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Understanding our extended families: predictors and outcomes

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Understanding our extended families: Predictors and outcomes

by

Marissa Emily Holst

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Human Development and Family Studies

Program of Study Committee:
Thomas Schofield, Co-Major Professor
Peter Martin, Co-Major Professor
Kere Hughes-Belding

Iowa State University

Ames, Iowa

2014

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“Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.” –Helen Keller
ABSTRACT

Family composition in the United States has continued to become increasingly diverse as illustrated by an increase in the occurrence of single parent families, blended families, and same-sex parent families (Walsh, 2012). However, comparatively few studies of extended families include rural European-Americans. The objective of this study was to identify factors that contribute to family engagement between young adolescents and their extended families, as well as identifying developmental outcomes that result from those relationships. The study included 451 adolescents as well as their families via the Iowa Youth and Families Project (IYFP). Seven measures were included in regression analysis. Geographic proximity to extended family, parent’s relationship quality with extended family, and mother personality were significantly associated with adolescent engagement. Parent’s relationship quality with extended family and adolescent’s engagement with extended family were significantly associated with adolescent’s relationship quality. Extended family engagement, parent’s relationship quality with extended family, mother personality and adolescent’s geographic proximity to extended family were not significantly related to either passive or active coping. Also, neither geographic proximity, extended family engagement, parent’s relationship quality with extended family, nor mother personality were significantly associated with perceived support from extended family. Lastly, neither geographic proximity nor mother personality were significantly associated with adolescent relationship quality. The increasing prevalence and continued importance of extended family relationships provide an important new resource for practitioners working with rural-dwelling families.
CHAPTER 1
LITERATURE REVIEW

The American Family: 1960’s to the 21st Century

The typical American family is often referred to as the nuclear family, consisting of two parents and their children (Bengston, Biblarz, & Roberts, 2002). A generation ago, this family style was dominant in popular culture as reflected in media such as *Leave it to Beaver* and *Father Knows Best*. During the late 1960’s, American society experienced a substantial shift in societal norms. American culture moved in the direction of greater individualism and experienced an overall loosening of moral constraints. However, the degree to which this shift affected all types of families is unknown.

The Changing American Family

The discussion of the modern family has continued for over 90 years (Burgess, 1926). Burgess’ analysis of American families began with considering the macro-social trends brought about by the Industrial Revolution (Bengston, 2001). He focused on interfamilial micro-social dynamics and was especially concerned with the family as an instrument of social organization. He promoted that families had the ability to change depending on time and society’s needs (Bengston, 2001). This perspective was criticized by other family scholars. For example, Popenoe (1993) suggested that there has been a decline in family structure in American society since the beginning of the 1960’s, and he highlighted how this decline as opposed to change has become more severe in modern times. Supporters of Popenoe’s research have primarily focused on the negative consequences of the changing nature of the family on children’s social, psychological, and economic well-being (Bengston, 2001). According to this viewpoint, the pursuit of individual goals over the family’s goals, combined with the availability of alternative
social groups is causing an overall breakdown of the social institution of the family (Popenoe). Some family researchers support Popenoe’s thoughts, as evidenced by an increase in single parent families as well as in the level of poverty that children experience in mother-headed households (Clark, 1984, McLanahan, 1994, Shin, 2008). However, there are others who do not agree with this perspective and have offered other interpretations of Popenoe’s findings. For example, Stacey (1996) argued that the traditional ideals of a nuclear family do not fit into our postmodern society. Instead, women’s economic and social freedom has become much more salient, reducing the “male breadwinner” family form. Consequently, although we have seen an increase in divorce, single parenting, and step parenting, these changes are not necessarily viewed as problems. Feminist researchers also discuss the importance of families who consist of gay/lesbian parents as well as the need to study other alternative family forms.

Researchers who study racial minority families seem to agree with these calls to prioritize research on alternative family structures (Burton, 1995, Stack, 1974). Changes in the way we approach engagement with our extended family have occurred along with the shifts in nuclear family. However, those shifts in the extended family have received considerably less attention. This is in part due to the lack of information available on how extended family ties affect development.

**Understanding Extended Family Engagement**

**Theoretical approach.** A theory that is uniquely beneficial when looking at the extended family is the intergenerational solidarity model. This theory was conceptualized by Vern Bengston and Robert Roberts in 1991. According to these theorists, the 1980’s included an expansion of research on parent-child relationships in later life; however the
theory remained underdeveloped. Therefore, Bengtson and Roberts conceptualized a theory that expanded intergenerational cohesion to include the period after children reach adulthood and establish careers and families of their own. They conceptualized intergenerational cohesion or family solidarity as multifaceted with six elements of parent-child interactions. These dimensions are: structure (factors such as geographic distance that constrain or enhance interaction between family members), association (frequency of social contact and shared activities between family members), affect (feelings of emotional closeness, affirmation, and intimacy between family members), consensus (actual or perceived agreement in opinions, values, and lifestyles between family members), function (exchanges of instrumental and financial assistance and support between family members), and norms (strength of obligation felt toward other family member (Silverstein & Bengston, 1997). This theory works well and it has informed research on intergenerational relationships over the course of many years (Charles, Reynolds, & Gatz, 2001).

There are a number of dimensions that strongly resonate with my research questions, including the associational solidarity component. This component highlights how intergenerational interaction is either enabled or constrained by factors including kin proximity, number of kin, and the demands of busy work and family lives (Bengston & Roberts, 1991). It also does states that proximity alone cannot be a standalone predictor of intergenerational exchange. A second component of the theory that works well within the context of my research questions is the functional solidarity component. According to this component, it is important to also pay attention to the conditions under which assistance flows both up and down the generational lines within a family. The final
component that strongly identifies with my research is that of structural solidarity. This component states that the overall availability of, distance, marital status and ages of the members of one’s intergenerational family impacts the degree to which one engages with them (Bengston & Roberts, 1991).

A second theory that is informative for research on the role of extended family is ecological theory. Bronfenbrenner’s (1979, 1986) ecological theory proposed five levels of environmental forces that can shape our development: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. On a basic level, the microsystem includes the institutions and settings in which a child personally interacts with directly. The mesosystem is the interconnections found between the family and teachers or the relationship between the child’s friends and their family. The exosystem is the links between a social setting in which the individual does not have an active role. An example of the exosystem could be if a child’s parent gets a promotion and that child and the family have to move to another community. The macrosystem can be used to describe the culture in which individuals live in. The chronosystem is the patterning of environmental events and changes over the life course, as well as socio-historical circumstances.

According to the literature, interactions between all these systems affect a child’s social, emotional, and cognitive development (Bronfenbrenner, 1986).

Bronfenbrenner’s theory is especially helpful when trying to understand engagement with extended family, and also helps explain why this particular area of research is unique. Understanding the microsystem is important to the overall knowledge we have regarding why individuals choose to have relationships with their extended family. If we have an understanding of the reasons why we connect with those who are
closest to us, we can better understand how we form and maintain other relationships in our lives. Interestingly, many extended families fall into the mesosystem and thus they are not directly interacting with the child. However, I propose that within rural families oftentimes extended family does interact directly with the child and therefore can be found in the microsystem.

**Defining extended family.** Martin (1980) defined extended family as a group of family members that are in charge of preparing young members for living in the world today, as well as helping them to maintain the family and the overall welfare of its members. This is the backbone of a great deal of the research done on extended families. A large portion of extended family research has been dedicated to the African American extended family specifically (Mashele, Poggenpoel, & Myburgh, 2006, Wilson, 1989, Wilson, 1986). Many researchers are interested in these families because they are unique in the sense that they are affected by higher levels of poverty, single-parent households and fictive kin. They are also interested in how relationships formed within these families affect child development.

However, effects of fictive kin have not been replicated in other ethnic groups, so in the current study extended family will be defined as the biological family members that exist beyond the immediate or household family. This generally consists of grandparents, aunts, uncles, and cousins (Anderson, Margaret, & Taylor, 2006). Despite the discrepancies in how researchers define who is considered extended family, more relevant to the current study is how extended family engagement has been defined. Wilson (1999) discussed how one important benefit of an extended family is its ability to function as a support network. He also suggested that the amount of overall time spent
with one’s family members is directly affected by non-normal and normal changes and events. For example, single-parent families are comparatively common among African Americans (Population Reference Bureau, 2010). Within these situations it is common for the single parent family to be absorbed by the larger extended family, if there is a strong support network. According to Wilson (1999), it is very common for the extended family to then influence the nuclear family for most of the lifespan. There may be factors that are associated with how extended families influence the nuclear family including historical factors, socioeconomic factors, as well as marital and interpersonal factors. According to Taylor and colleagues (2013), African Americans are more likely to engage with their family members than non-Hispanic whites and were more likely to have daily contact with their extended family members. The authors discussed that these individuals engage with their families for emotional support and receive general assistance to help cope with socioeconomic stress.

Although a large literature is dedicated to the African American extended family engagement, a limited amount of research exists on other ethnicities. One example is the work of Litwick (1960), who suggested that there is only one kind of extended family relational pattern, the “classical” type, which he saw in Polish and Irish families. He described that family cohesion or engagement can be defined primarily by geographical proximity, occupational integration, the amount of authority found within the extended family, and overall stress level.

Interestingly, a lot of research that is geared towards understanding extended family engagement focuses predominately on urban populations. By focusing only on urban populations this field has neglected a very unique and intriguing subset of families
located in rural areas. Many of these families identify strongly with their family roots and often do not move or live very far from their relatives. Oftentimes, these families share businesses, own property, and depend highly on one another for support and aid regarding both business and family life. A strong example of families such as these includes families that own and run centennial farms. These farms or ranches in the United States have been officially recognized by regional programs documenting that the farm or ranch has been owned continuously by a single family for a 100 years or more (Iowa Department of Agriculture and Land Stewardship, 2014). Within the state of Iowa alone, over 15,000 families have been recognized as living on centennial farms since 1976 (Iowa Department of Agriculture and Land Stewardship, 2014). These rural families are given very little attention in literature, making the current investigation unique.

**Predicting family engagement.** For a lot of people, extended families fall within the mesosystem, however some rural adolescents have direct interface with extended family and therefore they are considered a part of an adolescent’s microsystem. With a better understanding of extended family, researchers and practitioners can then begin to ask why people seek to engage with their extended families. Researchers have already identified several predictors related to extended family engagement. Bronfenbrenner’s model was utilized by Hakoyama and Malonebeach (2013) to understand the relationships between grandparents and their grandchildren as well as predict what makes these relationships successful. These researchers examined demographic, personal, as well as environmental factors associated with close grandparent-grandchild relationships. Adult grandchildren’s perceptions of their relationships with their grandparents were examined retrospectively in three stages (childhood, adolescence, and young adulthood).
Closeness was operationalized by assessing the grandparents’ perception of their relationship with their grandchildren and the grandchildren’s perceptions of their relationship with their grandparents. Closeness between grandparent and grandchild was positively associated with grandparent-grandchild contact frequency, grandparents’ education levels and general health, as well as personality traits. Specifically, when looking at personality traits Hakoyama and Maleonbeach utilized the Ten Item Personality Inventory (TIPI) to assess participants’ grandparents’ personalities. TIPI assesses the Big-Five personality traits (i.e., extraversion, agreeableness, conscientiousness, neuroticism/emotional stability and openness) with two items per trait. Although each of these traits positively correlated with grandparent-grandchild closeness, grandparents’ personality traits were slightly more correlated with grandparent and grandchild closeness than those of the grandchildren. These results may have indicated that grandchildren perceive their grandparents’ personality traits as similar to their own.

In terms of predicting family engagement, another relevant area of research concerns gatekeeping. Parental gatekeeping is commonly defined as the parents’ attitudes and actions that serve to affect the quality of the other parent’s relationship with a child (Austin, Fieldstone, & Pruett, 2013). However, it has been applied more broadly to reflect that relationships cause people to facilitate or prevent interactions between other parties (Velasco-Garrido, Zentner, & Busse, 2011). For example, grandparents as well as other family member relationships can be affected by parental gatekeeping. Monsrud (2008) found that the mother’s relationships with the child’s grandparents predicted engagement between the grandparent and grandchild. That is, when mothers have a good relationship with the grandparents, the grandparents are more engaged with the children.
Women are often the major proponent in facilitating engagement between their children and parents, as they maintain stronger ties to relatives than men do in most cases (Fingerman, 2004, Monserud 2008). However, despite the fact that women maintain stronger ties to their relatives more often it does not mean men are not also helping to facilitate these connections. For instance, according to Brown (2003) grandparent-grandchild relationship quality was also predicted by a history of caregiving for the grandchild, the mother’s relationships with the child’s maternal grandparents and the father’s relationship with the paternal grandparents. This illustrates that both parents may play a role in facilitating the child’s engagement with extended family.

Hakoyama and Malonebeach (2013) also found educational attainment to predict the relationship between the grandparent and grandchild such that more educated grandparents were more likely to have a grandchild who engaged in higher learning. Crosnoe and Elder (2002) discovered that both grandparents and grandchildren disclosed having better relationships with each other when a grandchild had been or was enrolled in higher education. Grandparents’ age can also be a predictor of grandparent and grandchild closeness, in that it affects the frequency of contact (AARP, 1999). Grandparent and grandchild relationship quality seems to decrease as grandparents grow older (Creasey & Kaliher, 1994). However, this does not seem to be the belief of older adults, as 80% of them believe that they have positive relationships with their grandchildren (AARP, 1999). Moserud (2008) examined whether both parents’ relationships with their offspring, parents, and parents-in-law matter for young adults’ perceptions of closeness to grandparents. Their findings suggest that it is important to
examine grandparent-grandchild ties, and illustrates how demographic information seems to correlate with engagement with extended family.

In terms of family structure and intergenerational relationships, individuals who are married and living with their spouse interact with their parents about the same amount as individuals who are single, divorced, and widowed (Kruk & Hall, 1995). Despite this, married people are somewhat more likely to give advice or emotional support to their parents and to receive childcare (Kruk & Hall, 1995). Families with children are much more involved in exchange with their parents than their counterparts, and they receive aid much more often than those who are unmarried. In terms of ethnicity, these authors discovered that African Americans on average were less likely to be involved in exchange with their parents than Caucasian Americans, being less likely to both to provide and receive aid (Eggebeen & Hogan, 1990). Mexican-Americans were even less involved in exchange with parents than African Americans. Hispanics were found to be seldom involved in exchange of support, with only 8% of the maximum level of giving or receiving being reported. Kruk and Hall (1995) discussed how often parental divorce can be seen as a deterioration of grandchildren’s relationships with paternal grandparents over time. More specifically, paternal grandparents are viewed as being at higher risk for losing contact with their grandchildren when the child-in-law is the custodial mother. Their work suggests that the disengaged grandparent phenomenon is more widespread than previously thought, and that research like this has serious implications for counselors and mediators.

**Positive outcomes of strong extended family relationships.** One of my primary research questions is the degree to which extended families positively affect
developmental outcomes. A large portion of the research done in this area has focused on how older adults are affected by having intergenerational relationships with their grandchildren and other subsequent family members (Chen & Silverstein, 2000; Hughes, Waite, LaPierre, & Luo, 2007; Silverstein & Bengston, 1994). These findings illustrate the need to look further into longer term relationships with extended family and how they might potentially impact young adults.

Dressler (1985) described how a variety of social relationships, including the number of extended kin, can influence depression. He also looked into the perceived relationships of both kin and non-kin. Dressler found that people who perceived their extended kin to be more supportive reported fewer mental health problems. He also found that there seemed to be a buffering effect between extended kin support and life events among men more so than women. Interestingly, another major hypothesis in stress research has been that the availability of certain types of social support help coping in that it indirectly modifies or buffers the effect of stressors (Cassel, 1976). Although certain studies have also found a buffering effect, others have only found evidence of direct effects (Andrew et. al, 1978).

Walen and Lachman (2000) explained the association of social support, strain, psychological well-being and health. They investigated whether these associations depended on the type of relationship; specifically partner, family, or friend, focusing on a group of individuals aged twenty-five to seventy-five years. They found that for both genders, partner support and strain, along with family support were predictive of well-being. Family strain, however, was predictive of well-being and health outcomes more often for women than men. The authors did find some evidence that was supportive of
networks used to buffer the detrimental effects of strained interactions; friends and family served as a buffering role more often for women than men. Similarly, Adam, King, and King (1996) developed a model of the relationship between work and family that included variables from both the work-family conflict and social support research. They concluded that relationships between work and family can have an important effect on job and overall life satisfaction.

Another positive outcome potentially associated with family engagement is family coping. Coping can be defined as different actions that people take to avoid being harmed by life trials (Pearlin & Schooler, 1978). Therefore, any reaction taken to prevent further stress is considered coping. However, family coping is defined somewhat differently. According to Sahin, Nalbone, Wetchler, and Bercik (2010), family coping is a specific effort made by individual family members or the family as a whole that lessons or contributes to the handling of problems. This effectively helps hold the family in balance and assists in organization and encourages growth (McCubbin, Cauble, & Patterson, 1982). Coping is considered by many as a bridging concept that services both cognitive and behavioral components in which resources, perceptions, and responses can work together as a family works to achieve balance in overall family functioning (McCubbin et al., 1982). With this, an argument can be made that if children are observing family coping in their immediate extended family or microsystem they will be more likely to know how to effectively cope in their own adult lives. For example, Mendelowitz and colleagues (1999) explored the effect of cognitive-behavioral group intervention on anxiety and depression in school age children with anxiety disorders. They discovered that children in the parent and child intervention used more active
coping strategies post treatment compared with children in the child-only and parent-only intervention. This suggests that concurrent parental/family involvement enhanced the effect on coping strategies. Families often utilize many different types of adjustment coping strategies (McCubbin & Patterson, 1983) so the child is exposed to a number of ways to solve both individual and group problems. Because family relationships cannot easily be abandoned, families require people to learn problem solving skills, develop coping and communication skills simply because they are the easiest solutions to conflict.

According to Castiglia (1999), grandparents and other relatives can also serve as significant role models for children and young adults because they are less emotionally charged than parents; they are also very good at reducing anxiety surrounding aging. However, other older family members can provide the same service. Many of the physicians who were contacted by the researchers in this study also indicated that children who received love and care from many relatives had a much better capacity for mature love later in life. Therefore, if children see grandparents and other extended family members who are in strong positive relationships with their partners it makes sense that they will want similar relationships with their partners in later life. Streufert (2000) also noted that grandparents could be considered role models for their grandchildren, however in a much more economic sense. According to Streufert, grandparents are role models that can be a single point of observation for children when they are learning about schooling and the income of an adult worker. Therefore, if a young person observes a certain role model, in this instance a grandparent, aunt or uncle, who is representative of the labor force, she/he will be well informed in making school decisions. Eggebeen and Hogan (1989) looked at the types and amounts of aid exchanged
between adults and their parents, who did not share a home together. Their data were
drawn from a representative national sample survey of Americans age 19 and older. They
were able to identify several predictors of intergenerational relationships including
gender, family structure, ethnicity, and socio-economic status. Eggebeen and Hogan
reported that Americans limited the support they provided their non-co-resident parents.
About 17% of the respondent’s received money from their parents, and only 4% gave
money to their parents. Advice and emotional support was one of the most common
dimensions of exchange, with 27% of the respondents receiving such support and another
25% being the ones who gave it. Participants whose families were living below the
poverty line did not have the same levels of aid, only 17% of the possible exchanges
would bring aid to these families.

**Hypotheses**

I propose that family members’ personality, adolescent’s geographic proximity to
extended family, and parent relationship quality with extended family would predict
adolescent’s engagement with their extended family. I also propose that extended family
engagement will predict adolescent’s relationship quality with their extended family,
adolescent’s active and avoidant coping, and adolescent’s perceived support from their
extended family (See Figure 1).
Figure 1. Conceptual model
CHAPTER 2

METHOD

Sample

This research was conducted in accordance with approved Institutional Review Board (IRB) protocol (See Appendix 2). The data used in this study specifically come from the Iowa Youth and Families Project (IYFP, Conger, & Elder Jr, 1994). These families were part of a longitudinal study involving 451 individuals as well as their families. The Iowa Youth and Families Project (IYFP) began with a total of 451 families located in rural areas of Iowa in 1989. Families that were recruited included the two biological parents of a 7th grade child (focal or adolescent child) and a sibling within 4 years of the focal child's age. The selection of a 7th grade cohort allowed the study of transitional stress involved in the passage from childhood to adolescence as well as research on the broader socioeconomic stress created by financial conditions. A 5-year panel study was initiated with yearly assessments that lasted from 1989 to 1993, the period from 7th to 11th grade for the focal children. Families were assessed again in 1994 as part of a second study, the Family Transitions Project. Information from multiple informants was gathered including each of the four family members participating in the study, trained observers who rated video tapes of family discussions in their homes, teachers of the focal children, and from school records of academic performance and achievement. This multi-informant measurement strategy allowed for reduced biases endemic to single-informant studies and also created the opportunity to evaluate differences in family members' perspectives (see Lorenz & Melby, 1994).
The families in this study lived on farms (about one third) or in small towns. Because minority families are very rare in rural Iowa, all of the families were White and spoke English. The Income-to-needs ratios had a range from -3.95 to 19.03 with a mean of 2.85. The negative income-to-needs ratios are families who have more debt than income. Many of these families were on farms that were deep in the red. Income-to-needs ratios represent the ratio of family income to their appropriate poverty threshold. Ratios below 1.00 show that the income for the given family is below the official definition of poverty, while a ratio of 1.00 or greater indicates income above the poverty level (U.S. Census Bureau, 2004). Fathers’ education ranged from 8 to 20 years, with a mean of 12.4 years of education, whereas for mothers the range was from 8 to 18 years, with a mean of 13.4 years. Few parents had not completed grade school (2% for fathers, 1% for mothers), over half had completed high school (75% for fathers, 81% for mothers), and some had completed 4 years of college (23% for fathers, 18% for mothers). The fathers ranged in age from 31 to 68, with a mean of 39.7 years, and mothers’ ages ranged from 31-68, with a mean of 39.7 years. Because families of less than four were excluded from the sampling frame, the families were larger on average than would be expected from a general population survey. Households ranged from 4 to 13 members, with an average of 4.9 members. Adolescents were approximately evenly split across gender.

**Procedure**

Information from multiple informants was gathered at annual assessments from study initiation to 1992, and again at 1994, including interviews with each of the four family members participating in the study, observational assessments of video-recorded family interactions, and teachers of the focal children, academic performance and
achievement from school records. Missing data accounted for less than 10% for all the variables present in the study and analyses was conducted using pairwise deletion.

**Measures**

**Extended family engagement.** The degree to which the adolescent engaged with extended family was reported by both parents and the adolescent using a total of 4 scales. First, mothers and fathers indicated in 1991 how often, in the past 6 months, the adolescent had seen each of the following people either face to face in their home or somewhere else: adolescent’s grandfather, adolescent’s step grandfather, adolescent’s step grandmother, adolescents grandmother, adolescent’s grandfather (maternal), and adolescent’s grandfather (maternal). Each parent answered on a 6-point scale indicating contact frequency (6-daily, 5-several times per week, 4-about once a week, 3-1-3 times a month, 2-less than once a month, 1-no face to face-contact in the past six months). (See Appendix A)

Second, the adolescents were asked in 1989, 1990, 1991 and 1992 how often they had contact with certain extended family members either in person, on the phone, or by writing letters. The answers were also given on a 5-point scale indicating contact frequency (5-more than once a week, 4-about once a week, 3-1-3 times a month, 2-less than once a month, 1-never). Third, in 1992 adolescents were asked if they had relatives who they could talk to about their problems and worries, and how often did they contact these individuals either in person, on the phone or by writing letters. The answers were also given on a 5-point scale indicating contact frequency (5-more than once a week, 4-about once a week, 3-1-3 times a month, 2-less than once a month, 1-never). Finally, adolescents were asked in 1994 to indicate how often in the past 6 months they had
contact with their grandmother and grandfather on both sides of their family. Answers were given on a 6-point scale (6-daily, 5-several times per week, 4-about once a week, 3-1-3 times a month, 2-less than once a month, 1-no face to face contact in the past 6 months). The adolescent assessments were combined into a single scale (α = .75) which was combined with mother and father reports into a summary scale for analyses (α = .76). (See Appendix A)

**Geographic proximity.** Mothers and fathers reported the geographic proximity of extended family using three questions. First, mothers and fathers separately reported in 1989, 1990, 1991, and 1992 in which states their mother and father (i.e., the grandparents of the adolescent) lived. To create the first index of proximity, the state of Iowa was coded as 2, the states surrounding Iowa were coded as 1, and all other states were coded as 0. The average of the proximity of all living grandparents was then created. Second, mothers and fathers indicated in 1989 about how many of their brothers, sisters, or other relatives lived in their county or neighboring counties. Respondents simply listed how many brothers, sisters, and other relatives they had living in their county and neighboring counties. Mother and father responses were averaged into a single scale to create this second index of proximity. Third, mothers and fathers indicated in 1990 and 1994 how far they lived from their father, stepfather, mother, stepfather, father in law, mother in law, brother, sister, aunt, uncle and cousins. Responses included 6-we live together, 5-within 5 miles of each other, 4-within 5-25 miles of each other, 3-within 25-50 miles of each other, 2-within 150-250 miles of each other, 1-more than 250 miles of each other. Both parents’ reports across the two assessments were averaged into
a single scale as the third index of proximity. All three indices were standardized and combined. (See Appendix A)

**Personality.** Parent personality was assessed in 1990 by using parents’ self-report on the NEO Five-Factor Inventory (NEO-FFI), a 60-item inventory that contains 12 items tapping each of the five personality dimensions of extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Previous studies have demonstrated and described the convergent and discriminant validity of the instrument (Costa & McCrea, 1992). The adolescent’s personality was assessed in the 10th grade using self-reports on the NEO-FFI.

Recent interest in personality has examined higher order attributes that reflect certain constellations of traits likely to be associated with competent functioning. In particular, Digman (1997) suggested that conscientiousness, agreeableness, and emotional stability cohere into a higher-order trait of great developmental significance (DeYoung, 2006; Jang et al., 2006). Digman called this the alpha factor of personality and suggested that this broad attribute facilitates competency and reflects successful socialization. He concluded that: “…Factor α is what personality development is all about…if all proceeds according to society’s blueprint” (p. 1250). If an individual is found to have an alpha personality, it means that the person scored high on emotional stability, conscientiousness, and agreeableness (Digman, 1997). All scales had acceptable composite reliability (α’s > .70).

**Parents’ relationship with extended family.** Both the mother and father described their current relationship with their mother and father in 1989, 1990, 1991, 1992 and 1994. Answers were given on a 5-point scale (5-excellent, 4-good, 3-fair, 2-
poor, 1-very poor). The average relationship with all living grandparents was then created. Mothers and fathers indicated in 1991, 1992, and 1994 how happy they felt with their relationship with the following family members: fathers, stepfathers, mothers, stepmothers, father in laws, and mother in laws answers were given on a 4 point scale (4-very, 3-somewhat, 2-not very, and 1-not at all). Mothers and fathers also indicated in 1991, 1992, and 1994 how much conflict, tension, or disagreement they felt between them and the following family members: fathers, stepfathers, mothers, stepmothers, father in laws, and mother in laws answers were given on a 4 point scale (4 a lot, 3 some, 2 a little, and 1-None at all).

Adolescent relationship quality with extended family. Mothers and fathers described in 1991 their perception of the relationship between the adolescent child and their grandparents. Answers were given on a 5 point scale (5-closer than most of the other grandchildren, 4-closer than some of the other grandchildren, 3-about the same as the other grandchildren, 2-less close than some of the other grandchildren, 1-less close than most of the other grandchildren). Scores for all living grandparents were averaged into a single scale. Adolescents indicated in 1994 how close they were to their grandparents in comparison to other grandchildren. Answers were given on a 5-point scale (5-closer than most of the other grandchildren, 4-closer than some of the other grandchildren, 3-about the same as the other grandchildren, 2-less close than some of the other grandchildren, 1-less close than most of the other grandchildren). Mother, father, and adolescent reports were combined into a summary scale for analyses (α = .70). (See Appendix A)
Coping skills. In the 1994 wave, adolescents answered two questions related to active coping including, “When I have a problem, I try to figure out the cause and do something about it,” and “When I have a problem, I usually talk to other people about it.” Adolescents also completed two questions about avoidant coping including “When I have a problem, I try to forget about it,” and “When I have a problem, I try to do things that will keep me from thinking about it.” Answers were given on a 5-point scale (5-strongly agree, 4-agree, 3-neutral or mixed, 2, disagree, 1-strongly disagree). This scale assessing the degree to which the adolescents used active coping strategies was adapted from several different scales used to assess coping (Carver, Scheier, & Weintraub, 1989; Clark, 2006; Frydenberg & Lewis, 1993). The reliability for the avoidant coping measure was .54. The reliability for the active coping measure was .56.

Support from extended family. Adolescents reported in 1989 and 1990 if they had any relatives, such as grandparents, aunts, uncles or cousins who they could talk to about their problems and worries. Answers were given as either yes or no. The question that followed asked the adolescents to indicate 2 relatives by whom they felt supported. In 1989, answers were coded as 01- grandmother, 02- cousin, 03- grandfather, 04-aunt & uncle, 05-aunt & cousin, 06-grandparents, 07-cousin and uncle, 08-grandparents, uncle and aunt, 09-nephew. In 1990, answers were coded as 01-uncle, 02-cousin, 03-aunt, 04-grandmother, 05-grandfather.

In 1991 and 1992, adolescents were once again asked which relative or relatives they could talk to. For example, “Can you talk to your grandmother?” Answers were given as yes or no. Later questions asked them to indicate to whom they talked including their grandmother, grandfather, aunt, uncle, cousin, or other. Answers were given as a yes
or no. In the 1994 wave, adolescent children were asked how often their grandparents helped them in important ways by giving them advice or helping them solve problems they may have had. Answers were given on a 5-point scale (4-often, 3-sometimes, 2-rarely, 1-never). Also in the 1994 wave, adolescent children were asked if their grandparents made them feel appreciated, loved, and cared for. Answers were given on a 4-point scale (1-not at all, 2-a little, 3-some, 4-a lot). Lastly, in the 1994 wave adolescent children were asked how much they felt they could depend on their grandparents when they really needed them. Answers were given on a 5-point scale (1-not at all, 2-a little, 3-some, 4-a lot). These reports were combined into a summary scale for analyses (α = .82). (See Appendix A)
CHAPTER 3

RESULTS

Descriptive Statistics

In regards to adolescent support and mother alpha personality the numbers are not rounded because they are the average of several scales. Parents' relationship quality with extended family and geographic proximity are the average of several standardized scales. (See Table 1).

Table 1

Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother Alpha Personality</td>
<td>424</td>
<td>3.34</td>
<td>.75</td>
<td>1.00</td>
<td>5.00</td>
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<tr>
<td>Active Coping</td>
<td>396</td>
<td>4.02</td>
<td>.58</td>
<td>2.50</td>
<td>5.00</td>
</tr>
<tr>
<td>Avoidant Coping</td>
<td>396</td>
<td>3.21</td>
<td>.87</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Adolescent engagement with Extended Family</td>
<td>447</td>
<td>3.52</td>
<td>.87</td>
<td>1.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Adolescent Support</td>
<td>451</td>
<td>2.25</td>
<td>.80</td>
<td>0.00</td>
<td>3.81</td>
</tr>
<tr>
<td>Geographic Proximity</td>
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<td>0.99</td>
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<td>3.76</td>
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<tr>
<td>Parent Relationship Quality</td>
<td>451</td>
<td>.03</td>
<td>0.97</td>
<td>-3.55</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Hypothesis Testing

The first model regressed extended family engagement onto parent and adolescent personality, adolescent's geographic proximity to extended family, and parent relationship quality with extended family. Adolescent’s geographic proximity to extended family was significantly associated with adolescent’s engagement with their extended
family, $\beta=.49$, $t(423) = 12.62$, $p < .001$ (See Figure 2). Parents’ relationship quality with extended family significantly predicted adolescent’s engagement with extended family, $\beta=.18$, $t(423) = 4.66$, $p < .001$. Lastly, mother alpha personality (i.e., emotional stability, conscientiousness, and agreeableness) was also associated with Adolescent’s engagement with extended family, $\beta= -.10$, $t(423) =-2.49$, $p = .013$. These associations remained significant after controlling for the Adolescent’s gender and age.

Figure 2. Predictors of extended family engagement (*$p < .05$)

The next of my models regressed Adolescent’s avoidant and active coping onto adolescent’s engagement with extended family, adolescent’s geographic proximity to extended family, parent relationship quality with extended family, and both parent and adolescent personality. The multiple regression analysis demonstrated that engagement did not significantly predict active coping, $\beta=-.02$, $t(423)=-.32$, $p = .75$ or avoidant
coping $\beta = -06$, $t(423) = -088$, $p = .38$ (See Figures 3 and 4). Neither geographic proximity, personality of parent and child, nor parent relationship with extended family predicted either active or avoidant coping.

Figure 3. Predictors of active coping (*p < .05)
Next, the models predicted support from extended family from Adolescent’s engagement with extended family, Adolescent’s geographic proximity to extended family, parent relationship quality with extended family, and personality. The regression demonstrated that adolescents engagement did significantly predict adolescent support, $\beta = .18$, $t(423) = 2.06$, $p = .039$ (see Figure 5). Adolescent proximity to extended family was found to significantly predict adolescent support $\beta = .09$, $t(423) = 1.78$, $p = .075$. Parent relationship quality with extended family was found to significantly predict adolescent support $\beta = .27$, $t(423) = 4.56$, $p < .001$. Lastly, mother’s personality was found to not significantly predict adolescent support $\beta = .04$, $t(419) = 0.80$, $p = .42$. 

*Figure 4. Predictors of avoidant coping ($^*p < .05$)*
Adolescent’s overall engagement with extended family was found to significantly predict adolescent’s relationship with extended family $\beta = .28, t(423) = 5.28, p < .001$ (see Figure 6). Adolescent’s geographic proximity to extended family across reporters was found to not significantly predict the adolescent relationship with their extended family $\beta = -.09, t(423) = -1.88, p < .060$. Parent relationship quality significantly predicted Adolescent’s relationship with extended family $\beta = .38, t(423) = 8.49, p < .001$. Lastly, mother’s personality did not significantly predict Adolescent’s relationship with extended family $\beta = .02, t(419) = .36, p = .72$. 

Figure 5. Predictors of support (*$p < .05$)
Figure 6. Predictors of relationship quality (*p < .05)
The goals of this paper were to test the degree of empirical support of several hypothesized predictors of extended family engagement in adolescence and to test the degree to which extended family engagement is associated with several developmental outcomes (Hakoyama & Malonebeach, 2013, Taylor et. al, 2013, Wilson, 1999). I proposed that family members’ personality, adolescent’s geographic proximity to extended family, and parent relationship quality with extended family would predict adolescent’s engagement with their extended family. I also proposed that extended family engagement would predict adolescent’s relationship quality with their extended family, adolescent’s coping, and adolescent’s perceived support from their extended family.

Geographic proximity, parent relationship quality with extended family, and mother personality were all significant predictors of adolescents engaging with their extended family. The observed association between geographic proximity and extended family engagement supported the work of Hakoyama and Malonebeach (2013). They found a higher relationship rating between grandparents and grandchildren who lived within 50 miles of one another. Therefore, living closer to a person increases the likelihood to see them on a regular basis. These findings also support Connidis and Davies (1990) who found that geographic proximity encouraged emotional intimacy, as it enables more social contact and increases opportunities for shared experiences. These findings can be explained by Bronfenbrenner’s bioecological theory. Within this theory, the microsystem refers to groups and institutions a child deals with immediately and directly such as their family, school, religious institutions, and peers. Therefore, if a child
lives nearer to their extended family members they will be more likely to have direct interactions with them.

Another theory that suggests the merit of my findings is the intergenerational solidarity theory. Specifically, the associational component helps explain my findings. This component highlights how intergenerational interaction is either enabled or constrained by factors including kin proximity, number of kin, and the demands of busy work and family lives (Bengston & Roberts, 1991). Interestingly, Bengtson and Roberts stated that simple proximity cannot be a standalone predictor for intergenerational exchange.

Extended family engagement, geographic proximity, parent relationship quality, and personality were not significantly associated with adolescent coping. There are at least two possible reasons for this. First, the variables may not be related, or second they are related but the association can be explained by another variable. However, very few studies of coping with conflict have focused on adolescents, despite adolescence being a time where they are expected to acquire more coping skills (Wadsworth & Compas, 2002). Some researchers suggest that adolescents with more positive family relationships use more active coping at home and at school (Zimmer-Gembeck & Locke, 2007). The idea that family interactions influence coping is also suggested in other work as well (e.g., Dusek & Danko, 1994, Lewis & Kliwer, 1996).

Mother’s personality as a predictor for extended family engagement is supported by the work of Hakoyama and Malonebeach (2013); the results indicated that personality predicted extended family engagement. The researchers looked specifically at the Big Five personality traits (extraversion, agreeableness, conscientiousness,
neuroticism/emotionality stability, and openness) and found that while each of the traits correlated positively with grandparent and grandchild closeness, grandparent’s personality traits were more strongly correlated with grandparent-grandchild closeness than those of the grandchildren. In this study, all of the personality traits of the participants and those of their grandparents were significantly correlated. This suggests that if a mother has an alpha personality (i.e., emotional stability, conscientiousness, and agreeableness) she is less likely to support a relationship between their child and their extended family. This is further supported by research on maternal gatekeeping. As stated by Monserud (2008), “In most cases, women are major kin-keepers in the family because they maintain stronger ties to relatives than men do” (p. 183). Parental gatekeeping research also supports the finding that parents’ relationship quality with extended family can predict the adolescent engagement with extended family. If a parent wishes to maintain a close relationship with their extended family, their child may also engage with extended family. However, individuals engage with extended family for many reasons, one of which is because they appreciate the relationship and another because they may need social support. In this regard, a family who is fully functional may not need extended family for support and therefore may engage with them less frequently than a less-than-fully function family. Therefore, mothers high on alpha personality may be reflecting a highly functional family, and thus engage with their extended family less often. They may still engage, but just not as often as a family whose needs are greater. However, despite the intriguing nature of this finding and the unexpected direction, more research needs to be completed in this area to confirm the relation.
Extended family engagement, geographic proximity, and parent relationship quality were significantly associated with perceived support from extended family. The idea that family engagement predicted support is consistent with previous research. Shanas (1979) discussed how the immediate family of an older adult is a major social support especially in times of illness. Shanas (1979) also highlighted how interactions between older adults and their children, siblings, and other relatives help keep them tied into the community. Engagement with extended family for adolescents could be as beneficial as it is for adults. The presence of extended family makes it possible for older adults to live outside of public/private institutions. In this case, both immediate and extended family can supply older adults with care. Through these interactions, children and adolescents can learn about the positives associated with support.

Keefe, Padilla and Carlos (1979) compared Mexican American extended families and Caucasian American extended families and reported that Mexican American families relied heavily upon their extended family for support. However, their research does not indicate this is solely a unique Mexican-American trait. The intergenerational solidarity model also shows support for these findings. A second component of the theory that works well within this context is the functional solidarity component. According to this component, it is important to also pay attention to the conditions under which assistance flows both up and down the generational lines within any one family. With this research in mind, it could make sense that if young children see their parents relying on extended family members for social support they will choose to do so themselves.

Geographic proximity appears to be associated with support from extended families as well. According to Parsons (1943), maintaining the total amount of
interactions between a child and their family is significantly more difficult as the geographic distance between the two increases. Therefore, if adolescents live near their extended family, they would be expected to have more interactions with them and a higher potential for support to occur. Also, according to Cooney and Uhlenberg (1992), geographic proximity may play a role in a child’s chances of receiving support from family. According to Uhlenberg and Hammill (1998), geographic distance is a very strong predictor of contact. With this, it was evident that most grandparents maintain frequent contact and support with their grandchildren when it is possible to do so. Litwak (1960) outlined a different argument. He stated that individuals who are strongly attached to their extended families will be more reluctant to move even if better opportunities present themselves such as better employment or more resources. Therefore, in the future it would be important to test this relationship further. Bengston and Roberts’ (1991) findings also apply here as well. Within the six dimensions identified within this theory, structural solidarity is the component that aligns the most accurately with this research. This construct is nominally defined as the opportunity structure for intergenerational relationships reflecting number, type and geographic proximity of family members. Bengston and Roberts (1991) found that the effect of proximity on association, or in this case engagement, was very strong.

I also found that parent relationship quality was associated with support. It may be that parents who have positive relationships with their family are more likely to spend time with them and share that with their children. According to Uhlenberg and Hammill (1998), the overall quality of the relationship between a grandparent and his/her child affects the quality of contact between the grandparent and that set of grandchildren.
Interestingly, they found that the middle generation may act as a gatekeeper for the
grandparent-child relationship. This is very similar to what was discussed in relation to
gatekeeping previously. Although this research supports my findings, work done by
Eggebeen and Hogan (1989) does not support it. They reported that specifically
Americans limited the support they provided their non-co-resident parents, and with this
their relationship quality dropped.

In this study, mothers’ alpha personality was not significantly associated with
perceived support from extended family. The idea that personality was not significantly
associated with support can also be explained. If a mother is found to have an alpha
personality (i.e., emotional stability, conscientiousness, and agreeableness), she most
likely will not need support as often as those who do not have an alpha personality.

Finally, parent relationship quality and extended family engagement were
significantly associated with the Adolescent’s relationship quality with extended family.
The association between parent relationship quality with extended family and adolescent
relationship quality with extended family was supported by previous research. According
to Castiglia (1999), grandparents and other relatives serve as significant role models for
children and young adults. Therefore, when children watch a grandparent create and
maintain healthy relationships with those around them, they are more likely to wish to do
the same. The connection between extended family engagement and adolescent
relationship quality is also reasonable: the more a child spends time with their extended
family the more developed the relationship would become. As they strengthen this
relationship, the children also learn how to form strong supportive bonds with others
beyond their family.
Geographic proximity and mother personality were found to not be associated with the adolescent’s relationship quality. The lack of association between geographic proximity, personality and adolescent relationships with extended family is interesting. It would make sense that if a child lives near their extended family, then the child would spend more time with them, and thus create more relationships with extended family. However, these results suggest that this is not the case. This could be because the measures I used to look at adolescent relationship were limited in scope. Further research is needed to answer this question. The finding that mother personality does not predict adolescent relationship quality with extended family is also interesting. If a parent is more emotionally stable, it would stand to reason that this parent would build and maintain strong relationships. More research is needed to identify in what ways personality is related to adolescent relationship quality.

Limitations

Despite the advantage of being able to look at several predictors and outcomes at the same time, cross-sectional research comes with certain limitations. First, with cross-sectional research it is not possible to make a definitive causal inference about the families as cross-sectional research only provides a singular snapshot of what is taking place at any particular time point. With this, the predictors and outcomes I included in this study may be different at another chosen point of time. Another limitation is the low reliability of the coping measure. I was theoretically interested in the coping variable but found that the measure was limited in scope. A final limitation has to do with generalizability. Considering that the dataset only contains families who are from and
have lived in Iowa, the findings may not be relevant to families of other regions and ethnicities.

**Implications**

The purpose of this research was to develop a better understanding of extended family, what predicts engagement, and how engagement can have an effect on a developing adolescent. With a better understanding of extended family we can ask how and why individuals seek to engage with their extended families. Extended family relations can help to better understand how we navigate through other types of relationships in our lives. We can also delve deeper into the question, “Are families in the United States really in the state of decline?” or, “Have they simply changed?” I think that this work also brings to light the importance of extended family in other places. I believe it shows that there are many who are moved and affected by the relationships that they themselves have with their extended family, and how these relationships then affect the choices that they make. More research needs to be conducted to answer this question. For future studies it is important to assess other outcomes associated with engagement. For instance, what role could the concept of obligation play in how and when we decide to engage with our families? Other variables of interest could be educational attainment, and family size. This study touched on a very interesting facet of extended family research and there are more future research possibilities.
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APPENDIX A

Engagement with Extended Family

Father and mother reporting on how often his child is able to see their grandfather (paternal), their grandmother (paternal), step grandfather (if necessary), step grandmother (if necessary), grandfather (maternal), grandmother (maternal).

1. During the past 6 mths, how often did the adolescent child see your father either face to face, in their home or somewhere else?
2. During the past 6 mths, how often did the adolescent child see your stepfather either face to face, in their home or somewhere else?
3. During the past 6 mths, how often did the adolescent child see your mother either face to face, in their home or somewhere else?
4. During the past 6 mths, how often did the adolescent child see your stepmother either face to face, in their home or somewhere else?
5. During the past 6 mths, how often did the adolescent child see your father in law either face to face, in their home or somewhere else?
6. During the past 6 mths, how often did the adolescent child see your mother in law either face to face, in their home or somewhere else?
7. During the past 6 mths, how often did the adolescent child have contact with your father either face to face, in their home or somewhere else?
8. During the past 6 mths, how often did the adolescent child have contact with your stepfather either face to face, in their home or somewhere else?
9. During the past 6 mths, how often did the adolescent child have contact with your mother either face to face, in their home or somewhere else?
10. During the past 6 mths, how often did the adolescent child have contact with your stepmother either face to face, in their home or somewhere else?

Adolescent Report

11. How often do you have contact with this relative or relatives, either in person, on the phone or by writing letters?
12. How often do you have contact with this relative or relatives, either in person, on the phone or by writing letters?
13. How often do you have contact with this relative or relatives, either in person, on the phone, or by writing letters?

Adolescent Report

14. Of these relatives who can you talk to about your problems and worries, how often do you have contact with at least one of them, either in person, on the phone or by writing letters?
15. During the past 6 months, about how often did you have contact with your grandfather (father's side)?
16. During the past 6 months, about how often did you have contact with your grandmother (father's side)?
17. During the past 6 months, about how often did you have contact with your grandfather (mother's side)?
18. During the past 6 months, about how often did you have contact with your grandmother (mother's side)?

**Geographic Proximity**

**Parent Report**

19. Where does the father's mother live? (state)
20. Where does the father's father live? (state)
21. Where does the mother's mother live?
22. Where does the mother's father live?

**Parent Report**

23. About how many of your brother, sister, or other relatives live in your county or neighboring county? (number of brothers)
24. About how many of your brother, sister, or other relatives live in your county or neighboring county? (number of sisters)
25. About how many of your brother, sister, or other relatives live in your county or neighboring county? (Other relatives)
26. About how many of your brother, sister, or other relatives live in your county or neighboring county? (number of brothers)
27. About how many of your brother, sister, or other relatives live in your county or neighboring county? (number of sisters)
28. About how many of your brother, sister, or other relatives live in your county or neighboring county? (Other relatives)

**Parent Report**

29. How far do you live from the following people? (your father)
30. How far do you live from the following people? (your stepfather)
31. How far do you live from the following people? (your mother)
32. How far do you live from the following people? (your stepmother)
33. How far do you live from the following people? (your father in the law)
34. How far do you live from the following people? (your mother in law)
35. How far do you live from the following people? (Your brother or sister you see most often)
36. How far do you live from the following people? (Your aunt, uncle, or cousin you see most often)
37. How far do you live from the following people? (Other in laws you see most often)
38. How far do you live from the following people? (Your best friend (no relation))
39. How far do you live from the following people? (your father)
40. How far do you live from the following people? (your stepfather)
41. How far do you live from the following people? (your mother)
42. How far do you live from the following people? (your stepmother)
43. How far do you live from the following people? (your father in the law)
44. How far do you live from the following people? (your mother in law)
45. How far do you live from the following people? (Your brother or sister you see most often)
46. How far do you live from the following people? (Your aunt, uncle, or cousin you see most often)
47. How far do you live from the following people? (Other in laws you see most often)
48. How far do you live from the following people? (Your best friend (no relation))
49. How many of your spouse’s relatives live less than 100 miles from your house?
50. How many of your spouse’s relatives live less than 100 miles from your house?

Parents’ Relationship with Extended Family

*Parent Report*

1. How would you describe your current relationship with your mother/father?
2. How happy are you with the relationship you have with your father?

3. How happy are you with the relationship you have with your stepfather(s)?
4. How happy are you with the relationship you have with your mother?
5. How happy are you with the relationship you have with your stepmother(s)?
6. How happy are you with the relationship you have with your mother in law?
7. How happy are you with the relationship you have with your father in law?

*Parent Report*

8. Generally, how much conflict, tension, or disagreement do you feel there is between you and your father?
9. Generally, how much conflict, tension, or disagreement do you feel there is between you and your stepfather?
10. Generally, how much conflict, tension, or disagreement do you feel there is between you and your mother?
11. Generally, how much conflict, tension, or disagreement do you feel there is between you and your stepmother?
12. Generally, how much conflict, tension, or disagreement do you feel there is between you and your mother in law?
13. Generally, how much conflict, tension, or disagreement do you feel there is between you and your father in law?

Adolescent Relationship quality with Extended Family
Adolescent Report

1. In comparison with their relationships with other grandchildren, how would you describe the relationship between your father and the adolescent child?
2. In comparison with their relationships with other grandchildren, how would you describe the relationship between your stepfather and the adolescent child?
3. In comparison with their relationships with other grandchildren, how would you describe the relationship between your mother and the adolescent child?
4. In comparison with their relationships with other grandchildren, how would you describe the relationship between your stepmother and the adolescent child?
5. In comparison with their relationships with other grandchildren, how would you describe the relationship between your father in law and the adolescent child?
6. In comparison with their relationships with other grandchildren, how would you describe the relationship between your mother in law and the adolescent child?
7. In comparison with their relationships with other grandchildren, how close are you to your grandfather (father's side)
8. In comparison with their relationships with other grandchildren, how close are you to your grandmother (father's side)
9. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandfather (father's side)
10. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandmother (father's side)
11. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandfather (mother's side)
12. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandmother (mother's side)
13. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandfather (father's side)
14. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandmother (father's side)
15. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandfather (mother's side)
16. Compared to the other grandchildren, including your brothers or sisters in the study, how close are you to your grandmother (mother's side)

Coping Skills

Adolescent Report

Active

1. When I have a problem, I try to figure out the cause and do something about it.
2. When I have a problem, I usually talk to other people about it.

Avoidant

1. When I have a problem, I try to forget about it.
2. When I have a problem, I try to do things that will keep me from thinking about it.
Support from Extended Family

Adolescent Report

1. Do you have any relatives, such as grandparents, aunts, uncles or cousins you could talk to about your problems or worries?
2. Do you have any relatives; you could talk to about your problems or worries? (Grandmother)
3. Do you have any relatives; you could talk to about your problems or worries? (cousin)
4. Do you have any relatives; you could talk to about your problems or worries? (grandfather)
5. Do you have any relatives; you could talk to about your problems or worries? (aunt & uncle)
6. Do you have any relatives; you could talk to about your problems or worries? (aunt & cousin)
7. Do you have any relatives; you could talk to about your problems or worries? (grandparents)
8. Do you have any relatives; you could talk to about your problems or worries? (uncle & cousin)
9. Do you have any relatives; you could talk to about your problems or worries? (uncle & aunt)
10. Do you have any relatives; you could talk to about your problems or worries? (nephew)

11. Can you talk to your grandmother?
12. Can you talk to your grandmother?
13. Can you talk to your grandfather?
14. Can you talk to your aunt?
15. Can you talk to your uncle?
16. Can you talk to your cousin?

17. How often do your grandparents help you in important ways, by given you advice, helping some your problems?
18. Do you feel appreciated, loved, and cared for by your grandparents?
19. How much do you feel you can depend on your grandparents when you really need them?
The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University. Please refer to the IRB ID number shown above in all correspondence regarding this study.

Based on the information you provided in Section II of the IRB application, we have coded this study in our database as being:

- ☑ Permanently closed to the enrollment of new subjects, where all subjects have completed all research-related activities, and the study remains open only for long-term follow-up of subjects.

☐ Open only for data analysis.

Even though enrollment of subjects has ended, continuing review is required until human subjects are no longer involved and all data are completely de-identified. Check the website, http://www.compliance.iastate.edu, for further guidance on continuing review requirements.

Please also be sure to promptly report any of the following to the IRB: (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.

To re-open enrollment or initiate research-related interaction with subjects, you must submit a Modification Form and receive IRB approval prior to contacting subjects. Upon completion of this project, please submit a Project Closure Form to the Office for Responsible Research.

Please do not hesitate to contact us if you have questions or concerns at 515-294-4566 or IRB@iastate.edu.
INSTITUTIONAL REVIEW BOARD (IRB)
Amendment for Personnel Changes

RECEIVED

Title of Project: Family Transitions Project, FTP
Principal Investigator (PI): Tricia Nepple
University ID: 29167966245 Phone: 4-8502 Email Address: tnepple@iastate.edu

FOR STUDENT PROJECTS (Required when the principal investigator is a student)
Name of Major Professor/Supervising Faculty:
University ID:

Changes in Key Personnel:
Key personnel includes any individuals who will have contact with the participants or the participants' data (e.g., interviewers, transcribers, coders, etc.). This information is intended to inform the committee of the training and background related to the specific procedures that each person will perform on the project. For more information, please see Human Subjects - Persons Required to Obtain IRB Training. Personnel who will have contact with human blood, specimens, or other biohazardous materials must also complete Bloodborne Pathogens Training. If the principal investigator has or will change, a complete new IRB application is required.

1. List any individuals to be removed from the study staff:

2. Complete the following table to list any new key personnel:

<table>
<thead>
<tr>
<th>NAME</th>
<th>Initial contact or access to private <em>and/or</em> identifiable data?</th>
<th>Involved in the research process?</th>
<th>Contact with human blood specimens, or other biohazardous materials?</th>
<th>Other Roles in Research</th>
<th>Qualifications (i.e., special training, degrees, certifications, coursework, etc.)</th>
<th>Human Subjects Training Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marina Holst</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>Research Assistant BS</td>
<td>8/12 2013</td>
</tr>
</tbody>
</table>

Office for Responsible Research
Revised: 8/11/13