

DYADIC AND LONGITUDINAL APPROACHES TO PARENT-CHILD RELATIONSHIPS  
IN LATER LIFE: A CONTINGENT EXCHANGE PERSPECTIVE

by

LISA MARIE BELLISTON

Under the Direction of Dr. Adam Davey

ABSTRACT

Researchers have identified many factors influencing parent-adult child relationships. An extensive body of literature has characterized different indicators such as gender, health, race, and proximity of both parents and adult children that influence the types and amounts of support given and received by both generations, but not as much attention has been given to other aspects of the relationship such as what influences closeness within these relationships and normative beliefs members hold. Much of this literature is atheoretical. It is crucial to develop effective theories of aging that can help guide how we examine intergenerational relationships and exchange and help determine what aspects of exchange should be focused on. The lack of previous research being guided by strong theory addressed through a theoretical and empirical test of the Theory of Intergenerational Solidarity and the Contingent Exchange Perspective.

Working from the Contingent Exchange Perspective, I examined the relationship between needs and resources of both generations as predictors of five dimensions of Intergenerational Solidarity: Functional, Structural, Associational, Affectual, and Normative. Longitudinal data from 3,320 adult children (MAge = 38 years, 58% women, 12% African American, 4% Hispanic) and cross-sectional data from their parents (MAge = 65 years, 65%

women) were drawn from the National Survey of Families and Households to address the research questions. Additionally, instrumental and emotional exchange is examined using Intergenerational Solidarity and the Contingent Exchange Perspective. Results suggest that needs and resources of both generations are important for predicting each dimension of solidarity, and may serve as partial explanation for the shifting balance in intergenerational relationships across adulthood. There is also evidence for the importance of needs and resources in predicting flows of instrumental assistance up and down generations, whereas importance of dimensions of Intergenerational Solidarity (aside from Associational, necessary to provide instrumental aid) were largely absent. Predictors of emotional support were more complex: Affectual and Associational Solidarity were important, but parents and children often differ systematically in their reports of the same exchanges. Based on these findings, future research surrounding parent-adult child relationships and exchange must address needs and resources within the dyadic relationship.

**INDEX WORDS:** Parent-adult child Relationships, Intergenerational Solidarity, Contingent Exchange Perspective, Generational Stake Hypothesis, Needs and Resources, Psychological Well-being

DYADIC AND LONGITUDINAL APPROACHES TO PARENT-CHILD RELATIONSHIPS  
IN LATER LIFE: A CONTINGENT EXCHANGE PERSPECTIVE

by

LISA MARIE BELLISTON

B.S., Brigham Young University, 1996

M.S., Utah State University, 1998

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2003

© 2003

Lisa Marie Belliston

All Rights Reserved

DYADIC AND LONGITUDINAL APPROACHES TO PARENT-CHILD RELATIONSHIPS  
IN LATER LIFE: A CONTINGENT EXCHANGE PERSPECTIVE

by

LISA MARIE BELLISTON

Major Professor: Adam Davey

Committee: Maureen Davey  
Charlotte Wallinga

Electronic Version Approved:

Maureen Grasso  
Dean of the Graduate School  
The University of Georgia  
December 2003

## DEDICATION

This dissertation is dedicated to my parents, Nyla and Richard Belliston, and to my sister,  
Lara Michelle Belliston.

## ACKNOWLEDGMENTS

I am very grateful to Dr. Adam Davey for all the support and encouragement he has given me as I have prepared this dissertation. He pushed me to reach beyond my comfort zone to achieve in avenues that I did not think were possible. I sincerely appreciate the time he committed to broadening my understanding of various statistical methods and programs, areas I am sure I would not have had a chance to develop if I had not had the opportunity to work with Dr. Davey.

Dr. Charlotte Wallinga provided invaluable feedback and an upbeat attitude during the dissertation process. I sincerely appreciate Dr. Maureen Davey's willingness to serve on my committee at the last moment. They have both taken time away from their many personal and work-related responsibilities to be of assistance. Dr. Anita Smith and Dianne England have been very understanding and encouraging as I worked to complete my Ph.D; without their support I could not have accomplished this goal concurrent with beginning a full-time position at The University of Georgia.

I have been fortunate to study and work with a number of graduate student colleagues who prodded, mentored, and commiserated with me beginning with my first classes at The University of Georgia, including structural equation modeling and a summer in the computer lab, through the comprehensive exam process, and finally writing my dissertation. I would particularly like to mention Laurel Gulish, Amy Hough, and Emily Purvis-Montford among many other colleagues too numerous to name.

The smiling faces and constant follow-up on my progress of close friends Pat and Sarah Barlow , David Bradley, Jason Governo, and others have cheered me up and pushed me to continue when I was struggling with various phases of my dissertation. I want to especially acknowledge the continual encouragement and support given me by my roommate, Christa Haring. Her listening ear, star charts, gentle nudging, and checking on my progress every day after returning from work all helped me to complete the work necessary to finish my dissertation.

There are many others who have contributed to my education along the way, from high school teachers who challenged me to grow to my undergraduate professors at Brigham Young University, particularly Drs. Alvin Price and Suzanne Olson. Drs. Thomas Lee and Glen Jensen had a profound positive influence while I was pursuing a Masters Degree at Utah State University. The examples set by Drs. Price, Olson, Lee and Jensen motivated me to achieve similar academic excellence.

I am thankful for the comfort, support and strength of purpose I have felt from my Heavenly Father. He instilled within me an inner fire and desire to achieve my goal and helped me overcome challenges I faced along the way.

Lastly, I want to acknowledge the support of my family. As I have pursued my graduate degrees, my family has rallied around me and were always the cheerleaders behind the scenes encouraging me and giving me the confidence that I could complete the tasks at hand. My sister Lara virtually became an additional committee member as she unselfishly spent time to review drafts of my dissertation and provide suggestions for improvements, all while she was pursuing a Ph.D. and working on her own dissertation. She has truly been an awesome example to me and I hope I give back at least a part of the help she has given to me.

Words cannot express my thanks to my parents for their countless phone calls, late night support and encouragement, "bucking me up" during writer's blocks and discouragement, and willingness to do "whatever it takes" to help me finish. In every area of my life they have both been examples of what I would like to become. They exhibit the perseverance, dedication, and the work ethic needed to achieve a Doctorate of Philosophy. In my mind, they have both earned this degree with me as they have been right along side both Lara and me, every step of the way as we have pursued this next step in our lives. They have my deepest gratitude.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS .....	v
LIST OF TABLES .....	x
CHAPTER 1	
INTRODUCTION .....	1
CHAPTER 2	
REVIEW OF LITERATURE .....	6
Predictors of Intergenerational Solidarity .....	8
Psychological Well-Being .....	28
Generational Stake Hypothesis .....	32
New Directions .....	33
CHAPTER 3	
STATEMENT OF THE PROBLEM .....	36
Problem One .....	36
Problem Two .....	38
Problem Three .....	39
CHAPTER 4	
NEEDS, RESOURCES, AND THE NATURE OF PARENT-CHILD RELATIONSHIPS IN LATER LIFE .....	41
Abstract .....	42
Introduction .....	43
Methods .....	52
Results .....	55
Limitations .....	69
Conclusions .....	70
CHAPTER 5	
PARENTS' AND ADULT CHILDREN'S VIEWS OF INSTRUMENTAL AND EMOTIONAL ASSISTANCE AS A FUNCTION OF NEEDS, RESOURCES, AND INTERGENERATIONAL SOLIDARITY .....	76
Abstract .....	77
Introduction .....	78
Methods .....	86
Results .....	89
Limitations .....	94
Future Directions .....	96

Conclusions .....	96
CHAPTER 6	
DISCUSSION .....	100
Study One .....	101
Study Two .....	108
Limitations .....	109
Implications .....	112
Future Directions .....	113
REFERENCES .....	115
APPENDIX A	
STATISTICAL TABLES FOR STUDY ONE .....	131
APPENDIX B	
STATISTICAL TABLES FOR STUDY TWO .....	164

## LIST OF TABLES

Table 4.1	<i>Descriptive Statistics for Study 1 (N=3,320)</i> . . . . .	132
Table 4.2	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Affectual Solidarity</i> . . . . .	134
Table 4.3	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Face-to-face Contact Associational Solidarity</i> . . . . .	136
Table 4.4	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Letter/Phone Contact Associational Solidarity</i> . . . . .	138
Table 4.5	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Instrumental Dimension of Functional Solidarity</i> . . . . .	140
Table 4.6	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Emotional Dimension of Functional Solidarity</i> . . . . .	142
Table 4.7	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Normative Solidarity</i> . . . . .	144
Table 4.8	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Depressive Symptoms</i> . . . . .	146
Table 4.9	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Life Satisfaction</i> . . . . .	149
Table 4.10	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Hostility</i> . . . . .	152

Table 4.11	<i>Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Long-term Depression</i> .....	155
Table 4.12	<i>Summary of Simple Regression Analyses for Variables Predicting Adult Child's Self-efficacy and Self-esteem</i> .....	158
Table 4.13	<i>Summary of Simple Regression Analyses for Variables Predicting Adult Child's Mastery and Ryff's Scale</i> .....	161
Table 5.1	<i>Descriptive Statistics for Study 2 (N=3,320)</i> .....	165
Table 5.2	<i>Summary of Logistic Regression Analysis for Variables Predicting Exchange of Transportation, Shopping, Errands Support for Adult Children and Parents</i> .....	167
Table 5.3	<i>Summary of Logistic Regression Analysis for Variables Predicting Exchange of Housework, Yard work, Car Repairs, and Work Around the House Support for Adult Children and Parents</i> .....	170
Table 5.4	<i>Summary of Logistic Regression Analysis for Variables Predicting Exchange of Advice, Encouragement, Moral or Emotional Support for Adult Children and Parents</i> .....	173
Table 5.5	<i>Summary of Logistic Regression Analysis for Variables Predicting Exchange of Child Care Support for Adult Children and Parents</i> .....	176
Table 5.6	<i>Summary of Logistic Regression Analysis for Variables Predicting Exchange of Child Care While at Work Support for Adult Children and Parents</i> .....	178

## CHAPTER 1

### INTRODUCTION

Researchers have made great strides in identifying factors influencing parent-adult children relationships. An extensive body of literature has characterized different indicators such as gender, health, race, and proximity of both parents and their adult children that influence the types and amounts of support given and received by both generations, but not as much attention has been given to other aspects of parent-adult child relationships such as what influences closeness and contact within these parent-adult child relationships, and normative beliefs about family relationships. Additionally, much of this literature does not ascribe to any particular theory of aging and researchers do not attempt to relate their empirical findings to a greater body of theoretically relevant literature.

It is crucial to develop effective theories of aging that can help guide how I examine intergenerational exchange and help determine what aspects of intergenerational exchange should be focused on. Two such theories that can help with elaborating the processes involved in intergenerational exchange are the Theory of Intergenerational Solidarity suggested by Bengtson and his colleagues (Mangen, Bengtson, & Landry, 1988) and the Contingent Exchange Theory suggested by Davey and his colleagues (Davey & Eggebeen, 1998; Eggebeen & Davey, 1988). The Theory of Intergenerational Solidarity provides a well rounded framework for examining family functioning. With the addition of the Contingent Exchange Perspective I hope to further elaborate the psychological consequences and well being of family members involved

in intergenerational relationships. Hopefully with the integration of these two perspectives will come a better understanding of these processes.

To begin I examine the literature surrounding parent-adult child relationships theoretically. The Intergenerational Solidarity Theory is addressed; it provides a comprehensive framework for examining multiple aspects of parent-adult child relationships and the interactions between these aspects. To address the psychological impact upon parents and adult children the Contingent Exchange Perspective is next reviewed. It states that exchanges within families are best viewed from a needs and resources perspective. Provision of support is not harmful unless given in a time of need while receipt of support is not harmful unless given in the absence of necessary resources.

The final theoretical aspect which I address is the Generational Stake Hypothesis which states that parents will report a rosier viewpoint of the relationship based upon their developmental life stage. All three of these theories and perspectives have been used in the literature to explain parent-adult child relationships. I will investigate whether there are support from these theories in a nationally-representative, longitudinal sample.

Chapter two also includes a thorough review of the different predictors of the four dimensions of Intergenerational Solidarity used in this paper to examine parent-adult child relationships. Which variables have previous literature suggested as influential in elaborating upon closeness, contact, normative beliefs, and functional exchanges? Which parent-adult child characteristics and Intergenerational Solidarity dimensions impact the psychological well-being of the generations?

Several research questions arose after a study of the literature surrounding parent-adult child relationships and the different aspects of those relationships. These emanated from gaps or a lack in the empirical work done surrounding support relationships within families, and what influences these support exchanges. The first gap was a lack of theory to unify, inform, and provide a frame of reference for much of the parent-adult child relationship literature. The second gap was deciphering what aspects of the different areas of interaction between parents and adult children are actually important in the sense that they affect the psychological well-being of both parents and adult children. Thirdly, looking more specifically at the exchange literature and parent-adult child relationships, how does theory help us to better understand and predict support exchanges. These three issues are addressed more specifically in chapter three of this paper. In this dissertation, I conducted two studies to extend the empirical and theoretical work in this area. The first study examined the Intergenerational Solidarity Theory, the Generational Stake Hypothesis and the Contingent Exchange Perspective in two parts. The first part addressed the theories previously mentioned, while the second part examined psychological outcomes of both older adults and adult children stemming from these theories. Extending these results, the second study investigated Functional Solidarity in more depth.

The first study addresses predictors of the Intergenerational Solidarity, the influence of needs and resources upon exchange, and the psychological consequences of involvement in parent-adult child relationships. Study of parent-adult child relationships across the adult life-span has come to full fruition. We are rapidly gaining fuller appreciation for correlates and consequences of routine flows of assistance (i.e., Functional Solidarity) between generations. Predictors of other forms of Intergenerational Solidarity, however, have generally received less

attention in the research literature. Working from a Contingent Exchange Perspective, I examine the relationship between needs and resources of both older parents and their adult children as predictors of five kinds of Intergenerational Solidarity: Functional, Structural, Associational, Affectual, and Normative. Results suggest that both needs and resources of both generations are important for predicting each dimension of solidarity, and may serve as partial explanation for the shifting balance in intergenerational relationships across adulthood.

The second study examines Functional Solidarity in more depth. Gerontological literature has often demonstrated the “generational stake” phenomenon, in which there is a net transfer of resources down generations. A supplementary perspective on support exchanges is that this normative pattern emerges as a by-product of age-graded changes in the needs and resources of both generations. In support of the hypothesis, I found evidence for the importance of needs and resources in predicting flows of instrumental assistance up and down generations, whereas importance of dimensions of Intergenerational Solidarity (aside from Associational, necessary to provide instrumental aid) were largely absent. Predictors of emotional support were more complex. Implications for theory and practice are discussed.

Chapter six draws conclusions across both studies. Both parents and adult children’s responses make a unique contribution when predicting Intergenerational Solidarity. Additionally, to fully elaborate upon the relationship it is also necessary to include characteristics from each member of the dyad and gender, which were measured dyadically. I found that all dimensions were influenced by needs and resources variables, as implied by the Contingent Exchange Perspective, and that all the different dimensions of Intergenerational Solidarity affected the psychological well-being of each generation.

Finally, through these studies show that future research needs to include better operationalization of Intergenerational Solidarity, with a nationally-representative sample, particularly Normative and Consensual Solidarity. Elaboration upon how needs and resources variables affect and are affected by transitions within parent-adult and other family relationships will help us gain a fuller perspective on the psychological impact upon older adults.

## CHAPTER 2

### REVIEW OF LITERATURE

It is critical to use theory when explaining parent-adult child relationships in later life. While various theories have been used to explain such relationships, most do not address how parent-adult child relationships are affected by later life issues. This paper uses the Intergenerational Solidarity Theory as an organizational framework to discuss important aspects that influence the parent-adult child relationship. Subsequently, psychological consequences of parent-adult child relationship aspects are examined, followed by an examination of the developmental stake hypothesis, which arose from the Intergenerational Solidarity Theory, and research on extended family relationships that grew out of the developmental stake hypothesis and the Intergenerational Solidarity Theory.

#### *Intergenerational Solidarity*

The majority of gerontology literature (72%) (Bengtson, Burgess, & Parrott, 1997) does not ascribe empirical findings to a theoretical tradition, but is instead model-based thus precluding the achievement of cumulative knowledge in social gerontology (Bengtson et al., 1997). A main function of theory is to build knowledge and understanding in a systematic way so that it can guide what still remains to be learned (Bengtson, Parrott, & Burgess, 1996). Intergenerational Solidarity Theory was developed to build knowledge and understand multigenerational family relationships and what holds them together (McChesney & Bengtson, 1988). It provides a framework for identifying important aspects of family relationships to investigate and helps to identify where gaps in understanding remain.

Social changes such as smaller family size, increase in divorce, increased geographic mobility, and more women in the labor market may lead the public to believe in weakened intergenerational bonds, but Bengtson and Harootyan (1994) suggested that it may lead to stronger solidarity among family members due to a greater need to support each other. At least in principle, Intergenerational Solidarity Theory examines dyadic relationships within the family: parent-child, grandparent-grandchild, and additional combinations of the three generations.

Family solidarity is defined by six constructs. The six constructs are

- a) “*Associational Solidarity*, the frequency and patterns of interaction in various types of activities, b) *Affectual Solidarity*, the type and degree of positive sentiments held about family members and the degree of reciprocity of these sentiments, c) *Consensual Solidarity*, the degree of agreement on values, attitudes, and beliefs among family members d) *Functional Solidarity* or exchange, the degree to which family members exchange services or assistance, e) *Normative Solidarity*, the perception and enactment of norms of family solidarity and f) *Intergenerational Family Structure*, the number, type, and geographic proximity of family members” (p. 116, Bengtson & Schrader, 1982).

These constructs grew out of Nye and Rushing’s (1966) family integration framework, but Bengtson and his colleagues substituted intergenerational family structure instead of goal integration to better understand multigenerational family relationships (McChesney & Bengtson, 1988). The change stems from the authors’ belief that solidarity reflects family members being

interchangeable in function rather than being complementary. The final construct is now known as Structural Solidarity (Bengtson, & Roberts, 1991; Roberts, Richards, & Bengtson, 1991).

One strength of the Intergenerational Solidarity Theory is that it has been useful in stimulating new research and it helps to organize existing findings (Roberts et al., 1991).

Another strength is the identification of the base elements on which intergenerational relations are built: sentiment, structure and behavior (Bengtson, Giarrusso, Mabry, & Silverstein, 2002).

Some suggested weaknesses include how ambivalence is included in the theory (to be discussed later) and that it minimizes the diversity of family experiences (Connidis & McMullin, 2002).

Bengtson et al. (2002) dispute this criticism. They suggest that the dimensions of Intergenerational Solidarity are synergistically related and the different patterns and formations are unlimited based on different family experiences.

The Intergenerational Solidarity Theory provides an organizational framework for this paper because the six dimensions help to identify important aspects to consider in examining parent-adult child relationships. A review of the literature surrounding these dimensions reveals that while Functional Solidarity has received a lot of empirical attention, the other five dimensions have not. This paper will also focus on how the different dimensions of Intergenerational Solidarity Theory impact psychological well-being of the specific generations involved.

### Predictors of Intergenerational Solidarity

In the absence of a strong theoretical tradition in this area, it is important to begin by examining the consistent areas of empirical support between individual dyadic characteristics

and Intergenerational Solidarity. Once this evidence has been presented, its implications for theory testing can be assessed.

### *Functional Solidarity*

Much of gerontological literature has explored what influences the exchange of help within families (Davey, 1998; Davey & Eggebeen, 1998; Eggebeen, 1992; Zarit & Eggebeen, 1995). The Intergenerational Solidarity Theory incorporates the exchange of help within families under the dimension of Functional Solidarity. Functional Solidarity is defined as the degree to which family members exchange services or assistance (Bengtson & Schrader, 1982; Hancock, Mangen, & McChesney, 1988).

Many different characteristics have been found to influence exchange; the difficulty is organizing them in a way that is understandable and makes sense. One model categorized predictors of exchange into four areas: family background characteristics, parent characteristics, child characteristics, and relationship characteristics (Davey, 1998). Family background characteristics that are predictive include race, income, parent education, and urban/rural residence (Eggebeen, 1992; Hogan, Eggebeen, & Clogg, 1993; Kobayashi, 2000). Parents' level of education sets the culture in which a child is raised thus affecting the context of exchange. Parental characteristics include age, gender, marital status, health status, functional ability, and number of children (Davey & Eggebeen, 1998; Eggebeen, 1992; Zarit & Eggebeen, 1995). Similar to parent characteristics, child characteristics which influence exchange include gender, marital status, and transition to parenthood/number of children; relationship characteristics include proximity, relationship quality, and filial expectations and obligations. Alternatively, Chatters and Taylor (1993) utilize two factors, family and demographic. Family factors include

family contact, closeness, satisfaction with family life, and proximity. Demographic factors include age, gender, income, education marital status, urban/rural, and region. Both models utilize many of the same influential variables, but Davey's (1998) model is more descriptive and encompassing. This paper will now address the research surrounding different predictors of exchange under the categories suggested by Davey (1998): Family Background Characteristics, Parent Characteristics, Child Characteristics, and Relationship Characteristics.

*Family background characteristics.* Several family background characteristics are instrumental in predicting the exchange of support within an intergenerational dyad. These include: race, income, parent education, and urban/rural residence. Addressing the first characteristic we see that findings surrounding the influence of race on intergenerational exchange are mixed depending on which type of exchange is examined. Looking at instrumental exchanges like help with housework, yardwork and child care, Hogan et al., (1993) report that African American and Hispanics adult children and parents are less likely to be involved in instrumental exchanges when compared with Whites. However, Jayakody (1998) examined race and financial transfers and found income to be a mediating factor once family structure, needs of the adult child, and resources of the parents were controlled. White adult children received more financial assistance than African American adult children, but only in adult child families whose income was below \$15,000. For families above this income level there was no difference between White and African American families and financial exchanges. Findings regarding race and emotional support are less clear (Davey, 1998).

Although these findings seem to suggest that African-Americans and Hispanics are less involved in the exchange of support, the influence of race on support cannot be considered

without the inclusion of a discussion of fictive kin and skip-generation assistance. Fictive kin is defined as people considered to be related although they are not related by blood or marriage (Chatters, Taylor, & Jayakody, 1994). Scott and Black (1989) indicate that Black kin structures are often ignored when discussing Black family functioning.

Much of the research surrounding fictive kin relationships has investigated the existence of such relationships, support exchanges, and non-kin caregiving (Barker, 2002; Johnson & Barer, 1990; Piercy, 2001; Taylor, Chatters, Hardison, & Riley, 2001). Johnson and Barer (1990) found that African Americans have more active support networks with the inclusion of fictive kin than do Whites. Their finding suggests that support exchanges among African American families cannot be fully explained without the inclusion of fictive kin. The belief that African American families participate in fewer support exchanges may be biased without the inclusion of fictive kin. These studies suggest that to fully explain the variance of race and support exchanges, fictive kin should be included as a predictor. In the present studies I hypothesize that race will be a significant predictor in the exchange of support because fictive kin were not included as questions in that national data set and thus were not able to be addressed in this study. The inability of addressing the role of fictive kin and support will remain until nationally-representative surveys address appropriate questions about intergenerational support structures and pathways.

Along with race, income has received attention as a predictor of support exchanges. In general, higher income leads to providing higher levels of financial assistance, but not necessarily other types of assistance. Semyonov and Lewin-Epstein (2001) found that parents with high socioeconomic status were more likely to be involved in financial support of adult

children. Additionally, looking at the influence of that adult child's income on provision of support to parents, Kobayashi (2000) found that parental income affected children's provision of both financial and service support. Parents with lower incomes were more likely to receive both financial assistance and service support in the form of housework from adult children.

Other family background characteristics believed to affect exchange are parent's level of education and urban/rural residence. Greater education level of parents is associated with higher levels of giving and receiving in both generations; this held true across all domains of assistance, both instrumental assistance like help with housework, transportation, and yardwork, and emotional assistance or giving advice and encouragement (Eggebeen, 1992; Davey & Eggebeen, 1998; Eggebeen & Davey, 1998). As for urban/rural living, not much research has been done in examining its effect on intergenerational exchange. Eggebeen (1992) and Eggebeen and Davey (1998) found no significant differences between an urban and rural sample, but more empirical research is needed to learn any rural/urban differences in exchange.

Thus, we see that overall, the effects of race and exchange should not be addressed without including skip-generation patterns of assistance and fictive kin and exchanges of financial support may be affected by level of income, but other types of exchanges are not. Additionally, parents level of education increased exchanges while urban/rural domicile did not affect exchanges. Next, I address which parent characteristics affect the exchange of support.

*Parent Characteristics.* Parent characteristics that are influential in explaining intergenerational exchange include gender, marital status, age, health status/functional ability, and number of children. Looking first at gender, researchers found that mothers are more likely to receive all types of exchange when compared to fathers (Ikkink, van Tilburg, & Knipscheer,

1999; Rossi & Rossi, 1990; van Groenou & Knipscheer, 1999; Wright & Maxwell, 1991). For example, mothers receive more help with transportation, home or car repairs, other work around the house, advice or encouragement, care, and a loan or gift of \$200 or more than did fathers (Amato, Rezac, & Booth, 1995). Whereas Eggebeen (1992) found that fathers are more likely to provide certain types of exchange (household and financial assistance) to their adult children, Morgan (1983) found that mothers are as likely to provide financial assistance as fathers.

Marital status is another parent characteristic that affects the exchange of support within adult child/parent dyads. Widowhood and divorce of parents have received the most attention when examining how marital status affects intergenerational exchanges. Divorce impacted exchanges such as transportation, work around the house, advice or encouragement with fathers, but not with mothers; divorced fathers were involved in less helping exchanges with offspring, but single mothers received more and gave less to adult children than married mothers (Amato et al., 1995). The effect of widowhood is not as clear. Widows are more likely to receive support than single or divorced parents, but the effect of widowhood on giving support is still unclear with some saying widowhood contributes to less giving and others saying there was no change in support given with widowhood (Eggebeen, 1992; Ikkink et al., 1999).

Along with gender and marital status, age affects the exchange of support. As parents age there is an increase in support received and decrease in support given (Hirdes & Strain, 1995; Ikkink et al., 1999; Silverstein & Waite, 1993; Zarit & Eggebeen, 1995), however, it is not until later in life that the exchange given by adult children outweighs that given by parents (Eggebeen & Wilhelm, 1995; Zarit & Eggebeen, 1995).

Health status and the functional ability of parents affects how much support they receive and are able to give. Poor health of both parents and adult children leads to less support given and more support received. This follows the Contingent Exchange Perspective in which help is given in response to needs and based on resources (Davey & Eggebeen, 1998). Parents receive more assistance when they are in poor health and at the onset of physical impairment (Hogan et al., 1993; Kobayashi, 2000; Van Groenou & Knipscheer, 1999).

Finally, researchers found that as the number of children increases there is a greater probability that support will be given and received; total amount of exchange was more in families with more children (Eggebeen, 1992; Eggebeen & Wilhelm, 1995). Other researchers found that when looking at the specific parent-adult child relationship, rather than at assistance given to all the children, there was less assistance provided to a specific child in large families (Hoyert, 1991). Semyonov and Lewin-Epstein (2001) found that families with fewer adult children were more likely to have parents who helped with financial support.

Overall we see that mothers who are divorced or widowed are more likely to be engaged in exchanges of support. Additionally, older parents with health status problems and those with more children are also more likely to be involved in support exchanges; those with health problems receive more help and give less, while those with larger families gave less support to each individual child, but parents were more likely to engage in a greater number of support exchanges overall. Next I address which child characteristics affect the exchange of support.

*Adult child characteristics.* Child characteristics that were influential in predicting exchanges include gender, marital status, and their transition to parenthood/number of children. Less is known about how child characteristics contribute to intergenerational exchange than

parent characteristics (Davey, 1998). Looking first at gender we see that while Spitze and Logan (1990) report more exchanges with daughters along gender lines (mothers helping daughters more than fathers helping sons, Silverstein and Waite (1993) report no gender differences in support to adult children. Wright and Maxwell (1991) found that sons provided parents with more services, while daughters provided more socio-emotional help.

The adult child's marital status has also been investigated for the effect on exchanges of support. Davey (1998) suggests that child's marital status possibly functions as a moderator with gender and life stage. One study found that divorced women receive more assistance than married women from parents while married men receive more help with child care (Spitze, Logan, Deane, & Zerger, 1994). Chatters and Taylor (1993) found that separated and widowed men were less likely to give informal support to parents, but separated women were less likely to report giving to parents; widowed women showed no differences. Informal support was not specifically delineated; participants were asked how often do you help your parents out.

Finally, transition to parenthood signifies more exchanges between generations that may decrease as grandchildren get older. Ikkink et al., (1999) found that adult children with families gave smaller amounts of instrumental support to parents. Hogan et al. (1993) reported that adult children receive more assistance from parents when they have young children. Many of the same characteristics identified in the parent section were also influential in predicting exchanges between adult children and parents such as gender, race, and proximity of the dyad members.

Similar to the findings under parent characteristics we see that daughters receive more support than do sons. Additionally, divorced women receive more support, while married men receive more help with child care. Finally, adult children with children are more likely to be

involved in exchanges than those without children. The final group of characteristics which affect exchange are relationship characteristics and are addressed next.

*Relationship characteristics.* Relationship characteristics that are influential include proximity, relationship quality, and filial expectations and obligations. Proximity affects provision of instrumental support; it provides the opportunity structure for support to occur (Uphold, Lenz, & Soeken, 2000). Chatters and Taylor (1993) found that other types of support such as emotional support and financial assistance are not affected by proximity. Coresidence is one special type of proximity and is often difficult to deal with when measuring exchange within families. If coresidence is included as a predictor of assistance, adult children are more likely to receive financial assistance when compared with their non-coresident counterparts (Aquilino & Supple, 1991) and they are more likely to provide household assistance to parents (Spitze & Ward, 1995).

Another relationship characteristic which affects exchange is relationship quality. Intergenerational Solidarity characterizes this as Affectual Solidarity which leads to increased intergenerational exchanges. Parents and children who report being close are more likely to help each other with both generations giving and receiving help (Chatters & Taylor, 1993; Parrott & Bengtson, 1999; Whitbeck, Hoyt, & Huck, 1994; Wright & Maxwell, 1991). Contact between generations through telephone, letter, or face-to-face contact is described as Associational Solidarity by the Intergenerational Solidarity Theory. These behaviors also lead to intergenerational exchange; those that are in contact with each other are more able to meet exchange needs (Cicirelli, 1983; Wright & Maxwell, 1991).

The last relationship characteristics to be considered is filial expectations and obligations, or Normative Solidarity as described by the Intergenerational Solidarity Theory. Belief that families should help each other affects intergenerational exchanges (Uphold et al., 2000; Wright & Maxwell, 1991); however, there are mixed results about how this happens. Adults' expectations of help affect how much help they give; parents who believe in giving help are more likely to give help (Lee, Netzer, & Coward, 1994) and adult children and parents with high filial expectations had parents who were more likely to receive help (Ikkink et al., 1999). Thus, normative expectations and obligations influence giving more than receiving assistance (Ikkink et al., 1999; Lee, Netzer, & Coward, 1994). There are also gender differences; duty and obligations led to decreased exchanges with fathers, but not mothers. Normative obligations seem to motivate sons to engage in intergenerational exchanges; adult children with strong normative obligation ideals gave more to fathers, but received less. Adult daughters are more motivated by affection and give more support when they feel closer to parents (Parrott & Bengtson, 1999; Silverstein, Parrott, & Bengtson, 1995). Finally, higher levels of felt obligation affected emotional support, but not financial or service support exchanges with adult children providing more emotional support to parents when they had higher levels of felt obligation, but not more financial or service support (Kobayashi, 2000).

In general we see that intergenerational dyads which live close to each other, or even co-reside, are more likely to engage in instrumental support exchanges. Additionally, those who report having a good relationship and those who believe that families should help each other are also more likely to engage in support. Looking at predictors of Functional Solidarity in general we see that many different characteristics are influential and should be included when trying to

predict what affects the exchange of support. Next I address the other dimensions of Intergenerational Solidarity and what predicts them and how they are affected by each other. First I look at Affectual Solidarity or how close the dyads report feeling to each other; Associational Solidarity or how much contact there is between generations; Normative Solidarity or if the generations believe that they should help each other; Consensual Solidarity, or shared values between generations; and finally, Structural Solidarity which includes the structure of the family.

### *Affectual Solidarity*

Affectual Solidarity is defined by how close each generation reports feeling to the other (Gronvold, 1988; Lawton, Silverstein, & Bengtson, 1994). Several structural characteristics are influential in predicting closeness within dyadic relationships. These include gender, age, race, and marital status. Other variables associated with closeness in the parent-adult child relationship include religiosity, employment status, and similarity to the parent in educational attainment and occupation. First, I'll address structural characteristics which affect closeness and then the others.

Structural characteristics which influence closeness include gender, age, race, marital status, and coresidence. Typically the mother-daughter relationship is seen as the closest. Gender has been widely accepted as consequential in parent-adult child relationships (Bengtson & Harootyan, 1994; Golish, 2000; Lawton et al., 1994; Rossi & Rossi, 1990; Sutor, Pillemer, Keeton, & Robison, 1995; Troll, 1989). Sutor et al. (1995) found that dyads containing a female reported increased closeness; Troll (1989) reported the mother-daughter bond was most powerful. Along with gender, age affects closeness. There is a curvilinear relationship between

age and closeness, as children age, closeness increases and conflict decreases (Rossi & Rossi 1990; Sutor et al., 1995).

Race and marital status are also influential structural predictors of closeness. African-Americans report greater closeness when compared with White respondents (Aquilino, 1999; Bengtson & Harootyan 1994; Lawton et al., 1994; Sutor et al., 1995). Marital status also affects closeness. Children report feeling less close to non-married parents, whether it is through divorce, separation, or widowhood (Aquilino, 1999; Golish, 2000; Kitamura & Takashi, 2001; Lawton et al., 1994).

Finally, there are mixed findings on whether co-residence affects closeness. Sutor et al. (1995) found that co-residence, when adult children returned to their parent's home, did not affect closeness, while Aquilino (1999) found that it did. Parents reported higher levels of closeness with co-residence when they lived with a child. This difference may be due to who is reporting on the relationship. Parents report feeling closer to coresident children, but adult children do not share this perspective (Aquilino, 1999). Closeness is often likely to determine co-residence at least as much as closeness is determined by co-residence.

In summary we see that the mother-daughter dyad is the closest and as children become adults, the parent-adult child relationship becomes closer. Additionally, African-American dyads report feeling closer than do Whites and children report feeling less close to non-married parents. Closeness and coresidence depends upon who is reporting with parents reporting increased closeness and adult children reporting the opposite.

Other characteristics that influence closeness between dyads include religiosity, education (Aquilino, 1999), employment status (Kitamura & Takashi, 2001), and similarity to

parents in educational attainment and occupation. Kitamura and Takashi (2001) report that religious respondents describe increased closeness with parents who had higher levels of education and decreased closeness with those that were unemployed.

Similarity with parents is influential in affecting closeness. Similarity in educational attainment and occupational achievement affected reported closeness (Suitor et al., 1995; Welsh & Stewart, 1995). Rossi and Rossi (1990) also found that children who had attained adult status and separate households also reported higher Affectual Solidarity. Additionally, past relationships between members of the dyad are influential in predicting current relationship closeness. Those who report parent rejection earlier in life reported lower levels of closeness (Whitbeck et al., 1994) while Long and Martin (2000) reported past attachment as affecting relationship closeness.

In summary we see that characteristics influencing Affectual Solidarity, not including structural characteristics, consist of religiosity, education, employment status, and similarity to parents. Those adult children who were more religious felt closer to parents who had more education and those that were employed. Additionally, parents with children who were more similar to them reported feeling closer to their adult children. Next I examine what predicts contact between generations and if contact influences other dimensions of Intergenerational Solidarity such as Affectual Solidarity, Normative Solidarity, and Functional Solidarity.

#### *Associational Solidarity*

Associational Solidarity is defined as contact between generations through either face to face or telephone-letter contact (Mangen & Miller, 1988). In this section I will examine the different predictors of contact between the generations. Physical proximity was one of the first

characteristics used to predict and explain intergenerational association (Atkinson, Kivett, & Campbell, 1986; Dewit, Wister, & Burch, 1988; Roberts et al., 1991). Various studies found it to explain 30-60% of the variance in association/contact (Roberts et al., 1991). Marital status and education levels, gender of parent, race, and home ownership also significantly predict Associational Solidarity. Co-residence plays a unique role or impact when assessing amount of contact and factors influencing coresidence will be discussed.

Looking at the co-residence literature, many of the characteristics that were influential in predicting intergenerational contact also have been found to explain co-residence. Co-residence may be driven by child characteristics such as age, marital status, and economic needs (Goldscheider, 1997; Katz & Lowenstein, 1999; Ward, Logan, & Spitze, 1992; White & Rogers, 1997). Children who are younger and unmarried are more likely to co-reside (Ward et al., 1992; White & Rogers, 1997). Parents' marital status and education levels also influence coresidence. Married parents with less education are more likely to be involved in co-resident situations (White & Rogers, 1997). Crimmins and Ingegneri (1990) investigated whether co-residence is due to needs and resources and found that disability, widowhood, and education influenced contact. Additionally, residential propinquity contributed positively when the initial decision to co-reside was made.

Other variables which influence contact are marital disruption, gender, race, and home ownership. Parental marital disruption contributes to decreased contact; parents who are divorced are in less frequent contact with their adult children (Lawton et al., 1994; Sutor et al., 1995; Roberts et al., 1991). Gender of the parent also contributes to contact; dyads with mothers reporting increased contact compared with father dyads (Lawton et al., 1994; Sutor et

al., 1995). African-American and Hispanics report higher levels of contact (Lawton et al., 1994; Sutor et al., 1995) and adult child home ownership also leads to increased contact with parents ((Lawton et al., 1994).

In summary, proximity provides the opportunity for more contact, but also influences telephone/letter contact. Additionally, divorce and lower levels of education leads to decreased contact between members of the dyad while mother dyads, African-Americans, and adult children who own homes had higher levels of contact.

In examining what dimensions of Intergenerational Solidarity Theory affect association, Roberts et al., (1991) found that those that reported feeling closer to each other (Affectual Solidarity) and those that thought parents and children ought to provide support, either economically or through providing housing (Normative Solidarity) had increased contact between the generations. Looking cross-culturally Jeng (2000) found that filial obligation (Normative Solidarity) and family structure were central when predicting co-residence among Taiwanese families. Male firstborn children with low educational attainment were more likely to co-reside.

In general, we see that higher levels of Affectual, Functional, and Normative Solidarity lead to increased Associational Solidarity. Next I examine what predicts Normative Solidarity or feelings that family members ought to help each other by providing housing and economic support and what other dimensions of Intergenerational Solidarity affect it.

### *Normative Solidarity*

Normative Solidarity is defined as the perception and enactment of norms of family solidarity; these norms include beliefs in who helps with chores around the house, whether to

talk over life decisions with your family, what activities should be shared with extended family, and whether family members should help each other financially (Mangen & Westbrook, 1988). The study of norms has declined due to the difficulty of operationalizing a universal concept and needing to measure it at the individual level, but it still influences parent-adult child relationships and must be included (Roberts et al., 1991; Rossi & Rossi, 1990). Several structural characteristics influence Normative Solidarity or filial obligation including marital status, age, number of children of both parents and children, and race. Coresidence experience in multigenerational households, environment where the child was raised, and other dimensions of Intergenerational Solidarity such as Affectual Solidarity also influence Normative Solidarity.

Marital status or disruption through divorce or widowhood of either generation contributes to decreased levels of Normative Solidarity and there is a linear decrease in normative obligation with age (Marshall, Rosenthal, & Daciuk, 1987; Rossi & Rossi, 1991); parents and children with more children also report increased feelings of Normative Solidarity (Rossi & Rossi, 1991). Race is also a predictor of Normative Solidarity; Burr and Mutchler (1999) investigated norms surrounding the provision of housing among Blacks, Hispanics, and Whites and found that Blacks and Hispanics were more likely to report that assistance should be provided by parents and children to each other when compared with Whites. This also held true with a Mexican American/Anglo American sample; Mexican Americans had higher levels of familism (attitudes toward family support and membership) and felt more obligated to provide assistance, avoid conflict, and strive for self-sufficiency than did Anglo Americans (Freeberg & Stein, 1996).

Experience with multigenerational household influences Normative Solidarity. It is affected by the situation in which respondents were reared. Adult children who lived in multigenerational households while growing up were more likely to report that they felt family members should provide housing assistance (Goldscheider & Lawton, 1998). Adult children growing up in an adverse environment (alcoholism, physical or sexual abuse, psychiatric problems) reported lower levels of Normative Solidarity (defined as help given during a celebratory or crisis event) (Rossi & Rossi, 1991). Additionally, Lee, Coward, and Netzer (1994) found that being raised in a rural area contributed to increased norms of filial responsibility.

In general, we see that marital disruption and parents growing older lead to decreased levels of Normative Solidarity while being non-White, having more children and coresidence experience while growing up leads to higher levels of Normative Solidarity. Different dimensions of the Intergenerational Solidarity Theory were also found to affect Normative Solidarity. Feeling close to parents or adult children (Affectual Solidarity) led to greater feelings of Normative Solidarity (Ganong, Coleman, McDaniel, & Killian, 1998; Rossi & Rossi, 1991). Normative Solidarity was not affected by the amount of help that respondents received (one aspect of Functional Solidarity). In other words, parents' beliefs of what ought to happen was not affected by what they received (Lee, Netzer, & Coward, 1994). This does not contradict Kobayashi's (2000) findings because she reported on what adult children felt they should give to parents and Lee, Coward and Netzer (1994) reported on how beliefs affected what parents received.

Next I discuss what predicts Consensual Solidarity and what it influences. This area has received much less attention and will not be addressed in the present studies because it was not measured in the National Survey of Families and Households.

### *Consensual Solidarity*

Consensual Solidarity is defined as the degree of agreement on values, attitudes, and beliefs among family members. Religious beliefs, marriage norms, and political conservatism are examples of some attitudes that have been examined (Landry & Martin, 1988). Consensual Solidarity has received much less attention than other dimensions of parent-adult child relationships (Roberts et al., 1991). Consensual Solidarity has been conceptualized in two different ways, attitude similarity through the socialization of attitudes from 1) shared socialization experiences and 2) shared social class. Transmission through socialization experiences has been difficult to test empirically, but transmission through shared social class has modified attitudes about financial status, education, and religious attitudes (Roberts et al., 1991).

Maternal employment, gender, political, and religious ideology are some of the attitudes investigated pertaining to Consensual Solidarity (Acock, Barker, & Bengtson, 1982; Glass & Dunham, 1989; Brody, Moore, & Gleib, 1994). Acock et al. (1982) examined attitudes surrounding maternal employment. Mothers who worked in low status positions were less likely to report similar value orientations with their adult children. Additionally, amount of contact with mothers (Associational Solidarity) and closeness between the dyad (Affectual Solidarity) played a minimal role.

Glass and Dunham (1989) also examined consensus in adulthood among adult children and their parents. They postulated that Affectual Solidarity and structural characteristics such as income, education, number of children, marital status, gender, religious affiliation, and age would affect parent-adult child consensus of attitudes on political ideology, gender ideology, and religious ideology. They found no relationship between affective closeness and attitude similarity of the three different scales, although they hypothesized that this was due to lack of variability in closeness measures. Several structural characteristics were influential in parent-adult child attitude similarity of the three scales. Educated parents were more likely to report attitude similarity for sociopolitical issues, while children from large families were less likely to report attitude similarity. Although there were scattered effects showing that mothers had smaller attitude differences with children than fathers, the bulk of the results did not support the commonly held belief that mothers show more attitude similarity than fathers.

More recently Brody et al. (1994) looked at the effect of involvement in decision making in adolescence to see if that would influence later-life attitude similarity between parents and adult children. Looking at attitudes surrounding marriage and divorce, sex roles, child support, welfare, and teenage childbearing, they found that there was more attitude similarity between parents and children six years later when the adolescents had been actively involved in decision making and had close relationships with their fathers. More research needs to be done in this area, but conceptualization and measurement of attitude similarity remains difficult due to the complexity of defining an attitude and comparing it intergenerationally.

With the little amount of attention that Consensual Solidarity has received, it is difficult to draw conclusions about what influences this dimension. Examining the studies commented

upon here we see that education and involvement in decision making during adolescence increased attitude similarity, while coming from a larger family decreased it. This area needs further empirical work along with consideration of operationalization of the dimension. Finally, I address Structural Solidarity briefly since generally this dimension is used as a predictor of the other dimensions of Intergenerational Solidarity.

### *Structural Solidarity*

Structural Solidarity is defined as the number, type, and geographic proximity of family members. Structural Solidarity variables are often used to explain the other dimensions of solidarity. McChesney and Mangen (1988) used Structural Solidarity variables to compare the different generations on number of children and marital status. The different generations reported comparable statistics if questions were asked in a clear way. One example is asking questions in a way that distinguish among number of children given birth to, living children, adopted, and biological children. Some examples of structural variables that are significant in explaining the parent-adult child relationship discussed previously in this paper include gender (Affectual Solidarity), proximity (Associational Solidarity), and number of children (Functional Solidarity).

Looking across dimensions we see that many structural and individual characteristics are influential in predicting the different dimensions of Intergenerational Solidarity. While it is essential to describe what predicts the dimensions, another more compelling question is what effect do these dimensions have upon the psychological well-being of the different dyad members. The effect of these dimensions on psychological well-being will be addressed next.

### Psychological Well-Being

While it is important to further gerontological theory development and identify predictors that influence the parent-adult child relationship, it is of equal importance to discuss the impact of these predictors and Intergenerational Solidarity upon parents and children. The psychological consequences resulting from intergenerational exchange or Functional Solidarity have received the most attention and will be considered first. Affectual Solidarity or closeness between generations has also received attention, followed by association and Structural Solidarity. Consensual Solidarity, like research on what predicts it, has received little attention (see Ying and Zhang, 1995 for one example), and will not be included in this discussion.

#### *Functional Solidarity and Psychological Well-being*

Findings are mixed regarding Functional Solidarity and psychological well-being. On the positive side, parents who give instrumental support to children had better psychological well-being, while benefits from receiving support depended upon their satisfaction with the adult child; in general, support was more beneficial for those who held traditional norms surrounding family support (Chen & Silverstein, 2000). Looking at just the marital relationship and one generation, Wright and Aquilino (1998) found that wives involved in emotional support exchanges with husbands reported higher levels of marital satisfaction when compared to wives who were caregivers. However, when looking across generations, adult sons who gave help to parents experienced more distress, while mothers experienced increased well-being when giving help to children (Spitze, Logan, Joseph, & Lee, 1994).

It is better to look at psychological well-being and intergenerational exchange as a function of contingent exchange: help given is a function of needs and resources. Davey and

Eggebeen (1998) tested hypotheses based upon the three different theoretical perspectives about the relationship between exchange patterns and psychological well-being. They used data from the National Survey of Families and Households, and included measures on short term depressive symptoms, long term depression, and global satisfaction. Their results indicated negative support for the social exchange theory which posits that if the rewards exceeded the costs, individuals would continue to provide support. Parents who over-benefitted in the relationship, suffered psychologically. There was partial support for equity theory in which support should be an even exchange with no one over or under benefitting; participants who under benefitted did not exhibit serious mental health consequences, but those that over-benefitted did. The results supported the Contingent Exchange Perspective. When participants needed support and it was provided, there were beneficial mental health outcomes like fewer depressive symptoms, and lower levels of long term depression. Silverstein, Chen, and Heller (1996) also found support for the Contingent Exchange Perspective. Support at moderate levels led to a more positive mood, but high levels of support resulted in decreased positive mood; providing support to adult children was positive in that it reduced depression in older adults.

In summary, support exchanges can be psychologically harmful if given in a time of need or received when unneeded. The Contingent Exchange Perspective provides a much clearer view of how Functional Solidarity affects psychological well-being and should be included in future empirical tests of support exchanges and the effect upon psychological well-being. Contact between the generations and the effect of contact on psychological well-being is addressed next.

*Associational Solidarity and Psychological Well-being*

When looking at how contact with each generation affects psychological well-being, Umberson (1992) found that two structural characteristics were important in explaining the relationship: gender and marital status. Adult children reported that contact with mothers was linked to less distress, while contact with fathers did not have a strong psychological effect on them. However, among divorced children, contact with fathers was linked with more distress while contact was associated with less distress for married children. For parents, marital status and gender also played a role. Fathers reported that contact with children was more beneficial than did mothers. Looking at marital status, contact with children was more beneficial for divorced parents than married, but for widowed parents contact was associated with higher depression scores. She hypothesized that this could be due to contact being associated with increased needs of the parent.

Looking at the specific case of coresidence within Associational Solidarity, Aquilino and Supple (1991) found parental satisfaction to be higher than previously thought with 70% declaring satisfaction. Satisfaction was not influenced by gender of parent or child individually, but the mother-daughter dyad responded with significantly greater levels of positive social interaction. Shared leisure time and enjoyable time were greater than disagreements and arguing. However, conflict was the best predictor of parents' satisfaction with co-residence. For mothers, intensity of arguments was associated with dissatisfaction and lower levels of shared leisure time and enjoyable time, while for fathers occurrence of disagreements was associated with dissatisfaction.

In summary, we see that contact and psychological well-being between generations depends largely on gender and marital status. Contact with mothers and coresidence with a mother-daughter dyad tended to have a positive outcome while contact with a father tended to have less of an effect on psychological well-being. Additionally, widowed parents reported decreased psychological well-being possibly due to the effects of dealing with the loss of a spouse and the increased contact surrounding that transition. Finally, I address how closeness affects the psychological well-being.

#### *Affectual Solidarity and Psychological Well-being*

Affectual Solidarity, or how close the different members of the dyad feel to each other, and psychological well-being has received some attention in the literature, especially the mother-daughter dyad. Close relationships have been associated with adult daughter's high life satisfaction and lack of depressive symptoms (Kitamura & Takashi, 2001); high self esteem (Welsh & Stewart, 1995); decreased loneliness for both parent and child (Long & Martin, 2000), and it mediated stress and effectiveness for adult child caregivers (Townsend & Franks, 1995).

Similar to Associational Solidarity, structural characteristics of gender and marital status also affect the relationship between Affectual Solidarity and psychological well-being (Umberson, 1992). In father-adult child relationship, Amato (1994) found that the father-child relationship has less of an impact on the adult child's life satisfaction when the parents are divorced. Additionally, adult child's well-being is less affected by the parent-adult child relationship, both mother and father, when the child is married, a parent, and employed full time.

Looking across the literature surrounding Affectual Solidarity and Psychological well-being we see that there is greater life satisfaction and self esteem, and decreased depression,

loneliness, and stress during caregiving. Additionally, adult children are psychologically healthier and less affected by the parent-adult child relationship when they themselves are married, parents, and employed. Examination of these three dimensions of Intergenerational Solidarity and psychological well-being shows that there is an affect on the well-being of each member of the dyad and that it is essential to elaborate on this to identify what can be done to help families become stronger. Thus, psychological well-being variables are included in study one discussed in this paper. Also addressed in Study One is the Generational Stake Hypothesis which has grown out the Intergenerational Solidarity Theory. Literature surrounding this phenomenon will be addressed next.

#### Generational Stake Hypothesis

One way in which the Intergenerational Solidarity Theory has been used is the Generational Stake Hypothesis. First proposed in 1971, Bengtson and Kuypers hypothesized that parents reported higher levels of closeness and consensus because each generation was engaged in different developmental concerns and thus have different stakes within the relationship. Parents are more concerned with passing on values and with relationships in later life while younger adults are more focused on developing autonomy and independence; they hypothesized that these differences contributed to the discrepancies found between parents and children reporting on the same relationship (Giarrusso, Stallings, & Bengtson, 1995). They also tested to see if the difference was based upon if it was early or late in the family life course, but that refinement of the hypothesis was unsupported (Giarrusso et al., 1995).

Several other studies have tested this hypothesis to see if it is supported. Troll and Fingerman (1996) found that parents do report a “rosier” outlook than do children and children

seem to have less of an emotional investment in their parents than vice versa. Winkeler, Filipp, and Boll's (2000) findings also supported the generational stake hypothesis; based upon two family members discussing a controversial issue, older adults perceived scenarios more positively than did their adult children. Long and Martin (2000) also found support for the generational stake hypothesis; older adults perceived their current relationships with their children and past attachment higher than their children did.

Examination of the literature surrounding the Generational Stake Hypothesis shows that these studies supported the fact that parents report a more positive outlook than do adult children. Will this hold true in a nationally representative study? This is addressed in study one of this paper. Lastly this chapter addresses future areas of research, both theoretically and empirically that should be addressed in the discussion surrounding Intergenerational Solidarity. These include addressing conflict and ambivalence within family relationships, and investigation of non-adjacent relationships, like sibling and grandparent-grandchild relationships within the family and other close relationships like those found in the workplace and those with fictive kin.

#### New Directions

Much of the theoretical work and the over-arching framework for empirical research in family gerontology has taken a normative perspective (Bengtson, Burton, & Rosenthal, 1993). As a result of this framework, ambivalence and conflict within relationships and how that affects support exchanges has received relatively little attention. Recently, social scientists have begun to address this lack (Clarke, Preson, Raksin, & Bengtson, 1999; Parrott, Giarrusso, & Bengtson, 1994) and to look at what happens when there is ambivalence present within family relationships

(Davey, Belliston, Savla, & Cook, 2001; Luescher & Pillemer, 1998; Pillemer, 2001; Silverstein & Bengtson, 2001).

In a recent reformation of the Intergenerational Solidarity Theory, Bengtson and colleagues have expanded it to include new measures of conflict and ambivalence and indicate that it is one end of a continuum within the Solidarity perspective (Bengtson et al., 2002; Silverstein & Bengtson, 2001). During a symposium dedicated to a discussion of these issues, several social scientists agreed that ambivalence was an important area which needed to be addressed, but that it was theoretically different from the Intergenerational Solidarity Theory and to try to subsume ambivalence within the theory was stretching the theory beyond its useful range (Connidis & McMullin, 2002; Marshall, 2001; Pillemer, 2001). Ambivalence within family relationships remains an emerging area for future theoretical development and further discussion of these issues is likely to advance study within the gerontological field. This paper adds another dimension by addressing the context of the exchanges which occur within the intergenerational relationship, or the “why” of exchange through the Contingent Exchange Perspective rather than focusing on “what” of exchange addressed in the Intergenerational Solidarity Theory and ambivalence perspectives.

Several new research agendas have grown out of the Intergenerational Solidarity framework including studying nonadjacent intergenerational relationships, contexts outside the families and how they affect and are affected by Intergenerational Solidarity, and ambivalence and conflict within the parent-adult child relationship. One of the strengths of this theory is that it looks at relationships from multiple view points. Initially this consisted of examining parent-adult child relationships. More recently researchers have begun to investigate nonadjacent

intergenerational relationships, more specifically, the grandparent-grandchild relationship (Schilmoeller & Baranowski, 1998; Silverstein, Giarrusso, & Bengtson, 1998). See Goodman and Silverstein (2001) and Mills, Wakeman, and Fea (2001) for an overview of the grandparent-grandchild relationship and how grandparent's psychological well-being is influenced by caring for their grandchildren. Additionally, this theory has been used as a framework to examine how the workplace is affected by Functional Solidarity and caregiving (Starrels, Ingersoll-Dayton, Neal, & Yamada, 1995). Both the solidarity and ambivalence perspectives tend to focus attention on the "what" of Intergenerational Solidarity realms rather than the "why".

This review of the literature surrounding predictors of each dimension of the Intergenerational Solidarity Theory, their affect on the psychological well-being of the intergenerational dyad, and the Generational Stake Hypothesis has led me to address these issues in two studies. These research questions and the issues surrounding them will be addressed in Chapter 3.

## CHAPTER 3

### STATEMENT OF THE PROBLEM

Several research questions arose after a review of the literature surrounding parent-adult child relationships and the different aspects of those relationships. These emanated from gaps or a lack in the empirical work done on support relationships within families, and which intrapersonal and interpersonal factors influence these support exchanges. The first gap was a lack of theory to unify, inform, and provide a frame of reference for much of the parent-adult child relationship literature. The second gap was deciphering what aspects of the different areas of interaction between parents and adult children are actually important affecting the psychological well-being of both parents and adult children. Third, looking more specifically at the exchange literature and parent-adult child relationships, how does theory help us to better understand and predict support exchanges.

#### Problem One

Research in family gerontology has advanced considerably. Empirical work has taken a broader perspective from looking at the older individual to looking at families in middle and later years and the context in which the families are placed. Expanding the focus from the individual to a family context allows research on gerontological issues to have greater depth and breadth than previously allowed. Other advances in gerontological research comprise the inclusion of diversity, gender, race, and class in empirical work. This diversity presents methodological and theoretical problems for researchers (Allen, Blieszner, & Roberto, 2000).

It is crucial to develop and use theories of aging to guide how we examine intergenerational relationships and to help us determine which aspects of these relationships should be focused on. Additionally, theories can help us identify areas requiring future investigation and help us place empirical work within a body of knowledge and give us a framework for viewing what has been done. Several theoretical advances have occurred during the 1990's, one of which is Intergenerational Solidarity Theory. This theory offers a framework of six essential components within family relationships: function, or instrumental or emotional support, affection or emotional closeness, association or opportunity structures for interaction, consensus or agreement, and normative or family obligations. Additionally, the Generational Stake Hypothesis also grew out of theoretical work surrounding parent-adult child relationships. It asks whether parents report a rosier view of the relationship than do children (Bengtson & Kuypers, 1971). For example, are parents more likely to report feeling closer to their adult child than the adult child is to report feeling to the parent?

While this theory offers a broad perspective on families, Pyke and Bengtson (1996) acknowledge that the sample from the Three Generation Families study, on which the theory is based, was primarily White and not nationally representative. Thus, further analyses in a different context would make the theory stronger. Consequently, my first study is an empirical test of the Intergenerational Solidarity Theory and the Generational Stake Hypothesis using a nationally representative, longitudinal data set. Specifically, the research questions address: What are the unique predictors of each component of Intergenerational Solidarity? What are the predictors of "Generational Stake" within each dimension of Intergenerational Solidarity? Underlying this hypothesis is that needs and resources of both generations are related to age.

Normative changes in needs and resources may be responsible for observed differences in flows of assistance between generations. Thus, we would expect that the “difference” between parents’ and children’s reports should diminish and perhaps even reverse in later life (as parents resources dwindle, needs increase, and children’s resources increase and needs decrease).

### Problem Two

Growing out of my investigation of the Intergenerational Solidarity Theory and the Generational Stake hypothesis is the effects of these dimensions and support exchanges on the psychological well-being of both members of the dyad: parents and adult children. Allen et al., (2000) identified several substantive advances that have occurred within family gerontological research surrounding the well-being of older adults. They cite studies that found that social support research has found that it protects elders’ health (Roberto, 1992; Samuelsson & Dehlin, 1993) and psychological well-being (Barrett, 1999; McCulloch, 1995; Newson & Schulz, 1996). Krause (1991, 1994, 1995) also looked at negative aspects of family support and the impact of negative interaction and received support. Rook (1987) indicated that research with positive and negative support has methodological problems with things like intensity, time frame and sampling different domains of support.

The next set of research questions arose in response to whether the provision of support, and other dimensions of Intergenerational Solidarity, actually have implications for the psychological well-being of older adults. I postulate that as Rook (1987) stated, it is difficult to address intensity and time frame, and domains of support issues when looking at positive and negative effects. Instead it makes more sense to look at these issues using the Contingent Exchange Perspective suggested by Eggebeen and Davey (1998). This perspective states that

support is exchanged based on the needs and resources of each generation and when giving and receiving are in opposition of needs and resources, it will be psychologically detrimental to those involved in the exchange. Examples of this might include provision of emotional support as you yourself experience widowhood or not receiving instrumental support with an increase in activities of daily living limitations. Thus, the research question addresses: Is there support for the Contingent Exchange Perspective and is each type of Intergenerational Solidarity associated with parents' and children's psychological well-being?

### Problem Three

Finally, the last set of research questions address Functional Solidarity or instrumental and emotional support within families more specifically. Multigenerational relationships are increasingly important to individuals and families. Demographic changes have influenced how families interact with each other. The increase in life span has offered a greater opportunity for involvement with family members, while an increase in women in the labor force has contributed to less time spent in kinkeeping with family members. An increase in geographic mobility and increasing diversity of family forms, along with a decrease in fertility has led to the concern that there are weakened intergenerational bonds and a weakened support system for older adults. These changes have led to more opportunities for interaction with the multigenerational household rather than relying on solely the nuclear family (Bengtson, 2001).

With the expansion and inclusion of diversity issues in gerontological research, and the increasing importance of the multigenerational bond has come more extensive research on families in later life and how indicators such as gender, health, race, and proximity of parents and adult children affect the types and amounts of support given and received by both

generations. However, much of this literature does not subscribe to any particular theory of aging and researchers do not attempt to relate their empirical findings to a greater body of theoretically relevant literature. Thus, the last set of research questions look at what predicts different types of support within families using the Intergenerational Solidarity Theory and the Contingent Exchange Perspective. This study provides an intersection between theoretical advances and empirical work in the support literature. The research questions are: Does Functional Solidarity (Instrumental and Emotional Support) influence Affectual, Normative and Associational Solidarity? And, is Functional Solidarity (Instrumental and Emotional Support) a function of Contingent Exchange?

Next, Chapter Four contains Study One which addresses the predictors of Intergenerational Solidarity, the Generational Stake Hypothesis and whether these predict the psychological well-being of parents and their adult children. Chapter Five examines Functional Solidarity in more depth looking at predictors of different types of exchange within families. Finally, I will address what conclusions can be drawn from these two studies and how they inform the body of knowledge supporting parent-adult child relationships and theoretical developments of Intergenerational Solidarity and the Contingent Exchange Perspective.

CHAPTER 4

NEEDS, RESOURCES, AND THE NATURE OF PARENT-CHILD RELATIONSHIPS IN  
LATER LIFE

### Abstract

Study of parent-adult child relationships across the adult life-span has come to full fruition. We are rapidly gaining fuller appreciation for correlates and consequences of routine flows of assistance (i.e., Functional Solidarity) between generations. Predictors of other forms of Intergenerational Solidarity, however, have generally received less attention in the research literature. Working from a Contingent Exchange Perspective, I examine the relationship between needs and resources of both older parents and their adult children as predictors of five kinds of Intergenerational Solidarity: Functional, Structural, Associational, Affectual, and Normative. Longitudinal data from 3,320 adult children (MAge = 38 years, 58% women, 12% African American, 4% Hispanic) and cross-sectional data from their parents (MAge = 65 years, 65% women) were drawn from the National Survey of Families and Households to address the research question. Results suggest that both needs and resources of both generations are important for predicting each dimension of solidarity, and may serve as a partial explanation for the shifting balance in intergenerational relationships across adulthood.

## Introduction

Research scientists have made great strides in identifying different factors that influence support given and received between generations. An extensive body of literature has characterized different indicators such as gender, health, race, and proximity of both parents and their adult children that influence the types and amounts of support given and received by both generations. However, much of this literature does not ascribe to any particular theory of aging and researchers do not attempt to relate their empirical findings to a greater body of theoretically relevant literature.

It is crucial to develop effective theories of aging that can help guide how I examine intergenerational exchange and help determine what aspects of intergenerational exchange should be focused on. Two such theories that can help with elaborating the processes involved in intergenerational exchange are the Theory of Intergenerational Solidarity suggested by Bengtson and his colleagues (Bengtson & Kuypers, 1971; Bengtson, Burgess, & Parrott, 1991; Bengtson & Roberts, 1991; Mangen, Bengtson, & Landrey, 1988), and the Contingent Exchange Theory suggested by Davey and his colleagues (Davey & Eggebeen, 1998; Eggebeen & Davey, 1998). The Theory of Intergenerational Solidarity provides a well rounded framework for examining family functioning. However, with the addition of the Contingent Exchange Perspective I hope to further elaborate the psychological consequences and well being of family members involved in intergenerational exchange. Hopefully with the integration of these two perspectives will come a better understanding of these processes.

### *Problem Statement*

Although there is mounting empirical evidence consistent with the Theory of Intergenerational Solidarity (Mangen et al., 1988), evidence for the theoretical validity is equivocal at best. Building on evidence consistent with the Contingent Exchange Perspective, one plausible explanation is that the theory ignores the dynamic interplay between changing needs and resources over time in both generations. It is important to discover how both parents and adult children are affected psychologically by the interplay between needs and resources. With the integration of the two theories I show that the Contingent Exchange Perspective can further elaborate upon psychological well being as characterized by the Intergenerational Solidarity perspective.

### *Intergenerational Solidarity*

The Intergenerational Solidarity Theory suggested by Bengtson (Bengtson et al., 1991) deals with normative aspects of the parent-adult child relationship developmentally and includes six dimensions: Affectual, Associational, Functional, Normative, Structural, and Consensual. Affectual Solidarity is the type and degree of positive sentiments held about other family members and the degree of reciprocity about these statements. Associational Solidarity is the frequency and pattern of interaction in various types of activities. Functional Solidarity is the degree to which family members exchange services or assistance ranging from financial services, advice, gift-giving and services like transportation, work around the house, and child care. Normative Solidarity is the perception and enactment of norms of family solidarity. This covers shared expectations of how often family should get together, financial expectations and emotional expectations. Structural Solidarity is the number, type and proximity of family

members. Finally, Consensual Solidarity focuses on the degree of agreement on values, attitudes and beliefs among family members (Mangen et al., 1988).

Intergenerational Solidarity has undergone several theoretical tests to examine the relationships between and among the six dimensions: association, affection, consensus, function, norms and structure. Although initially postulated that affection, association, and Consensual Solidarity would be highly interdependent, studies indicated that they were not (Atkinson et al., 1986; Roberts & Bengtson, 1990). Specifically Atkinson et al. (1986) found that the affection, association, and consensus dimensions of the Intergenerational Solidarity Theory should not be combined into an additive scale and Roberts and Bengtson (1990) found that the consensus dimension was independent of the association and affection dimensions. The latter two dimensions did show a high correlation. In response to these empirical tests Bengtson and Roberts (1991) reformulated the theory and tested several hypotheses. They found that the Normative dimension of Intergenerational Solidarity was predictive of the affective dimension, but not for the association dimension.

In a recent reformation of the Intergenerational Solidarity Theory, Bengtson and colleagues have expanded it to include new measures of conflict and ambivalence and indicate that it is one end of a continuum within the Solidarity perspective (Bengtson et al., 2002; Silverstein & Bengtson, 2001). During a symposia dedicated to a discussion of these issues, several social scientists agreed that ambivalence was an important area which needed to be addressed, but that it was theoretically different from the Intergenerational Solidarity Theory and to try to subsume ambivalence within the theory was stretching the theory beyond its usefulness (Connidis & McMullin, 2002; Marshall, 2001; Pillemer, 2001).

One way in which the Intergenerational Solidarity Theory has been used is the Generational Stake Hypothesis. First proposed in 1971, Bengtson and Kuypers hypothesized that parents reported higher levels of closeness and consensus because each generation was engaged in different developmental concerns and thus have different stakes within the relationship. Parents are more concerned with passing on values and with relationships in later life while younger adults are more focused on developing autonomy and independence; they hypothesized that these differences contributed to the discrepancies found between parents and children reporting on the same relationship (Giarrusso et al., 1995). They also tested to see if the difference was based upon if it was early or late in the family life course, but that refinement of the hypothesis was unsupported (Giarrusso et al., 1995). Several other studies have tested this hypothesis to see if it is supported. Parents were found to have a “rosier” outlook than children for several domains such as emotional investment, discussion of a controversial issue and assessment of current and past relationships (Long & Martin, 2000; Troll & Fingerman, 1996; Winkeler et al., 2000).

The Intergenerational Solidarity Theory provides an organizational framework for this paper because the six dimensions help to identify important aspects to consider in examining parent-adult child relationships. A review of the literature surrounding these dimensions reveals that while Functional Solidarity has received a lot of empirical attention, the other five dimensions have not. This paper addresses this issue by examining the contribution of Affectual, Associational, and Normative Solidarity, along with Functional Solidarity to relationships. Consensual Solidarity is not discussed because it was not measured in the data set. The Ambivalence perspective is addressed in another paper under preparation (Davey et al.,

2001). Additionally, I also empirically test the Generational Stake Hypothesis for the four dimensions of Intergenerational Solidarity of interest here.

The other framework which provides theoretical background for this paper is the Contingent Exchange Perspective which will be discussed next. This perspective looks at the exchange relationships within families from a needs and resources viewpoint rather than the Generational Stake Hypothesis which says support flows down the generation.

#### *Contingent Exchange Perspective*

Contingent exchange theory posits that adults are better off psychologically when support is given in response to needs and participants are neither over or under benefitted. It was developed to examine how needs and resources variables affect exchanges within family relationships. Several theories have been used for explanation of support exchanges and psychological well-being including Exchange Theory and Equity Theory, however these theories do not address the contextual factors in intergenerational relationships; Davey and Eggebeen (1998) empirically tested the two theories and compared them with the Contingent Exchange Perspective. They found the most support for the Contingent Exchange Perspective. When participants needed support and it was provided, there were beneficial mental health outcomes like fewer depressive symptoms, and lower levels of long term depression.

While some researchers continue to disregard contextual factors when examining exchange within family relationships (see Ramos, Wilmoth, & Ramos, 2003 for one example), others have begun to consider the needs and resources of each generation. Families engage in exchange when there is a time of need including transitions of living arrangements and marital status (Eggebeen & Davey, 1998; Ikkink et al., 1999, Wilmoth, 2000). Additionally, these

support exchanges and the needs and resources of each generation affect the psychological well-being of families (Keefe & Fancey, 2002; Liang, Krause, & Bennett, 2001; Silverstein et al., 1996). Dissension remains specifically around how this occurs. For example, one study found that the structural characteristics of the adult child generation does affect parental psychological well-being and the exchange of support (Keefe & Fancey, 2002) another found that the structural circumstances did not affect the support received (Ikkink et al., 1999). These differences may possibly be explained by the use of non-representative samples. This study addresses Contingent Exchange using a longitudinal, nationally-representative sample to clarify these issues. It also uses the Intergenerational Solidarity Theory as another theoretical viewpoint used to examine intergenerational relationships and psychological well-being.

### *Integration*

The Theory of Intergenerational Solidarity has received much attention in the field of social science and has been used as a theoretical starting point for several empirical articles. The six dimensions of the Theory have been theoretically tested and we now know more about how these dimensions help us understand family functioning. However, I postulate that the Contingent Exchange Perspective can be used to expand upon the Intergenerational Solidarity framework to help researchers further understand psychological well being and intergenerational exchange within families. It is time to integrate the two perspectives and gain a better appreciation of intergenerational exchange and its effects on families.

### *Psychological Well-being*

While it is important to further gerontological theory development and identify predictors that influence the parent-adult child relationship, it is of equal importance is to discuss the

impact of these predictors and Intergenerational Solidarity upon parents and children. The psychological consequences resulting from intergenerational exchange or Functional Solidarity have received the most attention while Affectual, Associational, and Structural Solidarity characteristics such as gender and marital status have received less. Normative Solidarity, like Consensual Solidarity, has received little attention (see Ying and Zhang, 1995 for one example of the psychological effects of Consensual Solidarity). Examination of the effects of Normative Solidarity is one way in which this study addresses a gap in the literature. Because I was unable to measure Consensual Solidarity, it will not be addressed in this study.

Findings are mixed regarding Functional Solidarity and psychological well-being. On the positive side, parents who give instrumental support to children had better psychological well-being, while benefits from receiving support depended upon their satisfaction with the adult child; in general, support was more beneficial for those who held traditional norms surrounding family support (Chen & Silverstein, 2000). Looking at just the marital relationship and one generation, Wright and Aquilino (1998) found that wives involved in emotional support exchanges with husbands reported higher levels of marital satisfaction when compared to wives who were caregivers. However, when looking across generations, adult sons who gave help to parents experienced more distress, while mothers experienced increased well-being when giving help to children (Spitze, Logan, Joseph, & Lee, 1994). The Contingent Exchange Perspective, discussed previously, allows the context to be considered when examining the interaction between exchange and psychological well-being. Being involved in support exchanges can be psychologically deleterious if provided in a time of need or received when unneeded (Eggebeen & Davey, 1998; Keefe & Fancey, 2002; Liang et al., 2001; Silverstein et al., 1996).

Contact or Associational Solidarity and psychological well-being between generations depend largely on gender and marital status. Contact with mothers and coresidence with a mother-daughter dyad tended to have a positive outcome while contact with a father tended to have less of an effect on psychological well-being. Additionally, widowed parents reported decreased psychological well-being possibly due to the effects of dealing with the loss of a spouse and the increased contact surrounding that transition (Aquilino & Supple, 1991; Umberson, 1992).

Affectual Solidarity positively affects psychological well-being in that there is greater life satisfaction and self esteem, and decreased depression, loneliness, and stress during caregiving (Kitamura & Takashi, 2001; Long & Martin, 2000; Townsend & Franks, 1995; Welsh & Stewart, 1995). Additionally, adult children are psychologically healthier and less affected by the parent-adult child relationship when they themselves are married, parents, and employed (Amato, 1994; Umberson, 1992). Examination of these three dimensions of Intergenerational Solidarity and psychological well-being shows that there is an affect on the well-being of each member of the dyad and that it is essential to elaborate on this to identify what can be done to help families become stronger.

Thus, these three bodies of literature surrounding the Intergenerational Solidarity Theory, the Contingent Exchange Perspective and the effect on psychological well-being of the participants in the exchange relationships led to the research questions.

*Research Questions*

1) What are the unique predictors of Affectual, Associational, Normative, and Functional Solidarity? While previous research has examined predictors of Functional Solidarity, little has considered the potential importance of systematic biases in reporting (i.e., over-estimating amount given while under-estimating amount received). So one purpose of the proposed analyses is to examine any bias introduced by difference in reporting. Additionally, much less research has examined predictors of other kinds of solidarity in a nationally representative context. Secondly, the Contingent Exchange Perspective suggests that needs and resources of each generation should predict the balance of assistance between generations. These variables should therefore be important as predictors of the balance of support.

2) Is there evidence, in a nationally representative sample, for the generational stake hypothesis? What are the predictors of generational stake within each of the four dimensions of Intergenerational Solidarity available in the NSFH? The underlying hypothesis is that needs and resources of both generations are related to age. Normative changes in needs and resources may be responsible for observed differences in flows of assistance between generations. Thus, I would expect that the “difference” between parents’ and children’s reports should diminish and perhaps even reverse in later life (as parents resources dwindle, needs increase, and children’s resources increase and needs decrease).

3) Does each type of Intergenerational Solidarity considered have an effect on parents’ and children’s psychological well-being? Is there evidence for psychological benefits of the generational stake hypothesis? Previous research has suggested that the context in which support is given and received has important implications for psychological functioning. What

evidence is there that other dimensions of the parent-adult child relationship are also associated with well-being?

### Methods

This study used data from the National Survey of Families and Households (NSFH). This longitudinal national survey consisted of two waves of data with the first wave collected in 1987-1988 and the second wave collected in 1992-1994. The second wave of data included interviews with a parent of the main respondent. Overall, the NSFH includes data from 13,008 respondents and over-sampled single parent families, step families, recently married couples and cohabitating couples. The second wave of data had 10,008 respondents (Sweet & Bumpass; 1996; Sweet, Bumpass, & Call, 1988).

To address the research questions, I used multiple regression entering all of the variables into the model at once. I also addressed the missing variables by using multiple imputation. Both characteristics of parents and adult children were included to predict mean levels of each kind of solidarity, as well as the “generational stake,” operationalized as the difference between parents’ reports and children’s reports within each dyad.

### *Sample*

The analytic sample included nationally-representative, longitudinal data from 3,320 adult children with a mean age of 38. The sample consisted of 12% African American, and 4% Hispanic with 58% of the adult respondents being female. Cross-sectional data for the parents are available; parents had a mean age of 64 years and 65% were women. Mean education level was 13.5 years for respondents and 12 years for their parents.

### *Measures*

Consistent with a multidimensional understanding of parent-adult child relationships, several aspects of the intergenerational relationships were measured. Of the six dimensions of Intergenerational Solidarity proposed by Bengtson and colleagues (e.g., Mangen et al., 1988), I include measures for five of them. These are the Affectual, Associational, Functional, Normative, and Structural Solidarity.

Affectual Solidarity was measured using a single item global rating of closeness, by both parents and children. Associational Solidarity was measured with a two item scale assessing amount of contact through either face to face contact, or through talking on the telephone or letters, again measured by parents and children. Functional Solidarity measures the types of support exchanged in the relationship. This was separated into two different constructs, instrumental support which was assessed with a three item scale measuring help with transportation and shopping, housework, and car repairs, and emotional support which was assessed with a single item. Normative Solidarity was assessed with a four item scale asking about norms of financial aid from parent to child and child to parent, and sharing living quarters with parents or children. Finally, Structural Solidarity included dimensions of background characteristics like marital status, number of children, and residential propinquity in miles.

*Generational Stake.* The generational stake for Affectual, Associational, Normative, and Functional Solidarity was measured by taking parents reports and subtracting the adult respondents reports from them. In this way I was able to measure in which direction the intergenerational exchanges were flowing. If the number was positive, then parents reported a

greater amount of support or exchange than the adult respondents did. If the number was negative, then the adult respondent reported the greater amount of generational stake.

*Health and Well-being.* Health and well-being was measured using four different scales for both respondent and parent and four additional longitudinal scales for respondent. Scales with both respondent and parent data include the CES-D which is a 12-item depression scale was used with five items from the depressed affect scale and seven from the somatic scale (Radloff, 1977). This scale encompasses such questions as number of days respondents had experienced things like depression and loneliness. Also measured for both parents and adult respondents was a single item asking about Global Life Satisfaction. This scale came from the Institute for Social Research at the University of Michigan. Hostility was measured using a three item scale from Aquilino and Marks at the University of Wisconsin-Madison. Finally, long-term depression was measured for both parents and adult children using a three item scale from the Health Quality of Life Survey.

Well-being outcomes from only the adult respondents include four different measures. The first is well-being which was measured using eight items from Ryff's Well-being Scale (1989). These items contain questions about several aspects of an individual's life including financial worries, and overall feelings about relationships. The Rosenberg Self-Esteem Inventory (Rosenberg & Pearlman, 1978) was used. It includes ten items, with five items pertaining to negative self-esteem and five items pertaining to positive self-esteem. Self-efficacy was measured with a single item global measurement from the Institute of Social Research at the University of Michigan. Finally, mastery was measured with a single item scale from Pearlman (Pearlman, Menaghan, Lieberman, & Mullan, 1981).

## Results

In this study, I considered measures of several aspects of Intergenerational Solidarity, including Affectual, Associational, Normative, and Functional Solidarity. I was particularly interested in identifying predictors of each dimension of Intergenerational Solidarity in two generations of adults, and factors associated with the “generational stake.” Guiding these analyses was the expectation that needs and resources of both generations may provide partial “explanation” of the generational stake phenomenon. Initially I will examine research question 1, or what predicts each dimension of the Intergenerational Solidarity Theory. Each dimension will be addressed from both the parent’s viewpoint and the adult child’s viewpoint. Then research question 2 or predictors of the Generational Stake Hypothesis will be addressed within each dimension. Finally, I’ll conclude with research question 3, predictors of the different measures of psychological well-being for parents and older adults.

### *Affectual Solidarity*

Several predictors were influential in predicting parent’s levels of Affectual Solidarity ( $F(25, 2153) = 5.238, p \leq .001, R^2 = .06$ ) and adult children’s level of Affectual Solidarity ( $F(25, 2143) = 3.966, p \leq .001, R^2 = .05$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child characteristics for ease of discussion. Parents reported feeling less close in all dyadic combinations when compared with the mother-daughter dyad. Additionally, parents with more education and activities of daily living needs, who had more grandchildren reported feeling less close to their adult children. Characteristics that influenced closeness positively for older parents were age, having a spouse, and their adult children have a

spouse. In other words, older married parents with a married adult child reported higher levels of closeness. (See Table 4.2.)

Looking at predictors of closeness from the adult child's viewpoint we see that for adult children, father dyads are less close than mothers. African-American married children also report feeling closer to their parents as the parents age. Adult children with more education and their own activities of daily living needs report feeling less close to their parents with activities of daily living needs.

Looking across parent and adult child's reports we see that similar characteristics were significant in predicting closeness. Gender, age, marital status, education, activities of daily living needs, and number of children all influenced reports of closeness. These findings also support the Contingent Exchange Perspective in that needs such as age, number of children, and activities of daily living needs, along with resources such as marital status contributed to closeness.

#### *Associational Solidarity: Face-to-Face Contact*

Several predictors were influential in predicting parent's levels of Associational Solidarity, Face-to-face contact ( $F(25, 2171) = 180.696, p \leq .001, R^2 = .68$ ) and adult children's level of Associational Solidarity, face-to-face contact ( $F(25, 1508) = 87.168, p \leq .001, R^2 = .60$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child characteristics for ease of discussion. Parents report more face to face contact with daughters than with sons. Additionally, as parents get older (70+) they also report more contact. Parents report more contact with their married adult children when they themselves are married. Finally, parents report more contact between non-White adult children than with White children.

Looking at what contributes to decreased contact from the parent's viewpoint we see that they report less contact when they have more children, as their adult children get older, as adult children live farther away from parents, and as they have more grandchildren. (See Table 4.3.)

Many similar characteristics are influential for adult children's reports of face to face contact. Children report less contact across all dyadic combinations when compared with the mother-daughter dyad. They report more contact with parents as their parents get older (70+) and African American children also report more contact when compared to White children. Characteristics that negatively influence contact for adult children are having more siblings, age (40-49), living farther from their parents, having more children, and having good self-rated health at time 2. It intuitively makes sense that there would be less face to face contact if adult children live farther away from parents, but we also see continued support for the Contingent Exchange Perspective. Needs such as having more children in both generations influenced face to face contact.

Both parents and adult children's contact were influenced along gender lines with more contact with daughters. Furthermore, both parents and adult children reported more contact with their older parents (70+) and less contact when parents had more children (or adult children had more siblings). Both generations also report more contact with African American children than White and less contact when they live farther away from each other and more grandchildren (or children for adult children).

#### *Associational Solidarity: Telephone/Letter Contact*

Several predictors were influential in predicting parent's levels of Associational Solidarity telephone/letter contact ( $F(25, 2167) = 22.360, p \leq .001, R^2 = .21$ ) and adult children's

level of Associational Solidarity, telephone/letter contact ( $F(25, 1506)= 17.388, p \leq .001, R^2=.23$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child characteristics for ease of discussion. Parents report the most telephone/letter contact within the mother-daughter dyad. They also report more contact with adult children when parents are age 70-79, are in good self-rated health and have married children in good self-rated health at time 4. Parents report less telephone/letter contact when they have more children, as their children get older, and when they have more grandchildren. Interestingly, although telephone/letter contact shouldn't be influenced by proximity, parents report less telephone/letter contact when their adult children live farther away. (See Table 4.4.)

Adult children also report less telephone/letter contact in all dyads when compared to the mother-daughter dyad. They also report less contact when they have more siblings and are in better self-rated health at time 2. They, like parents, report less telephone/letter contact when they live farther away. Telephone/letter contact is positively affected for adult children by having a parent aged 80+, being African American, married, and with more education.

For both parents and adult children we see that gender, age, number of children, self-rated health and adult child's marital status influenced closeness. Similar needs and resources characteristics which influenced face to face contact also influenced telephone/letter contact.

#### *Functional Solidarity: Instrumental Support*

Several predictors were influential in predicting parent's levels of Functional Solidarity, Instrumental Support ( $F(25, 2175)= 12.179, p \leq .001, R^2=.12$ ) and adult children's level of Functional Solidarity, Instrumental Support ( $F(25, 2175)= 19.182, p \leq .001, R^2=.18$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child

characteristics for ease of discussion. This dimension of Intergenerational Solidarity examined exchanges of help with transportation, housework, yard work, and car repair. When compared to the mother daughter dyad, parents are more likely to report giving less help to sons. Parents who are in better self-rated health are more likely to report giving to adult children with more education and those with activities of daily living needs at time 2. Parents are less likely to report giving as their adult children become adults (30+) and to those that live farther away. This finding makes sense in that this type of support cannot be given long distance. (See Table 4.5.)

Adult children are more likely to report giving to mothers than fathers and to those parents with activities of daily living needs. They are less likely to report giving to parents who are in better self-rated health, when they themselves are aged 40-49, when they have more children and live farther away from their parents.

Both the parent's and the adult child's viewpoints strongly support the Contingent Exchange Perspective in that less is given to those in good health, while more is given to those with activities of daily living needs.

#### *Functional Solidarity-Emotional Support*

Several predictors were influential in predicting parent's levels of Functional Solidarity, Emotional Support ( $F(25, 2175) = 7.085, p \leq .001, R^2 = .08$ ) and adult children's level of Functional Solidarity, Emotional Support ( $F(25, 2175) = 4.696, p \leq .001, R^2 = .05$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child characteristics for ease of discussion. Like instrumental support, help with advice, encouragement, and emotional support is influenced along gender lines. Parents report giving less emotional support to all dyads when

compared to the mother-daughter dyad. They also report giving less support as their children get older (40+), to married adult children and to those that live farther away. Parents report giving more emotional support when they themselves are married with more education to adult children with more education. (See Table 4.6.)

Adult children also report giving less support in all dyads compared to the mother-daughter dyad. Additionally, those that live farther away report giving less support. Adult children are more likely to give this type of support to married parents with activities of daily living needs to when they themselves have more education.

Looking at both adult children and parents reports we see that education positively influences while living farther away from each other and not belonging to a mother-daughter dyad negatively influences provision of emotional support.

#### *Normative Solidarity*

Several predictors were influential in predicting parent's levels of Normative Solidarity ( $F(25, 2166) = 4.299, p \leq .001, R^2 = .05$ ) and adult children's level of Normative Solidarity ( $F(25, 2165) = 2.550, p \leq .001, R^2 = .03$ ). They will be addressed in terms of dyadic characteristics, parent characteristics, and adult child characteristics for ease of discussion. Intergenerational Solidarity include as one aspect of the parent-adult child relationship, the beliefs that each generation has about providing help to the other. In this study this was measured by parent and adult children's beliefs surrounding provision of financial aid and living space for the other. Parents' normative beliefs are lower for father-daughter dyads. Parents' also report lower levels of normative beliefs for non-White children. They are more likely to report higher levels of normative beliefs when they have had more education and their adult children live farther away. (See Table 4.7.)

Sons report lower levels of normative beliefs when compared with the mother-daughter dyad. Adult children also report lower levels of normative beliefs for parents aged 60-69 and 80+. Their normative beliefs are positively influenced as they get older and when they are married.

Looking across the different dimensions of Intergenerational Solidarity we see several characteristics were strongly predictive. There is a definite gender affect for all dimensions. Additionally, age, education, number of children, and activities of daily living needs were also influential. In some cases, self-rated health, and ethnicity also played a role. Next I address hypothesis 2 which examines the Generational Stake Hypothesis which postulates that parents will report a “rosier” viewpoint of the relationship. In other words, if it is true, parents will report feeling closer to their adult children, being in more contact with them, higher levels of Normative Solidarity, and provision of more support. I will examine predictors of the Generational Stake under each dimension of Intergenerational Solidarity. This outcome variable was coded such that positive regression coefficients are associated with higher levels of the generational stake (i.e., higher levels of net support flows down generations), and negative regression coefficients are associated with lower levels of generational stake (lower levels of net support flows down generations).

#### *Generational Stake and Affectual Solidarity*

Several predictors were influential in predicting the Generational Stake for Affectual Solidarity ( $F(25, 2121) = 3.147, p \leq .001, R^2 = .04$ ). Generational stake for Affectual Solidarity seems to be driven more by the adult child’s characteristics. Only three of these characteristics

were significant. Parents report higher levels of closeness with children who are more highly educated, have higher levels of income and live farther away. (See Table 4.2.)

*Generational Stake and Associational Solidarity - Face to Face Contact*

Several predictors were influential in predicting the Generational Stake for Associational Solidarity, Face-to-face contact ( $F(25, 1504) = 2.587, p \leq .001, R^2 = .04$ ). Generational stake for Associational Solidarity is influenced by several factors. Fathers tend to report higher levels of face-to-face contact with both sons and daughters, than their children report. Also, parents seem to have a rosier viewpoint of face to face contact than do adult children in that they reported higher levels of face-to-face contact than did adult children, the farther the adult children live from them. Finally, parents report more contact when the adult children have activities of daily living needs. (See Table 4.3.)

*Generational Stake and Associational Solidarity - Telephone/Letter Contact*

Several predictors were influential in predicting the Generational Stake for Associational Solidarity, Telephone/Letter Contact ( $F(25, 1498) = 2.495, p \leq .001, R^2 = .04$ ). The generational stake for telephone/letter contact of Associational Solidarity is heavily influence by dyadic characteristics. Parents report more telephone/letter contact than do children. However, the Generational Stake Hypothesis was not supported from African-American children aged 30-39 and 50+. They reported more telephone/letter contact than their parents and adult children aged 30-39 and 50+ also reported more telephone/letter contact than parents. (See Table 4.4.)

### *Generational Stake and Functional Solidarity - Instrumental Support*

Several factors were found to predict the Generational Stake for Functional Solidarity, Instrumental Support ( $F(25, 2175) = 8.879, p \leq .001, R^2 = .09$ ). Two dyadic characteristics were important in predicting net flows of support. Specifically, more net support flowed down generations in father-daughter dyads than in either same sex dyad. In turn, less net support flowed down generations in mother-son dyads. Parent age was also important in predicting net flows of support. Consistent with previous research (e.g., Morgan, Schuster, & Butler, 1991), it is not until after age 80 that parents' age is associated with lower net flows of assistance down generations. Distance between generations plays an interesting role in net flows of assistance. Whereas models of support in both directions indicate that less assistance flows in both directions when children and parents live further apart, greater distance between generations is actually associated with greater net flows of assistance down generations. (See Table 4.5.)

### *Generational Stake and Functional Solidarity - Emotional Support*

There were several predictors of the Generational Stake for Functional Solidarity, Emotional Support ( $F(25, 2175) = 2.730, p \leq .001, R^2 = .03$ ). This hypothesis was supported in that married parents who had a greater number of grandchildren were more likely to report giving more support than their adult children. However, the Generational Stake Hypothesis was not supported because adult children in opposite sex dyads reported giving more than their parents and those that were married also reported giving more than their parents. (See Table 4.6.)

### *Generational Stake and Normative Solidarity*

Several predictors were influential in predicting the Generational Stake for Normative Solidarity ( $F(25, 2157) = 3.163, p \leq .001, R^2 = .04$ ). The Generational Stake Hypothesis was

supported in the mother-son dyad. Mothers reported giving more than did sons. Additionally, parents aged 60-69 reported giving more than their adult children. The Generational Stake was unsupported for the father-daughter dyad. Daughters reported giving more than did fathers and non-White children aged 30-39 also reported giving more than did their parents. (See Table 4.7.)

From the above findings we see mixed support for the Generational Stake. In some instances there was a rosier outlook of parents when compared to adult children. For example, parents reported feeling closer to adult children with more education, income, and those that lived farther away. However, in many of the dimensions, while some predictors supported the stake, other predictors did not.

Next I examine the last research question. This addresses what predicts psychological consequences. Are needs and resources variables influential? Do different dimensions of Intergenerational Solidarity have a psychological benefit (or harm) to parents and adult children? I was able to measure several different psychological outcomes in both parents and adult children. These include a 12 item depressive symptom scale, hostility, long term depression, and life satisfaction. For adult children I had the following additional measures of psychological well-being: self-efficacy, self-esteem, mastery, and well-being.

### *Depression*

In predicting parents' depression symptoms, parents characteristics seem to drive the outcome, rather than child characteristics or measures of Intergenerational Solidarity. Parents had higher levels of depression when they had activities of daily living needs and more children, and when they received more emotional support at time 2. They had lower levels of depression

when they were married, with more education, were in better self-rated health, and when they reported feeling more close to their adult children ( $F(41, 1372)= 9.175, p \leq .001, R^2=.22$ ).

Children reported feeling less depressed when they had a parent aged 80+, when their parents were married with more education, when they themselves were married, and in better self-rated health. Adult children had higher levels of depressive symptoms when they lived farther from their parents, when they had activities of daily living needs at time 1 and 2 and when they showed signs of previous depressive symptoms. Intergenerational Solidarity variables which influenced depressive symptoms included the following. Adult children had lower levels of depression when they reported feeling more close to parents at time two and were more depressed when they reported more face-to-face contact at time 1 ( $F(41, 1370)= 14.631, p \leq .001, R^2=.32$ ). (See Table 4.8 .)

### *Life Satisfaction*

Several factors influenced parent's reports of life satisfaction ( $F(41, 1366)= 7.798, p \leq .001, R^2=.19$ ). Parent's life satisfaction was heavily influenced by Intergenerational Solidarity. All dimensions of Intergenerational Solidarity influenced Life Satisfaction. Affectual Solidarity or feeling close to each other was influential in that parents who reported feeling closer to their adult children had higher levels of life satisfaction. Normative Solidarity influenced parent's life satisfaction in that they were more satisfied when their children had higher levels of Normative Solidarity at Time 1. Associational Solidarity, both face to face contact and telephone letter contact also influenced life satisfaction. Parents were more satisfied when they reported more telephone/letter contact and had children who reported more face-to-face contact. Finally, Functional Solidarity or more specifically emotional support influenced

life satisfaction both positively and negatively. Receipt of support decreased life satisfaction, while giving support increased levels of life satisfaction. Parents also had higher levels of life satisfaction when they and their adult children were in better self-rated health. This latter finding is most likely an artifact of not including all variables that may have elicited the support (cf. Davey & Eggebeen, 1998).

Controlling for initial levels of life satisfaction, children reported higher life satisfaction when they were married, had fewer activities of daily living limitations, and were in better self-rated health. Among the Intergenerational Solidarity predictors, higher Affectual Solidarity at Wave 2 was associated with higher life-satisfaction. As with parents' reports, emotional support given to parents was associated with higher life satisfaction for adult children, whereas emotional support from parents was associated with lower life satisfaction. Because children's reports are based on longitudinal data, it really may be better to give than to receive ( $F(42, 1090) = 4.552, p \leq .001, R^2 = .15$ ). (See Table 4.9.)

### *Hostility*

Parents experienced lower levels of hostility in mother-son dyads, as they age, when they have a married adult child, and when they are in better self-rated health. Intergenerational Solidarity variables which lead to lower levels of hostility are both parents and adult children reporting feeling close to each other, and adult children with higher levels of Normative Solidarity ( $F(41, 1370) = 3.564, p \leq .001, R^2 = .10$ ).

Adult children experienced lower levels of hostility when their parents were married, when they were age 50+, married, in better self-rated health, and reported feeling closer to their adult children. African-American adult children experienced higher levels of hostility and when

they had activities of daily living needs at both time 1 and 2, and when they received emotional support from their parents ( $F(41, 1371) = 4.670, p \leq .001, R^2 = .13$ ). (See Table 4.10.)

### *Long-term Depression*

Parents' long-term depression was influenced by several characteristics. They had lower levels of long-term depression as they got older (70+), when they were married, and in better self-rated health. They also reported lower levels of long-term depression when they felt closer to their adult children (Affectual Solidarity). Parents reported higher levels of long-term depression when they had activities of daily living needs, Hispanic adult children, and when they received instrumental support from their adult children (Functional Solidarity) ( $F(41, 1371) = 7.017, p \leq .001, R^2 = .14$ ). (See Table 4.11.)

Examination of adult children's reports of long term depression shows that while having a parent who is married leads to lower levels of depression, this is driven mostly by child characteristics, as expected. Children who are married, in better health, and those who report higher levels of both Affectual and Normative Solidarity have decreased levels of long-term depression, while having activities of daily living needs at the second wave of measurement leads to increased levels of long-term depression ( $F(41, 1373) = 5.067, p \leq .001, R^2 = .18$ ).

### *Self-efficacy*

Adult children who were married, those with higher levels of education and income, and those in better self-rated health at time one and two had increased levels of self-efficacy. Self-efficacy ratings at time one also predicted self-efficacy ratings at time two. Affectual, Normative, and Functional Solidarity also influenced self-efficacy. Children who were close to their parents at time two, and had higher levels of normative beliefs at time one had higher levels

of self-efficacy. However, children who had higher levels of Normative Solidarity at time two, and who received higher levels of emotional support had lower levels of self-efficacy ( $F(42, 1354) = 9.026, p \leq .001, R^2 = .22$ ). (See Table 4.12.)

### *Self-esteem*

Several factors contributed to higher self esteem in adult children. Having a parent aged 70-79, living farther from your parents, and having good self-esteem at time 1 led to higher self-esteem. Having lower levels of self-esteem was influenced by ethnicity, education, income, and health at time 2. Intergenerational Solidarity influenced self esteem; children who had higher levels of Normative Solidarity at time 2 and received emotional support at time 2 had higher levels of self-esteem, surprisingly, those who reported feeling closer to their parents at time 2 had lower self esteem, perhaps due to individuation and connectedness concerns (See Grotevant and Cooper, 1998 for a review of these issues in adolescence) ( $F(42, 1363) = 13.953, p \leq .001, R^2 = .31$ ). (See Table 4.12.)

### *Mastery*

Adult children who had a parent with higher levels of education experienced higher levels of mastery. Additionally, those adult children who were married, had higher levels of education and better self-rated health also had higher levels of mastery. However, adult children who had activities of daily living needs experienced lower levels of mastery. Adult children who were closer to their parents at time one, and whose parents had high normative beliefs, had greater levels of mastery. Adult children who had high normative beliefs at time two, and received more emotional support experienced lower levels of mastery ( $F(41, 1370) = 7.752, p \leq .001, R^2 = .19$ ). (See Table 4.13.)

### *Well-being*

Mother-son dyads experienced more well-being compared to other dyads. African-American children, married children with more education and those with higher levels of self-rated health at time two also experienced higher levels of well-being. Intergenerational Solidarity variables that positively affected well-being included reporting higher levels of closeness to parents, and parents reports of higher levels of Normative Solidarity. Lower levels of well-being arose from adult children with activities of daily living needs who lived farther from their parents, those who had higher levels of Normative Solidarity, and those who received emotional support at time 2 ( $F(41, 1367) = 2.643, p \leq .001, R^2 = .08$ ). (See Table 4.13.)

### Limitations

Several limitations exist within this study one of which is measurement of several dimensions of Intergenerational Solidarity. While the use of a nationally-representative data set makes available access to longitudinal data with a large sample size, it does limit the questions that were asked. I was constrained to measure Intergenerational Solidarity using the questions they used. I measured Affectual Solidarity with a one item question asking both respondents and their parents how close they felt to each other. The measure could have been stronger if we'd been able to address Affectual Solidarity with a multi-question scale which would have been even better if I could have addressed questions of ambivalence with a well-rounded Affectual Solidarity Scale. Associational Solidarity was measured with a two item scale asking about contact face-to-face and telephone-letter contact. While the scale of Associational Solidarity was not as comprehensive as that suggested by Mangen and Miller (1988) I believe that it is comprehensive in assessing contact. Finally, Normative Solidarity was measured asking both

parents and adult children whether they thought each generation should help the other by providing financial aid and sharing living quarters. I did factor analyze this to see if help to parents loaded on another factor and found that they all loaded on one factor and thus I summed these items to provide the Normative Solidarity scale. Like that with Affectual Solidarity, I believe that the measure of Normative Solidarity would have been stronger if I could have included other areas of norms which I was unable to do due to the use of secondary data analysis.

I used multiple regression to address predictors of each dimension of Intergenerational Solidarity, the psychological well-being scales, and the Generational Stake Hypothesis. One way in which these results could better explain parent-adult child relationships would be if I could include interactions between dimensions of Intergenerational Solidarity and parent-adult child characteristics to examine psychological well-being. For example, some of the current literature suggests that structural characteristics like marital status and gender, would mediate between other dimensions of Intergenerational Solidarity and psychological well-being.

Finally, it would have been nice to include more variables to get at the transitions that families members go through to examine how these affect the parent-adult child relationship. I did find that needs and resources variables like marital status did explain several dimensions of Intergenerational Solidarity, but does the transition from having a spouse to not, influence other dimension such as how close family members feel to each other.

### Conclusions

The National Survey of Families and Households has given us the opportunity to extend the body of literature concerning the Theory of Intergenerational Solidarity. I was able to

measure five of the six dimensions of Intergenerational Solidarity. Using elements of Structural Solidarity, I examined predictors of four dimensions of the Theory. In predicting the different dimensions of Intergenerational Solidarity one thing that stood out across dimensions was the influence of dyadic characteristics. In other words the parent-adult child relationship is influenced depending on if you are a mother-daughter, mother-son, father-daughter, and father-son pair. This supports the research literature on parent-adult child relationships (Brody et al., 1994; Lawton et al., 1994; Roberts et al., 1991; Rossi & Rossi, 1990).

Parents' age also affects both Affectual Solidarity and Associational Solidarity. As parents get older both generations report feeling closer to each other and in more contact. This finding supports previous findings that there is a curvilinear relationship between closeness and age and that as adult children age (and parents along with them) they become closer (Rossi & Rossi 1990; Sutor et al., 1995). In addition to previous research which showed that child's age predicted Associational Solidarity or more specifically, co-residence (Goldscheider, 1997; Katz & Lowenstein, 1999), I found that both parents and children reported more contact as parents got older.

Concentrating on three dimensions, Normative Solidarity, Affectual Solidarity, and Functional Solidarity with both instrumental and emotional support, I find only moderate support for the generational stake hypothesis which states that more support flows down the generations, than up. Like Bengtson and Kuypers (1971) I did see parents report higher levels of closeness than children, but it was based on the child characteristics of education, income and living distance from parents. While other tests of the generational stake focused upon closeness within the relationship (Long & Martin, 2000; Troll & Fingerman, 1996), I tested the generational stake

hypothesis across four dimensions of Intergenerational Solidarity: Affection, Association, Functional, and Normative. In addition to supporting the hypothesis for Affectual Solidarity, there was mixed support for other dimensions. The Generational Stake Hypothesis was supported for Associational Solidarity and dyadic characteristics, but unsupported for child characteristics such as race and age. For Functional Solidarity it was predictive with needs and resources variables such as marital status, health, number of children, and having activities of daily living needs, but there were equivocal findings for dyadic characteristics. Finally, Normative Solidarity was basically unsupported with non-White children aged 30-39 reporting higher levels than parents, while only parents aged 60-69 reported higher levels of Normative Solidarity than their adult children.

These ambiguous findings lead us to suggest that the idea of the generational stake needs further elaboration. I suggest that rather than parents reporting a rosier viewpoint to the parent-adult children relationship, the difference in report may stem from other factors such as those suggested by the Contingent Exchange Perspective or needs and resources variables. This leads us to a discussion of the findings surrounding hypothesis 3 or the psychological outcomes of Intergenerational Solidarity and the Contingent Exchange Perspective.

The Contingent Exchange Perspective was supported across dimensions. Needs and resources such as activities of daily living needs, self-rated health, number of children, marital status and education were influential in predicting the different dimensions. These supported previous findings in the literature (Amato et al., 1995; Davey & Eggebeen, 1998; Hogan et al., 1993; Lawton et al., 1994).

More importantly, the Contingent Exchange Perspective suggests that receiving and giving help can have an effect on the psychological well-being of each generation; marital status of parents influenced the effect of receipt of support and psychological well-being with unmarried parents showing a more accentuated curvilinear pattern than married parents with initially rising levels of positive mood with receipt of support and decreased levels with higher levels of support given, over four types of support (Silverstein et al., 1996).

Contingent Exchange variables in the present study affected psychological well-being and supported that found in the literature. Depression, life satisfaction, hostility, long-term depression, self-efficacy, self-esteem, mastery, and well-being were all affected by needs and resources predictors such as self-rated health and having activities of daily living needs and this held up longitudinally for mastery. These findings support and extend Davey and Eggebeen's (1998) test of the Contingent Exchange Perspective.

Predictors of Intergenerational Exchange also affected psychological well-being of each generation. Closeness or Affectual Solidarity influenced every psychological well-being variable except well-being. Associational Solidarity only predicted, in part, life satisfaction and a decrease in depressive symptoms. Looking at Functional Solidarity we see that emotional support is more significant in influencing well-being variables (all except long-term depression which instrumental support influenced). Finally, Normative Solidarity influenced all psychological well-being variables except depressive symptoms. These findings support the existing literature which found that predictors of Intergenerational Solidarity did affect psychological well-being (Chen & Silverstein, 2000; Kitamura & Takashi, 2001; Long & Martin, 2000; Welsh & Stewart, 1995).

This study supports and extends the body of literature surrounding Intergenerational Solidarity and exchange relationships between adult children and their parents in three ways. First, most of the empirical work done surrounding predictors of the different dimensions of Intergenerational Solidarity was done using the Three Generation Study by Bengtson and his colleagues which is non-representative of the population (Bengtson & Harootyan, 1994, Bengtson & Roberts, 1991). The study provides support for their theory using a nationally representative sample and a longitudinal data set.

Secondly, this study considerably extended what was known about the Generational Stake. Previous research focused upon how the Generational Stake Hypothesis was influenced by Affectual Solidarity (Long & Martin, 2000; Troll & Fingerman, 1996). The study extends the body of literature by investigating the Generational Stake across all four dimensions of Intergenerational Solidarity addressed here and identifies influential structural characteristics which previous literature has not included. I found mixed support of the hypothesis; more remains to be done to really understand the differences in report between generations reporting on the same relationship.

Thirdly, this study highlights the importance of including needs and resources when predicting exchange. As suggested by the Contingent Exchange Perspective, and supported in this paper, the context cannot be left out when examining exchange because needs and resources do influence the provision and receipt of support within dyadic intergenerational relationships. Empirical work remains to be done in more specifically defining what characteristics within the parent-adult child relationship affect exchanges and if different types of support are affected by different needs and resources. This leads me to my next research question, addressed in the next

chapter. Is Functional Solidarity, both instrumental and emotional support, a function of contingent exchange? Is it influenced by dimensions of Intergenerational Solidarity, or more specifically, Affection, Normative, and Association?

## CHAPTER 5

PARENTS' AND ADULT CHILDREN'S VIEWS OF INSTRUMENTAL  
AND EMOTIONAL ASSISTANCE AS A FUNCTION OF NEEDS, RESOURCES,  
AND INTERGENERATIONAL SOLIDARITY

### Abstract

Gerontological literature has often demonstrated the “generational stake” phenomenon, in which there is a net transfer of resources down generations. A supplementary perspective on support exchanges is that this pattern emerges as a function of age-graded changes in the needs and resources of both generations. To test this hypothesis, I used data from 3,347 parent-adult child dyads (1,282 mother-daughter, 898 mother-son, 679 father-daughter, 488 father-son) in the second wave of the National Survey of Families and Households. In support of the hypothesis, I found evidence for the importance of needs and resources in predicting flows of instrumental assistance up and down generations, whereas importance of dimensions of Intergenerational Solidarity (aside from Associational, necessary to provide instrumental aid) were largely absent. Predictors of emotional support were more complex: Affectual and Associational Solidarity were important, but parents and children often differ systematically in their reports of the same exchanges. Implications for theory and practice are discussed.

## Introduction

Much of the research on intergenerational exchanges do not ascribe to a theory of aging. There is a thorough body of literature identifying what characteristics are influential in predicting exchange, much work remains to place this in a context of theory. Placing empirical work within a theoretical framework will allow us to identify area in which further investigation remains. More importantly, a theoretical background can provide the meaning behind predictors of exchange and allow us to hypothesize why exchange happens and what the effects of exchange are.

Research on assistance has also indicated needs and resources of each generation influence the exchange relationship (Davey & Eggebeen, 1998). The Contingent Exchange Perspective, by Davey and his colleagues, has been suggested as one explanation of exchange within relationships. This perspective postulated that exchanges within family relationships are based upon the needs and resources of each generation. If one generation has a need, then the family network will respond with their resources to try and fulfill it.

Another theory that has been used to explain relationships is the Intergenerational Solidarity Theory. This theory assumes that relationships can be characterized by six dimensions: Affectual Solidarity, which examines closeness between generations, Associational Solidarity, which examines contact between generations, Functional Solidarity, which looks at instrumental and emotional support exchanges, Normative Solidarity, which examines normative beliefs about what support ought to happen between generations, and Consensual Solidarity, which examines shared values and beliefs (Roberts, Richards, & Bengtson, 1991). Previous

studies have examined predictors of the different dimensions of exchange and if they are interrelated (Belliston, Davey, & Bookout, in preparation; Gronvold, 1988; Hancock et al., 1998; Mangel & Miller, 1988; Mangel & Westbrook, 1988). But, do these dimensions accurately predict specific types of exchange within families? Does the Contingent Exchange Perspective offer a better framework for viewing exchanges within families, or an additional viewpoint?

### *Intergenerational Exchange*

Intergenerational exchange can be a complex set of processes that have been defined in many different ways. Davey (1998) reviewed the literature relating to indicators which influence intergenerational exchange within families. He divided the indicators into family background characteristics, parental characteristics, child characteristics, and relationship characteristics.

Family background characteristics that influence intergenerational exchange include race, parental income, and parental education. Much of the literature states that African American and Hispanics tend to engage in less instrumental exchanges when compared with Whites (Eggebeen, 1992; Hogan et al., 1993; Silverstein & Waite, 1993). However, Jayakody (1998) stated that it was more of a function of needs and resources. When she compared African American and White families she found that in families with an income below \$15,000, African American adult children received less instrumental support, but in families with an income above this there was no difference. Parental income was influential in the provision of financial support, but not as much in other domains of support (Kobayashi, 2000; Semyonov & Lewsin-Epstein, 2001). Education level of parents contributed to being more involved in both giving

and receiving of both generations across several domains of support (Davey & Eggebeen, 1998; Eggebeen, 1992; Eggebeen & Davey, 1998).

Parental characteristics include age, gender, marital status, health status, functional ability, and the number of children. Parent characteristics and their influence on the exchange of support has received most of the attention in the literature. Gender is one of the most substantial findings; mothers are more likely to receive help across all types of exchange when compared to fathers (Ikkink et al., 1999; Rossi & Rossi, 1990; van Groenou & Knipscheer, 1999; Wright & Maxwell, 1991). Additionally, gender interacts with marital status to affect the exchange of support. Divorced fathers were less involved with exchanges, both giving and receiving with adult children, while divorced mothers received more and gave less (Amato et al., 1995). The effect of widowhood is less clear. Widows receive less support, but it is unclear whether widowhood contributes to less giving (Eggebeen, 1992; Ikkink et al., 1999). Health status and functional ability affect the ability of parents and adult children to engage in support exchanges. Parents and adult children who are in poor health are less likely to give support and more likely to receive help from the other generation (Hogan et al., 1993; Kobayashi, 2000; van Groenou & Knipscheer, 1999). Finally, when looking at the effect of number of adult siblings in the family and support exchanged with parents we see that the total amount of support given is more (Eggebeen, 1992; Eggebeen & Wilhelm, 1995, but looking at the individual parent/adult child relationship rather than total assistance provided led to less support given to each child (Hoyert, 1991).

Adult child characteristics include gender, marital status, and their transition to parenthood/parental status. Adult child characteristics have received much less attention in the

literature than have parent characteristics. Nevertheless, many of the same variables in adult children are instrumental. The findings surrounding gender of the adult child and how it affects exchanges with parents are unclear. One study found that there were more exchanges between mother-daughter dyads with mothers helping daughters than fathers helping sons (Spitze & Logan, 1990) while another found that sons provided more services while daughters provided more socio-emotional help (Wright & Maxwell, 1991). Still another found no gender differences in the provision of support to adult children (Silverstein & Waite, 1993). I hypothesize that there will be a gender difference in the provision of support along gender lines. Like we saw with parents, marital status and gender interact together to predict the exchange of support between the dyads. Separated and widowed men are less likely to give, but only separated women are less likely to give to parents (Chatters & Taylor, 1993). Looking at the receipt of support from parents, divorced women receive more help than married women while married men receive more help with child care (Spitze, Logan, Deane, & Zerger, 1994). Finally, the transition to parenthood affects support exchanges. Adult children receive more help when they have children and give less (Hogan et al., 1993; Ikkink et al., 1999).

Relationship characteristics can include proximity and/or coresidence, relationship quality, and filial expectations and obligations. Proximity affects the opportunity structure for the exchange of support (Uphold et al., 2000). Thus, living closer leads to the provision of instrumental support (Aquilino & Supple, 1991; Spitze & Ward, 1995). However, Chatters and Taylor (1993) found that provision of emotional support and financial assistance was not affected by proximity. Relationship quality, or emotional closeness leads to increased intergenerational exchanges; parents and adult children who report feeling closer are more likely

engage in support exchanges with both giving and receiving (Chatters & Taylor, 1993; Parrott & Bengtson, 1999; Whitbeck et al., 1994; Wright & Maxwell, 1991). Finally, the belief that families ought to help each other affects the provision of help (Uphold et al., 2000; Wright & Maxwell, 1991), but there are mixed results on how this happens. Adults' expectations of help affect how much help they give; parents who believe in giving help are more likely to actually give it (Lee, Netzer, & Coward, 1994) and adult children and parents who believed in helping the other had parents who were more likely to receive help (Ikkink et al., 1999). Thus, normative obligations affected more the help that was given than that which was received (Ikkink et al., 1999; Lee, Netzer, & Coward, 1994).

Much of the empirical work on intergenerational exchange does not ascribe to a theory of aging. Placing this work within a theoretical framework can better help us understand the findings rather than having a list of predictors. The Intergenerational Solidarity Theory contains six dimensions of a relationship: Affectual or emotional closeness, Associational, or contact between the generations, Functional or support exchanges, Normative or help or obligations within the family, Consensual or shared values, and Structural or the structure of the family. When we examine the Theory of Intergenerational Solidarity we see that many of these indicators can fit within these six dimensions (Bengtson & Roberts, 1991).

#### *Contingent Exchange Perspective*

Contingent exchange theory posits that adults are better off psychologically when support is given in response to needs and participants are neither over or under benefitted. It was developed to examine how needs and resources variables affect exchanges within family relationships. Several theories have been used for explanation of support exchanges and

psychological well-being including Exchange Theory and Equity Theory, however, these theories do not address the contextual factors in intergenerational relationships; Davey and Eggebeen (1998) empirically tested the two theories and compared them with the Contingent Exchange Perspective. They found the most support for the Contingent Exchange Perspective. When participants needed support and it was provided, there were beneficial mental health outcomes like fewer depressive symptoms, and lower levels of long term depression.

While some researchers continue to disregard contextual factors when examining exchange within family relationships (see Ramos et al., 2003 for one example), others have begun to consider the needs and resources of each generation. Families engage in exchange when there is a time of need including transitions of living arrangements and marital status (Eggebeen & Davey, 1998; Ikkink et al., 1999; Wilmoth, 2000). Additionally, these support exchanges and the needs and resources of each generation affect the psychological well-being of families (Keefe & Fancey, 2002; Liang et al., 2001; Silverstein et al., 1996). Dissension remains specifically around how this occurs. For example, one study found that the structural characteristics of the adult child generation does affect parental psychological well-being and the exchange of support (Keefe & Fancey, 2002) another found that the structural circumstances did not affect the support received (Ikkink et al., 1999). These differences may possibly be explained by the use of non-representative samples. This study addresses Contingent Exchange using a longitudinal, nationally-representative sample to clarify these issues. It also uses the Intergenerational Solidarity Theory as another theoretical viewpoint used to examine intergenerational relationships and psychological well-being.

### *Intergenerational Solidarity*

The Intergenerational Solidarity Theory suggested by Bengtson deals with normative aspects of the parent-adult child relationship developmentally and includes six dimensions: Affectual, Associational, Functional, Normative, Structural, and Consensual. Affectual Solidarity is the type and degree of positive sentiments held about other family members and the degree of reciprocity about these statements. Associational Solidarity is the frequency and pattern of interaction in various types of activities. Functional Solidarity is the degree to which family members exchange services or assistance ranging from financial services, advice, gift-giving and services like transportation, work around the house, and child care. Normative Solidarity is the perception and enactment of norms of family solidarity. This covers shared expectations of how often family should get together, financial expectations and emotional expectations. Structural Solidarity is the number, type and proximity of family members. Finally, Consensual Solidarity focuses on the degree of agreement on values, attitudes and beliefs among family members (Mangen et al., 1988).

Intergenerational Solidarity has undergone several theoretical tests to examine the relationships between and among the six dimensions: association, affection, consensus, function, norms and structure. Although initially postulated that affection, association, and Consensual Solidarity would be highly interdependent, studies indicated that they were not (Atkinson et al., 1986; Roberts & Bengtson, 1990). Specifically Atkinson et al. (1986) found that the affection, association, and consensus dimensions of the Intergenerational Solidarity Theory should not be combined into an additive scale and Roberts and Bengtson (1990) found that the consensus dimension was independent of the association and affection dimensions. The

latter two dimensions did show a high correlation. In response to these empirical tests Bengtson and Roberts (1991) reformulated the theory and tested several hypotheses. They found that the Normative dimension of Intergenerational Solidarity was predictive of the affective dimension, but not for the association dimension.

In a recent reformation of the Intergenerational Solidarity Theory, Bengtson and colleagues have expanded it to include new measures of conflict and ambivalence and indicate that it is one end of a continuum within the Solidarity perspective (Bengtson et al., 2002; Silverstein & Bengtson, 2001). During a symposia dedicated to a discussion of these issues, several social scientists agreed that ambivalence was an important area which needed to be addressed, but that it was theoretically different from the Intergenerational Solidarity Theory and to try to subsume ambivalence within the theory was stretching the theory beyond its usefulness (Connidis & McMullin, 2002; Marshall, 2001; Pillemer, 2001).

One way in which the Intergenerational Solidarity Theory has been used is the Generational Stake Hypothesis. First proposed in 1971, Bengtson and Kuypers hypothesized that parents reported higher levels of closeness and consensus because each generation was engaged in different developmental concerns and thus have different stakes within the relationship. Parents are more concerned with passing on values and with relationships in later life while younger adults are more focused on developing autonomy and independence; they hypothesized that these differences contributed to the discrepancies found between parents and children reporting on the same relationship (Giarrusso et al., 1995). They also tested to see if the difference was based upon if it was early or late in the family life course, but that refinement of the hypothesis was unsupported (Giarrusso et al., 1995). Several other studies have tested this

hypothesis to see if it is supported. Parents were found to have a “rosier” outlook than children for several domains such as emotional investment, discussion of a controversial issue and assessment of current and past relationships (Long & Martin, 2000; Troll & Fingerman, 1996; Winkeler et al., 2000). This hypothesis is still under review and while some found support for it (Giarrusso et al., 1995; Long & Martin 2000; Troll & Fingerman, 1996), others found only it to be only partially supported (Belliston et al., in preparation).

The Intergenerational Solidarity Theory provides an organizational framework for this paper because the six dimensions help to identify important aspects to consider in examining exchange within parent-adult child relationships. The Ambivalence perspective is addressed in another paper under preparation (Davey et al., 2001).

### *Research Questions*

While many of the studies reviewed address exchange relationships within families, none examines exchange from an encompassing theoretical standpoint using a nationally representative sample. I propose looking at specific types of exchanges within a parent-adult child relationship from both the Intergenerational Solidarity Theory and the Contingent Exchange Perspective. Do dimensions of Intergenerational Solidarity, Affection, Association, and Normative, play a role in predicting intergenerational exchanges? Are needs and resources, the Contingent Exchange Perspective, important in predicting intergenerational exchanges?

### Methods

This study was conducted using data from the National Survey of Families and Households (NSFH). This longitudinal national survey consisted of two waves of data with the first wave collected in 1987-1988 and the second wave collected in 1992-1994. The second

wave of data included interviews with a parent of the main respondent. Overall the NSFH includes data from 13,008 respondents and over-sampled single-parent families, step-families, recently married couples and cohabitating couples. The second wave of data had 10,008 respondents (Sweet & Bumpass; 1996; Sweet et al., 1988). Parent data were matched with respondents so that each respondent was informing about the same relationship.

The data used for this study included a nationally-representative, longitudinal data set with 3,320 adult children and cross-sectional data of their parents. The mean age of adult children was 38. The sample consisted of 84% White, 12% African-American, and 4% Hispanic with 58% of adult respondents being female. The mean age of parents was 64 and 65% of them were females. Mean educational level was 13.5 for adult respondents and 12 for their parents. (See Table 5.1.)

### *Measures*

The dependent variables used in this study include four items of instrumental support and a one item scale on emotional support. The instrumental support items ask a yes/no question if help was given with 1) transportation, shopping, and errands; 2) housework, yardwork, car repairs, and work around the house; 3) child care while parent is at work; and 4) child care in general. To measure emotional support respondents were asked whether they give advice, encouragement, moral or emotional support.

Independent variables include dyadic characteristics or whether the pair of respondents belonged in a mother-daughter dyad (comparison category), mother-son dyad, father-daughter dyad, and father-son dyad. Also included were age, marital status, years of education, number of children, activities of daily living needs, and self rated health. For adult respondents I have

longitudinal data for the latter two variables. Additionally, for adult children, I also include race, which was not asked of parent respondents, income, and proximity to parents in miles.

In the logistic regression model for parent's reports of giving help with housework, yard work, car repairs, and work around the house, no parents aged 80 or older reported giving this type of help. I tested to see if the findings were the same when older parents were grouped with those 70 years of age and older and found no differences. Thus, these 100 cases were dropped from the analysis. Additionally, adult children aged 50 or older reported receiving this type of help. I tested to see if the findings remained the same when they were combined with adult children aged 40 and older and there were no differences and the 165 cases were dropped from the analysis. Finally, no Hispanic parents reported receiving emotional support from adult children. I tested to see how the results would change by combining Hispanics into the White category and into non-White. There were no differences when Hispanics were recoded into the non-White category while parents in mother-son dyads reported receiving significantly less emotional support when Hispanics were combined into the White category. There were no other differences. Thus, these 51 cases were dropped from the analysis.

I measured three aspects of Intergenerational Solidarity as reported by both members of the dyad. These included Affectual Solidarity, Normative Solidarity, and Associational Solidarity. Affectual Solidarity was measured using a single item global rating of closeness. Normative Solidarity was assessed with a four item scale asking about norms of financial aid from parent to child and child to parent, and sharing living quarters with parents or children. Associational Solidarity was measured with a two item scale assessing amount of contact through either face to face contact, or through talking on the telephone or letters.

## Results

Rather than address the results by dependent variable, they will be discussed based upon investigation of the hypotheses. For statistical results by dependent variable see Table 5.2, for predictors of exchange of transportation, shopping, and errand support, Table 5.3 for predictors of exchange of help with housework, yardwork, car repairs, and work around the house, Table 5.4 for predictors of exchange of advice, encouragement, moral or emotional support, Table 5.5 for predictors of exchange of child care support, and Table 5.6 for predictors of exchange of child care support while the adult child is at work.

### *Intergenerational Solidarity - Hypothesis 1*

*Affectual Solidarity.* Looking at how Affectual Solidarity influences the different types of Functional Solidarity measured in this study, we see overall that all types of exchange were influenced except child care. Adult children who reported feeling close to their parents were more likely to report receiving help with transportation, shopping, errands, housework, yardwork, car repairs, and help around the house. For adult children, those that report feeling closer to their parents are also more likely to report receiving advice, encouragement, moral or emotional support. Parents who reported higher levels of feeling close to their children had adult children who were less likely to report receiving help with transportation, errands, housework, yardwork, car repairs, and help around the house. This could stem from adult children's reports of closeness being more important in influencing their reports of help received (See Table 5.2-5.6).

*Associational Solidarity.* Associational Solidarity provides the opportunity structure for support to occur. It influenced all types of support. Looking specifically at parent and adult

respondents reports of face-to-face contact we see that parents who report higher levels of face-to-face contact were more likely to report giving help with child care while their adult children were at work and child care in general. They also reported receiving help, and their adult children reported giving help, with transportation, shopping and errands. Both parents and adult children who report higher levels of face-to-face contact had adult children who reported receiving help with housework, yardwork, car repairs and work around the house. Thus, with both parent and adult children's report of higher contact, instrumental support is likely to occur. Parents are also more likely to report giving help with housework, yardwork, car repairs, and work around the house with greater telephone-letter contact. When parents and adult children report higher levels of telephone-letter contact they also report giving and receiving advice, encouragement, moral and emotional support. (See Table 5.2-5.6).

*Normative Solidarity.* Normative Solidarity was not as strongly supported. Parents who reported higher levels of Normative Solidarity, or the belief that parents and children ought to help each other with housing or economic support, were more likely to report receiving transportation, shopping, and errand help. Additionally, they had adult children who were more likely to report receiving help with housework, yardwork, car repairs, and work around the house. (See Table 5.2-5.6).

*Contingent Exchange - Characteristics which Influence Functional Solidarity - Hypothesis 2*

Three different categories were used to examine which characteristics influence the five dimensions of Functional Solidarity. These include dyadic characteristics, such as belonging to a mother-daughter, etc., parent characteristics; and child characteristics. An easier way to consider these may be to think of these variables as resources and needs. As example of this is

that child characteristics that could be seen as resources include having a spouse, more years of education, higher income level, and better self-rated health. Child characteristics that could be seen as needs include age, and needing help with activities of daily living. The Contingent Exchange Perspective states that support exchanges are better explained by examining the needs and resources of each generation. Looking at these data, resources which were influential across all types of exchange include marital status, education, and self-rated health. Needs which were influential across all types of exchange included needing help with activities of daily living and having more children.

*Dyadic Characteristics.* Looking at just help with transportation, shopping, and errands we see that compared to the mother-daughter dyad, children in the father-son dyad report both giving and receiving less help. For housework, yardwork, car repairs, and help around the house, sons are more likely to report giving help to mothers while their mothers are less likely to report giving this help, compared to the mother-daughter dyad. Both mothers and fathers are more likely to report receiving this help from sons than daughters. Both sons and daughters are less likely to report giving advice, encouragement, moral or emotional support to fathers, while adult children in opposite sex dyads (mother-son and father-daughters) are less likely to report receiving this type of support. Finally, sons report being less likely to receive help with child care from fathers. (See Table 5.2-5.6).

*Parent Characteristics.* Hypothesis 2 held true when examining parents characteristics and Functional Solidarity. Looking just at age, children reported giving more transportation, shopping, and errand help to parents aged 70-79. Parents the same age reported giving less of all types of support except child care while at work. Looking at child care given at work we see that

parents aged 80 or older were less likely to report giving, probably due to their grandchildren being in less need of this type of support. For child care in general, parents age 60-69 were less likely to report giving and had children who were less likely to report receiving this type of help. Parents aged 60-69 were more likely to report receiving less housework, yardwork, car repairs, and help around the house. (See Table 5.2-5.6).

Parental resources that influenced support exchanges included marital status, years of education, self-rated health and activities of daily living needs. Married parents reported giving more help with transportation, shopping, errands and receiving less help with housework, yardwork, car repairs, and help around the house. They also reported giving more advice, encouragement, moral and emotional support and their children were more likely to report receiving this type of support. Parents with more education were more likely to have their children report receiving help with transportation, shopping, errands, advice, encouragement, moral and emotional support, while they were more likely to report giving child care support. Parents who reported better self-rated health also reported giving more help with housework, yardwork, car repairs, and help around the house while their children were more likely to report receiving it. Additionally, parents with activities of daily living needs were more likely to report receiving advice, encouragement, moral and emotional support. (See Table 5.2-5.6).

*Child Characteristics.* As expected, opportunity structure was important in predicting the effect of child characteristics on different types of Functional Solidarity; adult children who reported living farther away to their parents also reported receiving less help with all types of support. Additionally, they reported giving less help with housework, yardwork, care repairs and work around the house to their parents. Race affected receipt of both housework, yardwork,

car repairs, work around the house, advice, encouragement, moral or emotional support.

African-American Adult children were more likely to report receiving the instrumental types of support while their parents reported being less likely to receive advice, encouragement, moral or emotional support. (See Table 5.2-5.6).

Child resource characteristics such as self-rated health, education, income and having a spouse also affected gift and receipt of Functional Solidarity. Adult children with higher self-rated health compared to their peers reported receiving less help from their parents, possibly based on a reduced need on their part. Those adult children with more education were more likely to report receiving help with transportation, shopping, errands, housework, yardwork, car repairs, work around the house and child care. They also report giving more help with transportation, shopping, and errands to their parents. Interestingly, those with more education are less likely to report receiving advice, encouragement, moral or emotional support from their parents. Income seemed to encourage support exchanges in both directions. (See Table 5.2-5.6).

Adult children with higher levels of income had parents who reported giving help with transportation, shopping, errands, advice, encouragement, moral or emotional support and child care while the adult children were at work. These parents also are more likely to report receiving help with housework, yardwork, car repairs and work around the house. Finally, like income, marriage also seems to encourage exchanges of support. Adult children with a spouse were less likely to report receiving advice, encouragement, moral or emotional support from their parents, probably due to receiving this type of help from their spouse. They also had parents who were less likely to report receiving help with housework, yardwork, car repairs, and

work around the house. Adult children with spouses also were more likely to report receiving child care in general and while they were at work and their parents reported giving child care in general. (See Table 5.2-5.6).

Three child characteristics that may be categorized more as needs influenced exchanges of support: age, needing help with activities of daily living, and adult children with larger families (more offspring). Adult children age 30-39 and 50+ years had parents who reported receiving advice, encouragement, moral or emotional support and those aged 40-49 were less likely to report receiving housework, yardwork, car repairs and work around the house. Those adult children aged 40 and older also reported receiving less help with child care and parents reported giving less help with child care, probably because of the reduced need due to grandchildren growing up. Adult children with more children were more likely to report receiving advice, encouragement, moral or emotional support, and help with child care both in general, which their parents also reported giving, and while they were at work. Their parents reported receiving less advice, encouragement, moral or emotional support from their adult children who had more children. Finally, those adult children who needed help with activities of daily living were more likely to report receiving advice, encouragement, moral or emotional support and had parents who reported giving help with transportation, shopping, and errands. (See Table 5.2-5.6).

### Limitations

Several limitations exist within this study one of which is measurement of several dimensions of Intergenerational Solidarity. While the use of a nationally-representative data set makes available access to longitudinal data with a large sample size, it does limit the questions

that were asked. I was constrained to measure Intergenerational Solidarity using the questions they used. I measured Affectual Solidarity with a one item question asking both respondents and their parents how close they felt to each other. The measure could have been stronger if we'd been able to address Affectual Solidarity with a multi-question scale which would have been even better if I could have addressed questions of ambivalence with a well-rounded Affectual Solidarity Scale. Associational Solidarity was measured with a two item scale asking about contact face-to-face and telephone-letter contact. While the scale of Associational Solidarity was not as comprehensive as that suggested by Mangen and Miller (1988) I believe that it is comprehensive in assessing contact. Finally, Normative Solidarity was measured asking both parents and adult children whether they thought each generation should help the other by providing financial aid and sharing living quarters. I did factor analyze this to see if help to parents loaded on another factor and found that they all loaded on one factor and thus I summed these items to provide the Normative Solidarity scale. Like that with Affectual Solidarity, I believe that the measure of Normative Solidarity would have been stronger if I could have included other areas of norms which I was unable to do due to the use of secondary data analysis.

I used multiple regression to address predictors of each scale of Functional Solidarity. It would have been nice to include more variables to get at the transitions that families members go through to examine how these affect exchanges within the parent-adult child relationship. I addressed this issue to the best of my ability by including needs and resources variables like marital status, and longitudinal data on activities of daily living needs.

### Future Directions

This study elucidates several areas in which empirical research remains. Additional theoretical work remains to be done both for the Intergenerational Solidarity Theory and the Contingent Exchange Perspective. Future research needs to continue to refine how solidarity is measured and to address the issue of ambivalence within family relationships as suggested by Luescher and Pillemer (1998) and others. Bengtson and colleagues have tried to do this by expanding Intergenerational Solidarity to include new measures of conflict and ambivalence and indicate that it is one end of a continuum within the Solidarity perspective (Bengtson et al., 2002; Silverstein & Bengtson, 2001). During a symposia dedicated to a discussion of these issues, several social scientists agreed that ambivalence was an important area which needed to be addressed, but that it was theoretically different from the Intergenerational Solidarity Theory and to try to subsume ambivalence within the theory was stretching the theory beyond its usefulness (Connidis & McMullin, 2002; Marshall, 2001; Pillemer, 2001). I address this issue of ambivalence in exchange relationships in Davey et al. (2001). Additionally, the Contingent Exchange Perspective can be more fully elaborated upon by addressing transitions and expanding upon exactly how these variables are affected by and affect the relationship while going through transitions.

### Conclusions

Examination of the questions surrounding Hypothesis 1 shows that Affectual, Normative, and Associational Solidarity influenced support exchanges. More specifically, Affectual Solidarity, or each generation's reports of closeness affected all types of support except child care. This supports the previous research literature findings that relationship quality does affect

giving and receiving help (Chatters & Taylor, 1993; Parrott & Bengtson; 1999; Wright & Maxwell, 1991). With closeness affecting provision of both instrumental support, in this case help with transportation, shopping, errands, housework, yardwork, car repairs, and work around the house, and emotional support of advice and encouragement, we know that it is vital to include measures of relationship quality in future studies of support exchanges. In the sample, Affectual Solidarity only influenced child's receipt of support across two types of instrumental support, excluding child care, and emotional support. Thus, it is necessary to include both parent's and child's report of giving and receiving to be able to discern what specific influences affection has on exchanges of support.

Looking at Normative Solidarity we find that parents who had higher levels of filial obligations and expectations, had children who were more likely to report receiving help with transportation, shopping, errands, housework, yardwork, car repair, and help around the house. Thus, like Lee, Netzer, and Coward (1994) found, parents who believe in helping actually help. Contrary to what Ikkink et al., (1999), in the sample, children's beliefs about what financial and housing help they ought to provide to parents in general did not affect parent's reports of receipt of help. This finding could possibly be explained by the Generational Stake Hypothesis with parents reporting a more favorable viewpoint of the exchange relationship.

Finally, I examine Associational Solidarity or face to face or telephone/letter contact and how that influences instrumental and emotional support. I found that face to face contact influenced transportation and housework support for parents and housework and child care support for adult children, while telephone/letter contact influenced housework support for parents and emotional support for children. Looking more specifically at instrumental support,

parents who reported higher levels of face to face contact also were more likely to report receiving help with transportation, shopping, and errands and had children who reported giving this help. Both parent's and child's reports of face to face contact led to children reporting giving help with housework, yardwork, and car repair. Finally, parents who report higher levels of face to face contact also report giving help with child care to their adult children. This is unsurprising since contact provides the opportunity structure and this type of help could not be done without contact. Additionally, parent's reports of telephone/letter contact led to children reporting receipt of this type of help. These findings support the literature surrounding contact and provision of support (Uphold et al., 2000; Wright & Maxwell, 1991). Looking at emotional support, parent's reports of telephone/letter contact led to them reporting giving and receiving emotional support, advice, and encouragement, while child's report of this type of contact influenced their giving and receiving this type of contact.

Hypothesis 2 or the influence of needs and resources on exchange in intergenerational relationships was also supported. Resources that were influential across all type of exchange included marital status, education, and self-rated health. While needs that influenced all type of exchange were having activities of daily living needs and more children. Thus, these finding support the previous literature in which older adults received support in times of need (Belliston et al., in preparation; Eggebeen & Davey, 1998).

Knowing that needs and resources play a vital role in predicting exchange in intergenerational relationships, it is essential to include these variables in future research on intergenerational exchange. It is not enough to try to predict exchange using different parent and adult child characteristics; research must place their empirical models within a theoretical

background to adequately explain why exchanges occur. While previous research has begun to do this (Parrott & Bengtson, 1999; Silverstein et al., 1996) we must continue to examine the effects of needs and resources and what affects transitions in parent's and adult children's lives might have on provision of support.

## CHAPTER 6

### DISCUSSION

This dissertation extended previous seminal research in the area of Intergenerational Solidarity and the Contingent Exchange Perspective (Bengtson et al, 1997; Bengtson et al., 1996; Bengtson & Roberts, 1991; Davey & Eggebeen, 1998; Eggebeen & Davey, 1998; Rossi & Rossi, 1990; Mangen et al., 1988). Specifically, this research reflected a conceptual and methodological advancement, moving from a *generational* and *cross-sectional* approach to one that focuses explicitly on *dyadic* and *longitudinal* questions. The Theory of Intergenerational Solidarity addresses five dimensions of closeness, contact, support exchanges, normative beliefs, and structural makeup of the family provide an overall picture of family life and allow a look at family functioning.

Intergenerational Solidarity Theory provided some explanatory power for understanding psychological well-being in adult child and parent generations. However, the Generational Stake Hypothesis, which grew out of Intergenerational Solidarity, posits that parents will report a greater net investment down the generations (i.e., from parents to children to a greater extent than the reverse) to adult children was largely unsupported in the present research. Instead, the Contingent Exchange Perspective was more successful in explaining older parent-adult child relationships and the exchanges that occur within them. The Contingent Exchange Perspective focuses on the importance of *needs* and *resources* of each generation in predicting these different domains of family functioning. The results also strongly supported the hypothesis that needs and resources of each generation would influence and better explain psychological well-being of

each generation over time. Key findings are discussed and synthesized below, organized according to each study of this dissertation.

### Study One

Study one was an empirical test of the Intergenerational Solidarity Theory and the Generational Stake Hypothesis. The Contingent Exchange Perspective was also used to help explain parent-adult child relationships in later life. Additionally, this study also addressed how adult children and their parents' psychological well-being was affected due to these processes. The critical finding from this empirical test of the two theories was that the Contingent Exchange Perspective extends to other dimensions of Intergenerational Solidarity beyond Functional Solidarity. I will highlight a few of the findings to illustrate this, according to the specific dimension of Intergenerational Solidarity considered.

Looking first at Affectual Solidarity, needs and resources which were influential in predicting this dimension include age, having activities of daily living needs, and adult child's marital status. Both generations reported feeling closer as parents grew older and less close to those with activities of daily living needs. Both generations also reported increased closeness when the adult child had a spouse. Previous literature has found that child's age was the most meaningful variable in predicting levels of closeness within families (Rossi & Rossi, 1990; Sutor et al., 1995); however, with reports from *both* parents and children the data showed that it was *parent's* age that drove Affectual Solidarity rather than *child's* age. Evidence for the influence of child's marital status supports the finding that both generations feel closer when adult children are married (Aquilino, 1999; Golish, 2000; Kitamura & Takashi, 2001; Lawton et al., 1994).

Significant predictors of Associational Solidarity also support the Contingent Exchange Perspective. Age of both generations, smaller family size in both generations, closer proximity to one another, and adult child being married were all positively associated with contact between generations, both face to face contact and telephone/letter contact. Much of the literature addresses the effects of parent's marital status on contact, but not child's marital status. Disruption in parents' marital status led to decreased contact between the generations (Lawton et al., 1994; Sutor et al., 1995; Roberts et al., 1991). Both parents' and adult children's marital status have been addressed in the co-residence literature. White and Rogers (1997) found that co-residence was more likely with married parents and with children with a disrupted marital status (divorced or never married), while Crimmins and Ingegneri (1990) found that widowhood among older adults led to the increased likelihood of co-residence with adult children. As previously stated, my findings lead to the continued realization that more investigation is required into how child characteristics influence Intergenerational Solidarity. Parent characteristics have received the most attention, but the study shows that for both generations, it is the child's marital status that increases contact. Finally, the finding that residential proximity explains face-to-face and telephone/letter contact fits with that found in the current literature of proximity explaining from 30-60% of the variance in contact (Atkinson et al., 1986; Dewit et al., 1988; Roberts et al., 1991).

Needs and resources also explain Functional Solidarity, the exchange of instrumental and emotional support. Better self-rated health of parents increases support given and reduces support received. Likewise parents give less and receive more support as children age. Proximity between generations facilitates instrumental support exchanges. Married parents,

better educated generations who live closer to one another all enjoy greater emotional support exchanges. The current literature surrounding support exchanges and marital status is more complex. Marital status and gender interacted to affect instrumental exchanges. Davey (1998) suggests that marital status functions as a moderator with gender and life stage to explain support exchange and the literature supports this. Effects of divorce, widowhood, and separation are greater for fathers than mothers (Amato et al., 1995; Eggebeen, 1992; Ikkink et al., 1999). More specifically, marital disruption led to fathers giving less help with transportation, and work around the house for fathers, but single mothers received more and gave less (Amato et al., 1995; Eggebeen, 1992; Ikkink et al., 1999). I was unable to examine the interaction between gender, marital status, and support exchanges beyond addressing it using dyadic characteristics which were predictive of both instrumental and emotional support. Addressing proximity, these findings support the literature in that proximity is needed to provide an opportunity structure for the exchange of these types of support (Uphold et al., 2000).

While needs and resources did predict Normative Solidarity, each generation differs on which variables were important. For parents, higher education, being non-white, and living close predicted greater Normative Solidarity, whereas for adult children, parent's and child's ages, and being married predicted more Normative Solidarity. Rossi and Rossi (1991) investigated the structure of normative obligations (who is involved in norms of giving and receiving help); others have examined agreement between normative beliefs about what should be exchanged and actual exchanges (i.e., Normative and Functional Solidarity, cf. Davey et al., in preparation; Marshall et al., 1987), less has been said about the relationship between age and normative obligations. One exception to this is Lawton, et al, (1994). Similar to the current

findings, these authors state that the relationship between age and normative obligations is not simple. In their study their measure of normative obligation was split into parent's obligation to children and children's obligation to parents. I combined these two into one measure of normative obligations after factor analysis revealed the items formed a single scale and each generation reported their normative obligations. These authors found no age differences in obligations to parents during early and middle adulthood, but in older adulthood obligations to children rises, which they point out refutes the "greedy geezers" stereotype. They did not find any age differences in adult children's obligations to parents. While parent's marital status did not affect Normative Solidarity, the child's marital status did. Married children were more likely to report higher levels of Normative Solidarity when they were married. The literature shows that marital disruption of either generation leads to a decrease in Normative Solidarity for both generations (Marshall et al., 1987; Rossi & Rossi, 1991).

The second research question for study one address the Generational Stake Hypothesis which posits that parents will report a greater net investment down the generations to adult children. While it was expected that dimensions of Intergenerational Solidarity would be predictive of the Stake Hypothesis, needs and resources provided greater explanatory power, supporting the Contingent Exchange Perspective.

The Generational Stake Hypothesis for the Affectual domain appears to be primarily driven by *adult child characteristics*, including education, income, and distance. This raises an important causal distinction that cannot be separated in the present research. Does parental investment lead to better child outcomes, or do parents take pride in successful children's accomplishments? There is evidence within the gerontological literature for both causal

directions of influence. Sociological literature, for example points toward the former, with expectations that greater parental investment leads to more successful child outcomes, especially in terms of occupational and educational attainment (Valenzuela & Dornbusch, 1994). On the other hand, the psychological literature has recently tended toward emphasis of how older adults gain life satisfaction through their children's accomplishments. The work of Carol Ryff and others, for example (Ryff, Lee, Essex, & Schmutte, 1994; Ryff, Schmutte, & Lee, 1996) suggests that children's attainment is linked with positive parental psychological outcomes.

Findings surrounding Associational Solidarity and the Generational Stake also support the explanatory influence of needs and resources variables. For both face to face contact and telephone/letter contact, needs and resources variables such as proximity and having activities of daily living needs explain the Stake. More specifically, dyads that live farther from each other and dyads in which the child has activities of daily living needs had parents who reported greater investment in the younger generation.

Functional Solidarity and the Generational Stake was also better explained using needs and resources. Parents reported greater net investment in their children who themselves had more children and in those with activities of daily living needs. Additionally, parents with resources like having a spouse, education, and being in better self-rated health also reported greater net investment.

There was little to no evidence of the Generational Stake Hypothesis for Normative Solidarity. Additionally, few needs and resources variables provided explanation. The Stake was supported for mothers in mother-son dyads and for parents aged 60-69. It was unsupported for fathers in the father-daughter dyad, for non White adult children, and for children aged 30-39.

The third research question addressed in study one has to do with psychological well-being in adult respondents and their parents. Effects of Intergenerational Solidarity dimensions on psychological well-being in each generation are considered first, followed by needs and resources variables. The effects for Affectual Solidarity and psychological well-being all fell along expected dimensions and were in the expected directions. Parents' closeness explained parents' own psychological well-being; the child's closeness explained the child's well-being. For example, the higher reported levels of closeness by both parent and child, the lower their depression scores. Associational Solidarity did not influence parent or child's reports of psychological well-being with the exception of parents reporting greater contact leading to increased life satisfaction.

Normative Solidarity also did not strongly predict psychological well-being; for the most part, the findings were in the expected direction: increases for self-efficacy, self-esteem, and life satisfaction, and decreases in hostility and long-term depression with higher levels of Normative Solidarity. Looking at the effects of Functional Solidarity on psychological well-being, what does not emerge is more surprising than what does. Giving instrumental support to parents led to higher levels of depression and long-term depression in adult children. Most importantly,

when looking at emotional support exchanges and life satisfaction, parents and children did better psychologically when *giving* help rather than *receiving* it.

Needs and resources variables provided much more explanatory power for psychological well-being. Psychological well-being for both generations were influenced by variables such as age, having a spouse, having activities of daily living needs and self-rated health. Additionally, for parents, education and number of children influenced psychological well-being, while for adult children, race and depression levels at Time 1 influenced psychological well-being. The Contingent Exchange Perspective did a much better job at explaining the psychological outcomes of both adult child and parent generations as opposed to the different dimensions of Intergenerational Solidarity.

Some theoretical work has suggested that positive and negative aspects of intergenerational relationships are important (Luescher & Pillemer, 1998; Connidis & McMullin, 2002). The present research suggests, however, that solidarity within intergenerational relationships can itself simultaneously have positive and negative consequences for psychological well-being. Children's reports of self-efficacy and self-esteem are a case in point. When parents report greater Affectual Solidarity, on the one hand, children tend to report lower scores on these variables. However, if children provide more emotional support to parents, their scores on these outcomes are enhanced. This is not entirely surprising, given that the former may undermine children's ability to meet expectations within the relationship, for example (it may set up unrealistic expectations), or it may undermine the normative developmental tasks of individuation, associated with early adulthood transitions, in particular. The emotional support that children are able to provide to parents, however, can be expected to exert exactly the

opposite effects on children's well-being, because it enhances their own sense of control within the relationship. Perhaps if comparable measures had been available for parents, this pattern would have been even clearer (Liang et al, 2001; Newsom & Schultz, 1998).

### Study Two

Study two addresses Functional Solidarity in more depth by examining predictors of four types of instrumental support: help with transportation, shopping, and errands (transportation); housework, yardwork, car repairs, and work around the house (housework); child care provided while parent is at work (child care at work); and child care in general (child care). I also examined emotional support exchanges in more depth than in study one. Looking first at how other dimensions of Intergenerational Solidarity predict Functional Solidarity we see that Affectual Solidarity influenced all types of support. Children were more likely to report receiving help with transportation, housework, and emotional support when they felt closer to the parent and less support when their parents felt less close.

Normative Solidarity influenced all types of instrumental support except child care scales. The higher the normative obligations reported by parents, the more likely they were to report receiving help with transportation and their children were to report receiving help with housework. Associational Solidarity also influenced support exchanges. When parents and children reported higher levels of face to face contact, children were more likely to provide help with transportation and housework, while parents reported receiving more help with transportation and giving help with child care at work. Additionally, telephone/letter contact influenced all types of support. Greater telephone/letter contact by parents and adult children led to them reporting giving and receiving more emotional support. Additionally, when parents'

reported more contact, children reported receiving more help with housework and parents reported giving more help with child care at work. These data add to Rossi and Rossi's (1990) findings that proximity is a necessary, but not a sufficient condition for exchange of instrumental assistance.

There was some evidence for the importance of both needs and resources in predicting Functional Solidarity. Summarizing across resource variables, I found that three were instrumental in influencing support exchanges. Having a spouse, greater educational attainment, and being in better self-rated health all contributed to participation in support exchanges. Needs that were influential in predicting parental provision of Functional Solidarity included children having and activities of daily living needs and more children. Similar to what Rossi and Rossi (1990) found, the resources of each generation affects the extend of help given to the other.

#### Limitations

Several limitations exist within these studies. These can be divided into limitations of theory and methods, including measures, and analysis. Intergenerational Solidarity has undergone several revisions since its early development, not all of which have been positively received in the field. For example, some social scientists bemoan the addition of Structural Solidarity as a dimension to explain family functioning (Marshall, 2001) because causality is nearly impossible to establish with race, socio-economic status, employment, geographical dispersion, and educational opportunities further confounding this construct. Another criticism of the theory is that it focuses solely upon a solidarity or normative perspective and thus does not address the ambivalence presumed to underlie family relationships. The authors have tried to address this in current theoretical work by saying that each dimension is a continuum with

conflict and ambivalence being subsumed within these continua (Bengtson et al., 2002; Silverstein & Bengtson, 2001). The ambivalence perspective and the Intergenerational Solidarity theory is addressed in a more recent paper which examines the congruence between beliefs of giving support and actual support given, and between reported closeness and emotional support exchanged (Davey et al., in preparation).

Additionally, much of the gerontological research has adopted the Intergenerational Solidarity Theory, but the solidarity construct has been used in many different ways, some of which the originators did not intend. Many authors have subsumed all types of solidarity into one solidarity term and thus current researchers need to sift through the literature and critically assess it to encompass only that which measures solidarity in a theoretically appropriate way. Unquestionably, future theoretical work will need to work toward developing greater consensus among gerontological researchers on solidarity constructs and structure.

Methodologically, the study was quite powerful, overall. The sample was large and nationally representative, and the design was longitudinal for adult respondents and cross-sectional for parents. Several different measures were used in this study. One limitation derives from how some of the dimensions of Intergenerational Solidarity were measured. Use of secondary data limits the depth of the questions that were asked. Affectual Solidarity was measured as a single item, for example, asking both respondents and their parents how close they felt to one another. The measure could have been stronger if I'd been able to address Affectual Solidarity with a multi-question scale which would have been even better if I could have addressed questions of ambivalence with a well-rounded Affectual Solidarity Scale. Associational Solidarity was measured with two items asking about face-to-face and telephone-

letter contact. While the scale of Associational Solidarity was not as comprehensive as that suggested by Mangen and Miller (1988) I believe that it was successful in assessing contact. Finally, Normative Solidarity was measured asking both parents and adult children whether they thought each generation should help the other by providing financial aid and sharing living quarters. I did factor analyze this to see if help to parents loaded on another factor and found that they all loaded on one factor and thus I summed these items to provide the Normative Solidarity scale. As with Affectual Solidarity, the measure of Normative Solidarity could have been stronger if it included additional norms for obligations and responsibility between generations.

Multiple regression was used to address predictors of each dimension of Intergenerational Solidarity, the psychological well-being scales, the Generational Stake Hypothesis and each individual scale of the Functional Solidarity dimension of Intergenerational Solidarity. One way in which these results could better explain parent-adult child relationships would be to include interactions between selected dimensions of Intergenerational Solidarity and parent-adult child characteristics to examine psychological well-being. For example, some of the current literature suggests that structural characteristics like marital status and gender, would mediate between other dimensions of Intergenerational Solidarity and psychological well-being. Overall, however, moderating influences remain little explored and less hypothesized in this area.

Finally, it would have been useful to include more variables to capture the transitions that families members go through to examine how these affect the parent-adult child relationship. Needs and resources variables like marital status explained several dimensions of

Intergenerational Solidarity, but the influence on other dimensions of solidarity such as affection or contact of the transition from having a spouse to not could not be explored in this research.

### Implications

These findings have implications for theory, practice, policy, and program development. Future theoretical work needs to consider the context of older parent-adult child relationships. Assistance, affection, association, and norms are all contingent upon the characteristics and experiences of each generation. Additionally, previous research has shown (Bengtson et al., 1997) that solidarity is not a unidimensional construct, but some scientists continue to use it as such; the field needs to work toward a clearer conceptualization of solidarity so that the term is not used inappropriately.

Implications for practitioners and policy makers focus on the findings surrounding needs and resources variables. Since these provided the most explanatory power, practitioners and policy makers need to concentrate on linking their clients or constituents with resources to meet existing needs, or even to help them identify the resources that they already have. Given the existing contingencies governing intergenerational relationships, identifying potentially problematic situations, such as where parents health problems necessitate provision of functional assistance despite low levels of obligation and affection, for example, may be particularly problematic and thus important for practitioners to be aware of. Finally, community educators can share the message that it truly is better to give than to receive, at least from an intergenerational perspective.

### Future Directions

These studies contributed to the current parent-adult child relationship literature in several ways. The first is that it better elaborates upon child characteristics that influence Intergenerational Solidarity. Davey (1998) points out that many child characteristics have not previously been considered, but this study shows that several characteristics, such as marital status, number of children and income, are predictors of solidarity. Thus, inclusion of both parent and child characteristics will help future research provide a well-rounded picture to explain parent-adult children relationships.

Second, the study is unique in that it includes both the parent's and adult child's responses for each dimension, thus providing a view from multiple directions. Dyadically, if both generations are reporting on the same relationship, we can examine whether the different generations view the relationship similarly, tested by the Generational Stake Hypothesis, or if the different generations perceive and are affected by the same relationship differently. I did find generational differences and that each generation was affected by characteristics and responses of the other thus leading us to conclude that responses from both generations are necessary in future research.

Additional theoretical work remains to be done both for the Intergenerational Solidarity Theory and the Contingent Exchange Perspective. Future research needs to continue to refine how solidarity is measured and address ambivalence within family relationships as suggested by Luescher and Pillemer (1998) and others. Additionally, the Contingent Exchange Perspective can be more fully elaborated upon by addressing transitions and expanding upon exactly how these variables affect and are affected by the relationship while going through life transitions.

The difficulty in defining both Normative Solidarity and Consensual Solidarity has led to their receiving much less attention in the literature. This study defines parent, adult child, and dyadic characteristics that predict Normative Solidarity and also to use Normative Solidarity to predict psychological well-being of both generations, finding that it does in fact influence psychological outcomes for both generations. I was unable to measure Consensual Solidarity with the national data set and thus suggest that future research must find a way to operationalize this construct and then move on to elaborating upon predictors of it and the impact that it has on both the parent and adult child and the parent-adult child relationship.

Finally, future research will need to take these findings and extend them to different family relationships. How is the grandparent-grandchild relationship predicted by different dimensions of Intergenerational Solidarity, for example? Is the Generational Stake Hypothesis supported in non-adjacent relationships. Are sibling relationships affected by different dimensions of solidarity? What impact do these dimensions have upon families? Does it matter psychologically to other family relationships to be providing support in the absence of resources or in a time of need?

In conclusion, these studies show that future studies of parent-adult child relationships must include reports from both members of the dyad. Additionally, research methods must be expanded to address data from multiple family members and multiple time points to consider how transitions and needs and resources variables suggested by the Contingent Exchange Perspective affect the different dimensions of Intergenerational Solidarity and the psychological well-being of those involved.

## REFERENCES

- Acock, A.C., Barker, D. & Bengtson, V.L. (1982). Mother's employment and parent-youth similarity. *Journal of Marriage and the Family*, 44: 441-455.
- Allen, KR., Blieszner, R., & Roberto, K.A. (2000). Families in the middle and later years: A review and critique of research in the 1990's. *Journal of Marriage and the Family*, 62, 911-927.
- Amato, P.R. (1994). Father-child relations, mother-child relations, and offspring psychological well-being in early adulthood. *Journal of Marriage and the Family*, 56, 1031-1042.
- Amato, P.R., Rezac, S.J., & Booth, A. (1995). Helping between parents and young-adult offspring: The role of parental marital quality, divorce, and remarriage. *Journal of Marriage and the Family*, 57, 363-374.
- Aquilino, W.S. (1999). Two views of one relationship: comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and the Family*, 61, 858-871.
- Aquilino, W.S., & Supple, K. R. (1991). Parent-child relations and parent's satisfaction with living arrangements when adult children live at home. *Journal of Marriage and the Family*, 53, 13-27.
- Atkinson, M.P., Kivett, V.R., & Campbell, R.T. (1986). Intergenerational solidarity: An examination of a theoretical model. *Journal of Gerontology*, 41, 408-416.

- Barker, J.C. (2002). Neighbors, friends, and other nonkin caregivers of community-living dependent elders. *Journal of Gerontology: Psychological Sciences and Social Sciences*, 57, S158-S167.
- Barrett, A.E. (1999). Social support and life satisfaction among the never married. *Research on Aging*, 21, 4672.
- Belliston, L.M., Davey, A., & Bookout, J.C. (In preparation). "Needs, resources , and the nature of parent-child relationships in later life."
- Bengtson, V.L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and the Family*, 63, 1-16.
- Bengtson, V.L., Burgess, E.O., & Parrott, T.M. (1997). Theory, explanation, and a third generation of theoretical development in social gerontology. *Journal of Gerontology: Social Sciences*, 52B, S72-S88.
- Bengtson, V.L., Burton, L.M., Rosenthal, C. (1993). Families and aging: Diversity and heterogeneity. In R.S. Pierce & M.A. Black, (Eds.), *Life-span development: A diversity reader*, (pp. 226-246). Dubuque, IA: Kendall/Hunt Publishing Co.
- Bengtson, V.L., Giarrusso, R., Mabry, J.B., & Silverstein, M. (2002). Solidarity, conflict, and ambivalence: Complementary or competing perspectives on intergenerational relationships? *Journal of Marriage and the Family*, 64, 568-576.
- Bengtson, V.L., & Harootyan, R.A. (1994). *Intergenerational linkages: hidden connections in American society*. New York: Springer Publishing Company.
- Bengtson, V.L., & Kuypers, J.A. (1971). Generational difference and the "developmental stake." *Aging and Human Development*, 2, 249-260.

- Bengtson, V.L., Parrott, T., & Burgess, E. (1996). Progress and pitfalls in gerontological theorizing. *Gerontologist, 36*, 768-772.
- Bengtson, V.L. & Roberts, R.E.L. (1991). Intergenerational solidarity in aging families: An example of formal theory construction. *Journal of Marriage and the Family, 53*, 856-870.
- Bengtson, V.L. & Schrader, S.S. (1982). Parent-child relations. In D.J. Mangen & W.A. Peterson (Eds.), *Research instruments in social gerontology* (pp. 115-128). Minneapolis, MN: University of Minnesota Press.
- Brody, G.H., Moore, K., & Gleib, D. (1994). Family processes during adolescence as predictors of parent-young adult attitude similarity. *Family Relations, 43*, 369-374.
- Burr, J.A., & Mutchler, J.E. (1999). Race and ethnic variation in norms of filial responsibility among older persons. *Journal of Marriage and the Family, 61*, 674-687.
- Chatters, L.M., & Taylor, R.J. (1993). Intergenerational support: The provision of assistance to parents by adult children. In J. Jackson, L. Chatters & R.J. Taylor (Eds.), *Aging in black america* (pp. 69-83). Thousand Oaks, CA: Sage Publications.
- Chatters, L.M., Taylor, R.J., & Jayakody, R. (1994). Fictive kinship relationships in black extended families. *Journal of Comparative Family Studies, 25*, 297-312.
- Chen, X., & Silverstein, M. (2000). Intergenerational social support and the psychological well-being of older parents in China. *Research in Aging, 22*, 43-65.
- Cicirelli, V.G. (1983). Adult children's attachment and helping behavior to elderly parents: A path model. *Journal of Marriage and the Family, 45*, 815-825.

- Clarke, E.J., Preson, M., Raksin, J. & Bengtson, V.L. (1999). Types of conflicts and tensions between older parents and adult children. *Gerontologist, 39*, 261-270.
- Connidis, I.A., & McMullin, J.A. (2002). Ambivalence, family ties, and doing sociology. *Journal of Marriage and the Family, 64*, 594-601.
- Crimmins, E.M., & Ingegneri, D.G. (1990). Interaction and living arrangements of older parents and their children. *Research on Aging, 12*, 3-35.
- Davey, A. (1998). Correlates and consequences of intergenerational exchanges: Interfamilial differences in intrafamilial support. *Dissertation Abstracts International, 58*(7-A).
- Davey, A., Belliston, L.M., Savla, T., & Cook, T. (2001, November). *Walking the walk: Congruence between intergenerational beliefs and behaviors*. Paper presented at the annual meeting of the Gerontological Society of America. Chicago, IL.
- Davey, A., & Eggebeen, D.J. (1998). Patterns of intergenerational exchange and mental health. *Journal of Gerontology: Social Sciences, 53B*, P86-P95.
- Dewit, D.J., Wister, A.V. & Burch, T.K. (1988). Physical distance and social contact between elders and their adult children. *Research on Aging, 10*, 56-80.
- Eggebeen, D.J. (1992). Family structure and intergenerational exchanges. *Research in Aging, 14*, 427-447.
- Eggebeen, D.J., & Davey, A., (1998). Do safety nets work? The role of anticipated help in times of need. *Journal of Marriage and the Family, 60*, 939-950.
- Eggebeen, D.J., & Wilhelm, M.O. (1995). Patterns of support given by older Americans to their children. In S.A. Bass (Ed.), *Older and active: How Americans over 55 are contributing to society* (pp. 122-168). New Haven, CT: Yale University.

- Freeberg, A.L., & Stein, C.H. (1996). Felt obligations towards parents in Mexican-American and Anglo-American young adults. *Journal of Social and Personal Relationships, 13*, 457-471.
- Ganong, L., Coleman, M., McDaniel, A.K., & Killian, T. (1998). Attitudes regarding obligations to assist an older parent or stepparent following later-life remarriage. *Journal of Marriage and the Family, 60*, 595-609.
- Giarrusso, R., Stallings, M., & Bengtson, V.L. (1995). The “intergenerational stake” hypothesis revisited: Parent-child differences in perceptions of relationships 20 years later. In V.L. Bengtson, K.W. Schaie, & L.M. Burton, (Eds.), *Adult intergenerational relations: Effects of societal change* (pp.227-263). New York: Springer Publishing Co.
- Glass, J. L. & Dunham, C. (1989). Factors influencing intergenerational consensus in adulthood. In J. Mancini (Ed.), *Aging parents and adult children* (pp. 135-148). Lexington, MA: Lexington Books.
- Goldscheider, F. (1997). Recent changes in U.S. young adult living arrangements in comparative perspective. *Journal of Family Issues, 18*, 708-724.
- Goldscheider, F.K., & Lawton, L. (1998). Family experiences and the erosion of support for intergenerational coresidence. *Journal of Marriage and the Family, 60*, 623-632.
- Golish, T.D. (2000). Changes in closeness between adult children and their parents: A turning point analysis. *Communication Reports, 13*, 79-98.
- Goodman, C.C., & Silverstein, M. (2001). Grandmothers who parent their grandchildren: An exploratory study of close relations across three generations. *Journal of Family Issues, 22*, 557-579.

- Gronvold, R.L. (1988). Measuring affectual solidarity. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp. 74-97). Newbury Park, CA: Sage Publications.
- Grotevant, H. D. & Cooper, C. R. (1998). Individuality and connectedness in adolescent development: Review and prospects for research on identity, relationships, and context. In E. E. A. Skoe & A. L. Yondder Lippe (Eds.), *Personality development in adolescence: A cross-national and life span perspective* (pp. 3-37). New York: Routledge.
- Hancock, P., Mangen, D.J., & McChesney, K.Y. (1988). The exchange dimension of solidarity: Measuring intergenerational exchange and functional solidarity. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp. 156-186). Newbury Park, CA: Sage Publications.
- Hirdes, J.P., & Strain, L.A. (1995). The balance of exchange in instrumental support with network members outside the household. *Journals of Gerontology: Social Sciences*, 50B, S134-S142.
- Hogan, D.P., Eggebeen, D.J., & Clogg, C.C. (1993). The structure of intergenerational exchanges in American families. *American Journal of Sociology*, 98, 1428-1458.
- Hoyert, D.L., (1991). Financial and household exchanges between generations. *Research on Aging*, 13, 205-225.
- Ikkink, K.K., Van Tilburg, T., & Knipscheer, K.C.P.M. (1999). Perceived instrumental support exchanges in relationships between elderly parents and their adult children: normative and structural explanations. *Journal of Marriage and the Family*, 61, 831-844.

- Jayakody, R. (1998). Race differences in intergenerational financial assistance. *Journal of Family Issues, 19*, 508-533.
- Jeng, W. (2000). Intergenerational relations, living arrangements, and well-being of the elderly in Taiwan. *Dissertation Abstracts International, 60*(8), 3152A.
- Johnson, C.L., & Barer, B.M. (1990). Families and networks among older inner-city blacks. *Gerontologist, 30*, 726-733.
- Katz, R., & Lowenstein, A. (1999). Adjustment of older soviet immigrant parents and their adult children residing in shared households: An intergenerational comparison. *Family Relations, 48*, 43-51.
- Keefe, J.M., & Fancey, P.J. (2002). Work and eldercare: Reciprocity between older mothers and their employed daughters. *Canadian Journal on Aging, 21*, 229-241.
- Kitamura, K. & Takashi, M. (2001). The influence of adult mother-daughter relationships on daughters' psychological well-being: Life events of marriage and childbearing. *Japanese Journal of Developmental Psychology, 12*, 46-57.
- Kobayashi, K.M. (2000). The nature of support from adult sansei (third generation) children to older nisei (second generation) parents in Japanese Canadian families. *Journal of Cross-Cultural Gerontology, 15*, 185-205.
- Krause, N. (1991) Stress and isolation from close ties in later life. *Journal of Gerontology: Social Sciences, 46*, S183-S194.
- Krause, N. (1994). Stressors in salient social roles and well-being in later-life. *Journal of Gerontology: Psychological Sciences, 49*, P137-P148.

- Krause, N. (1995). Negative interaction and satisfaction with social support among older adults. *Journal of Gerontology: Psychological Sciences, 50*, P59-P73.
- Landry, P.H., & Martin, M.E. (1988). Measuring intergenerational consensus. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp. 126-155). Newbury Park, CA: Sage Publications.
- Lawton, M.P., Silverstein, M. & Bengtson, V. (1994). Affection, social contact, and geographic distance between adult children and their parents. *Journal of Marriage and the Family, 56*, 57-68.
- Lee, G.R., Netzer, J.K., & Coward, R.T. (1994). Filial responsibility expectations and patterns of intergenerational assistance. *Journal of Marriage and the Family, 56*, 559-566.
- Lee, G.R., Coward, R.T., & Netzer, J.K. (1994). Residential differences in filial responsibility expectations among older persons. *Rural Sociology, 59*, 100-109.
- Liang, J., Krause, N.M., & Bennett, J.M. (2001). Social exchange and well-being: Is giving better than receiving? *Psychology and Aging, 16*, 511-523.
- Long, M. V., & Martin, P. (2000). Personality, relationship closeness, and loneliness of oldest old adults and their children. *Journals of Gerontology, Psychological Sciences, 55*, P311-P319.
- Luescher, K. & Pillemer, K. (1998). Intergenerational ambivalence: A new approach to the study of parent-child relations in later life. *Journal of Marriage and the Family, 60*, 413-425.
- Mangen, D.J., Bengtson, V.L., & Landrey, P.H., (1988). *Measurement of intergenerational relations*. Newbury Park, CA: Sage Publications.

- Mangen, D.J., & Miller, R.B. (1988). Measuring intergenerational contact in the family. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp.98-125). Newbury Park, CA: Sage Publications.
- Mangen, D.J., & Westbrook, G.J. (1988). Measuring intergenerational norms. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp.187-207). Newbury Park, CA: Sage Publications.
- Marshall, V. (2001, November). *Discussant comments on new approaches to the study of intergenerational family relations: Theoretical, conceptual and methodological innovations*. Paper presented at the annual meeting of the Gerontological Society of America. Chicago, IL.
- Marshall, V.W., Rosenthal, C.J., & Daciuk, J. (1987). Older parents' expectations for filial support. *Social Justice Research, 1*, 405-424.
- McChesney, K.Y., & Bengtson, V.L. (1988). Solidarity, integration, and cohesion in families: Concepts and theories. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp.15-30). Newbury Park, CA: Sage Publications.
- McChesney, K.Y., & Mangen, D.J. (1988). Measuring family structure. In D.J. Mangen, V.L. Bengtson, & P.H. Landry (Eds.), *Measurement of intergenerational relations* (pp. 56-73). Newbury Park, CA: Sage Publications.
- McCulloch, B.J. (1995). The relationship of family proximity and social support to the mental health of older adults: The Appalachian context. *Journal of Aging Studies, 9*, 65-81.

- Mills, T.L., Wakeman, M.A., & Fea, C.B., (2001). Adult grandchildren's perceptions of emotional closeness and consensus with their maternal and paternal grandparents. *Journal of Family Issues*, 22, 427-455.
- Morgan, L.A. (1983). Intergenerational economic assistance to children: The case of widows and widowers. *Journal of Gerontology: Social Sciences*, 38, S725-731.
- Morgan, D. L., Schuster, T. L., & Butler, E. W., (1991). Role reversals in the exchange of social support. *Journals of Gerontology: Social Sciences*, 46, S278-S287.
- Newsom, J.T. & Schultz, R. (1998). Caregiving from the recipient's perspective: Negative reactions to being helped. *Health Psychology*, 17, 172-181.
- Nye, F. & Rushing, W. (1966). Toward family measurement research. In J. Hadden and E. Borgatta, (Eds.), *Marriage and family* (pp. 31-34). Itasca, IL: F.E. Peacock.
- Parrott, T.M., & Bengtson, V.L. (1999). The effects of earlier intergenerational affection, normative expectations, and family conflict on contemporary exchanges of help and support. *Research on Aging*, 21, 73-106.
- Parrott, T.M., Giarrusso, R., & Bengtson, V.L. (1994, August). *What predicts conflict in parent-adult child relationships?* Paper presented at the meeting of the American Sociological Association, Washington, D.C.
- Pearlin, L.I., Menaghan, E.G., Lieberman, M.A., & Mullan, J.T. (1981). The stress process. *Journal of Health and Social Behavior*, 22, 337-356.
- Piercy, K. T. (2001). We couldn't do without them.: The value of close relationships between older adults and their nonfamily caregivers. *Generations*, 25, 41-47.
- Pillemer, K. (2001, November). *Beyond positive versus negative assessments of parent-child relations: Does ambivalence matter?* Paper presented at the annual meeting of the Gerontological Society of America. Chicago, IL.

- Pyke, K.D., & Bengtson, V.L., (1996). Caring more or less: Individualistic and collectivist systems of family eldercare. *Journal of Marriage & the Family*, 58, 379-392.
- Radloff, L.S., (1977). "The CES-D Scale: A self-report depression scale for research in the general population." *Applied Psychological Measurement*, Vol 1, 385-401.
- Ramos, M., Wilmoth, J., & Ramos, M. (2003). Social relationships and depressive symptoms among older adults in southern Brazil. *Journals of Gerontology: Social Sciences*, 58B, S253-S261.
- Roberto, K.A. (1992). Coping strategies of older women with hip fractures: Resources and outcomes. *Journal of Gerontology: Psychological Sciences*, 47, P21-P26.
- Roberts, R.E.L., & Bengtson, V.L. (1990). Is intergenerational solidarity a unidimensional construct? A second test of a formal model. *Journal of Gerontology: Social Sciences*, 45, S12-S20.
- Roberts, R. E. L., Richards, L.N., & Bengtson, V. L. (1991). Intergenerational solidarity in families: Untangling the ties that bind. In S. P. Pfeifer & M. B Sussman (Eds.), *Families: Intergenerational and generational connections* (pp. 11-46). New York: Haworth Press.
- Rook , K.S. (1987). Social support versus companionship: Effects on life stress, loneliness, and evaluations by others. *Journal of Personality & Social Psychology*, 52, 1132-1147.
- Rosenberg, M., & Perlin, L.I. (1978). Social-class and self-esteem among children and adults. *American Journal of Sociology*, 84, 53-77.
- Rossi, A.S., & Rossi, P.H. (1990). *Of human bonding*. New York : A. de Gruyter.

- Rossi, A.S., & Rossi, P.H. (1991). Normative obligations and parent-child help exchange across the life course. In K. Pillemer & K. McCartney (Eds.), *Parent-child relations throughout life* (pp. 201-223). Hillsdale, NJ: Lawrence Erlbaum, Assoc.
- Ryff, C.D. (1989). Happiness is everything, or is it - explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069-1081.
- Ryff, C.D., Lee, Y.H., Essex, M.J., & Schmutte, P.S. (1994). My children and me: Midlife evaluations of grown children and of self. *Psychology and Aging*, *9*, 195-205.
- Ryff, C.D., Schmutte, P.S., & Lee, Y.H., (1996). How children turn out: Implications for parental self-evaluation. In C.D. Ryff, & M. Mailick (Eds.), *The parental experience in midlife. The John D. and Catherine T. MacArthur foundation series on mental health and development: Studies on successful midlife development*. (pp. 383-422). Chicago, IL: University of Chicago Press.
- Samuelsson, G., & Dehlin, O. (1993). Family network and mortality: Survival chances through the lifespan of an entire age cohort. *International Journal of Aging and Human Development*, *37*, 277-295.
- Schilmoeller, G.L. & Baranowski, M.D. (1998). Intergenerational support in families with disabilities: Grandparents' perspectives. *Families in Society*, *79*, 465-476.
- Scott, J.W., & Black, A. (1989). Deep structures of African American family life: Female and male kin networks. *Western Journal of Black Studies*, *13*, 17-24.
- Semyonov, M., & Lewin-Epstein, N. (2001). Impact of parental transfers on living standards of married children. *Social Indicators Research*, *54*, 115-137.

- Silverstein, M. & Bengtson, V.L. (2001, November). *Theory and method in the study of intergenerational relations over time*. Paper presented at the annual meeting of the Gerontological Society of America. Chicago, IL.
- Silverstein, M., Chen, X., & Heller, K. (1996). Too much of a good thing? Intergenerational social support and the psychological well-being of older parents. *Journal of Marriage and the Family*, 58, 970-982.
- Silverstein, M., Giarrusso, R., & Bengtson, V.L. (1998). Intergenerational solidarity and the grandparent role. In M.E. Szinovacz (Ed.), *Handbook on grandparenthood* (pp. 144-158). Westport, CN: Greenwood Press.
- Silverstein, M., Parrott, T.M., & Bengtson, V.L. (1995). Factors that predispose middle-aged sons and daughters to provide social support to older parents. *Journal of Marriage and the Family*, 57, 465-476.
- Silverstein, M., & Waite, L.J. (1993). Are Blacks more likely than Whites to receive and provide social support in middle and old age? Yes, no, and maybe so. *Journals of Gerontology: Social Sciences*, 48, S212-S222.
- Spitze, G., & Logan, J.R. (1990). Sons, daughters, and intergenerational social support. *Journal of Marriage and the Family*, 52, 420-430.
- Spitze, G., Logan, J.R., Deane, G., & Zerger, S. (1994). Adult children's divorce and intergenerational relationships. *Journal of Marriage and the Family*, 56, 279-293.
- Spitze, G., Logan, J.R., Joseph, G., & Lee, E. (1994). Middle generation roles and the well-being of men and women. *Journal of Gerontology: Social Sciences*, 49, S107-S116.

- Spitze, G., & Ward, R. (1995). Household labor in intergenerational households. *Journal of Marriage and the Family*, 57, 355-361.
- Starrels, M.E., Ingersoll-Dayton, B. Neal, M.B., & Yamada, H. (1995). Intergenerational solidarity and the workplace: Employees' caregiving for their parents. *Journal of Marriage and the Family*, 57, 751-762.
- Suitor, J.J., Pillemer, K., Keeton, S., & Robison, J. (1995). Aged parents and aging children: Determinants of relationship quality. In R. Blieszner & V.H. Bedford (Eds.), *Handbook of aging and the family*. (pp.223-242). Westport, CT: Greenwood Press.
- Sweet, J.A. & Bumpass, L.L. (1996). *The national survey of families and households - waves 1 and 2: data description and documentation*. Center for demography and ecology, University of Wisconsin-Madison (<http://www.ssc.wisc.edu/nsfh/home.htm>).
- Sweet, J.A., Bumpass, L.L., & Call, V. (1988). *The design and content of the national survey of families and households*." Center for Demography and Ecology, University of Wisconsin-Madison, NSFH Working Paper #1.
- Taylor, R.J., Chatters, L.M., Hardison, C.B., & Riley, A. (2001). Informal social support networks and subjective well-being among African Americans. *Journal of Black Psychology*, 27, 439-463.
- Townsend, A.L., & Franks, M.M. (1995). Binding ties: Closeness and conflict in adult children's caregiving relationships. *Psychology and Aging*, 10, 343-351.
- Troll, L.E. (1989). Myths of midlife intergenerational relationships. In S. Hunter & M. Sundel (Eds.), *Midlife myths: Issues, findings, and practice implications* (pp. 169-201). Thousand Oaks, CA: Sage.

- Troll, L.E., & Fingerman, K.L. (1996). Connections between parents and their adult children. In C. Magai & S.H. McFadden (Eds.), *Handbook of emotion, adult development, and aging* (pp. 185-205). San Diego, CA: Academic Press.
- Uphold, C.R., Lenz, E.R., & Soeken, K.L. (2000). Social support transactions between professional and nonprofessional women and their mothers. *Research in Nursing and Health, 23*, 447-460.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family, 54*, 664-674.
- Valenzuela, A., & Dornbusch, S. (1994). Familism and social capital in the academic achievement of Mexican origin and Anglo adolescents. *Social Science Quarterly, 75*, 713-719.
- van Groenou, M.I.B., & Knipscheer, C.P.M. (1999). Onset of physical impairment of independently living older adults and the support received from sons and daughters in the Netherlands. *International Journal of Aging and Human Development, 48*, 263-278.
- Ward, R., Logan, J., & Spitze, G. (1992). The influence of parent and child needs on coresidence in middle and later life. *Journal of Marriage and the Family, 54*, 209-221.
- Welsh, W.M., & Stewart, A.J. (1995). Relationships between women and their parents: Implications for midlife well-being. *Psychology and Aging, 10*, 181-190.
- Whitbeck, L.B., Hoyt, D. R., & Huck, S. M. (1994). Early family relationships, intergenerational solidarity and support provided to parents by their adult children. *Journals of Gerontology: Social Sciences, 49*, S85-S94.

- White, L.K. & Rogers, S.J. (1997). Strong support but uneasy relationships: Co-residence and adult children's relationships with their parents. *Journal of Marriage and the Family*, 59, 62-76.
- Wilmoth, J.M. (2000). Unbalanced social exchanges and living arrangement transitions among older adults. *Gerontologist*, 40, 64-74.
- Winkeler, M., Filipp, S. & Boll, T. (2000). Positivity in the aged's perceptions of intergenerational relationships. A "stake" or "leniency" effect? *International Journal of Behavioral Development*, 24, 173-182.
- Wright, D.L., & Aquilino, W.S. (1998). Influence of emotional support exchange in marriage on caregiving wives' burden and marital satisfaction. *Family Relations*, 47, 195-204.
- Wright, C.L., & Maxwell, J.W., (1991). Social support during adjustment to later-life divorce: How adult children help parents. *Journal of Divorce and Remarriage*, 15, 21-48.
- Ying, Y., & Zhang, X. (1995). Mental health in rural and urban Chinese families: The role of intergenerational personality discrepancy and family solidarity. *Journal of Comparative Studies*, 26, 233-246.
- Zarit, S.H., & Eggebeen, D.J. (1995). Parent child relationships in adulthood and old age. In M.H. Bornstein (Ed.), *Handbook of parenting: Volume 1, children and parenting* (pp. 119-140). Mahwah, NJ: Lawrence Erlbaum.

APPENDIX A  
STATISTICAL TABLES FOR STUDY ONE

Table 4.1

*Descriptive Statistics for Study 1 (N=3,320)*

Variable	Mean	SD	Range	$\alpha$
<b>Dyadic Characteristics</b>				
Mother-Son Dyad <sup>b</sup>	.413	.620	0-1	
Father-Daughter Dyad <sup>b</sup>	.076	.357	0-1	
Father-Son Dyad <sup>b</sup>	.076	.351	0-1	
<b>Parent Characteristics</b>				
Parent's age 60-69 <sup>c</sup>	.376	.561	0-1	
Parent's age 70-79 <sup>c</sup>	.289	.508	0-1	
Parent's age 80+ <sup>c</sup>	.073	.289	0-1	
Parent's with a spouse <sup>d</sup>	.549	.681	0-1	
Parent's years of education	12.128	4.042	0-18	
Parent's activities of daily living needs	.164	.379		
Parent's self-rated health <sup>e</sup>	3.912	1.198	1-5	
Parent's number of children	4.219	2.784	0-22	
<b>Child Characteristics</b>				
Adult African-American Children <sup>f</sup>	.070	.459	0-1	
Adult Hispanic Children <sup>f</sup>	.040	.462	0-1	
Adult Children age 30-39 <sup>c</sup>	.379	.495	0-1	
Adult Children age 40-49 <sup>c</sup>	.337	.447	0-1	
Adult Children age 50+ <sup>c</sup>	.127	.481	0-1	
Adult children with a spouse <sup>d</sup>	.711	.540	0-1	
Adult Child's years of education	13.894	3.326	0-20	
Adult Child's income (thousands)	29.835	31.487	0-6000	
Distance living from Parent <sup>g</sup>	3.603	2.935	0-9.11	
Adult Child's number of children	2.085	2.348	0-17	
Adult Child's activity of daily living needs	.085	.195		
Adult child's self-rated health <sup>e</sup>	4.117	.777	1-5	
<b>Intergenerational Solidarity</b>				
Parent's rating of Affectual Solidarity <sup>h</sup>	9.207	1.577	1-10	
Adult Child's rating of Affectual Solidarity <sup>h</sup>	7.921	2.352	1-10	
Parent's rating of Normative Solidarity	2.707	.740	1-5	
Adult Child's rating of Normative Solidarity	2.556	.825	1-5	
Parent's face-to-face contact <sup>i</sup>	3.297	1.423	1-5	
Adult Child's face-to-face contact <sup>j</sup>	4.067	1.822	1-6	
Parent's telephone/letter contact <sup>i</sup>	4.026	1.382	1-5	
Adult Child's telephone/letter contact <sup>j</sup>	4.792	1.565	1-6	
<b>Psychological Well-being</b>				
Parent's CES-D	.886	1.230	0-7	.777

Variable	Mean	SD	Range	$\alpha$
Adult Child's CES-D	1.152	1.253	0-7	.926
Parent's Life Satisfaction <sup>k</sup>	8.449	1.884	0-10	
Adult Child's Life Satisfaction <sup>k</sup>	5.333	1.232	1-7	
Parent's Hostility	.491	.986	0-7	.708
Adult Child's Hostility	1.117	1.352	0-7	.846
Parent's Long-term Depression <sup>a</sup>	.159	.310	0-1	
Adult Child's Long-term Depression <sup>a</sup>	.227	.327	0-1	
Adult Child's Well-being	3.677	.480	2-5.38	.444
Adult Child's Self-esteem	1.873	.625	1-5	
Adult Child's Self-efficacy <sup>l</sup>	2.379	.955	1-5	
Adult Child's Mastery	3.690	.710	1-5	.428

<sup>a</sup>0=No, 1=Yes. <sup>b</sup>0= mother-daughter dyad, dyad described. <sup>c</sup>0= other age, 1= age described.

0= separated, divorced, widowed, or not wed, 1=married. <sup>e</sup>1= very poor, 5= excellent.

<sup>f</sup>0= White, 1= ethnicity described. <sup>g</sup>log linear of miles live from parents +1 (range is 0-9,000).

<sup>h</sup>Describing the relationship: 1= really bad, 10= absolutely perfect. <sup>i</sup>1= not at all, 5= once a week. <sup>j</sup>1= not at all, 6= more than once a week. <sup>k</sup>1= very unhappy, 7= very happy. <sup>l</sup>1= strongly disagree, 5= strongly agree.

Table 4.2

*Summary of Simple Regression Analyses for Variables Predicting Parent's, Adult Child's, and the Difference Affectual Solidarity*

Variables	Parent's affect			Child's affect			Difference affect		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>									
(Mother-Daughter)	---	---	---	---	---	---	---	---	---
Mother-Son	-.113*	.076	-.037	.066	.108	.015	.209	.113	-.047
Father-Daughter	-.155***	.080	-.047	-.350**	.115	-.074	.146	.121	.030
Father-Son	-.319***	.090	-.086	-.364**	.130	-.069	.046	.136	.008
<b>Parent Characteristics</b>									
Age									
(50-59)	---	---	---	---	---	---	---	---	---
60-69	.347***	.078	.126	.349**	.111	.090	-.000	.117	.000
70-79	.546***	.102	.178	.389**	.145	.090	.167	.152	.037
80+	.844***	.157	.150	.713***	.224	.089	.166	.235	.020
Has Spouse									
(No)	---	---	---	---	---	---	---	---	---
Yes	.154*	.064	.055	.103	.093	.026	.069	.097	.017
Years of Education	-.035**	.011	-.077	-.021	.016	-.033	-.011	.017	-.017
Activities of Daily Living	-.240*	.121	-.049	-.467**	.173	-.067	.210	.182	.029
Self-Rated Health	-.008	.038	-.005	-.037	.054	-.018	.018	.056	.008
Number of Children	-.007	.013	-.013	.022	.018	.028	-.023	.019	-.027
<b>Child Characteristics</b>									
Race									
(White)	---	---	---	---	---	---	---	---	---
African American	.144	.100	.032	.415**	.142	.066	-.251	.149	-.039
Hispanic	.242	.164	.033	.064	.231	.006	.246	.246	.023
Age									

Variables	Parent's affect			Child's affect			Difference affect		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
(20-29)	---	---	---	---	---	---	---	---	---
30-39	-.101	.092	-.037	-.216	.131	-.056	.143	.138	.036
40-49	-.018	.113	-.006	-.203	.160	-.050	.213	.169	.050
50+	-.175	.156	-.038	-.039	.223	-.006	-.096	.235	-.014
Has Spouse									
(No)	---	---	---	---	---	---	---	---	---
Yes	.333***	.066	.117	.270**	.093	.067	.066	.098	.016
Years of Education	.010	.015	.018	-.042*	.021	-.054	.057**	.022	.070
Income (Logged)	.000	.000	.028	-.000	.000	-.043	.000*	.000	.061
Distance from Parent	.018	.012	.032	-.023	.018	-.029	.044*	.019	.055
Number of Children	-.028**	.020	-.069	-.034	.029	-.029	-.026	.030	-.021
Activities of Daily Living @ T1	.234	.316	.017	-.303	.451	-.015	.505	.473	.025
Activities of Daily Living @ T2	-.155	.158	-.024	-.431*	.223	-.048	.307	.237	.033
Self-Rated Health @ T1	-.022	.044	-.012	.109	.062	.042	-.120	.066	-.044
Self-Rated Health @ T2	.026	.044	.015	.100	.062	.04	-.089	.066	-.035
<i>R</i> <sup>2</sup>			.058***			.045***			.036***
<i>F</i>			5.238***			3.966***			3.147***
<i>df</i>			(25, 2153)			(25, 2143)			(25, 2121)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$



Variables	Parent's face to face contact			Child's face to face contact			Difference face to face contact		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
(20-29)	---	---	---	---	---	---	---	---	---
30-39	-.217***	.051	-.085	-.115	.082	-.040	-.115	.080	-.062
40-49	-.337***	.062	-.123	-.207*	.098	-.068	-.178	.097	-.092
50+	-.301***	.086	-.069	-.188	.130	-.041	-.163	.129	-.055
Has Spouse									
(No)	---	---	---	---	---	---	---	---	---
Yes	.081*	.036	.030	.009	.054	.003	.089	.053	.045
Years of Education	.005	.008	.009	-.008	.012	-.014	.010	.012	.026
Income (Logged)	-.000	.000	-.010	.000	.000	.006	-.000	.000	-.017
Distance from Parent	-.422***	.007	-.810	-.446***	.011	-.742	.035***	.010	.090
Number of Children	-.024*	.011	-.030	-.034*	.017	-.039	.012	.017	.020
Activities of Daily Living @ T1	.216	.174	.016	.068	.257	.005	.151	.254	.016
Activities of Daily Living @ T2	.099	.087	.017	-.169	.131	-.025	.283*	.130	.066
Self-Rated Health @ T1	.027	.024	.016	.101	.036	.053	-.058	.035	-.048
Self-Rated Health @ T2	-.000	.024	.000	-.067**	.036	-.036	.047	.036	.040
R <sup>2</sup>			.678***			.595***			.042***
<i>F</i>			180.696***			87.168***			2.587***
<i>df</i>			(25, 2171)			(25, 1508)			(25, 1504)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$



Variables	Parent's letter-phone contact			Child's letter-phone contact			Difference letter-phone contact		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
(20-29)	---	---	---	---	---	---	---	---	---
30-39	-.165**	.066	.066	.032	.098	.098	-.212*	.100	-.092
40-49	-.293***	.081	.081	-.107	.118	.118	-.229	.121	-.095
50+	-.265*	.112	.112	.034	.157	.157	-.343*	.160	-.093
Has Spouse									
(No)	---	---	---	---	---	---	---	---	---
Yes	.099*	.047	.047	.129*	.065	.065	.019	.066	.008
Years of Education	.019	.010	.010	.030*	.015	.015	-.014	.015	-.030
Income (Logged)	-.000	.000	.000	.000	.000	.000	.000	.000	.021
Distance from Parent	-.175***	.009	.009	-.154***	.013	.013	-.013	.013	-.027
Number of Children	-.042**	.015	.015	-.024	.020	.020	.000	.021	.001
Activities of Daily Living @ T1	.143	.228	.228	.445	.309	.309	-.303	.316	-.026
Activities of Daily Living @ T2	-.010	.113	.113	-.267	.157	.157	.261	.161	.049
Self-Rated Health @ T1	.063*	.032	.032	.056	.043	.043	.010	.044	.006
Self-Rated Health @ T2	-.058	.032	-.043	-.097*	.044	-.061	.030	.045	.020
<i>R</i> <sup>2</sup>			.207***			.227***			.041***
<i>F</i>			22.360***			17.388***			2.495***
<i>df</i>			(25, 2167)			(25, 1506)			(25, 1498)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$



Variables	Instrumental down			Instrumental up			Instrumental difference		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
(20-29)	---	---	---	---	---	---	---	---	---
30-39	-.022*	.018	-.069	-.021	.014	-.049	-.001	.015	.015
40-49	-.044***	.010	-.131	-.039*	.017	-.085	-.005	.018	.018
50+	-.010***	.013	-.130	-.037	.023	-.050	-.034	.025	.025
Has Spouse									
(No)	---	---	---	----	---	---	---	---	---
Yes	-.013	.017	-.039	-.006	.010	-.014	-.007	.011	.011
Years of Education	.005**	.007	.077	.003	.002	.031	.002	.002	.002
Income (Logged)	-.000	.002	-.020	-.000	.000	-.027	.000	.000	.000
Distance from Parent	-.018***	.000	-.278	-.034***	.002	-.384	.016***	.002	.002
Number of Children	-.001	.001	-.009	-.009**	.003	-.068	.008**	.003	.003
Activities of Daily Living @ T1	.018	.002	.011	-.026	.047	-.012	.044	.051	.051
Activities of Daily Living @ T2	.046**	.035	.064	-.033	.023	-.033	.080**	.026	.026
Self-Rated Health @ T1	.005	.018	.025	.011	.006	.039	-.006	.007	.007
Self-Rated Health @ T2	-.004	.005	-.022	-.010	.006	-.037	.006	.007	.020
R <sup>2</sup>			.124***			.182***			.094***
<i>F</i>			12.179***			19.182***			8.879***
<i>df</i>			(25, 2175)			(25, 2175)			(25, 2175)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$



Variables	Emotional down			Emotional up			Emotional difference		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
(20-29)	---	---	---	---	---	---	---	---	---
30-39	-.005	.020	.020	-.003	.019	.019	-.002	.020	.020
40-49	-.050*	.024	.024	-.035	.023	.023	-.015	.025	.025
50+	-.074*	.034	.034	-.015	.032	.032	-.060	.034	.034
Has Spouse									
(No)	---	---	---	---	---	---	---	---	---
Yes	-.034**	.014	.014	.023	.013	.013	-.057***	.014	.014
Years of Education	.008**	.003	.003	.011***	.003	.003	-.003	.003	.003
Income (Logged)	-.000	.000	.000	-.000	.000	.000	-.000	.000	.000
Distance from Parent	-.007**	.003	.003	-.008***	.003	.003	.002	.003	.003
Number of Children	.004	.004	.004	-.007	.004	.004	.011**	.004	.004
Activities of Daily Living @ T1	-.057	.069	.069	-.099	.065	.065	.041	.070	.014
Activities of Daily Living @ T2	.053	.034	.034	.044	.032	.032	.008	.035	.006
Self-Rated Health @ T1	.008	.010	.010	.010	.009	.009	-.001	.010	-.003
Self-Rated Health @ T2	-.008	.010	-.022	-.009	.009	-.026	.001	.010	.002
<i>R</i> <sup>2</sup>			.076***			.052***			.031***
<i>F</i>			7.085***			4.696***			2.730***
<i>df</i>			(25, 2175)			(25, 2175)			(25, 2175)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$



Variables	Parent's norms			Child's norms			Difference norms		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	-.017	.043	.043	.114**	.038	.038	-.125*	.054	.054
40-49	.033	.052	.052	.157***	.046	.046	-.118	.065	.065
50+	.046	.072	.072	.173**	.063	.063	-.125	.090	.090
Has Spouse									
(No)	---	---	---	----	---	---	---	---	---
Yes	.027	.030	.030	.068**	.027	.027	-.047	.038	.038
Years of Education	.002	.007	.007	-.010	.006	.006	.012	.008	.008
Income (Logged)	-.000	.000	.000	.000	.000	.000	-.000	.000	.000
Distance from Parent	.015**	.006	.006	.006	.005	.005	.009	.007	.007
Number of Children	.006	.009	.009	.002	.008	.008	.004	.012	.012
Activities of Daily Living @ T1	-.082	.146	.146	-.010	.129	.129	-.074	.183	.183
Activities of Daily Living @ T2	-.051	.073	.073	-.012	.064	.064	-.038	.091	.091
Self-Rated Health @ T1	-.031	.020	.020	-.011	.018	.018	-.022	.025	.025
Self-Rated Health @ T2	.009	.020	.011	-.011	.018	-.016	.022	.025	.022
$R^2$			.048***			.029***			.036***
<i>F</i>			4.299***			2.550***			3.163***
<i>df</i>			(25, 2166)			(25, 2165)			(25, 2157)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$

Table 4.8

*Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Depressive Symptoms*

Variables	Parents' depressive symptoms			Children's depressive symptoms		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	-.169*	.075	-.065	-.130	.068	-.051
Father-Daughter	.015	.127	.003	.084	.115	.115
Father-Son	-.061	.158	-.010	-.106	.143	.143
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-.073	.086	-.028	-.029	.078	.078
70-79	-.173	.112	-.061	-.098	.101	.101
80+	-.128	.169	-.025	-.312*	.152	.152
Has Spouse						
(No)	---	---	---	---	---	---
Yes	-.218***	.066	-.086	-.175**	.060	.060
Years of Education	-.026*	.013	-.059	-.021*	.012	.012
Activities of Daily Living	.887***	.129	.197	.129	.117	.117
Self-Rated Health	-.323***	.041	-.229	-.021	.037	.037
Number of Children	.031*	.014	.061	.010	.012	.012
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	-.194	.108	-.047	.114	.098	.098
Hispanic	.185	.185	.026	.102	.167	.167
Age						
(20-29)	---	---	---	---	---	---

Variables	Parents' depressive symptoms			Children's depressive symptoms		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	-.047	.107	-.018	.069	.098	.098
40-49	-.053	.129	-.020	-.085	.118	.118
50+	-.180	.171	-.044	-.247	.155	.155
Has Spouse (No)	---	---	---	----	---	---
Yes	-.015	.071	-.005	-.251***	.065	.065
Years of Education	-.022	.016	-.043	.004	.014	.014
Income (Logged)	.000	.000	.017	-.000	.000	.000
Distance from Parent	.008	.025	.016	.054***	.023	.023
Number of Children	.012	.022	.016	.032	.020	.020
Activities of Daily Living @ T1	-.450	.336	-.035	.849**	.303	.303
Activities of Daily Living @ T2	-.102	.172	-.017	1.256***	.157	.157
Self-Rated Health @ T1	.015	.047	.009	-.012	.043	.043
Self-Rated Health @ T2	-.062	.048	-.038	-.178***	.043	.043
Depressive Symptoms @ T1	---			.276***	.023	.023
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	-.094***	.026	-.103	.013	.027	.027
Child's Affect @ T1	-.049	.029	-.053	.035	.020	.020
Child's Affect @ T2	-.014	.021	-.022	-.048**	.046	.046
Normative Solidarity						
Parent's Norms @ T2	.039	.051	.019	.017	.038	.038
Child's Norms @ T1	-.069	.042	-.043	-.047	.055	.055
Child's Norms @ T2	-.033	.060	-.014	-.042	.045	.045
Associational Solidarity						
Parent's Face-to-Face @ T2	-.065	.050	-.065	.047	.035	.035
Parent's Phone/Letters @ T2	-.051	.039	-.043	-.012	.030	.030
Child's Face-to-Face @ T1	.020	.033	.025	.068*	.039	.039
Child's Face-to-Face @ T2	.005	.043	.036	.005	.030	.030

Variables	Parents' depressive symptoms			Children's depressive symptoms		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T1	.051	.033	.006	-.043	.032	.032
Child's Phone/Letters @ T2	.054	.036	.052	.051	.156	.156
Functional Solidarity						
Instrumental Support to Parents @ T2	.272	.172	.046	.104	.118	.118
Emotional Support to Parents @ T2	.266*	.130	.060	-.200	.219	.219
Instrumental Support to Children @ T2	.158	.242	.018	-.009	.108	.108
Emotional Support to Children @ T2	-.061	.119	-.015	.204	.025	.275
<i>R</i> <sup>2</sup>				.220		.316***
<i>F</i>				9.175***		14.631***
<i>df</i>				(41, 1372)		(42, 1370)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$

Table 4.9

*Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Life Satisfaction*

Variables	Parents' life satisfaction			Children's life satisfaction		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	.126	.114	.033	-.023	.087	-.009
Father-Daughter	.192	.191	.027	.115	.145	.145
Father-Son	.165	.239	.019	.144	.187	.187
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	.031	.130	.008	.124	.097	.097
70-79	.136	.169	.032	.001	.127	.127
80+	.441	.255	.058	.019	.188	.188
Has Spouse						
(No)	---	---	---	---	---	---
Yes	.666	.100	.178	-.022	.077	.077
Years of Education	-.018	.019	-.027	.001	.015	.015
Activities of Daily Living	-.279	.196	-.042	-.056	.147	.147
Self-Rated Health	.443***	.062	.211	.011	.048	.048
Number of Children	.008	.021	.011	.006	.016	.016
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	.182	.163	.030	-.187	.127	.127
Hispanic	-.154	.279	-.014	-.245	.218	.218
Age						
(20-29)	---	---	---	---	---	---

Variables	Parents' life satisfaction			Children's life satisfaction		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	-.059	.162	-.016	.184	.121	.121
40-49	-.059	.195	.034	.118	.146	.146
50+	.043	.258	.007	.184	.194	.194
Has Spouse						
(No)	---	---	---	---	---	---
Yes	-.059	.107	-.015	.286***	.082	.082
Years of Education	-.001	.024	-.001	.000	.018	.018
Income (Logged)	-.000	.000	-.019	-.047	.000	.000
Distance from Parent	.013	.038	.016	-.047	.029	.029
Number of Children	.044	.033	.038	-.032	.025	.025
Activities of Daily Living @ T1	.603	.504	.032	.123	.386	.386
Activities of Daily Living @ T2	-.256	.261	-.029	-.393*	.195	.195
Self-Rated Health @ T1	.151*	.070	.060	.072	.053	.053
Self-Rated Health @ T2	-.091	.072	-.038	.272***	.055	.055
Life Satisfaction @ T1	---	---	---	---	.029	.029
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	.329***	.039	.242	-.008	.035	-.006
Child's Affect @ T1	.056	.045	.040	-.006	.025	.144
Child's Affect @ T2	-.014	.033	-.014	.091***	.058	.033
Normative Solidarity						
Parent's Norms @ T2	-.003	.077	-.001	.065	.047	.005
Child's Norms @ T1	.169**	.063	.072	.007	.068	-.012
Child's Norms @ T2	-.094	.091	-.028	-.027	.057	-.081
Associational Solidarity						
Parent's Face-to-Face @ T2	.035	.075	.024	-.079	.046	.044
Parent's Phone/Letters @ T2	.116*	.059	.066	.052	.038	-.084
Child's Face-to-Face @ T1	.147**	.050	.127	-.064	.049	-.001
Child's Face-to-Face @ T2	-.093	.065	-.071	-.001	.038	.028

Variables	Parents' life satisfaction			Children's life satisfaction		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T1	-.007	.051	-.006	.022	.040	.001
Child's Phone/Letters @ T2	-.025	.054	-.016	.001	.196	-.012
Functional Solidarity						
Instrumental Support to Parents @ T2	-.021	.261	-.002	.068	.147	.087
Emotional Support to Parents @ T2	-.599**	.197	-.090	.375**	.270	.027
Instrumental Support to Children @ T2	.024	.365	.002	.226	.136	-.112
Emotional Support to Children @ T2	.351*	.180	.058	-.439***	.031	.124
$R^2$			.194***			.154***
$F$			7.798***			4.552***
$df$			(41, 1366)			(42, 1090)

\* $p \leq .05$     \*\* $p \leq .01$     \*\*\* $p \leq .001$

Table 4.10

*Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Hostility*

Variables	Parents' Hostility			Children's hostility		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	-.140*	.064	-.068	.110	.080	.042
Father-Daughter	.015	.107	.107	.162	.135	.135
Father-Son	-.088	.134	.134	.022	.169	.169
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-.241***	.073	.073	-.015	.092	.092
70-79	-.276**	.095	.095	-.133	.119	.119
80+	-.436**	.143	.143	-.161	.179	.179
Has Spouse						
(No)	---	---	---	---	---	---
Yes	.122	.056	.056	-.175**	.071	.071
Years of Education	-.008	.011	.011	-.021	.014	.014
Activities of Daily Living	.153	.110	.110	.260	.138	.138
Self-Rated Health	-.142***	.035	.035	.044	.044	.044
Number of Children	.008	.012	.012	-.008	.015	.015
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	.005	.091	.091	.258*	.115	.115
Hispanic	.069	.156	.156	.127	.197	.197
Age						
(20-29)	---	---	---	---	---	---

Variables	Parents' Hostility			Children's hostility		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	.032	.091	.091	-.026	.114	.114
40-49	-.025	.109	.109	-.186	.138	.138
50+	-.046	.145	.145	-.448**	.182	.182
Has Spouse						
(No)	---	---	---	----	---	---
Yes	-.170**	.060	.060	-.183*	.076	.076
Years of Education	-.007	.013	.013	.002	.017	.017
Income (Logged)	.000	.000	.000	-.000	.000	.000
Distance from Parent	.011	.021	.021	.049	.027	.027
Number of Children	.007	.018	.018	.039	.023	.023
Activities of Daily Living @ T1	-.154	.284	.284	.895**	.355	.355
Activities of Daily Living @ T2	-.169	.146	.146	.765***	.183	.183
Self-Rated Health @ T1	.006	.039	.039	-.062	.050	.050
Self-Rated Health @ T2	-.044	.040	.040	-.134**	.051	.051
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	-.084***	.022	.022	-.028***	.027	.027
Child's Affect @ T1	-.062**	.025	.025	.022	.032	.032
Child's Affect @ T2	.016	.018	.018	-.077	.023	.023
Normative Solidarity						
Parent's Norms @ T2	.022	.043	.043	.072	.054	.054
Child's Norms @ T1	-.077*	.035	.035	-.027	.044	.044
Child's Norms @ T2	.005	.051	.051	.043	.065	.065
Associational Solidarity						
Parent's Face-to-Face @ T2	-.014	.042	.042	.056	.053	.053
Parent's Phone/Letters @ T2	.008	.033	.033	.002	.042	.042
Child's Face-to-Face @ T1	.013	.028	.028	.061	.035	.035
Child's Face-to-Face @ T2	-.001	.036	.036	-.000	.045	.045
Child's Phone/Letters @ T1	.016	.028	.028	-.036	.036	.036

Variables	Parents' Hostility			Children's hostility		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T2	-.013	.030	.030	.021	.038	.038
Functional Solidarity						
Instrumental Support to Parents @ T2	.002	.146	.146	-.021	.184	.184
Emotional Support to Parents @ T2	.150	.110	.110	-.181	.139	.139
Instrumental Support to Children @ T2	-.120	.205	.205	.343	.258	.258
Emotional Support to Children @ T2	-.028	.101	-.009	.418***	.127	.102
<i>R</i> <sup>2</sup>			.099***			.126***
<i>F</i>			3.564***			4.670***
<i>df</i>			(41, 1370)			(41, 1371)

\* $p \leq .05$ \*\* $p \leq .01$ \*\*\* $p \leq .001$

Table 4.11

*Summary of Simple Regression Analyses for Variables Predicting Parent's and Adult Child's Long-term Depression*

Variables	Parents' long-term depression			Children's long-term depression		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	.003	.019	.005	-.025	.020	-.037
Father-Daughter	.007	.032	.032	.047	.033	.033
Father-Son	-.013	.040	.040	-.034	.041	.041
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-.040	.022	.022	-.010	.022	.022
70-79	-.070**	.028	.028	.001	.029	.029
80+	-.169***	.042	.042	-.052	.044	.044
Has Spouse						
(No)	---	---	---	---	---	---
Yes	-.041**	.017	.017	-.046**	.017	.017
Years of Education	-.001	.003	.003	-.004	.003	.003
Activities of Daily Living	.126***	.033	.033	.008	.034	.034
Self-Rated Health	-.063***	.010	.010	.003	.011	.011
Number of Children	.002	.003	.003	.000	.004	.004
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	.020	.027	.027	.005	.028	.028
Hispanic	.122**	.047	.047	.070	.048	.048
Age						
(20-29)	---	---	---	---	---	---

Variables	Parents' long-term depression			Children's long-term depression		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	.021	.027	.027	.004	.028	.028
40-49	.017	.033	.033	-.003	.034	.034
50+	.068	.043	.043	-.023	.045	.045
Has Spouse (No)	---	---	---	----	---	---
Yes	-.008	.018	.018	-.107***	.018	.018
Years of Education	.003	.004	.004	-.007	.004	.004
Income (Logged)	-.000	.000	.000	-.000	.000	.000
Distance from Parent	.000	.006	.006	.006	.007	.007
Number of Children	.004	.005	.005	.008	.006	.006
Activities of Daily Living @ T1	.031	.084	.084	.120	.087	.087
Activities of Daily Living @ T2	.065	.043	.043	.269***	.045	.045
Self-Rated Health @ T1	.012	.012	.012	-.025*	.012	.012
Self-Rated Health @ T2	.001	.012	.012	-.044***	.012	.012
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	-.018**	.006	.006	.009	.007	.007
Child's Affect @ T1	.003	.007	.007	-.006	.008	.008
Child's Affect @ T2	-.004	.005	.005	-.015**	.006	.006
Normative Solidarity						
Parent's Norms @ T2	-.019	.013	.013	-.007	.013	.013
Child's Norms @ T1	.006	.011	.011	-.024	.011	.011
Child's Norms @ T2	.002	.015	.015	-.015*	.016	.016
Associational Solidarity						
Parent's Face-to-Face @ T2	-.000	.013	.013	.023	.013	.013
Parent's Phone/Letters @ T2	.004	.010	.010	-.007	.010	.010
Child's Face-to-Face @ T1	.000	.008	.008	.004	.009	.009
Child's Face-to-Face @ T2	-.002	.011	.011	-.003	.011	.011
Child's Phone/Letters @ T1	-.008	.008	.008	.002	.009	.009

Variables	Parents' long-term depression			Children's long-term depression		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T2	.006	.009	.009	.002	.009	.009
Functional Solidarity						
Instrumental Support to Parents @ T2	.086*	.043	.043	-.039	.045	.045
Emotional Support to Parents @ T2	.023	.033	.033	-.015	.034	.034
Instrumental Support to Children @ T2	.078	.061	.061	.027	.063	.063
Emotional Support to Children @ T2	.003	.030	.004	.055	.031	.053
<i>R</i> <sup>2</sup>			.135***			.178***
<i>F</i>			7.017***			5.067***
<i>df</i>			(41, 1371)			(41, 1373)

\**p* ≤ .05      \*\**p* ≤ .01      \*\*\**p* ≤ .001

Table 4.12

*Summary of Simple Regression Analyses for Variables Predicting Adult Child's Self-efficacy and Self-esteem*

Variables	Self-efficacy			Self-esteem		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	.051	.056	.026	-.021	.037	.006
Father-Daughter	.018	.094	.094	.044	.062	.020
Father-Son	.145	.118	.118	.004	.078	.012
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-.113	.064	.064	.072	.042	.061
70-79	-.110	.083	.083	.112*	.055	.099
80+	-.138	.125	.125	.038	.083	.021
Has Spouse						
(No)	---	---	---	---	---	---
Yes	-.002	.049	.049	.005	.033	.006
Years of Education	.000	.010	.010	-.009	.006	-.030
Activities of Daily Living	.012	.096	.096	.008	.064	.013
Self-Rated Health	-.022	.031	.031	.014	.020	.031
Number of Children	.002	.010	.010	.002	.007	-.007
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	-.120	.081	.081	-.120**	.053	-.038
Hispanic	-.191	.142	.142	-.272**	.091	-.071
Age						
(20-29)	---	---	---	---	---	---

Variables	Self-efficacy			Self-esteem		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	.014	.080	.080	-.015	.053	.007
40-49	.088	.096	.096	-.005	.064	.016
50+	.039	.127	.127	-.026	.084	-.012
Has Spouse						
(No)	---	---	---	----	---	---
Yes	-.228***	.053	.053	-.039	.035	-.040
Years of Education	-.024*	.012	.012	-.023***	.008	-.131
Income (Logged)	-.000**	.000	.000	-.000*	.000	-.072
Distance from Parent	.027	.019	.019	.023*	.012	.067
Number of Children	.013	.016	.016	.000	.011	.008
Activities of Daily Living @ T1	-.280	.254	.254	-.005	.164	.007
Activities of Daily Living @ T2	.140	.130	.130	.467	.085	.175
Self-Rated Health @ T1	-.087**	.035	.035	.008	.023	-.026
Self-Rated Health @ T2	-.109**	.036	.036	-.141***	.023	-.204
T1	.306***	.019	.019	.342***		
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	.020	.022	.022	.008	.013	.019
Child's Affect @ T1	-.002	.016	.016	-.008	.014	-.040
Child's Affect @ T2	-.058***	.038	.038	-.036***	.011	-.115
Normative Solidarity						
Parent's Norms @ T2	-.045	.041	.041	.012	.025	.003
Child's Norms @ T1	-.090*	.047	.047	-.085***	.021	-.030
Child's Norms @ T2	.101*	.037	.037	.075**	.030	.071
Associational Solidarity						
Parent's Face-to-Face @ T2	.007	.029	.029	.027	.024	.057
Parent's Phone/Letters @ T2	.004	.025	.025	.010	.019	.017
Child's Face-to-Face @ T1	.019	.032	.032	.010	.016	.031
Child's Face-to-Face @ T2	.045	.025	.025	.016	.021	.041

Variables	Self-efficacy			Self-esteem		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T1	-.013	.027	.027	-.008	.016	-.037
Child's Phone/Letters @ T2	.016	.129	.129	.016	.018	.037
Functional Solidarity						
Instrumental Support to Parents @ T2	-.091	.097	.097	-.144	.085	-.050
Emotional Support to Parents @ T2	-.100	.181	.181	-.057	.064	-.044
Instrumental Support to Children @ T2	-.231	.089	.089	.105	.119	.036
Emotional Support to Children @ T2	.196*	.025	.316	.164**	.059	.092
<i>R</i> <sup>2</sup>			.224***			.307***
<i>F</i>			9.026***			13.953***
<i>df</i>			(42, 1354)			(42, 1363)

\* $p \leq .05$     \*\* $p \leq .01$     \*\*\* $p \leq .001$

Table 4.13

*Summary of Simple Regression Analyses for Variables Predicting Adult Child's Mastery and Ryff's Scale*

Variables	Mastery			Ryff's scale		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	-.026	.044	-.017	.079**	.031	.081
Father-Daughter	-.027	.073	.073	-.025	.052	.052
Father-Son	-.067	.092	.092	.047	.065	.065
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-.049	.050	.050	-.040	.035	.035
70-79	.006	.065	.065	-.038	.046	.046
80+	-.025	.097	.097	-.037	.069	.069
Has Spouse						
(No)	---	---	---	---	---	---
Yes	.065	.038	.038	.020	.027	.027
Years of Education	.018**	.007	.007	.008	.005	.005
Activities of Daily Living	-.056	.075	.075	.053	.053	.053
Self-Rated Health	-.008	.024	.024	-.010	.017	.017
Number of Children	.005	.008	.008	.000	.006	.006
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	.065	.063	.063	.105*	.044	.044
Hispanic	.157	.107	.107	.105	.076	.076
Age						
(20-29)	---	---	---	---	---	---

Variables	Mastery			Ryff's scale		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
30-39	-.040	.062	.062	.039	.044	.044
40-49	-.135	.075	.075	.016	.053	.053
50+	-.040	.099	.099	.083	.070	.070
Has Spouse						
(No)	---	---	---	---	---	---
Yes	.090*	.041	.041	.052	.029	.029
Years of Education	.022**	.009	.009	-.008	.006	.006
Income (Logged)	.000	.000	.000	.000	.000	.000
Distance from Parent	-.021	.015	.015	-.025*	.010	.010
Number of Children	-.007	.013	.013	-.004	.009	.009
Activities of Daily Living @ T1	-.410*	.193	.193	.027	.137	.137
Activities of Daily Living @ T2	-.437***	.100	.100	-.013	.071	.071
Self-Rated Health @ T1	.058*	.027	.027	.025	.019	.019
Self-Rated Health @ T2	.169***	.028	.028	.083***	.020	.020
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	-.002	.015	.015	-.002	.011	.011
Child's Affect @ T1	.040*	.017	.017	.002	.012	.012
Child's Affect @ T2	-.005	.012	.012	.013	.009	.009
Normative Solidarity						
Parent's Norms @ T2	.063*	.029	.029	.023	.021	.021
Child's Norms @ T1	.029	.024	.024	.019	.017	.017
Child's Norms @ T2	-.104**	.035	.035	-.060*	.025	.025
Associational Solidarity						
Parent's Face-to-Face @ T2	-.047	.029	.029	-.021	.020	.020
Parent's Phone/Letters @ T2	-.009	.023	.023	-.017	.016	.016
Child's Face-to-Face @ T1	-.025	.019	.019	.004	.014	.014
Child's Face-to-Face @ T2	-.007	.025	.025	-.012	.018	.018
Child's Phone/Letters @ T1	.017	.019	.019	-.007	.014	.014

Variables	Mastery			Ryff's scale		
	<i>B</i>	<i>SEB</i>	$\beta$	<i>B</i>	<i>SEB</i>	$\beta$
Child's Phone/Letters @ T2	.002	.021	.021	-.004	.015	.015
Functional Solidarity						
Instrumental Support to Parents @ T2	.028	.100	.100	.016	.071	.071
Emotional Support to Parents @ T2	.029	.076	.076	.119*	.054	.054
Instrumental Support to Children @ T2	.118	.140	.140	-.053	.099	.099
Emotional Support to Children @ T2	-.177**	.069	-.076	-.129**	.049	-.084
R <sup>2</sup>			.193***			.076***
<i>F</i>			7.752***			2.643***
<i>df</i>			(41, 1370)			(41, 1367)

\* $p \leq .05$     \*\* $p \leq .01$     \*\*\* $p \leq .001$

APPENDIX B  
STATISTICAL TABLES FOR STUDY TWO

Table 5.1

*Descriptive Statistics for Study 2 (N=3,320)*

Variable	Mean	SD	Range	$\infty$
<b>Transportation, Shopping and Errands Exchange</b>				
Parent gives to Adult Child <sup>a</sup>	.066	.318	0-1	
Parent receives from Adult Child <sup>a</sup>	.108	.381	0-1	
Adult child gives to Parent <sup>a</sup>	.165	.358	0-1	
Adult child receives from Parent <sup>a</sup>	.081	.390	0-1	
<b>Housework, Yardwork, Car Repairs, and Work Around the House Exchange</b>				
Parent give to Adult Child <sup>a</sup>	.028	.192	0-1	
Parent receive from Adult Child <sup>a</sup>	.073	.301	0-1	
Adult child gives to Parent <sup>a</sup>	.154	.410	0-1	
Adult child receives from Parent <sup>a</sup>	.036	.232	0-1	
<b>Advice, Encouragement, Moral or Emotional Support Exchange</b>				
Parent give to Adult Child <sup>a</sup>	.132	.374	0-1	
Parent receives from Adult Child <sup>a</sup>	.080	.319	0-1	
Adult child gives to Parent <sup>a</sup>	.359	.610	0-1	
Adult child receives from Parent <sup>a</sup>	.317	.552	0-1	
<b>Child Care While at Work Exchange</b>				
Parent gives to Adult Child <sup>a</sup>	.054	.223	0-1	
Adult child receives Help from Parent <sup>a</sup>	.050	.232	0-1	
<b>Child Care Exchange</b>				
Parent gives to Adult Child <sup>a</sup>	.082	.294	0-1	
Adult child receives from Parent <sup>a</sup>	.088	.327	0-1	
<b>Dyadic Characteristics</b>				
Mother-Son Dyad <sup>b</sup>	.413	.620	0-1	
Father-Daughter Dyad <sup>b</sup>	.076	.357	0-1	
Father-Son Dyad <sup>b</sup>	.076	.351	0-1	
<b>Parent Characteristics</b>				
Parent's age 60-69 <sup>c</sup>	.376	.561	0-1	
Parent's age 70-79 <sup>c</sup>	.289	.508	0-1	
Parent's age 80+ <sup>c</sup>	.073	.289	0-1	
Parent's with a spouse <sup>d</sup>	.549	.681	0-1	
Parent's years of education	12.128	4.042	0-18	
Parent's activities of daily living needs	.164	.379		
Parent's self-rated health <sup>e</sup>	3.912	1.198	0-5	
Parent's number of children	4.219	2.784	0-22	
<b>Child Characteristics</b>				
Adult African-American Children <sup>f</sup>	.070	.459	0-1	
Adult Hispanic Children <sup>f</sup>	.040	.462	0-1	

Variable	Mean	SD	Range	∞
Adult Children age 30-39 <sup>c</sup>	.379	.495	0-1	
Adult Children age 40-49 <sup>c</sup>	.337	.447	0-1	
Adult Children age 50+ <sup>c</sup>	.127	.481	0-1	
Adult children with a spouse <sup>d</sup>	.711	.540	0-1	
Adult Child's years of education	13.894	3.326	0-20	
Adult Child's income (thousands)	29.835	31.487	0-6000	
Distance living from Parent <sup>g</sup>	3.603	2.935	0-9.11	
Adult Child's number of children	2.085	2.348	0-17	
Adult Child's activity of daily living needs	.085	.195		
Adult child's self-rated health <sup>e</sup>	4.117	.777	0-5	
<b>Intergenerational Solidarity</b>				
Parent's rating of Affectual Solidarity <sup>h</sup>	9.207	1.577	1-10	
Adult Child's rating of Affectual Solidarity <sup>h</sup>	7.921	2.352	1-10	
Parent's rating of Normative Solidarity	2.707	.740	1-5	
Adult Child's rating of Normative Solidarity	2.556	.825	1-5	
Parent's face-to-face contact <sup>i</sup>	3.297	1.423	1-5	
Adult Child's face-to-face contact <sup>k</sup>	4.067	1.822	1-6	
Parent's telephone/letter contact <sup>i</sup>	4.026	1.382	1-5	
Adult Child's telephone/letter contact <sup>k</sup>	4.792	1.565	1-6	

Note. <sup>a</sup>0=No, 1=Yes. <sup>b</sup>0= mother-daughter dyad, dyad described. <sup>c</sup>0= other age, 1= age described. 0= separated, divorced, widowed, or not wed, 1=married. <sup>e</sup>0=White, 1= ethnicity described. <sup>f</sup>0=White, 1= ethnicity described. <sup>g</sup>log linear of miles live from parents +1 (range is 0-9,000). <sup>h</sup>Describing the relationship: 1= really bad, 10= absolutely perfect. <sup>i</sup>1= not at all, 5= once a week. <sup>j</sup>1= not at all, 6= more than once a week. <sup>k</sup>1= very unhappy, 7= very happy. <sup>l</sup>1= strongly disagree, 5= strongly agree.

Table 5.2

*Summary of Logistic Regression Analysis for Variables Predicting Exchange of Transportation, Shopping, Errands Support for Adult Children and Parents*

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$
<b>Dyadic Characteristics</b>												
(Mother-Daughter)	---	---	---	---	---	---	---	---	---	---	---	---
Mother-Son	-0.104	0.203	.902	-0.387	0.324	.679	-0.021	0.321	.979	-0.269	0.227	.764
Father-Daughter	-0.417	0.457	.659	-0.305	0.469	.7369	-0.949	-0.949	.387	-0.052	0.522	.949
Father-Son	-1.328**	0.453	.265	-1.952**	0.718	.142	-0.125	-0.125	.883	0.099	0.666	1.104
<b>Parent Characteristics</b>												
Age												
(50-59)	---	---	---	---	---	---	---	---	---	---	---	---
60-69	0.258	0.343	1.295	0.065	0.237	1.067	-0.752	-0.752	.471	-0.303	0.309	.739
70-79	0.723*	0.344	2.061	-0.670	0.369	.512	-1.150*	-1.150	.317	0.058	0.349	1.060
80+	0.742	0.530	2.100	-0.523	0.844	.592	-1.694	-1.694	.184	0.069	0.528	1.071
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	-0.275	0.204	.760	0.138	0.233	1.148	0.629*	0.629	1.875	0.020	0.256	1.020
Years of Education	-0.037	0.051	.963	0.083*	0.040	1.086	-0.018	-0.018	.982	-0.028	0.056	.972
Activities of Daily Living	0.119	0.364	1.126	-0.004	0.480	.996	-0.512	-0.512	.599	0.558	0.422	1.748
Self-Rated Health	-0.111	0.125	.895	0.341	0.175	1.407	0.235	0.235	1.265	0.000	0.128	1.000
Number of Children	0.013	0.037	1.013	-0.038	0.060	.962	-0.002	-0.002	.998	-0.045	0.036	.956
<b>Child Characteristics</b>												
Race												
(White)	---	---	---	---	---	---	---	---	---	---	---	---
African American	0.144	0.232	1.155	0.125	0.372	1.134	-1.175*	-1.175	.309	0.010	0.425	1.010
Hispanic	0.293	0.549	1.340	0.312	0.684	1.366	-0.983	-0.983	.374	-0.585	0.529	.557

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
Age												
(20-29)	---	---	---	---	---	---	---	---	---	---	---	---
30-39	-0.014	0.342	.986	0.163	0.340	1.177	0.538	0.538	1.713	-0.043	0.378	.958
40-49	-0.697	0.370	.498	-0.563	0.368	.569	0.692	0.692	1.998	0.191	0.427	1.210
50+	-1.084	0.661	.338	-1.518	1.077	.219	0.585	0.585	1.795	0.016	0.624	1.016
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	0.271	0.225	1.312	-0.211	0.252	.809	-0.428	-0.428	.652	-0.276	0.261	.759
Years of Education	0.151	0.040	1.162	0.136**	0.049	1.146	0.063	0.063	1.065	-0.083	0.047	.920
Income (Logged)	0.000	0.000	1.000	0.000	0.000	1.000	0.000*	0.000	1.000	0.000	0.000	1.000
Distance from Parent (Logged)	-0.106	0.073	.900	-0.178**	0.069	.837	-0.155	-0.155	.856	-0.146*	0.069	.864
Number of Children	-0.003	0.051	.997	0.143	0.076	1.153	-0.122	-0.122	.885	-0.069	0.076	.934
Activities of Daily Living @ T2	-0.725	0.547	.4845	0.541	0.519	1.718	1.383*	1.383	3.987	0.250	0.499	1.284
Self-Rated Health @ T2	-0.010	0.141	.990	-0.253	0.166	.776	0.091	0.091	1.095	-0.171	0.126	.843
<b>Intergenerational Solidarity</b>												
Affectual Solidarity												
Parent's Affect @ T2	-0.024	0.088	.977	-0.177*	0.080	.838	-0.083	-0.083	.921	-0.091	0.076	.913
Child's Affect @ T2	-0.063	0.066	.939	0.207**	0.065	1.230	0.004	0.004	1.004	-0.048	0.066	.953
Normative Solidarity												
Parent's Norms @ T2	0.064	0.140	1.066	0.257	0.169	1.293	-0.167	-0.167	.8465	0.399**	0.153	1.490
Child's Norms @ T2	-0.174	0.159	.841	-0.216	0.176	.806	-0.198	-0.198	.820	0.088	0.284	1.091
Associational Solidarity												
Parent's Face-to-Face @ T2	0.338*	0.170	1.403	0.156	0.162	1.168	0.053	0.053	1.055	0.388*	0.180	1.474
Child's Face-to-Face @ T2	0.495***	0.146	1.640	0.266	0.157	1.305	0.257	0.257	1.292	0.194	0.153	1.214
Parent's Phone/Letters @ T2	-0.061	0.097	.941	0.219	0.148	1.245	0.096	0.096	1.101	0.267	0.154	1.307
Child's Phone/Letters @ T2	0.104	0.100	1.109	0.091	0.138	1.095	-0.031	-0.031	.969	0.094	0.097	1.099
Constant	-5.176***	1.443		-8.165***	2.104		-3.256	2.096		-3.282	2.293	

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$
F (31, 21)			11.99***			4.34***			5.800**			6.420***

\* $p \leq .05$

\*\* $p \leq .01$

\*\*\* $p \leq .001$

Table 5.3

*Summary of Logistic Regression Analysis for Variables Predicting Exchange of Housework, Yard work, Car Repairs, and Work Around the House Support for Adult Children and Parents*

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
<b>Dyadic Characteristics</b>												
(Mother-Daughter)	---	---	---	---	---	---	---	---	---	---	---	---
Mother-Son	0.456*	0.212	1.577	-0.141	0.379	0.869	-0.937*	0.402	0.392	1.211***	0.341	3.356
Father-Daughter	0.071	0.071	1.073	-0.294	0.781	0.745	-0.473	0.756	0.623	-0.751	-0.751	.471
Father-Son	-0.236	-0.236	.790	0.792	0.689	2.207	0.772	0.634	2.164	1.335*	1.335	3.80
<b>Parent Characteristics</b>												
Age												
(50-59)	---	---	---	---	---	---	---	---	---	---	---	---
60-69	-0.004	-0.004	.996	0.413	0.472	1.512	-0.431	0.462	0.650	-0.791**	-0.791	.453
70-79	0.092	0.092	1.097	0.290	0.573	1.336	-1.416*	0.676	0.243	-0.830	-0.830	.436
80+	0.281	0.281	1.324	-0.984	1.254	0.374	--- <sup>a</sup>	--- <sup>a</sup>	--- <sup>a</sup>	-0.523	-0.523	.593
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	0.112	0.112	1.119	0.207	0.342	1.230	0.329	0.462	1.390	-0.734*	-0.734	.480
Years of Education	-0.014	-0.014	.986	-0.029	0.049	0.972	0.017	0.073	1.017	-0.007	-0.007	.993
Activities of Daily Living	-0.388	-0.388	.678	-0.956	0.845	0.385	1.133	1.014	3.105	1.118	1.118	3.057
Self-Rated Health	-0.197	-0.197	.821	0.591**	0.211	1.807	0.596*	0.274	1.814	0.221	0.221	1.247
Number of Children	0.022	0.022	1.022	-0.132	0.067	0.876	-0.072	0.121	0.930	0.028	0.028	1.029
<b>Child Characteristics</b>												
Race												
(White)	---	---	---	---	---	---	---	---	---	---	---	---
African American	0.139	0.139	1.149	1.474**	0.512	4.365	-1.803	1.071	0.165	-0.562	-0.562	.570
Hispanic	0.200	0.200	1.222	-1.535	1.291	0.215	-1.197	1.167	0.302	-0.505	-0.505	.604

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$
Age												
(20-29)	---	---	---	---	---	---	---	---	---	---	---	---
30-39	0.561	0.561	1.752	-0.484	0.531	0.617	-0.404	0.632	0.668	-0.680	-0.680	.507
40-49	0.011	0.011	1.011	-2.071**	0.753	0.126	-0.412	0.975	0.662	-0.204	-0.204	.816
50+	0.142	0.142	1.152	--- <sup>B</sup>	--- <sup>B</sup>	--- <sup>B</sup>	-0.151	1.405	0.860	-0.638	-0.638	.528
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	0.273	0.273	1.315	0.529	0.392	1.697	0.169	0.354	1.184	-0.647*	-0.647	.524
Years of Education	0.059	0.059	1.061	0.213*	0.095	1.238	0.054	0.102	1.056	0.091	0.091	1.096
Income (Logged)	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000
Distance from Parent (Logged)	-0.157*	-0.157	.855	-0.329**	0.108	0.720	0.042	0.143	1.043	-0.154	-0.154	.858
Number of Children	-0.088	-0.088	.916	0.073	0.131	1.076	-0.051	0.123	0.950	-0.039	-0.039	.962
Activities of Daily Living @ T2	-0.459	-0.459	.632	0.894	0.770	2.445	2.994***	0.840	19.970	-0.854	-0.854	.426
Self-Rated Health @ T2	-0.104	-0.104	.901	-0.499*	0.224	0.607	0.329	0.208	1.390	0.080	0.080	1.083
<b>Intergenerational Solidarity</b>												
<b>Affectual Solidarity</b>												
Parent's Affect @ T2	-0.025	-0.025	.975	-0.243*	0.109	0.784	-0.155	0.159	0.857	0.223	0.223	1.250
Child's Affect @ T2	-0.029	-0.029	.971	0.289*	0.114	1.335	0.037	0.095	1.038	-0.004	-0.004	.996
<b>Normative Solidarity</b>												
Parent's Norms @ T2	0.102	0.102	1.107	0.752**	0.272	2.122	-0.124	0.265	0.884	-0.088	-0.088	.916
Child's Norms @ T2	-0.208	-0.208	.812	0.218	0.297	1.244	-0.164	0.415	0.848	0.068	0.068	1.071
<b>Associational Solidarity</b>												
Parent's Face-to-Face @ T2	0.319*	0.319	1.375	-0.164	0.351	0.849	0.150	0.309	1.162	0.377	0.377	1.458
Child's Face-to-Face @ T2	0.284**	0.284	1.328	0.355	0.323	1.426	0.022	0.297	1.022	0.097	0.097	1.101
Parent's Phone/Letters @ T2	0.090	0.090	1.094	0.773*	0.361	2.166	0.573	0.323	1.774	0.185	0.185	1.203
Child's Phone/Letters @ T2	0.122	0.122	1.130	-0.139	0.207	0.870	-0.130	0.223	0.879	0.017	0.017	1.017
Constant	-4.135**	1.603		-11.414**	3.356		-8.433**	3.121		-7.864**	2.448	
<i>F</i>			2.63**			4.67***			4.65***			3.76***

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
<i>df</i>	(31, 21)			(30, 22)			(30, 22)			(31, 21)		

\* $p \leq .05$     \*\* $p \leq .01$     \*\*\* $p \leq .001$

<sup>a</sup> No parents aged 80+ (n=100) gave children help with housework, so these observations were not included in this model.

<sup>B</sup> No children aged 50+ (n=165) received help from parents with housework, so these observations were not included in this model.

Table 5.4

*Summary of Logistic Regression Analysis for Variables Predicting Exchange of Advice, Encouragement, Moral or Emotional Support for Adult Children and Parents*

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
<b>Dyadic Characteristics</b>												
(Mother-Daughter)	---	---	---	---	---	---	---	---	---	---	---	---
Mother-Son	-0.177	0.159	.838	-0.546**	0.174	.579	-0.418	-0.418	.658	-0.444	0.239	0.641
Father-Daughter	-1.042**	0.324	.353	-1.122***	0.306	.326	-0.543	-0.543	.581	-0.393	0.445	0.675
Father-Son	-0.944**	0.305	.389	-0.512	0.302	.600	-0.165	-0.165	.848	-0.218	0.503	0.804
<b>Parent Characteristics</b>												
Age												
(50-59)	---	---	---	---	---	---	---	---	---	---	---	---
60-69	0.205	0.228	1.227	0.201	0.172	1.223	-0.188	-0.188	.829	0.147	0.339	1.159
70-79	-0.128	0.248	.880	-0.024	0.199	.976	-0.704*	-0.704	.494	-0.191	0.375	0.826
80+	-0.394	0.452	.674	-0.032	0.432	.968	-0.761	-0.761	.467	-1.193	0.734	0.303
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	0.109	0.156	1.115	0.572***	0.162	1.771	0.654**	0.654	1.923	0.285	0.229	1.329
Years of Education	0.043	0.029	1.0445	0.071**	0.026	1.074	0.045	0.045	1.046	0.037	0.045	1.037
Activities of Daily Living	0.270	0.309	1.311	0.378	0.318	1.459	0.654*	0.654	1.924	1.159**	0.364	3.186
Self-Rated Health	-0.065	0.089	.9367	0.063	0.087	1.066	0.181	0.181	1.1987	0.108	0.156	1.114
Number of Children	-0.013	0.028	.987	-0.040	0.029	.961	-0.038	-0.038	.962	-0.025	0.047	0.976
<b>Child Characteristics</b>												
Race												
(White)	---	---	---	---	---	---	---	---	---	---	---	---
African American	-0.280	0.216	.755	0.175	0.269	1.191	0.057	0.057	1.058	-1.276**	0.446	0.279
Hispanic	0.067	0.439	1.070	0.220	0.425	1.246	-0.674	-0.674	.510	--- <sup>a</sup>	--- <sup>a</sup>	--- <sup>a</sup>

Variables	Child						Parent					
	Give			Receive			Give			Receive		
	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$	<i>B</i>	<i>SEB</i>	$e^B$
Age												
(20-29)	---	---	---	---	---	---	---	---	---	---	---	---
30-39	0.156	0.248	1.169	0.111	0.209	1.117	0.197	0.197	1.218	1.093**	0.370	2.982
40-49	0.000	0.274	1.000	-0.284	0.270	.753	-0.059	-0.059	.9428	0.566	0.490	1.762
50+	-0.133	0.323	.875	-0.732	0.429	.481	0.551	0.551	1.736	1.894**	0.699	6.645
Has Spouse												
(No)	---	---	---	---	---	---	---	---	---	---	---	---
Yes	0.151	0.157	1.1623	-0.383**	0.151	.682	-0.157	-0.157	.855	0.442	0.256	1.556
Years of Education	0.118***	0.034	1.125	0.051	0.032	1.053	0.009	0.009	1.009	-0.027	0.049	0.974
Income (Logged)	0.000	0.000	1.000	0.000	0.000	1.000	0.000**	0.000	1.000	0.000	0.000	1.000
Distance from Parent (Logged)	-0.010	0.046	.990	-0.121*	0.055	.886	0.048	0.048	1.049	0.062	0.084	1.064
Number of Children	-0.061	0.058	.941	0.109*	0.046	1.116	-0.019	-0.019	.982	-0.201**	0.073	0.818
Activities of Daily Living @ T2	0.167	0.307	1.182	0.826*	0.349	2.284	0.438	0.438	1.550	0.302	0.552	1.353
Self-Rated Health @ T2	-0.061	0.100	.941	0.027	0.107	1.027	-0.084	-0.084	.919	-0.166	0.141	0.847
<b>Intergenerational Solidarity</b>												
<b>Affectual Solidarity</b>												
Parent's Affect @ T2	0.035	0.065	1.035	0.003	0.052	1.003	-0.114	-0.114	.892	0.068	0.083	1.070
Child's Affect @ T2	0.011	0.053	1.011	0.272***	0.051	1.312	0.054	0.054	1.056	0.009	0.075	1.009
<b>Normative Solidarity</b>												
Parent's Norms @ T2	0.021	0.127	1.021	-0.037	0.148	.964	0.066	0.066	1.069	0.289	0.185	1.336
Child's Norms @ T2	0.083	0.113	1.087	0.080	0.110	1.083	0.286	0.286	1.330	0.065	0.170	1.068
Parent's Face-to-Face @ T2	-0.050	0.119	.951	-0.068	0.103	.934	0.205	0.205	1.227	0.322	0.198	1.379
Child's Face-to-Face @ T2	0.104	0.099	1.110	-0.137	0.092	.872	-0.157	-0.157	.854	-0.236	0.136	0.790
Parent's Phone/Letters @ T2	0.117	0.109	1.125	0.072	0.071	1.075	0.258**	0.258	1.295	0.332*	0.152	1.393
Child's Phone/Letters @ T2	0.165*	0.076	1.180	0.190**	0.068	1.210	0.008	0.008	1.008	0.017	0.093	1.017
Constant	-4.300***	0.997		-4.989***	1.127		-4.064**	-4.064		-6.370**	1.760	
<i>F</i>			4.23***				4.50***				3.89***	4.44***
<i>df</i>			(31, 21)				(31, 21)				(31, 21)	(30, 22)

\* $p \leq .05$       \*\* $p \leq .01$       \*\*\* $p \leq .001$

<sup>a</sup> No Hispanic parents (n=51) reported receiving emotional support from children so these observations were not included in this model.

Table 5.5

*Summary of Logistic Regression Analysis for Variables Predicting Exchange of Child Care Support for Adult Children and Parents*

Variables	Child			Parent		
	Receive			Give		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	0.134	0.134	1.143	-0.428	0.284	.652
Father-Daughter	-1.756	-1.756	.173	-0.311	0.484	.733
Father-Son	-0.252	-0.252	.777	-0.617	0.651	.540
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	0.003	0.003	1.002	-0.190	0.354	.827
70-79	-0.153	-0.153	.858	-0.869	0.502	.419
80+	-0.780	-0.780	.459	-1.953*	0.820	.142
Has Spouse						
(No)	---	---	---	---	---	---
Yes	0.514	0.514	1.673	-0.144	0.246	.866
Years of Education	0.107	0.107	1.113	0.070	0.065	1.072
Activities of Daily Living	0.179	0.179	1.196	0.021	0.535	1.021
Self-Rated Health	-0.134	-0.134	.875	0.009	0.146	1.009
Number of Children	-0.076	-0.076	.927	0.065	0.052	1.067
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	0.393	0.393	1.481	-0.477	0.371	.620
Hispanic	0.730	0.730	2.075	0.153	0.490	1.166
Age						

Variables	Child			Parent		
	Receive			Give		
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
(20-29)	---	---	---	---	---	---
30-39	-0.229	-0.229	.795	0.191	0.391	1.211
40-49	-0.998	-0.998	.369	-0.546	0.558	.579
50+	-2.659**	-2.659	.070	-1.328	0.999	.266
Has Spouse						
(No)	---	---	---	---	---	---
Yes	1.332**	1.332	3.790	0.112	0.284	1.118
Years of Education	0.045	0.045	1.046	-0.042	0.073	.959
Income (Logged)	0.000	0.000	1.000	0.000***	0.000	1.000
Distance from Parent (Logged)	-0.306*	-0.306	.736	-0.094	0.102	.9102
Number of Children	0.263**	0.263	1.300	0.169*	0.086	1.184
Activities of Daily Living @ T2	0.283	0.283	1.327	-0.664	0.686	.5149
Self-Rated Health @ T2	-0.079	-0.079	.924	-0.246	0.165	.7818
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	-0.157	-0.157	.855	0.087	0.131	1.090
Child's Affect @ T2	0.014	0.014	1.014	0.034	0.093	1.035
Normative Solidarity						
Parent's Norms @ T2	-0.064	-0.064	.938	-0.083	0.185	.921
Child's Norms @ T2	-0.199	-0.199	.820	-0.072	0.196	.930
Associational Solidarity						
Parent's Face-to-Face @ T2	0.262	0.262	1.299	0.533**	0.195	1.705
Child's Face-to-Face @ T2	0.014	0.014	1.014	0.048	0.228	1.049
Parent's Phone/Letters @ T2	-0.040	-0.040	.961	-0.126	0.163	.881
Child's Phone/Letters @ T2	0.470	0.470	1.600	0.342	0.201	1.408
Constant	-5.946	-5.946		-6.269**	2.158	
<i>F</i> (31, 21)			5.59***			6.200**

\**p* ≤ .05\*\**p* ≤ .01\*\*\**p* ≤ .001

Table 5.6

*Summary of Logistic Regression Analysis for Variables Predicting Exchange of Child Care While at Work Support for Adult Children and Parents*

Variables	Child			Parent		
		Receive			Give	
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
<b>Dyadic Characteristics</b>						
(Mother-Daughter)	---	---	---	---	---	---
Mother-Son	0.021	0.284	1.021	-0.258	0.302	.772
Father-Daughter	-0.400	-0.400	.671	-0.392	-0.392	.676
Father-Son	-1.693**	-1.693	.184	-0.846	-0.846	.429
<b>Parent Characteristics</b>						
Age						
(50-59)	---	---	---	---	---	---
60-69	-0.580*	-0.580	.560	-0.701*	-0.701	.496
70-79	-0.760	-0.760	.468	-0.969*	-0.969	.379
80+	-1.654	-1.654	.1913	-1.852	-1.852	.157
Has Spouse						
(No)	---	---	---	---	---	---
Yes	-0.344	-0.344	.709	-0.111	-0.111	.895
Years of Education	0.008	0.008	1.008	0.091*	0.091	1.095
Activities of Daily Living	-0.924	-0.924	.397	0.333	0.333	1.395
Self-Rated Health	-0.091	-0.091	.913	0.298	0.298	1.347
Number of Children	-0.042	-0.042	.959	0.014	0.014	1.014
<b>Child Characteristics</b>						
Race						
(White)	---	---	---	---	---	---
African American	-0.652	-0.652	.521	0.020	0.020	1.020
Hispanic	0.166	0.166	1.180	0.577	0.577	1.782

Variables	Child			Parent		
		Receive			Give	
	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>	<i>B</i>	<i>SEB</i>	<i>e<sup>B</sup></i>
Age						
(20-29)	---	---	---	---	---	---
30-39	0.035	0.035	1.035	0.584	0.584	1.793
40-49	-1.209*	-1.209	.298	0.003	0.003	1.003
50+	-2.719*	-2.719	.066	-2.485*	-2.485	.084
Has Spouse						
(No)	---	---	---	---	---	---
Yes	1.462***	1.462	4.316	1.149***	1.149	3.154
Years of Education	0.152*	0.152	1.164	-0.016	-0.016	.984
Income (Logged)	0.000	0.000	1.000	0.000	0.000	1.000
Distance from Parent (Logged)	-0.226*	-0.226	.798	-0.068	-0.068	.935
Number of Children	0.308***	0.308	1.361	0.213**	0.213	1.237
Activities of Daily Living @ T2	-0.943	-0.943	.390	-0.172	-0.172	.842
Self-Rated Health @ T2	-0.329	-0.329	.720	-0.014	-0.014	.986
<b>Intergenerational Solidarity</b>						
Affectual Solidarity						
Parent's Affect @ T2	0.051	0.051	1.053	-0.092**	-0.092	.912
Child's Affect @ T2	0.017	0.017	1.018	-0.055	-0.055	.947
Normative Solidarity						
Parent's Norms @ T2	0.052	0.052	1.054	-0.127	-0.127	.881
Child's Norms @ T2	-0.163	-0.163	.850	-0.244	-0.244	.784
Associational Solidarity						
Parent's Face-to-Face @ T2	0.178	0.178	1.195	0.532	0.532	1.702
Child's Face-to-Face @ T2	0.127	0.127	1.135	-0.274	-0.274	.760
Parent's Phone/Letters @ T2	0.192	0.192	1.212	0.121	0.121	1.128
Child's Phone/Letters @ T2	0.337	0.337	1.401	0.273*	0.273	1.314
Constant	-6.707**	2.207		-5.458**	1.684	
<i>F</i> (31, 21)			5.94***			5.11***

\* $\underline{p} \leq .05$     \*\* $\underline{p} \leq .01$     \*\*\* $\underline{p} \leq .001$