mother lives near her daughter and lives alone, her daughter is more likely to perceive her as being demanding. The addition of relationship quality into the regression equation is

important. Hypothesis 9, relationship quality with mother at time one will negatively affect perceived demands, is supported. The reduced regression equation increased the  $R^2$  from .15 to .17. The  $F$  value is 12.93, which is significant at  $p < .01$ .

Finally, relationship quality at time three was regressed on the ten exogenous variables, on relationship quality at time one, on instrumental support given, and on perceived demands. The only exogenous variable affecting relationship quality at time three was health of the daughter at time one (.12). This is in the expected direction, higher levels of health result in higher relationship quality. This is surprising only in that daughter's health did not affect relationship quality at time one but does at time three. Relationship quality at time one most strongly predicts relationship quality at time three (.37). All other things constant, good relationship with one's mother at time one is expected to continue over time. Concerning relationship quality with mothers, hypothesis 10 is accepted. Amount of instrumental support given by daughters to their mothers did not predict relationship quality at time three as hypothesized. Hypothesis 6 is not supported for relationship quality with mothers. Perceived demands at time two negatively affect relationship quality at time three (-.22). This is in the expected direction. Hypothesis 7 is accepted for relationship quality with mothers. The adjusted  $R^2$  remains strong, explaining 26% of the variance in this reduced model. The  $F$  value increases to 22.55, which is significant at  $p < .01$ .

In summary, the results of the path analysis show that the support recipient characteristics, mother's health and living alone affect relationship quality with mother at time one. Variables affecting instrumental support given to mother are also all support

recipient characteristics: health, proximity and living alone. Relationship quality does not affect amount of instrumental support given, this reflects the norm of filial obligation.

Giving support to one's mother is not dependent upon the quality of mother-daughter relationship. If support is needed, it is given regardless of relationship quality. However, perceived demands are dependent upon relationship quality. Daughters with poor relationships with their mothers are more likely to perceive demands of mother as excessive. Lastly, relationship quality at time three is not affected by amount of instrumental support given at time two, but is affected by the perceived demands of the mother on her daughter. This effect exists controlling for relationship quality at time one.

#### Results of path analysis with mother-in-law as support recipient

Table 10 illustrates the results of the regression analyses for the full path model with mothers-in-law as support recipients. Nine exogenous variables were significant in the full model of relationship quality with mothers-in-law over time and therefore remained in the reduced model. Only the variable family income was non-significant with any of the endogenous variables. Table 11 presents the results of the reduced regression equations. The resulting reduced model is graphically presented in Figure 3.

In the full model, several age related exogenous variables were significantly predictive of relationship quality at time one (Table 10). Mother-in-law's age and daughter-in-law's length of marriage are negatively related to relationship quality at time one, while age of the daughter-in-law positively affects relationship quality. Because of the moderately

Table 10. Regression analysis for full path model with mothers-in-law as support recipients

Exogenous variables	Relationship quality: time one		Instrumental support		Perceived demands		Relationship quality time three	
	Beta	t	Beta	t	Beta	t	Beta	t
<u>Daughter-in-law variables</u>								
Health	.02	.18	.07	1.15	-.03	-.48	.11	1.86
Age	.34	3.10**	.01	.13	-.04	-.39	.03	.27
Family income	-.07	-.92	-.03	-.49	.02	.22	.10	1.61
Education	.09	1.36	.18	2.70**	-.05	-.67	-.01	-.16
Hours worked	.11	1.57	.11	1.83	-.03	-.46	-.01	-.24
Marriage length	-.20	-2.11*	-.05	-.49	-.05	-.47	.03	.37
<u>Mother-in-law variables</u>								
Health	.09	1.36	-.12	-1.93	.08	1.18	.03	.52
Proximity	.12	1.72	.25	3.84**	.08	1.12	.05	.85
Lives alone	.00	.03	.26	4.09**	.07	1.01	-.06	-.90
Age	-.16	-1.96*	.14	1.83	.13	1.65	-.05	-.77
<u>Endogenous Vars</u>								
Rel. qual: time one			.05	.78	-.16	-2.38*	.49	8.25**
Instrumental support <i>given mother-in-law</i>							-.03	.27
Instrumental support <i>given mother</i>							-.14	-2.59**
Perceived demands							-.10	-1.66
R2	.07		.20		.07		.32	
Adjusted R2	.03		.16		.02		.28	
df	10 and 225		11 and 224		11 and 224		14 and 221	
F	1.73		5.16**		1.46		7.65**	

\*Significant at  $p < .05$ \*\*Significant at  $p < .01$



Table 11.

Regression analysis for reduced path model with mothers-in-law as support recipients

Exogenous variables	Relationship quality: time one		Instrumental support		Perceived demands		Relationship quality: time three	
	Beta	t	Beta	t	Beta	t	Beta	t
<u>Daughter-in-law variables</u>								
Health							.11	1.92*
Age	.22	2.23*						
Education			.19	3.04**				
<u>Mother-in-law variables</u>								
Proximity			.26	4.34**				
Lives alone			.25	4.00**				
Age			.13	2.07*				
<u>Endogenous Vars.</u>								
Rel. qual: time one					-.15	-2.31*	.49	8.74**
Instrumental support <i>given mother</i>							-.14	-2.59**
Perceived demands							-.11	-2.00*
R2	.02		.20		.04		.31	
Adjusted R2	.01		.17		.03		.30	
df	3 and 232		7 and 228		2 and 233		4 and 231	
F	1.82		7.89**		4.35**		25.98**	

\*Significant at  $p < .05$ \*\*Significant at  $p < .01$

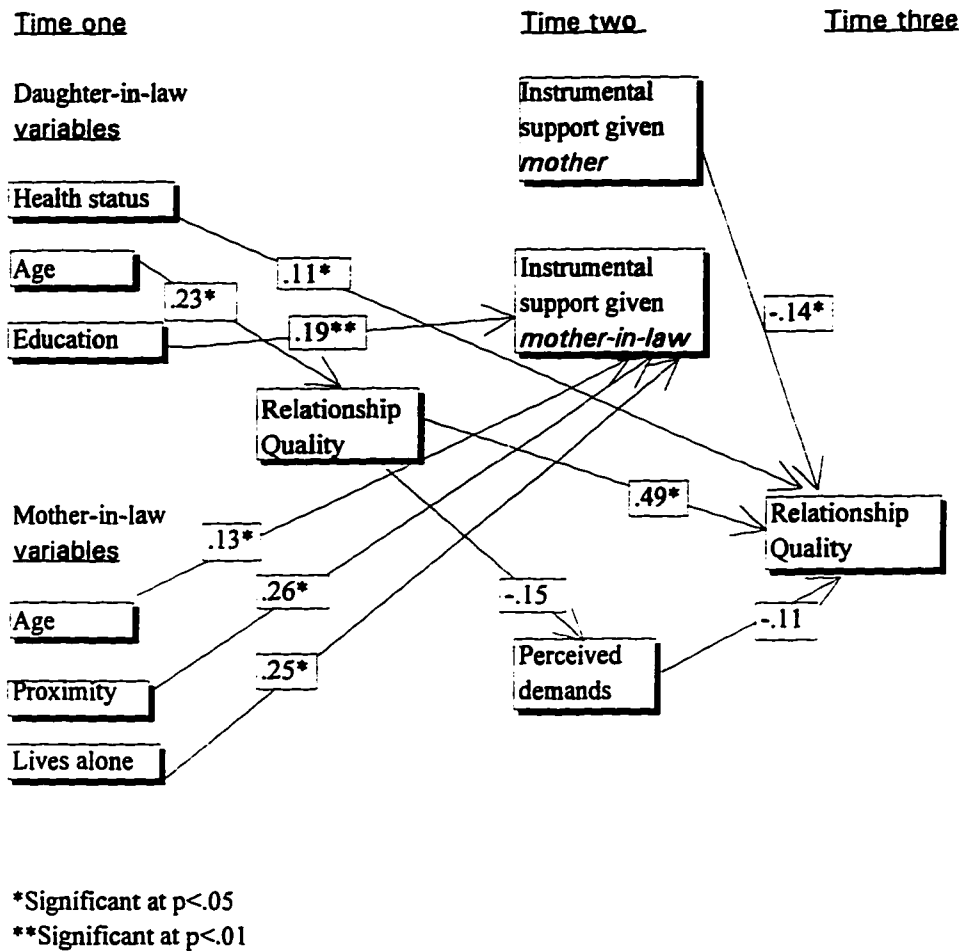


Figure 3. Path Model: Relationship quality of women with their mothers in law over time.

strong correlations between the age variables, it is important to discern what the directional effect of age related variables will hold up in the reduced model. In the resulting reduced model, (Figure 3) only daughter-in-law's age was related to relationship quality at time one. This is a moderately strong (.23) positive effect. This implies that as a woman ages, her relationship quality with her mother-in-law improves, holding mother-in-law's age and length of the daughter-in-law's marriage constant (see Table 11). The adjusted R<sup>2</sup> is very low (.01) indicating that relationship quality with mothers-in-law depends on many other factors not included in this model.

In the regression equation with instrumental support given as the dependent variable, in the reduced model, only one daughter-in-law characteristic remains significant: education. Education of the daughter-in-law is predictive of amount of instrumental support she gives to her mother-in-law. This is a weak but positive effect (.19) significant at  $p < .01$ . The more education a mid-life woman has, the more likely is she to give instrumental support to her mother-in-law.

All other variables significantly predicting instrumental support given to mothers-in-law are mother-in-law's proximity, living alone, and her age. The effects of proximity and living alone are moderately strong, .26 and .25 respectively. A weaker, but still significant effect is due to age of the mother-in-law (.13). This indicates that mothers-in-law who are older, live alone and live near their daughters-in-law will receive more instrumental support. Again for mothers-in-law, relationship quality at time one does not predict amount of instrumental support given at time two. Hypothesis 8, with mothers in law as support

recipients is rejected. The adjusted R<sup>2</sup> for the resulting regression equation for the predicting instrumental support given is fair, (.17) with an F value of 7.89 which is significant at  $p < .01$ . This shows that the strength of the unknown covariates is .83.

The only variable that significantly predicted perceived demands of the mother-in-law is relationship quality at time one. The effect of that variable is negative and weak (-.15). The R<sup>2</sup> for the resulting reduced equation is .03. The F value is 4.35 with a significance level of .05. Hypothesis 9, regarding relationship quality at time one predicting perceived demands of mother-in-law, is accepted.

The last regression equation in the path model predicts relationship quality at time three for mothers-in-law. Variables significantly affecting relationship quality at time three are health of the daughter-in-law, perceived demands, and relationship quality at time one. The strong effect of relationship quality at time one (.49) show the stability of that variable over time. Hypothesis 10 for relationship quality with mothers-in-law is accepted. Health of the daughter-in-law weakly predicts relationship quality with her mother-in-law at time three (.11) and actually just approaches significance at an alpha level of .056. Any effect of health on relationship quality at time three was not hypothesized. This effect may indicate that health of mid-life women declines over time and has deleterious effects on their relationship with their mother-in-law.

The last variable significantly predicting relationship quality with mother-in-law at time three is perceived demands on the daughter-in-law. The strength of this variable is fairly weak (-.11), yet significant at  $p < .05$ . Hypothesis 7 is accepted concerning negative

effects of perceived demands on relationship quality with mothers-in-law. Hypothesis 6, predicting relationship between instrumental support given and relationship quality at time three is rejected. The F value for this equation is 25.98, which is also significant at .01 alpha level.

For mothers-in-law, different socio-demographic variables come into play in predicting relationship quality, instrumental support given and perceived demands, than with mother. Age of support giver (daughter-in-law) was significant in predicting relationship quality with mother-in-law. This may reflect Duvall's (1954) and Fischer (1983) hypothesis that similar status between these women increases liking. Some of the same variables, that affected support given to mother (proximity and living alone) also affect support given to mother-in-law, along with age of support recipient. Perceived demands were most strongly affected by relationship quality at time one, just as for mothers. Again, instrumental support given mothers-in-law, was not predictive of relationship quality at time three, just as for mothers. For both relationships with mothers and with mothers-in-law, it is the perceived demands that the support recipient makes of the support giver that affect relationship quality at time three, not the actual support given.

## **CHAPTER 5**

### **DISCUSSION**

#### **Summary**

The purpose of this study was to examine the effect of giving of instrumental support to mothers and mothers-in-law on the relationship quality of mid-life women with the support recipients over time. The general hypothesis was that when sociodemographic variables are controlled, giving instrumental support and perceived demands for support will erode relationship quality over time.

Two theoretical approaches were applied to develop path models which would suggest causal relationships. Drawing on social exchange theory, it was predicted that the amount of instrumental support given would erode relationship quality of mid-life women with their mothers and mothers-in-law over time. As the elderly women age, they are less likely to be in a position to reciprocate with tangible rewards. The value of the emotional rewards will also decline as support giving increases. Thus, relationship quality for support givers with support recipients will decline over time as costs of giving support outweigh the rewards. Another prediction utilizing social exchange theory was that because the norm of reciprocity can carry over time, daughters will give more support to their mothers than their mothers-in-law, and also perceive the support given to their mothers as less demanding than that given to their mothers-in-law (Clark, Mills, & Powell, 1986).

Using role theory, it was also predicted that perceived demands of the support recipient would negatively affect relationship quality over time. Mid-life women have many roles and responsibilities associated with those varying roles. If the demands from the support recipient are perceived as being unrealistically high, stress results which will negatively impact the support giver's relationship with the support recipient. Role theory also explains why support given to a mother will be seen as less demanding than that given to a mother-in-law. The role of daughter is a much more salient role to the mid-life woman than is the role of daughter-in-law. She will therefore perceive the support given to her mother as part of her inaction of the daughter role rather than an unrealistic demand. The daughter-in-law role, on the other hand, is a role which is much less well defined. The norms attached to it are not as clear. Thus, the daughter-in-law will perceive mother-in-law demandingness as higher and this will negatively affect her relationship with her mother-in-law (Steinmetz, 1988).

### Testing of the Hypotheses

#### T-tests results

The results of a t-test supported the first hypothesis, that mid-life women would give significantly more instrumental support to their mothers than their mothers-in-law. This supports the literature which states that second only to spouses, elderly women turn most often to their daughters for support (Brody, 1981; Chappel, 1990; Franks & Stephens, 1992). Social exchange theory is applicable. Mothers gave more to their daughters over time and

daughters are more likely to feel a sense of obligation to repay their mothers for their past giving, and to give support. Mid-life women have received far less from their mothers-in-law, therefore the need for "re-payment" is not as great, and less support is given.

The results of the t-test on differences between perceived demands of mothers and of mothers-in-law show no significant differences. Although mid-life women gave more support to their mothers than to their mothers-in-law, demands were not seen as any more excessive for mothers than for mothers-in-law. Hypothesis 2 was rejected with the understanding that giving of instrumental support was not controlled for when comparing the differences between perceived demands of mother and of mother-in-law. This points to both social exchange and role theories. Demands of mothers are likely to be seen as their right because of past support given to the daughter, even if demands for support are numerous. Role theory would explain that the role of daughter is more salient for mid-life women than the role of daughter-in-law. Stronger saliency of a particular role results in greater expectations of one's self in that role (Turner, 1978). Demands from mother in fulfillment of the daughter role are therefore not seen as excessive but expected.

Relationship quality of mid-life women with mothers was higher than relationship quality with mothers-in-law as predicted. The literature is supported which has found the mother-daughter relationship to be a closer relationship than other intergenerational relationships (Rossi & Rossi, 1990). Hypotheses 4 and 5 regarding the stability in relationship quality over time were also both supported. This agrees with the literature that shows relationship quality to endure over time (Whitbeck et al., 1991).



### Results from path analysis

The path analyses with mothers and mothers-in-law as support recipients show some similarities and some differences (Figures 2 and 3). No daughter variables affected relationship quality at time one with mother. Control variables affecting relationship quality of mid-life women with their mothers at time one were health status of mother and proximity. As mother's health declines, she may be less likely to be able to reciprocate in the relationship exchange. This adversely affects relationship quality. This is what Baruch and Barnett (1983) also found. Poor health of mother was negatively associated with enjoyment of mother's company, getting along with mother, and seeing mother as a positive role model. Declining health of mother may also cause lack of role consensus or confusion as to expectations of how the daughter is to enact her role. This in turn, could have negative effects on relationship quality.

Proximity was also positively related to relationship quality. This means the further away one lived from her mother, the higher she rated her satisfaction with their relationship. This rural sample tended to live near-by their mothers, with 43% living 50 miles or less from their mothers, and no one living greater than 250 miles from their mothers. Women are typically the family members who are responsible for maintaining relationships. Since the relationship with her mother is stronger and longer than her relationship with her mother-in-law, mid-life women will be more likely to live nearer to their mothers than their mothers-in-law.

Age of daughter-in-law positively affected her relationship with her mother-in-law.

As the mid-life daughter ages, her relationship with her husband is more autonomous (Duvall, 1954; Bengtson & Kuypers, 1971) and less threatened by her mother-in-law.

The same control variable at time one affected relationship quality at time three for both relationships with mothers and with mothers-in-law. If a mid-life woman perceived her health as good, this positively affected her relationships over time. Conversely, the poorer she rated her health the more negative an outlook she had on her relationships over time.

Control variables affecting amount of support given to mother were mother's health status, proximity, and if mother lived alone. These same variables affected daughter's perception of her mother's demandingness. It is instructive to note that mother characteristics were associated with her perceived demands, but the only variable related to perceived demands of mother-in-law was relationship quality at time 1. The effect of proximity on perceived demands of mother may be an indication of greater power on the part of the mother. A mother who lives closer to her daughter is likely to be more involved and exert more power and control over the daughter, so that the daughter perceives her mother as more demanding than daughters whose mothers live further away.

Only proximity and age of mother-in-law affected giving of instrumental support to mother-in-law. Health status of mothers-in-law did not affect instrumental support given by daughters-in-law. To understand why the health of mother-in-law did not affect the amount of support given by the daughter-in-law, but health status of mother affected the amount of support given by daughters, it is helpful to note the way the data for health of the elder

generation were obtained. Adult children, having more intimate ties with mother, are more likely to know the health of their mother, and so the daughters were asked how they rated their mothers' health. Health status of mother-in-law was obtained through asking subjects' husbands how they would rate their mother's health. In this study, age may be a better indicator to daughters-in-law of their mothers-in-law's health status.

Relationship quality at time one did not affect instrumental support given to both mothers and mothers-in-law. Although this indicates that hypothesis 8 is to be rejected, and does not support previous literature, it can be explained using role theory. Role theory would predict that filial norms will cause a mid-life woman to give support to her mother even if relationship quality is poor. In cases of support given mothers-in-law, daughters-in-law are helping their husbands to also fulfill filial expectations, when they give support to their mothers-in-law (Goetting, 1990).

However, relationship quality does predict perceived demands of both mothers and mothers-in-law. This implies that although instrumental support is given in spite of relationship quality, the way support giving is perceived is affected by previous relationship quality. Furthermore, giving of support does not affect relationship quality at time three, but perceived demands does for both mothers and mothers-in-law. A daughter may give much support, but unless her mother or mother-in-law is perceived as being overly demanding, this will not affect relationship quality. Again, the issue of power in relationships is raised. As long as mothers and mothers-in-law do not demand too much support from the daughters perspective, the daughter is the party in control of the relationship and amount of support

given. Once the demands are perceived to be excessive, the daughter may feel her involvement in the relationship is no longer be due to choice, but to coercion. Coercion in a relationship has the effect of reducing her satisfaction with that relationship.

A unexpected finding was a type of "spill-over effect" from the amount of support given mothers to relationship quality with mothers-in-law. The term "spill-over effect" was originally coined to explain the connection between job satisfaction and life satisfaction (Rain, Lane, & Steiner, 1991). The current study showed that when mid-life women gave their mothers much instrumental support it affected their relationship with their mothers-in-law negatively. This may also be interpreted as scapegoating, the tendency to blame others with less power rather than the true, more powerful source of one's frustration. Mothers have had a great amount of power over their children during the childhood years and beyond. It is socially unacceptable to blame one's mother for felt stress and frustration. Historically and cross-culturally, the mother-in-law has been perceived negatively. Blaming one's mother-in-law is more acceptable, both to society and to the self (Fischer, 1983).

Relationship quality was found to be fairly constant over time. Perceived demands altered relationship quality between times one and three with both mothers and mothers-in-law. This is what was shown in both figures 2 and 3. In spite of generally high relationship quality ratings with both mothers and mothers-in-law, perceived demands of support recipients negatively affected relationship quality over time. This is supported by previous literature (Thompson & Walker, 1984). Thompson and Walker (1984) found that when mothers required more assistance, assistance patterns were not reciprocal, and daughters

reported more negative feelings and less attachment toward their mothers. In this current study the effect was stronger for mothers than for mothers-in-law. Once perception of one's relationship with mother-in-law is established as positive one, it is not likely to be affected by perceived demands.

According to social exchange theory, when demands are perceived as being excessive, rewards are not as great. Actors seek to keep rewards of exchanges higher than costs. Although, support may continue to be given in the face of poor relationship quality, demands associated with support given will continue to erode relationship quality over time.

Role and social exchange theories would suggest that filial obligation will cause a daughter or daughter-in-law to give support when needed, in spite of poor relationship quality. However, if filial responsibilities are perceived by the mid-life woman to be unrealistically high, the quality of her relationship with the elder relative may decline. This is also in agreement with previous research examining support stress (Frank & Stephens, 1992). Research with caregivers of Alzheimer's patients also indicated that as caregiving increased, caregiver burden increased, and relationship quality decreased (Lawton et al., 1989).

### Limitations and Conclusion

One limitation of this longitudinal study is its lack of generalizability to the general population because of its rural, white, female sample. In rural environments there are fewer formal organizations available for support of the elderly population. Rural women may be

expected to give more support to their elderly relatives due to the lack of formal support. The close proximity of this sample of rural women to mothers and mothers-in-law is not representative of the larger population and is also a factor that affects social support. However, this sample does give a good indication of relationship change over time due to perception of excessive demands in a support giving relationship. Future research should include minorities, males and urban populations. Future research should also take into account the husband-wife relationship, as in our culture this is considered to be the paramount relationship. A negative relationship with one's husband may be a cause to draw on the relationship with mother for support and to withdraw from the relationship with mother-in-law.

Although the scope of this study prohibited examining the perspective of both parties involved in the exchange relationship, this should also be taken into account in future research. Zarit (1989) makes the case for a multi-method approach. He questions the cause and effect mechanism. For example, does the overburdened support giver become depressed, or does depressed support giver report more burden? The multi-method approach has been the direction of recent social support literature (c.f. Walker & Allen, 1991; Riley and Riley, 1993).

The one item global measures (i.e. "how happy are you with your relationship with mother/ mother-in-law) used in this study may be seen as a limitation. The one item measure used in this study does not express the richness of a relationship, but an overall assessment of that relationship over time, which was the interest of this study. The question addresses the

heart of the matter. It was shown that the relationship quality of women with their mothers and mothers-in-law were quite stable over time. This concurs with the literature (Whitbeck, et al., 1991).

The main benefit of longitudinal data used in this study is that it was able to show that perceived demands associated with instrumental support given, erodes relationship quality over time, controlling for selected sociodemographic variables and previous relationship quality. It is not the sheer amount of instrumental support given that negatively affects relationship quality over time, but how the support given is perceived. The findings suggest the importance of a support network for the support giver, including reciprocal support from the exchange partner.

### Conclusion

The population forecast predicts that 20 to 25% of the population in 2030 will be over age 65 (Hooyman & Kiyak, 1996). Though it is also expected that this group will be healthier than this age group in the past, there is a segment of this aging population that will require more support. It is the oldest-old that is the fastest growing age group and the one that requires more support from the younger generations. Intergenerational understanding is needed now and will be needed even more so in the future. As families change in size and form, inter-familial understanding is also required. Daughters-in-law will be called on more often to give support in the absence of a husband and daughter. Gender roles in the context

of family care need to be reexamined, so that support giving to the elderly does not rest solely and heavily on the shoulders of mid-life women.



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