Family networks and emerging adulthood: The modern extended family

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Family networks and emerging adulthood: The modern extended family

by

Marissa E Holst

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

DOCTOR OF PHILOSOPHY

Major: Human Development and Family Studies

Program of Study Committee:
Megan Gilligan, Major Professor
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The student author and the program of study committee are solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University
Ames, Iowa
2017

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DEDICATION

I warmly dedicate this dissertation
to Oakley and the twins.
I hope you find as much love and life in your extended family
as I always have!
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“Nevertheless, she persisted.”
ABSTRACT

Recent demographic shifts in the United States have substantially altered family structure. These shifts include an increase in the average life span, smaller family sizes, and changes in marriage patterns including individuals who never marry, divorce, remarry, and cohabitate (Silverstein & Giarruso, 2010; Wu, 2014). Taken together, these factors have resulted in increasingly complex family forms. These shifts in family structure have implications for family process including the quality of relationships across and within generations (Uhlenberg, 1996). Previous work has focused on examining relationship quality in the family of origin (e.g., parents and siblings). A potential consequence of focusing on families of origin is that researchers may overlook the role of other family systems including the extended family.

Utilizing a population of 491 emerging adults (ages 18-25), I examined the association between characteristics of emerging adults (e.g., gender, closeness with family of origin, and romantic relationship status) and relationship quality (i.e., closeness and conflict) with extended family. I then evaluated how relationship quality (e.g., closeness and conflict) with extended family members is associated with emerging adults’ well-being (i.e., self-acceptance and loneliness). In both papers, two measures for each relationship quality variable were created (average closeness, highest closeness, average conflict, highest conflict). Highest closeness and highest conflict were included to capture the extremes found within family relationships, and average closeness and average conflict were created to capture an overall assessment of relationship quality across all extended family members.
Results of the first paper indicated that gender is associated with emotional closeness in relationships between emerging adults and their extended family members. Specifically, women were more likely than men to indicate having close relationships with their extended family members. Results also indicated that the quality of relationships between emerging adults and their families of origin was highly correlated with relationship quality between emerging adults and their extended family members. Finally, the results of the first paper indicated that emerging adult romantic relationship status is not associated with close relationships with extended family members.

The results of the second paper demonstrated that conflict (e.g., average & highest) with extended family members was associated with higher levels of loneliness and lower levels of self-acceptance. Results also indicated that closeness (e.g., average and highest) with extended family members was associated with lower levels of reported loneliness, and higher levels of self-acceptance. Emerging adult gender was found to moderate the relationship between highest closeness and self-acceptance. This effect was stronger for men than for women.

The findings of these two papers were consistent with the broader family of origin literature, but provide unique insight into familial relationships that extend beyond the family of origin. These results also help develop a clearer picture of the characteristics of emerging adulthood (e.g., gender, closeness with family of origin, and romantic relationship status), as well as emerging adults’ well-being (e.g., loneliness and self-acceptance).
CHAPTER 1. INTRODUCTION

Understanding Extended Family

Over the last several decades family scholars have emphasized the importance of the relationships within the family of origin—which is commonly defined as two parents and their young children (Bengtson, 2001; Bengtson, Biblarz, & Roberts, 2002). However, recent demographic shifts in the United States have substantially altered family structure. These shifts include an increase in the average life span, smaller family sizes, and changes in marriage patterns including individuals who never marry, divorce, remarry, and cohabitate (Silverstein & Giarruso, 2010; Wu, 2014). Taken together, these factors have resulted in increasingly complex family forms. These shifts in family structure have implications for family process including the quality of relationships across and within generations (Uhlenberg, 1996). An implication of focusing on families of origin is that researchers may be overlooking important aspects of family life including the role that extended family members have in human development.

Disciplines such as sociology and anthropology have shown interest in the complexities of the extended family. Anthropologists have investigated how cultural aspects of kinship shape the way people relate to one another as well as how they interact with their environment (Aschenbrenner, 1973; Smith-Morris, Morles-Campos, Alvarez, & Turner, 2012). On the other hand, sociologists have focused on how understanding extended family relationships aids in the examination of social networks (Litwak, 1960; Mikkelson, 2014; Sussman & Burchinal, 1962). Current sociological research has looked specifically at how social networks that include extended family inform our outlook on social, economic, and
demographic change. As demonstrated by these examples, the definition of extended family is highly variable. Therefore, agreeing on a specific definition of what constitutes extended family has been a source of contention among scholars. In the early 1960s, Murdock (1982) defined extended family as “two or more nuclear families affiliated through an extension of the parent-child relationship” (p. 103). In contrast, other researchers have defined extended family more broadly. Hagen (1962) defined extended family as consisting of several generations in which “all feel responsible for all.” In the 1980s, Martin and 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. More recently, Sarkisian, Gerena, and Gerstel (2007) defined extended family as “any relatives other than a spouse or minor child.”

Some researchers restrict their definition of extended family to include only biological relatives, whereas other studies include close friends and neighbors. In regards to the latter, a large portion of research on the African American extended family includes the concept of fictive kin (Mashele, Poggenpoel, & Myburgh, 2006; Wilson, 1986, 1989). Sussman (1985) defined fictive kin as individuals who are not biologically related but regard one another as family. Including fictive kin in the definition of extended family allows researchers to better comprehend diverse family experiences. Families of color often experience additional stress due to racism, discrimination, or other social barriers and fictive kin can serve as an important source of support (Taylor, Chatters, Woodward, & Brown, 2013; Woods-Giscombé, Lobel, Zimmer, Cené, & Corbie-Smith, 2015).

Despite the emphasis on extended family relationship in the literature on minority families- the broader literature on family relationships has overwhelming focused on
relationships between parents and their young children (Fingerman & Hay, 2002). Comparatively, the roles of other family members such as aunts, uncles, and cousins have received little attention. As a result, family researchers have not captured the contributions of other family members in the lives of individuals. One exception is Robert Milardo’s qualitative exploration of the relationships between aunts, uncles, nieces, and nephews (Milardo, 2010). Milardo (2010) discussed how aunts, uncles, and grandparents often serve as mentors, teachers, and family history resources by providing advice and criticism regarding an individual’s life choices. Extended family members who engage in mentoring and teaching roles also help emerging adults to understand parent/caregivers, and why parent/caregivers make the choices and decisions that they do. Aunts engage their nieces and nephews in emotional work by helping them process conflicts with family members such as siblings and parents. This enhanced understanding improves parent-child relationships. Milardo also noted that extended family members are important in the development of family norms, values, and history. Taken together, Milardo’s work highlights that aunts and uncles often serve as an intergenerational buffer between parents and their children.

This pivotal research clearly demonstrates that extended family members often play a unique role in the lives of young people. In this dissertation research, I furthered Milardo’s work by considering the role of extended family relationships in the lives of emerging adults. Specifically, I asked emerging adults to report on extended family members including grandparents, aunts, uncles, and cousins.

**Theoretical Framework**

This dissertation research draws from two theoretical frameworks: (1) Bowen’s family systems theory (Bowen, 1978); and (2) intergenerational model of solidarity
(Bengtson & Roberts, 1991). Historically, Bowen’s family systems theory has been used in a family therapy context, however much can be learned by utilizing it as a framework for understanding familial relationships. This theory discusses families as “emotional units” and uses a systems thinking approach to examine the complexity of the relationships within families. Bowen (1978) posited that all subsystems within a family are interconnected, and therefore to understand one subsystem researchers need to consider it in the context of other family systems. Specifically, family context has the ability to influence individuals and, conversely individuals can shape family context (Van Velsor & Cox, 2000). As a result, this framework has been popular among researchers examining the impact of family systems on individual outcomes ((Rothbaum, Rosen, Ujiie, & Uchida, 2002; Shek, 1997). In the first paper, I considered multiple systems (e.g., romantic relationships and families of origin) and how they impact emerging adult relationship quality within extended family.

As mentioned previously, mental health professionals and family therapists have utilized Bowen’s family systems theory in practice (Ponappa et al., 2016; Titehnan, 1998). Initial work by Bowen (1960; 1978) suggested that both therapists and counselors should recognize that certain psychotherapeutic changes in an individual can be influenced by other family systems in the form of providing support, verbalizing expectations, and giving advice (Fingerman & Bermann, 2000). Commonly, family therapists apply this theory when interacting with clients by considering psychopathology as a reflection of family process. For example, according to this theory, the relationship between parents, parent-child relationships, and experiences with friends may influence the well-being of a child. As a result, all family systems need to be taken into account when deciding best treatment. With this framework in mind, the second paper considered the association between relationship
quality with extended family members and the well-being of emerging adults (e.g., loneliness and self-acceptance).

Whereas Bowen’s family systems theory helps provide justification for studying systems outside of the family of origin and how these relationships can impact well-being, the intergenerational model of solidarity (Bengtson & Silverstein, 1991) informs the inclusion of both positive and negative aspects of relationships quality in the study families. The original goal of Intergenerational Solidarity Model was to account for patterns of solidarity among parents and their children during the adult family life course utilizing six elements of parent-child interaction: affection, association, consensus, resource sharing, the strength of family norms, and the opportunity for interaction. The original model emphasized positive aspects of family relationships. As a result, much of the early work using the theory focused on positive relationships (Lawton, Silverstein, & Bengtson, 1994; Monserud; 2008). However, an absence of positive emotions does not necessarily reflect negative feelings or conflict. To address the negative aspects of family relationships the model was modified to include conflict (Bengtson, Rosenthal, & Burton, 1995; Silverstein, Chen, & Heller, 1996). Considering the changes made to the intergenerational model of solidarity, I incorporated measures of conflict in addition to measures of closeness to examine both the positive and negative aspects of family relationships.

**Family Relationships and Emerging Adulthood**

Emerging adulthood is a relatively newly recognized developmental period taking place between 18 and 25 years of age (Arnett, 1998; 2000). Pivotal work by Arnett and Tanner (2006) identified emerging adulthood as a time of identity exploration (primarily in the areas of love, work, and worldviews), instability (in terms of residence changes), self-
focus (lacking obligations), feeling in-between (not identifying as an adult or a child), and optimism regarding future opportunities. Therefore, emerging adulthood is a unique developmental stage in which individuals have the opportunity to experiment with new roles and develop their own worldview. As a result, emerging adults are aspiring for autonomy and independence (Aquilino, 2006, Larson & Richards, 1994). Evidence has identified aspects of emerging adulthood in a variety of cultures, however, this developmental period may be significantly impacted by culture and socioeconomic status (Arnett, 2003; 2006). As a result, emerging adulthood occurs primarily within industrialized countries (Arnett, 2004; 2014).

Many scholars have remarked that this stage occurred as a result of demographic and economic shifts during the latter half of the 20th century when changes were evident in the timing of marriage, parenthood, and the pursuit of higher education (Arnett & Tanner, 2006). Between 1960 and 1990, the median age of marriage increased greatly in industrialized society. For instance, in 1960, the median age of marriage for men was 23 and 20 for women (Wilcox, 2001). Today, the average age for those getting married is 29 for men and 27 for women (Cohn, Passel, Wang, & Livingston, 2011). Individuals are also waiting longer to have children; therefore, the age of first childbirth has increased (Arnett & Taber, 1994; Arnett & Tanner, 2006). These demographic changes may be occurring as a result of an increased pursuit of education.

During this stage, many young people choose to further their education by attending college. Data indicate a steady increase in undergraduate enrollment over the past 20 years, with a jump of 31% from 13.2 million in 2000 to 17.3 million in 2014 (National Center for Education Statistics, 2016). Researchers predict that this number will increase to 19.8 million by the year 2025. Interestingly, in 2015, 35% of individuals age 25-29 attained a bachelor’s
degree or higher, which indicates a high number of emerging adults have attended post-secondary institutions (National Center for Educational Statistics, 2016). For many emerging adult students the transition to college involves moving out of their parent/caregiver’s home and onto university campuses resulting in more independence and less adult supervision. This transition can result in a number of challenges such as higher rates of loneliness and depression (Eshbaugh, 2008). Feelings of loneliness and depression have implications for other activities such as risky sexual behavior (Huggins & Rooney, & Chronis-Tuscano, 2015) binge drinking (Byrd, 2016), and suicide (Furr, Westefeld, McConnell, & Jenkins, 2001).

Despite the increased autonomy that college students experience, they still rely on their parents/caregivers for emotional, instrumental, and financial support (Aquilino, 2006, Eshbaugh, 2008; Larson & Richards, 1994). However, it is during this time that parent-child relationships are experiencing renegotiation, and emerging adults’ views of their parents are beginning to shift. Emerging adults are moving from the role of a dependent child to that of an adult. As a result, they are developing a sense of filial maturity, and are beginning to see their parents/caregivers as individuals who have their own life histories, personalities, experiences, and needs (Aquilino, 2006; Arnett, 2014). It is likely that they are also experiencing a similar renegotiation of boundaries within other familial relationships.

Emerging adulthood provides an opportunity for growth in both individual and familial understanding and may be a salient time for relationships with extended family members. Therefore, in the current research, I examined familial relationships between emerging adult college students and their extended family members.

The overarching goal of this research was to develop a deeper understanding of what factors are associated with relationship quality between emerging adults and their extended

family members, and how relationship quality between emerging adults and their extended family influences emerging adults’ well-being. Specifically, I examined the association between characteristics of emerging adults (e.g., gender, closeness with family of origin, and romantic relationship status) and relationship quality (i.e., closeness and conflict) with extended family. Then I evaluated how relationship quality (e.g., closeness and conflict) with extended family members is associated with emerging adults’ well-being (i.e., self-acceptance and loneliness).

References


CHAPTER 2. EMERGING ADULTS, RELATIONSHIP QUALITY, AND EXTENDED FAMILY

A paper to be submitted to Emerging Adulthood

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Abstract

The purpose of this study was to examine the association between characteristics of emerging adults (e.g., gender, closeness with family of origin, and romantic relationship status) and relationship quality (i.e., closeness and conflict) with extended family. Two measures for each relationship quality variable were created (average closeness, highest closeness, average conflict, highest conflict). Highest closeness and highest conflict were included to capture the extremes found within family relationships, and average closeness and average conflict were created to capture an overall assessment of relationship quality across all extended family members. The data used in this study were collected from 491 undergraduate college students (ages 18-25) who were enrolled at a large Midwestern university. Participants were recruited from beginner and intermediate level social science classes (M age= 20.79 years). A series of t-tests, ANOVAs, and OLS regressions were utilized. The findings of this study revealed that female emerging adults were more likely than males to identify close relationships with their extended family members, after controlling for year in school, first generation college student status, in-person contact,
messaging technology, and race. The findings also demonstrated that closeness in families of origin was highly correlated with closeness in extended family and therefore was excluded from further models. There was not a significant association between emerging adults’ romantic relationship status and their relationship quality with extended family members. Further, gender did not moderate the association between emerging adult romantic relationship status and relationship quality with extended family members.

**Keywords:** emerging adulthood, extended family, relationship quality

**Background and Theoretical Framework**

Understanding relationship quality between family members has been of long-standing interest to family scholars (Cruz et al., 2014; Rossi & Rossi, 1990; Wolfinger & Wilcox, 2008). Early work looking at relationship quality between family members focused primarily on positive aspects of family relationships (i.e., closeness) (Bengtson & Roberts 1991; Rossi & Rossi, 1990). Although this previous work considered multiple dimensions of solidarity, it failed to capture other dimension of family relationships. As a result, some scholars critiqued this approach as being unidimensional, and stated that it did not provide a holistic picture of relationship quality between family members (Connidis & McMullin, 2002). More recent scholarship has advocated for the consideration of additional perspectives that include more complex considerations of familial relationships (Burbidge & Minnes, 2014; Pillemer & Suitor, 2014). In response, scholars have been choosing to measure both positive and negative aspects of family relationships — including conflict (Bengtson, Rosenthal, & Burton, 1995; Ferring, Michels, Boll, & Filipp, 2009; Pillemer & Suitor, 2002; Szydlik, 2008). By including multiple aspects of relationship quality, scholars are able to develop a more complete understanding of relationship quality within a given family system.
Therefore, in this paper, I consider two dimensions of emerging adults’ relationships with their extended family members: closeness and conflict.

The current study draws from two theoretical frameworks: (1) Bowen’s family systems theory (Bowen, 1978); and (2) the intergenerational model of solidarity (Bengtson & Roberts, 1991). Bowen’s family systems provide a basis for the consideration of multiple familial relationships. This theory discusses families as “emotional units” and uses a systems thinking approach to examine the complexity of the relationships found within families. Bowen (1978) posited that all subsystems within a family are interconnected; therefore, to understand one subsystem researchers need to consider it within the context of other family systems. Specifically, family context has the ability to influence individuals and conversely individuals can shape family context (Van Velsor & Cox, 2000). As a result, this framework has been widely used among researchers examining the impact of family systems on individual outcomes (Rothbaum, Rosen, Ujiie, & Uchida, 2002; Shek, 2002). Within the current study, I consider the association between multiple systems (e.g., romantic relationships, families of origin) and emerging adult relationship quality with extended family members.

Whereas Bowen’s family systems theory provides a framework for evaluating the effects of multiple systems and their impact on an individual’s behavior, the intergenerational model of solidarity (Silverstein & Bengtson, 1991) informs the inclusion of positive and negative aspects of relationships quality when studying families. The original goal of this theory was to account for patterns of solidarity between parents and children during the adult family life course utilizing six elements of parent-child interaction: affection, association, consensus, resource sharing, the strength of family norms, and the opportunity for
interaction. The original model focused on the positive aspects of family relationships (Lawton, Silverstein, & Bengtson, 1994; Monserud; 2008). However, an absence of positive emotions doesn’t necessarily reflect negative feelings or conflict as a result the model was expanded to include conflict (Bengtson, Rosenthal, & Burton, 1995), and other negative aspects of solidarity (Silverstein, Chen, & Heller, 1996). Therefore, in the current study, I incorporate measures of conflict in addition to measures of closeness to examine both the positive and negative aspects of family relationships.

**Emerging Adulthood: Transitions and Families**

Pivotal work by Arnett (2000) defined emerging adulthood as the developmental period that takes place between 18 and 25 years of age. This period is distinct from both adolescence and young adulthood, and has been characterized by researchers using five characteristics: identity exploration (in the areas of love, work, and world perspectives), instability (relationships, work, residence, and education), and self-focus (lacking obligations), feeling in-between (emerging adults do not consider themselves as children or adults), and optimism (the opportunity to steer their lives in multiple directions) (Arnett & Tanner, 2006). These characteristics highlight the uniqueness of emerging adulthood, and how those within this period have the ability to explore new roles and develop their own perspectives.

Emerging adults are pursuing college at higher rates than previous generations. College enrollment has increased 31% from 13.2 million in 2000 to 17.3 million in 2014 (National Center for Education Statistics, 2016). Scholars predict that this number will continue to increase to 19.8 million by the year 2025 (National Center for Education Statistics, 2016). As a result of the transition to college, many emerging adults will move out
of their childhood homes and onto college campuses. This transition often includes greater independence, an increased exposure to diversity, and less adult supervision. Despite their newfound autonomy, students often depend on their parents for emotional, instrumental, and financial support (Aquilino, 2006, Larson & Richards, 1994).

Despite some continued dependence during this period, the relationship between emerging adults and their parents is experiencing a dramatic shift. As emerging adults progress through this stage, their relationships with their parents/caregivers evolves from that of a dependent to a fellow adult (Arnett, 1998). They also develop a sense of filial maturity, making them more capable of understanding their parents’ perspectives, experiences, and needs (Arnett, 2003, Arnett 2015; Aquilino, 2006). For many parents and children, these changes lead to decreased levels of conflict and power issues within their relationships (Aquilino, 2006). It is reasonable to suggest that this progression may reach beyond immediate family members to include the relationships emerging adults have with their extended family members. In the current study, extended family is defined as individuals who extend beyond the family of origin including grandparents, aunts, uncles, and cousins. Because the post-secondary environment provides increased opportunities for growth in both individual and familial understanding, it may be a particularly relevant context for relationships with extended family members. For this reason, the current study focuses on emerging adult college students’ relationships with their extended family members.

**Gender and Familial Relationships**

Family scholars have indicated that gender is an important indicator of relationship quality within familial relationships (Maccoby, 1990, Sells & Ganong, 2016; Walker, 1999). For example, women are more likely than men to report higher levels of intimacy, closeness,
and contact with family members (Cornwell, 2011; Marsden, 1987; Moore, 1990). This relationship is especially apparent when examining the mother-daughter bond. Researchers have documented that the mother-daughter bond is the strongest of all human ties (Friedman, 1980; Suitor, Pillemer & Sechrist, 2006). Often, this bond is characterized by high levels of emotional closeness, and greater instances of confiding (Pillemer & Suitor, 2002; Rossi & Rossi, 1990). However, as with many types of relationships, mother-daughter bonds shift and change over time. These changes are typically influenced by early family experiences, the flow of social support, future goals and plans, and geographic proximity (McNutt et al., 2013; Rossi & Rossi, 1990).

A similar preference for female kin can be found in the literature on sibling relationships. Researchers have noted that the closest bond within sibling pairs is between sisters (Connidis & Campbell, 1995; Rossi & Rossi, 1990). In general, sisters express higher levels of closeness and contact as opposed to sibling networks that include both brothers and sisters (Doron & Sharabi, 2016). Pitze and Trent (2006) found that men are less likely to indicate feeling close with their brothers and sisters than their female counterparts. Furthermore, brother-brother dyads tend to report lower levels of positive relations than both sister-sister dyads and brother-sister dyads (Cole & Kearns, 2001).

Taken together, the literature on parent-child and sibling indicates that women often have closer familial relationships than men. Based on these findings, I anticipated that female adults will be more likely than males to report close relationships with extended family relationships.

Although many family relationships are emotional close, relationships can also be tense and strained. As mentioned previously, scholars have demonstrated that the mother-
daughter is the closest family tie. However, findings have shown that ties between mothers and daughters can be highly conflictual (Nice, 1992; Suitor, Pillemer, & Sechrist, 2006). This is often due to disagreements in expectations between mothers and their daughters, specifically in regard to the daughter’s parental and marital status (Aquilino, 1999) as well as conflicting values and beliefs (Suitor, Gilligan, & Pillemer, 2013). Men experience conflictual relationships with their mothers differently than women because mothers often have different expectations for their male and female children (Cichy, Lefkowitz, Davis, & Fingerman, 2013; Gilligan, 1982; Gregory & Huang, 2013). Mothers typically expect their daughters to become more similar to them as they age but do not hold the same expectations for sons (Suitor & Pillemer, 2006).

Taken together, the literature on gender and conflictual relationships indicate that women tend to have more conflictual relationships than men. Often, higher conflict is a result of women’s greater investment in family relationships when compared to men. Therefore, I hypothesize female emerging adults will be more likely than male emerging adults to report that their relationships with their extended family members as being characterized by both emotional closeness and tension and strain.

**The Impact of Families of Origin**

The relationships quality we experience with our families of origin (i.e., parents and siblings) is uniquely influential and affects many different aspects of our lives. One area where the family of origin influence is evident is in the relationship quality we experience with other people (e.g., friends, peers, and romantic partners). Support for this can be found when looking at the literature related to parent-child attachment styles, and children’s future relationship development. Individuals who identify having a secure attachment style with
their parents commonly report higher levels of satisfaction, intimacy, trust, and commitment across all other types of relationships (Kirkpatrick & Davis, 1994). Those with secure attachment styles report greater relationship interdependence, commitment, trust, and satisfaction than those with anxious or avoidant attachment styles (Simpson, 1990).

Siblings also have the ability to influence development of other relationships (e.g. friends, peers, and romantic partners) (Antonucci, Akiyama, Takahashi, 2004; Cicirelli, 1995). Cicirelli highlighted that we learn relationship management skills such as conflict resolution and communication from our siblings through mutual socialization, cooperation, and helping behaviors. The development of these skills facilitates healthy relationships that are characterized by closeness (Markman et al., 1993). Therefore, sibling relationships influence other types of relationships (e.g. friends, peers, and romantic partners). Taken together, the literature on families of origin indicates that individuals who experience close relationships and siblings are more likely to experience other close relationships.

Conversely, negative relationships with families of origin may have detrimental effects for development of other relationships. Scholars have shown that negative relationships with parents can influence relationship with friends, peers, and romantic partners. For example, adults who experience avoidant/ambivalent attachment styles with their parents tend to experience greater difficulty creating and sustaining relationships with others (e.g., friends, peers, and romantic partners) (Moller, Fouladi, & Hatch, 2003).

As mentioned previously, in many cases experiencing conflict with siblings aids in the development of relationship management skills. However, too much conflict can cause relationships to become maladaptive. For instance, sibling relationships that are characterized by conflict and violence negatively influence later emotional adjustment (Graham-Bermann
et al., 1994). Issues with emotional adjustment can have implications for the development of relationships with others (e.g., friends, peers, and romantic partners). Individuals may have difficulty establishing emotionally close relationships with others as a result of the relationship quality they have with their siblings.

Therefore, I hypothesized that emerging adults who identify having emotionally close relationships with their families of origin will also report emotionally close relationships with their extended family members. Conversely, I hypothesized that emerging adults who identify having conflictual relationships with extended family will report lower levels of emotional closeness with their families of origin.

**Romantic Relationships and Emerging Adulthood**

Emerging adulthood is a time of identity exploration in regard to romantic relationships and sexuality (Arnett, 2004; Arnett & Brody, 2008; Shulman & Connolly, 2013). Fifty percent of emerging adults will report being sexually active by the time they are 18 years old. This percentage increases as people age with the majority of emerging adults being sexually active by 25 (Laumann, Michael, Gagnon, & Kolata, 1994; Siegel, Klein, & Roghmann, 1999). The increase in sexual activity during this stage often coincides with the development of romantic relationships (Claxton & Van Dulmen, 2013). However, current research has been mixed regarding how meaningful these romantic relationships are perceived by emerging adults and their relationships with family (Luyckx et al., 2014; Shulman & Connolly, 2013).

Scholars have argued that emerging adults’ perspective surrounding romantic relationships are becoming less about dating and “having fun” and more serious as they search for long-term romantic partners (Wallace, 1995). These scholars also believed that
emerging adults are exploring what is available to them in regard to love and romance, and discerning what type of romantic relationship they are looking for. Pivotal work by Arnett (2014) also suggested that emerging adults are engaging with many different partners, and that doing so has little impact on later marital behavior. Other scholars have disagreed with this perspective, and suggested that there may be more continuity in emerging adult relationships than originally thought (Collins & Van Dulmen, 2006; Roberson, Norona, Fish, Olmstead, & Fincham, 2017). These researchers highlighted the small percentage of emerging adults who are married and indicated that for this group the search for love is more important and intense (Cohen, Kasen, Chen, Hartwark, & Gorden, 2003).

In the United States, 20% of individuals between the ages of 18-29 are married (Cohn, Passel, Wang, & Livingston, 2011). For these emerging adults, relationships with extended family members may be less salient as they are more reliant on their romantic partner. This expectation is based on literature demonstrating the salience of committed romantic relationships compared to other family relationships. For example, a large body of literature exists that has looked at adult sibling relationships and has identified that those who are married are less likely to feel emotionally close to their siblings and choose to engage with them less often (Spitze & Trent, 2016). Similar findings by Gerstel and Sarkisian (2006) have also noted that those who are married are less likely to engage with extended family members than those who identify as being single. Therefore, based on this literature, I hypothesized that emerging adults who identify as single will report higher levels of emotional closeness, and lower levels of conflict with extended family members than those who identify being in committed romantic relationships.
Gender as a Moderator between Extended Family Relationships and other Relationships

As previously noted, gender plays an important role in relationship quality between family members. Overall, women often experience more intense (both positive and negative) family relationships compared to men (Suitor, Gilligan & Pillemer, 2013). Therefore, I expected that gender will moderate the association between emerging adults’ relationships with extended family members and their relationships with their families of origin and their romantic partners (see Figures 1-4).

Summary and Hypotheses

This paper draws from the family systems theory framework (Bowen, 1978; Kerr & Bowen, 1988) and the intergenerational solidarity model (Bengtson & Roberts, 1991) to understand emerging adults’ relationship quality with extended family members. I examined the association between characteristics of emerging adults (i.e., gender, closeness with the family of origin, and romantic relationship status) and relationship quality (e.g., closeness and conflict) with extended family.

Gender has been shown to impact family of origin (i.e., parents and siblings) relationships in a number of ways. I expanded on previous literature by focusing on emerging adult gender and its impact on relationship quality with extended family members. Based on the literature examining the effects of gender on families of origin, I hypothesized that emerging adult gender will impact relationship quality between emerging adults and their extended family members. Specifically, I hypothesized female emerging adults will be more likely than males to report both close and conflictual relationships with their extended family members.
Previous literature has noted that emotionally close relationships within families of origin (i.e., parents and siblings) often influence a child’s ability to develop positive relationships with others (i.e., peers, friends, and romantic partners). Therefore, I hypothesized that emerging adults who identify having emotionally close relationships with their families of origin will also report have emotionally close relationships with their extended family members. Conversely, I hypothesized that emerging adults who identify conflictual relationships with extended family will report lower levels of emotional closeness with their families of origin.

As previously noted, gender plays a substantial role in relationship quality between family members. For instance, women are more likely than men to indicate higher levels of emotional closeness with extended family (Cornwell, 2011; Marsden, 1987; Moore, 1990). Therefore, I hypothesized that gender will moderate the association of emerging adults’ relationships with extended family members and their relationships with families of origin and romantic partners (see Figures 1-4).

Method

Participants and Recruitment

This research was conducted in accordance with Institutional Review Board approval. The data used in this study were collected from 491 undergraduate college students (ages 18-25) who were enrolled at a large Midwestern university (see Table 1). Participants were recruited from large sized (200-300 students) beginner and intermediate level social science courses (Mean age=20.79 years). Emails were sent to instructors within the college. The emails detailed the purpose of the study, requirements to participate, and the link to the survey. Instructors were asked to post or share the details of this email with students. If
students were interested they clicked on the link and were redirected to the survey. The sample was mostly White (83%) followed by Asian/Pacific Islander (7%), Black (5%), Latinx (5%), and Native American (2%). There were more female (n=334) than male (n=154) participants. The majority of participants reported on the relationship quality they experienced with their grandparents (205), followed by aunts/uncles (159), and finally cousins (80).

**Procedure**

Participants were presented with an informed consent document wherein they provided their consent to participate in the survey. The survey took participants an average of 25-30 minutes to complete and consisted of measures of demographic information, relationship quality measures for families of origin, and extended family members.

**Measures**

**Demographic Information.** Demographic questions were asked regarding the emerging adults’ age, gender, education, ethnicity, and first-generation student status.

**Relationship Status.** Emerging adult relationship status was assessed using one item: Which best describes your current relationship status. Are you…(1) Married; (2) Living with someone in a steady, marriage-like relationship; (3) In a steady, romantic relationship with one person, but not living together; (4) Dating, but do not have a steady, romantic relationship with one person; (5) Not dating or seeing anyone right now; (6) Does not apply. The data were collapsed from 6 categories into 2 categories to ensure an even distribution: (1) In a Relationship; or (2) Single.

Participants who were identified as in a romantic relationship were married, living with someone in a steady marriage-like relationship, or in a steady, romantic relationship
with one person, but not living together. Those were identified as single were dating but did not have a steady romantic relationships with one person, not dating or seeing anyone, or indicated that the question didn’t apply to them.

**Family of Origin Closeness.** An assessment of the relationship quality between emerging adults’ and their family of origin (e.g., parents/caregivers and siblings) was also completed. Questions included: (1) Thinking about the people who raised you and your siblings, describe the relationship between you and these family members? Participants responded using any number from 1-7, where 1 is very distant and 7 is very close. (2) Thinking about the people who raised you and your siblings, how often does your family make you feel loved and cared for? Similar items have been used to study parent child relationships (Pillemer & Suitor, 2002; Suitor & Pillemer, 2006). In the current study the items were modified to study extended family members. Participants responded using very often, fairly often, sometimes, rarely or never. Because these responses were skewed, categories 1-4 were combined. Higher scores indicate higher levels of closeness. The two items were averaged to create a scale of “family of origin closeness.” The mean of this scale was 2.89, and the standard deviation was 0.67. This scale had acceptable internal consistency (George & Mallery, 2003). The Cronbach alpha coefficient was .74.

**Extended Family.** Participants were asked to list the first three people who came to mind when they thought about their extended family. Respondents were prompted that these people could include their grandparents, aunts, uncles, and cousins. For each of these extended family members, participants were asked to report the following information:

**Closeness.** Closeness was measured using two items (1) Describe the relationship between you and (person 1)? Using any number from 1-7, where 1 is very distant and 7 is
very close. (2) How often does (person 1) make you feel loved and cared for? Responses offered include: Very often, Fairly often, Sometimes, Rarely, and Never. Similarly, worded items have been utilized to study parent-child relationships (Pillemer & Suitor, 2002; Suitor & Pillemer, 2006). In the current study, items were modified to study extended family members. The data were collapsed from 7 categories into 4 categories to ensure an even distribution, with items ranging from 1-4. Items were coded to indicate that higher scores meant higher levels of closeness. Two separate measures were calculated using information on the three extended family members: (1) the average level of closeness across extended family members, and (2) the highest level of closeness across extended family members. The mean for the average closeness scale was 2.73, and the standard deviations was 0.77. The mean for the highest closeness scale was 3.19, and the standard deviation was 0.80. The Cronbach alpha coefficient for the average closeness scale was .75. The Cronbach alpha coefficient for the highest closeness scale was .70. Both scales had acceptable internal consistency (George & Mallery, 2003).

Conflict. Conflict was measured using two items: (1) “Sometimes no matter how close we may be to someone, the relationship can also at times be tense and strained. Using any number from 1 to 7, where 1 is not at all tense and strained and 7 is very tense and strained, what number would you use to describe how tense and strained the relationship between you and your mother is nowadays?” and (2) “How often, very often, fairly often, sometimes, rarely, or never, would you say the two of you typically have disagreements or conflicts. Similarly, worded items have been used to investigate conflict in parent-child relationships (Suitor & Pillemer, 1988; Suitor, Gilligan, Johnson, & Pillemer; 2014). In the current study, items were changed to assess extended family members. The data were
collapsed from 7 categories into 4 categories to ensure an even distribution, with items ranging from 1-4. Items were coded to indicate that higher scores meant higher levels of conflict. Similarly to the closeness items, two separate measures of conflict were calculated: (1) the average of conflict across the three listed extended family members; and (2) the highest levels of conflict across the three listed extended family members. The mean for the average conflict scale was 2.35, and the standard deviations was 0.55. The mean for the highest conflict scale was 2.76, and the standard deviation was 1.06. The Cronbach alpha coefficient for the average conflict scale was .73. The Cronbach alpha coefficient for the highest conflict scale was .71. Both scales had acceptable internal consistency (George & Mallery, 2003).

**Control Variables**

Variables that have been found to be associated with familial relationships were included as controls in the analysis: race, year in school, and 1st generation status, and in-person contact, messaging technology with extended family. Race been found to be significantly associated with familial relationship quality (Gelman, 2014; Hofferth, 1984). First generation college student status is commonly associated with lower socioeconomic status (Van & Bui, 2002). Low socioeconomic status has historically been linked to family hardship and conflict and, therefore, can influence familial relationships negatively (Conger, Conger, & Martin (2010). Contact, both physical and technological, has been repeatedly used to examine relationship quality between grandparent-grandchild relationships (Drew & Smith, 1999). Results from these data indicated that the more contact between grandparents and their grandchildren, the higher levels of closeness (Brussoni & Boon, 1998).
Race. Race was assessed by having participants indicate which ethnicity they most identified, with (1) White, (2) Hispanic-Latino, (3) Black or African American, (4) Native American or American Indian, (5) Asian/Pacific Islander, or (6) Other. These were collapsed into two categories: (1) White, and (2) Non-white.

Year in School. Year in school was assessed with the question: “What year are you in school? (1) Freshman, (2) Sophomore, (3) Junior, (4) Senior, or (5) Graduate Student.

First-Generation Status. First generation college student status was evaluated using the question “Are you a first generation college student?” Participants could respond with (1) Yes, or (2) No.

In-Person Contact. Physical contact was assessed with one question: How often do you get together with your extended family member in person? Do you visit him/her, he/she visits you, or you go out somewhere? Responses offered included: Everyday, Several times a week; At least once a week, 2-3 times a month; About once a month; Less than once a month, or I do not contact them. The item was reverse coded. Higher scores indicated higher levels of in-person contact between emerging adults and their extended family members. The mean for this scale was 2.91, with a standard deviation of 1.23.

Messaging Technology. Messaging technology was evaluated with one question: How often do you email, instant message, text message, skype, or facetime with your extended family member? Responses offered included: Everyday, Several times a week, At least once a week; 2-3 times a month, About once a month; Less than once a month; or I do not contact them. The item was reverse coded. Higher scores indicated higher levels of technological contact between emerging adults and their extended family members. The mean for this scale was 3.04, with a standard deviation of 1.76.
Data Analyses

Analyses were conducted in SPSS version 24. Two separate relationship outcome measures of extended family ties were included: (a) closeness, or (b) conflict. Two measures for each relationship quality variable were created (e.g., average closeness, highest closeness, average conflict, highest conflict). The primary independent variables of interest in these analyses were: (a) respondents’ gender; (b) average closeness in families of origin (parents/caregivers and siblings); and (c) whether the participants were in a romantic relationship. First, basic bivariate correlations analyses were completed. Second, a t-test was utilized to examine the relationship between participants’ gender and closeness with their extended family members. Two analyses of variance (ANOVA) were included to examine the association between relationship status and relationship quality with extended family. The first ANOVA used the relationship status variable as a multi-category variable, however, given the distribution it was dichotomized as: (1) In a Relationship, or (2) Single. The second ANOVA used the dichotomized version of this variable. Last, an OLS regression was conducted to test the moderating effect of gender on the association between extended family relationship, relationship status and family of origin interaction terms were included. Five variables were included as controls in the analysis: (a) race; (b) year in school; (c) whether or not the respondent is a first generation college student; (e) in-person contact; and (f) messaging technology.
Missing Data

Missingness was assessed in both the independent and dependent variables. The missingness in the overall data was 10%. The missingness in both the closeness and conflict scales was 6.5%. Analysis of the missing data indicated that men and students of color were the least likely to report on their relationship quality with their extended family members. Listwise deletion was used to manage the missing data because less than 10% was missing overall (Allison, 2002; Graham, 2009).

Results

Table 2 presents bivariate correlations among key variables associated with closeness and conflict in extended family relationships. Reported average closeness with extended family members was significantly associated with emerging adults’ gender ($r=-.18^{**}, p=.01$). Closeness with families of origin was also significantly related to the average closeness and average conflict within extended family relationships ($r=.95^{**}, p=.001$, and $r=-.26^{**}, p=.01$, respectively). Furthermore, the relationship status of the responding emerging adult was correlated with average closeness or conflict ($r=-.03^*, and r=.00^*, p=.05$, respectively). Messaging technology and in-person contact, were associated with closeness with extended family members ($r=-.34^{**}, p=.001$, and $r=-.27^{**}, p = .01$, respectively).

Closeness & Conflict

Emerging Adult Gender and Extended Family. An independent samples $t$-test was conducted to test the first hypothesis looking at the effects of emerging adult gender on relationship quality (see Table 3). Consistent with the hypothesis, there was a significant difference in the highest closeness with extended family members for women ($M=3.30\ SD=0.75$) and men ($M=2.97\ SD=0.86$); $t(241)=2.00, p=.00$. Similar findings were found when
comparing men and women’s levels of average closeness with extended family, there was a significant difference for women \((M=2.83 \ SD=2.25)\) and men \((M=2.53 \ SD= 0.77)\); \(t(265)=1.95, p<.001\). When comparing women’s and men’s levels of conflict there were no significant differences when examining either average conflict or highest conflict. Therefore, consistent with the hypothesis, female emerging adults were more likely to report close relationships with their extended family members than their male counterparts. However, there were no gender differences in how much conflict they reported experiencing with their extended family members.

**Families of Origin and the Extended Family.** Bivariate correlations were conducted to examine the relationship between emerging adults’ closeness with their family of origin and their closeness with extended family. The correlation matrix indicated that the two variables were very highly correlated (see Table 2). Therefore, closeness in families of origin was excluded in further models.

**Relationship Status and Extended Family.** The third hypothesis examines the relationship between emerging adult relationship status and relationship quality with extended family members. A one-way analysis of variance was conducted to examine the effects of relationship status on each relationship quality outcome. No significant effect was found between the multiple category relationship status variable and relationship quality (see Table 4). The relationship status was dichotomized to determine whether there was an association between extended family relationships and relationship status when emerging adults are in committed romantic relationships. Similarly, no significant difference was found between relationship status and relationship quality (see Table 5).
Ordinary least squares regression was conducted to examine the full model. The results for average closes across extended family members are presented in Models 1 and 2 in Table 7. Men were less likely than women to report emotional close relationships with extended family members. The association between relationship status and average closeness was not significant ($\beta=0.05 \ t(398)=0.06, \ p=.21$). The results when the interaction term between gender and relationship status was added are presented in Model 2. This association was not significant ($\beta=.0.15, \ t(398)=1.61, \ p=.10$). The results for the relationship for the extended family member whom emerging adults had the highest emotional close relationship are presented in Models 3 and 4. The findings in Models 3 and 4 are similar to those in Models 1 and 2.

The OLS Regression results for conflict with extended family members are presented in Table 8. Model 1 in Table 8 illustrates that the association between relationship status and average conflict was not significant ($\beta=0.03; \ t(399) =0.63, \ p=.52$). First generation college students and White college students were less likely to report conflict with extended family members (see Table 8). The interaction term between gender and relationship status is added in Model 2. No significant moderating effect was found ($\beta=-0.14 \ t(399) =-1.45, \ p=.15$). Models 3 and 4 yielded similar results.

**Discussion**

The goal of this study was to examine the association between characteristics of emerging adults (i.e., gender, closeness with family of origin, and romantic relationship status) and relationship quality (e.g., closeness and conflict) with extended family. This work highlights the importance of understanding how different characteristics influence relationship quality between emerging adults and their extended family.
The findings of this study indicated that female emerging adults are more likely than male emerging adults to identify close relationships with their extended family members. It has been well established that women are more likely to indicate high levels of closeness with their family members (McPherson, Smith-Lovin, & Cook, 2001; Rossi & Rossi, 1990). Therefore, these findings are consistent with previous literature. However, the current study is unique in that it demonstrated the salience of a previously overlooked family relationship—extended family members.

The results of this study also demonstrated that the quality of relationships between emerging adults and their families of origin is highly correlated with relationship quality between emerging adults and their extended family members. This high correlation may indicate that participants are not differentiating between members of the family of origin and extended family members. If this is the case, the results of these data would be more indicative of closeness or conflict across both family systems than about their relationship with any one individual. Suitor, Pillemer, and Sechrist (2006) discussed how traditional measures of parent-adult child relationship quality have not been able to capture variation in these ties because they asked respondents to report on one specific dyadic or report on their children in aggregate. To capture differences researchers need to utilize measures that ask participants to specifically differentiate among family members. Therefore, future work regarding emerging adults and their extended family members and their families of origin should encourage participants to differentiate between family members. Asking about specific family relationships may provide a clearer picture of how emotionally close or conflicted a relationship is with specific extended family members and members of family of origin.
The current study also revealed that romantic relationship status in emerging adulthood had no impact on closeness with extended family members. This finding was consistent with previous work by Arnett (2014), which indicated that emerging adults are not invested in serious long-term romantic relationships. Therefore, romantic relationships are not likely to interfere with familial relationships. However, other scholars have remarked that there is a population of emerging adults who are actively searching for long-term romantic relationships (Collins & Van Dulmen, 2006). The findings indicated, however, that relationship status was not associated with relationship quality with extended family members, even among emerging adults’ in committed romantic relationships. Further research is needed to better understand what romantic relationships look like in emerging adulthood, and the impact they may have on relationship quality between emerging adults and their families.

The present analysis was limited by the cross-sectional nature of the data. Another limitation of this study was the bidirectional impact of familial relationships. As a result, the direction of the associations in this study could not be specified. For example, characteristics of emerging adulthood may influence relationships quality with extended family. However, relationship quality with extended family may also be influencing certain characteristics of emerging adults. Another limitation was the inability to generalize the data. The sample population was predominately white and female. Current research has indicated that race, ethnicity, and religion strongly influence the way we engage with our families. This has been documented in the literature when looking at families of color, whose culture strongly influences their interactions with extended family (Gelman, 2014; Wilson 1989). Thus, these data do not account for the unique impact of cultural background. Future research should use
more diverse samples when examining relationship quality between emerging adults and extended family members.

Despite these limitations, these data are unique because they explored relationship quality with family members outside of the family origin. Bowen’s family systems theory purported that to understand one family subsystem it is relevant to consider it within the context of other family subsystems (Bowen, 1978; Kerr & Bowen, 1988). Therefore, to develop a clearer picture of the individual one must consider multiple systems in which they are situated — including the extended family. In this regard, these data may provide an important resource to therapists and professionals who work with emerging adults (e.g., careers counselors). Therapists should note the importance of relationships with extended family members in the lives of emerging adults and include questions pertaining to these relationships within their intake assessments. Other professionals such as career counselors should also note the impact of these familial relationships, and ask questions regarding how extended family may be influencing an individual’s career path. By including these relationships, professionals may be able to make deeper connections with their clients and provide greater individualized and empathetic care and support.

This paper contributes to the broader family literature by considering extended family relationships which have been previously overlooked in past research. Consistent with the broader family of origin literature, the findings of this study highlight the importance of emerging adult characteristics. These findings reveal the ways in which relationship quality can be influenced by emerging adults based on gender, relationships of origin, and relationship status.
References


Van T., & Bui, K. (2002). First generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*(1), 3-12.


Table 1. Demographic characteristics of the participants

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*Note.* Percentage totals are not 100 for every characteristic due to rounding.
Table 2. Bivariate correlations among key study variables

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<tr>
<td>3. Highest EF Conflict</td>
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<td>-.12*</td>
<td>1</td>
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<td>-.17**</td>
<td>.90**</td>
<td>-.23**</td>
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<td>-.13**</td>
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<td>11. Messaging Technology</td>
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<td>.34**</td>
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<td>-.34**</td>
<td>.02</td>
<td>.14*</td>
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<td>.04</td>
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<td>12. In-Person Contact</td>
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<td>.10*</td>
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<td>-.03</td>
<td>.06</td>
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*Note.* *p < .05. **p < .01. ***p < .001. Gender: 1 = Female 0 = Male; Race: 1 = White 0 = Non-White; Romantic Relationship Status 0 = In a Relationship 1 = Single; First Generation College Student: 1 = Yes 0 = No
Table 3. Independent group t-test between relationship quality and gender

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<th>Male</th>
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<td></td>
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<td>SD</td>
<td>M</td>
<td>SD</td>
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*p < .05. ** p < .01. *** p < .001.

Table 4. Relationship status and relationship quality with extended family

<table>
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<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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<tbody>
<tr>
<td>Average Closeness</td>
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<td>3.11</td>
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<td>1.49</td>
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*p < .05. ** p < .01. *** p < .001.

Table 5. Independent group t-test between relationship quality and relationship status dichotomized

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<td>SD</td>
<td>M</td>
<td>SD</td>
<td>t</td>
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<td>Highest Closeness</td>
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<td>Average Conflict</td>
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*p < .05. ** p < .01. *** p < .001.
### Table 6. Dichotomized relationship status and relationship quality with extended family

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

### Table 7. Coefficients for gender and extended family closeness

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<td>SE</td>
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</tr>
<tr>
<td>Messaging Technology</td>
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<td>0.02</td>
</tr>
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<td>In-Person Contact</td>
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<td>White</td>
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<tr>
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Note. *p < .05. ** p < .01. *** p < .001. Gender: 1 = Female, 0 = Male; Race: 1 = White, 0 = Non-White; Romantic Relationship Status 0 = In a Relationship; 1 = Single; First Generation College Student: 1 = Yes 0 = No
Table 8. Coefficients for gender and extended family conflict

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Note. *p < .05. **p < .01. ***p < .001. Gender: 1 = Female, 0 = Male; Race: 1 = White, 0 = Non-White; Romantic Relationship Status 0 = In a Relationship
1 = Single; First Generation College Student: 1 = Yes 0 = No.
Figure 1. Conceptual model of gender moderating the relationship between emerging adult romantic relationship status and emotional closeness with extended family members.

Figure 2. Conceptual model of gender moderating the relationship between emerging adult romantic relationship status and conflict with extended family members.
Figure 3. Conceptual model of closeness with family of origin moderating the relationship between emerging adult romantic relationship status and emotional closeness with extended family members.

Figure 4. Conceptual model of closeness with family of origin moderating the relationship between emerging adult romantic relationship status and conflict with extended family members.
CHAPTER 3. EMERGING ADULTS’ WELLBEING: RELATIONSHIP QUALITY AND THE EXTENDED FAMILY

A paper to be submitted to Emerging Adulthood

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Abstract

The purpose of this study was to examine the association between the well-being of emerging adults (i.e., loneliness and self-acceptance) and relationship quality with extended family members (i.e., closeness and conflict). Two measures for each relationship quality variable were created (average closeness, highest closeness, average conflict, highest conflict). Highest closeness and highest conflict were included to capture the extremes found within family relationships, and average closeness and average conflict were created to capture an overall assessment of relationship quality across all extended family members.

The data used in this study were collected from 491 undergraduate college students ages 18-25 (Mean age= 20.79 years) who were enrolled at a large Midwestern university. Participants were recruited from beginner and intermediate level social science classes. The findings of this study revealed that conflictual relationships with extended family members are associated with higher levels of emerging adult loneliness and lower levels of self-
acceptance. Conversely, emotionally close relationships with extended family members are associated with lower levels of emerging adult loneliness and higher levels of self-acceptance. Emerging adult gender moderated the relationship between highest closeness and self-acceptance. This effect was stronger for men than for women.

**Keywords:** emerging adulthood, extended family, well-being, relationship quality

### Background and Theoretical Framework

A significant portion of family research has been conducted to evaluate the association between relationship quality with families of origin (e.g., parents and siblings) and individual well-being (Baumeister & Leary, 1995; Buunk & Schaufeli, 1999; Finkel, Simpson, & Eastwick, 2017). Interestingly, literature focusing predominately on the parent-child dyad has indicated that relationship quality with parents can significantly predict positive and negative well-being in children (Casas, Coenders, Gonzalez, Malo, Bertran, & Figuer, 2012; Suldo & Fefer, 2013). Parent-child relationships that are characterized by emotional closeness have been shown to positively influence the overall life satisfaction of children (Ma & Huebner, 2008; Wong et al., 2010). Qualitative exploration has identified similar findings, with participants describing how their close relationships with their parents positively influenced their well-being (Joronen & Astedt-Kurki, 2005). However, relationships within the family of origin (e.g., parents and siblings) are not always positive, and can also be characterized by tension and strain. Conflictual relationships have been found to have the opposite effect on child well-being. When children perceive their relationships with their parents to be negative, they are more likely to report issues regarding their well-being (Raudino, Fergusson, & Horwood, 2013).
The majority of the family literature evaluating the association between familial relationship quality and individual well-being has focused on relationships within the family of origin (e.g., parents and siblings). Comparatively, very little attention has been paid to relationship quality within other family systems — specifically the extended family. In the current study, extended family is defined as individuals that extend beyond the family of origin including grandparents, aunts, uncles, and cousins. Given this gap in the research, the goal of this paper is to examine the association between the well-being of emerging adults (i.e., loneliness and self-acceptance) and relationship quality with extended family members (i.e., closeness and conflict).

The current study draws from two theoretical frameworks: (1) Bowen’s family systems theory (Bowen, 1978), and (2) intergenerational model of solidarity (Bengtson & Roberts, 1991). Mental health professionals and family therapists have utilized Bowen’s family systems theory in practice (Ponappa et al., 2016; Titehnan, 1998). Initial work by Bowen (1978) has suggested that both therapists and counselors should recognize that certain psychotherapeutic changes in an individual can be influenced by other family systems in the form of providing support, verbalizing expectations, and giving advice (Fingerman & Bermann, 2000). Commonly, family therapists apply this theory when interacting with clients by considering psychopathology as a reflection of family process. For example, according to this theory, the relationship between parents, parents and children, and experiences with friends may influence the well-being of a child. As a result, all family systems need to be taken into account when deciding best treatment. With this framework in mind, this study considered the association between relationship quality with extended family members and the well-being of emerging adults (e.g., loneliness and self-acceptance).
Whereas Bowen’s family systems theory provides a framework for evaluating the effects of multiple systems and their impact on an individual’s behavior, the intergenerational model of solidarity (Bengtson & Silverstein, 1991) informs the inclusion of positive and negative aspects of relationships quality when studying families. The original goal of this theory was to account for patterns of solidarity between parents and children during the adult family life course utilizing six elements of parent-child interaction: affection, association, consensus, resource sharing, the strength of family norms, and the opportunity for interaction. The original model focused on the positive aspects of family relationships (Lawton, Silverstein, & Bengtson, 1994; Monserud, 2008). However, an absence of positive emotions does not necessarily reflect negative feelings or conflict as a result the model was expanded to include conflict (Bengtson, Rosenthal, & Burton, 1995). Therefore, in the current study, I incorporated measures of conflict in addition to measures of closeness to examine both the positive and negative aspects of family relationships.

Emerging Adulthood: Experiences with College and Family

Arnett (2014) defined emerging adulthood as a developmental period that occurs between the ages of 18-25, this period being unique from adolescence and young adulthood. Scholars have utilized five features to define this developmental period: instability (relationships, work, residence, and education), identity exploration (specifically in the areas of love, work, and world outlooks), and feeling in-between (emerging adults do not consider themselves as teens or adults), self-focus (lacking obligations), and optimism (the opportunity to steer their lives in multiple directions) (Arnett & Tanner, 2006). These five features highlight the distinctiveness of emerging adulthood, and demonstrate how these
individuals are exploring and experimenting with new roles as well as pursuing independence (Aquilino, 2006, Larson & Richards, 1994).

A factor that contributes to increased independence during this developmental period is often the enrollment of emerging adults into college. Over the last 20 years, results have indicated that there has been a sharp increase in college enrollment, with a jump of 31% from 13.2 million in 2000, to 17.3 million in 2014 (National Center for Education Statistics, 2016). It is predicted that these numbers will increase to 19.9 million by the year 2025 (National Center for Education Statistics, 2016). In the year 2015, 35% of those 25-29 years of age attained a bachelor’s degree or higher, providing further evidence of the increasing interest in higher education during this period (National Center for Educational Statistics, 2016). The transition to college often involves emerging adults moving out of their childhood homes and into a university environment, which features less adult supervision, and provides easier access to drugs and alcohol (O’Malley & Johnston, 2002).

Despite the increased autonomy associated with college, students still rely heavily on their parents for emotional, instrumental, and financial support (Aquilino, 2006, Larson & Richards, 1994). However, the relationship between emerging adults and their parents/caregivers is changing. As emerging adults age, their relationships with their parents/caregivers matures from that of a dependent to a fellow adult (Arnett, 1998). As a result of this transition, emerging adults’ perceive their parent/caregiver differently as they develop a sense of filial maturity. Filial maturity enables emerging adults to better understand the perspectives and needs of their parents/caregivers (Arnett, 2003, Arnett 2014; Aquilino, 2006). It is likely that a similar reevaluation of boundaries is occurring between emerging adults and their extended family. The collegiate environment provides increased
opportunities for growth in both individual and familial understanding and may be a particularly relevant time for relationships with extended family members.

However, the college experience is one that is often riddled with highs and lows. As a result, college students experience higher rates of mental health problems (Lyubomirsky et al., 2003). Loneliness is often characteristic of these mental health problems and can cause complications such as poor sleep quality, disrupted eating behaviors, and suicide (Lund, Whiting, & Prichard, 2010; Murberg, Bru, Svebak, Tveteras, & Aarsland, 1999; Quick & Byrd-Bredbenner, 2013). For new students, loneliness is typically most severe during their first two weeks on campus (Berman & Sperling, 1991; Cacioppo et al, 2000; Wei, Russell, & Zakalik, 2005). Although loneliness may wane over time, it remains a large concern for students throughout their college experience (Gallagher, Golin, & Kelleher, 1992). Given the literature on loneliness during the college years, it has become increasingly relevant to determine the factors that may be associated with loneliness in emerging adulthood.

Emerging adults are also experiencing dramatic changes in their self-esteem and overall self-acceptance (Galambos, Barker, & Krahn, 2006; Robins et al., 2002). On average, emerging adults have lower-self-esteem and lower levels of self-acceptance than middle aged adults (Galambos, Barker, & Krahn, 2006). Scholars have repeatedly attributed these differences to their developmental period. Pivotal work by Arnett and Tanner (2006) has outlined that emerging adulthood is characterized by a sense of feeling “in-between”. This feature of emerging adulthood highlights how these individuals are leaving childhood but do not feel ready for the obligations that are characteristic of adulthood. Thus, feeling “in-between” often results in psychological changes that can impact self-acceptance in emerging adulthood (Schulenberg et al., 2004). As a result of the change related to self-acceptance in
emerging adulthood, it is relevant to examine what factors may be associated with emerging adult self-acceptance.

**Relationship Quality and Well-being in Emerging Adults**

**Conflict.** As discussed previously, scholars are choosing to consider both positive and negative aspects of familial relationships. With this in mind, negativity is very powerful and can influence our memories, experiences, and relationships (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Negative emotions have the potential to overshadow positive emotions, and “bad” impressions have the potential to overshadow “good” ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Often family scholars use literature related to the impact of negativity to frame their work focusing on conflict in familial relationships. With this in mind, the negative association between conflictual relationships within the family of origin and the well-being of children has been documented in the literature (Rowen & Emery, 2014; Schermerhorn, Chow, & Cummings, 2010; Sobolewski & Amato, 2007). Specifically, children who experience conflictual relationships with their families of origin (e.g., parents and siblings) are more likely to experience loneliness (Johnson, LaVoie, & Mahoney, 2001). Feelings of loneliness put children at risk for other mental health problems such as anxiety and depression (Davies, Cicchetti, & Martin, 2012). Often loneliness inspired by conflictual relationships with the family of origin has enduring negative effects on well-being across the lifespan (Hetherington, Cox, & Cox, 1978). Similar findings have been found when examining the impact of conflictual sibling relationships on individual loneliness (Rubenstein & Shaver, 1982). Current literature has highlighted how conflictual relationships with siblings are often associated with higher levels of individual loneliness (Ponzetti & James, 1997; Uruk & Demir, 2003).
Tense and strained relationships within the family of origin also have implications for self-acceptance in children (Amato, 1986; Raschke & Raschke, 1979). There is also support for this association in literature looking specifically at emerging adults and their family of origin. Confictual parent-child relationships that provide little support are more likely to negatively influence self-acceptance in emerging adults (Aquilino & Supple, 2001; Boudreault-Bouchard, Dion, Hains, Vandermeerschen, Laberge, Perron, 2013; DeHart, Pelham, & Tenn, 2006). Similar results were found when examining conflictual sibling relationships and self-acceptance. Individuals who have conflictual relationships with their siblings often identify a lower self-acceptance (Sherman, Landsford, & Villing, 2006). However, when the relationship between the parent and the child is conflictual, siblings can act as a buffer between parents and other children (Caya, Liem & 1998).

Taken together, the literature exploring the impact of conflictual relationships on well-being in emerging adulthood has been situated around the family of origin. Nevertheless, comparatively few studies have explored tense and strained relationships with family members outside of the family of origin — including the extended family. Based on this previous research, I hypothesized that emerging adults who identify having conflictual relationships with their extended family will report higher levels of loneliness and lower levels of self-acceptance.

**Closeness.** Close familial relationships have also been a topic of interest to scholars (Bengtson & Roberts, 1991; Rossi & Rossi, 1990). The literature has repeatedly demonstrated the positive impact of close relationships between parents and their children (Rossi & Rossi, 1990). Often close relationships have illustrated positive implications for children’s well-being (Buhl, 2007). Past literature has primarily focused on close
relationships between mothers and their children (Bezirganian, Cohen, & Brook, 1993). However, more recent scholarship has begun to examine father-child relationships. The results of this work has indicated that emotionally close relationships between fathers and their children may be equally beneficial (Amato, 1994; Polenick, DePasquale, Eggebeen, Zarit, & Fingerman, 2016). Close parent-child relationships have implications for children as they age, particularly as they progress into adulthood (Amato, 1994; Polenick, DePasquale, Eggebeen, Zarit, & Fingerman, 2016). Within emerging adulthood, emotionally close relationships with parents have been linked to lower levels of loneliness (DiTommaso, Brannen-McNulty, Ross, & Burgess, 2003). Sibling relationships that are characterized by emotional closeness often have been associated with positive well-being, specifically lower levels of loneliness (Sherman, Landsford, & Volling, 2006).

Close relationships with families of origin also have implications for individual self-acceptance (Supple & Small, 2006). Research on attachment styles between parents and children has continually highlighted the association between secure attachment styles and individual self-acceptance (Kerns & Brumariu, 2014). Interestingly, this association seems to continue as individuals’ age. In emerging adulthood, secure relationships with parents/caregivers are associated with positive well-being, specifically regarding self-acceptance (Rosario et.al, 2014). Emotionally close relationships with siblings also seem to be particularly influential to emerging adult self-acceptance. Emerging adults who identify having close relationships with siblings typically experience higher levels of self-acceptance (Sherman, Lansford, & Volling, 2006).

The literature evaluating the impact of close relationships on well-being in emerging adulthood has predominately focused on the family of origin. However, comparatively few
studies have assessed relationship quality in other family systems — including the extended family. Based on the literature, I hypothesized that emerging adults who identify as having emotionally close relationships with their extended family will report lower levels of loneliness and higher levels of self-acceptance.

**Gender as a Moderator between Extended Family Relationships and Well-Being**

In this study, I examined the moderating effect of gender on the association between emerging adult relationship quality with extended family and emerging adult well-being. Gender has been found to significantly predict familial relationships. Specifically, women report higher amounts of intimacy, closeness, and contact in kin relationships (Cornwell, 2011; Marsden, 1987; Moore, 1990; Rossi & Rossi, 1990). Therefore, I hypothesized that gender acts as a moderator between relationship quality between emerging adults and their extended family members and emerging adult well-being. Specifically, I hypothesized this association will be stronger for women than for men.

**Summary and Hypotheses**

This study was drawn from the family systems theory framework (Bowen, 1978) and the intergenerational solidarity model (Bengtson & Roberts, 1991) to examine the association between relationship quality (i.e., closeness and conflict) with extended family members and emerging adult well-being (i.e., self-acceptance and loneliness). I hypothesized that emerging adults who identify having relationships with extended family members that are tense and strained will report higher levels of loneliness and lower levels of self-acceptance. Further, I hypothesized that emerging adults who identify having emotional close relationships with their extended family will report lower levels of loneliness and higher levels of self-acceptance. Due to the literature indicating the impact of gender on relationship quality, I
also hypothesize that emerging adult gender will moderate the association between closeness and conflict with extended family and emerging adult well-being (i.e., self-acceptance and loneliness). More, specifically, I hypothesized this effect will be stronger for women than for men.

Method

Participants and Recruitment

This research was conducted in accordance with Institutional Review Board approval. The data used in this study were collected from 491 undergraduate college students (ages 18-25) who were enrolled at a large Midwestern university (see Table 1). Participants were recruited from large sized (200-300 students) beginner and intermediate social science courses (Mean age=20.79 years). Emails were sent to instructors within the college. The emails detailed the purpose of the study, requirements to participate, and provided a link to the survey. Instructors were asked to post or share the details of this email with students. If students were interested they clicked on the link and were redirected to the survey. The sample was predominantly White (83%) followed by Asian/Pacific Islander (7%), Black (5%), Latinx (5%), and Native American (2%). There were more female (n=334) than male (n=154) participants. The majority of participants reported on the relationship quality they experienced with their grandparents (205), followed by aunts/uncles (159), and finally cousins (80).

Procedure

Participants were presented with an informed consent document wherein they provided their consent to participate in the survey. The survey took participants an average of
25-30 minutes to complete and consisted of measures of demographic information, relationship quality with extended family members, and emerging adults.

**Measures**

**Demographic Information.** Demographic questions were asked regarding the emerging adult’s age, gender, education, ethnicity, and first-generation student status.

**Extended Family.** Participants were asked to list the first three people who came to mind when they thought about their extended family. These people could include their grandparents, aunts, uncles, and cousins.

**Closeness.** Closeness was measured using two items: (1) Describe the relationship between you and (person 1)? Using any number from 1-7, where 1 is very distant and 7 is very close; and (2) How often does (person 1) make you feel loved and cared for? Responses offered included: Very often, Fairly often, Sometimes, Rarely, and Never. Similar items have been used to study parent child relationships (Pillemer & Suitor, 2002; Suitor & Pillemer, 2006; Suitor & Pillemer; 2013). In the current study the items were modified to study extended family members. The data were collapsed from 7 categories into 4 categories to ensure an even distribution, with items ranging from 1-4. Items were coded to indicate that higher scores meant higher levels of closeness. Two separate measures were calculated using information on the three extended family members: (1) the average level of closeness across extended family members; and (2) the highest level of closeness across extended family members. The mean for the average closeness scale was 2.73, and the standard deviations was 0.77. The mean for the highest closeness scale was 3.19, and the standard deviation was 0.80. Cronbach’s alpha coefficient for the average closeness scale was .75. Cronbach’s alpha
coefficient for the highest closeness scale was .70. Both scales have acceptable internal consistency (George & Mallery, 2003).

**Conflict.** Conflict was measured using two items: (1) “Sometimes no matter how close we may be to someone, the relationship can also at times be tense and strained. Using any number from 1 to 7, where 1 is not at all tense and strained and 7 is very tense and strained, what number would you use to describe how tense and strained the relationship between you and your mother is nowadays?” and (2) “How often, very often, fairly often, sometimes, rarely, or never, would you say the two of you typically have disagreements or conflicts. Similarly worded items have been used to investigate conflict in parent-child relationships (Suitor & Pillemer, 1988; Suitor, Gilligan, Johnson, & Pillemer; 2014). In the current study, items were adjusted to evaluate extended family members. The data was collapsed from 7 categories into 4 categories to ensure an even distribution, with items ranging from 1-4. Items were coded to indicate that higher scores meant higher levels of conflict. Similarly to the closeness items, two separate measures of conflict were calculated: (1) the average of conflict across the three listed extended family members; and (2) the highest levels of conflict across the three listed extended family members. The mean for the average conflict scale was 2.35, and the standard deviations was 0.55. The mean for the highest conflict scale was 2.76, and the standard deviation was 1.06. Cronbach’s alpha coefficient for the average conflict scale was .73. Cronbach’s alpha coefficient for the highest conflict scale was .71. Both scales have acceptable internal consistency (George & Mallery 2003).

**Self-Acceptance.** A 3-item version of Ryff’s self-acceptance index was used to assess participants' self-acceptance (Ryff & Keyes, 1995). This index is correlated highly (r<.70)
with its parent 20-item scale, indicating that it is a highly reliable scale (Ryff & Keyes, 1995). Participants were shown three statements: (1) I like most parts of my personality; (2) When I look at the story of my life, I am pleased with how things have turned out; and (3) In many ways, I feel disappointed about my achievements in life. For all 3 items, respondents were asked to indicate the degree to which they agree or disagree with the statements on a 6-point scale (1 = strongly disagree; 5 = strongly agree). The items regarding participants’ feeling disappointed about their achievements in life were reverse coded, and all items were summed such that higher scores indicated personal growth. The mean for this scale was 11.9, with a standard deviation of 2.55. Cronbach’s alpha coefficient for the self-acceptance scale was .71, indicating an acceptable internal consistency (George & Mallery, 2003).

Loneliness. The original UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978) was comprised of 20 items that measure the levels of loneliness an individual is experiencing. In the original version, the 20 items were negatively worded. The second version, the Revised UCLA Loneliness Scale, (UCLA–R; Russell et al., 1980) was changed to include 10 positively worded items. The most recent version, the UCLA–3 (Russell, 1996), is a simplified version utilizing a more shortened response format. It consists of 10 items that are rated on a 4-point Likert-type scale with higher scores indicating greater loneliness. For example, respondents were asked, “How often do you feel that you lack companionship?” The response format corresponds to the frequency of feelings (1 = never; 4 = always). All 10 items were reverse coded and then summed to create the scale. The mean for this scale was 10.67, with a standard deviation of 5.74. Cronbach’s alpha coefficient for the loneliness scale was .89, indicating good internal consistency (George & Mallery, 2003).
Control Variables

Variables that have been found to be associated with familial relationships were included as controls in the analysis: race, year in school, and 1st generation status, and in-person contact, messaging technology with extended family. Race has been found to be significantly associated with familial relationship quality (Gelman, 2014; Hofferth, 1984). First generation college student status is commonly associated with lower socioeconomic status (Van & Bui, 2002). Low socioeconomic status has historically been linked to family hardship and conflict and, therefore, can influence familial relationships negatively (Conger, Conger, & Martin, 2010). Contact, both physical and technological, has been repeatedly used to examine relationship quality between grandparent-grandchild relationships (Drew & Smith, 1999). Results have indicated that the more contact between grandparents and their grandchildren the higher levels of closeness (Brussoni & Boon, 1998).

Race. Race was assessed within this study by having the participant indicate which ethnicity they most identified with: (1) White, (2) Hispanic-Latino, (3) Black or African American, (4) Native American or American Indian, (5) Asian/Pacific Islander, or (6) Other. These were collapsed into two categories:

Year in School. Year in school was assessed with the question, “What year are you in school? Response choices were: (1) Freshman, (2) Sophomore, (3) Junior, (4) Senior, or (5) Graduate Student.

First-Generation Status. First generation college student status was evaluated using the question, “Are you a first generation college student?” Participants could respond with (1) Yes or (2) No.
In-Person Contact. In-person contact was assessed with one question: How often do you get together with your extended family member in person? That is, you visit him/her, he/she visits you, or you go out somewhere? Responses offered included: Everyday, Several times a week, At least once a week, 2-3 times a month, About once a month, Less than once a month, or I do not contact them. The item was reverse coded. Higher scores indicated higher levels of in-person contact between emerging adults and their extended family members. The mean for this scale was 2.91, with a standard deviation of 1.23.

Messaging Technology. Messaging technology was evaluated with one question: How often do you email, instant message, text message, skype, or facetime with your extended family member? Responses offered included: Everyday; Several times a week; At least once a week; 2-3 times a month; About once a month; Less than once a month; or I do not contact them. The item was reverse coded. Higher scores indicated higher levels of technological contact between emerging adults and their extended family members. The mean for this scale was 3.04, with a standard deviation of 1.76.

Data Analyses

Analyses were conducted using SPSS version 24. Two separate relationship outcome measures of extended family ties were included: (a) closeness, and (b) conflict. Two measures for each relationship quality variable were created (e.g., average closeness, highest closeness, average conflict, highest conflict). The primary independent variables of interest in these analyses are closeness (e.g., highest and average) and conflict (e.g., highest and average). The primary dependent variables of interest in these analyses were emerging adult loneliness and self-acceptance. A series of OLS regressions were conducted to examine the association between closeness and conflict with extended family and emerging adult well-
being. An interaction term was entered to examine the moderating effect of gender on the association between relationship quality and well-being outcomes. Five variables were included as controls in the analysis: (a) race; (b) year in school; (c) whether or not the respondent is a first generation college student; (e) in-person contact; or (f) messaging technology.

**Missing Data**

Missingness was assessed in both the independent and dependent variables and found to be 26% overall. The missingness in the independent variables of closeness and conflict scales was 6.5%. The missingness in the dependent variables of self-acceptance and loneliness scales was 25%. Specifically, each of the 10 items of the loneliness scale contained 22.6% missing. The three items within the self-acceptance scale each contained 22.4% missing. The missingness found in the predictors was not reliant on the dependent variable; therefore, list wise deletion provided an unbiased estimate of the regression coefficients (Little, 1992). Multiple imputation was considered for managing the large percentage of missingness in the dependent variable. However, a large body of literature highlights how using this method on missing data found in the dependent variable is inappropriate (Allison, 2002, Little, 1992).

**Results**

Table 2 presents bivariate correlations among key variables associated with emerging adult wellbeing (i.e., loneliness and self-acceptance). Average closeness with extended family members was significantly associated with the loneliness ($r = -.33^*$, $p < .01$). Highest closeness and highest conflict with extended family were also significantly associated with
loneliness ($r=-.24^{**}$ and $r=.19^{**}; p<.01$, respectively), and self-acceptance ($r=.15^{**}$ and $r=-.30^*; p=.05$, respectively).

**Conflicting Relationship with Extended Family**

The first hypothesis predicted that conflicting relationships with extended family would be associated with higher levels of emerging adult loneliness and lower levels of emerging adult self-acceptance. Ordinary least squares regression was conducted to examine the full model.

The results for the association between average conflict across extended family members and emerging adult loneliness and self-acceptance are shown in Models 1-4 in Table 3. The results of the association between average conflict and emerging adult loneliness are presented in Model 1. Average conflict was associated with high levels of loneliness ($\beta=0.18; t(348)=3.39; p=.001$). Model 2 reveals the results when the interaction term between gender and average conflict was added in the model. This association was not significant ($\beta=-0.12; t(348)=-0.85; p=.39$). Model 3 illustrates the results of the association between emerging adult self-acceptance and average conflict with extended family. In this model average conflict was associated with lower self-acceptance ($\beta=-0.13; t(367)=-2.52; p=.01$). Model 4 reveals the results of when the interaction term between gender and average conflict was added in model. This association was not significant ($\beta=-0.09; t(367)=0.67; p=.50$).

The results for the association between highest conflict across extended family members and emerging adult loneliness and self-acceptance are shown in Models 1-4 in Table 4. Model 1 and 2 illustrate the results of the association between highest conflict with extended family members and emerging adult loneliness. Model 1 depicts the results of the
association between highest conflict and emerging adult loneliness. Highest conflict was associated with high levels of loneliness ($\beta=0.17; t(359)=3.37; p=.001$). Model 2 illustrates the results when the interaction term between gender and highest conflict was added. This association was not significant ($\beta=-0.18; t(348)=-1.09; p=.27$). Model 3 depicts the results of the association between highest conflict and emerging adult self-acceptance. Highest conflict was associated with lower levels of self-acceptance ($\beta=-0.12^{**}; t(367)=-2.22; p=.02$). Model 4 presents the results when the interaction term between gender and highest conflict was added. This association was not significant ($\beta=0.10; t(367) = 0.63; p=.52$).

**Close Relationships with Extended Family**

The second hypothesis predicted that close relationships with extended family would be associated with lower levels of emerging adult loneliness and higher levels of emerging adult self-acceptance. Ordinary least squares regression was conducted to examine the full model. Models 1-4 in Table 5 illustrate the results for the association between average closeness with extended family members and emerging adult loneliness and self-acceptance. Model 1 depicts the results of the association between average closeness and emerging adult loneliness. Average closeness was associated with lower levels of loneliness ($\beta=-0.30; t(347)=-5.44; p =.00$). Model 2 reveals the results when the interaction term between gender and average closeness was added in the model. This association was not significant ($\beta=0.27 t(347)=1.26; p=.20$). Model 3 evaluated the association between average closeness and emerging adult self-acceptance. Average closeness was associated with higher levels of self-acceptance ($\beta=0.17; t(366)=3.00, p=.00$). Model 4 illustrates the results when the interaction term between gender and average closeness was added. This association was not significant ($\beta=-0.44; t(377)=-2.05; p=.41$).
The association between highest closeness and emerging adult loneliness and self-acceptance was examined in Models 1-4 in Table 6. Similar to previous findings, Model 1 indicated that highest closeness was associated with lower levels of loneliness ($\beta=-0.18; t(347)=-3.16; p=.00$). Model 2 revealed the results when the interaction term between gender and highest closeness was added in the model. This association was not significant ($\beta=0.36; t(347)=1.47; p=.14$). The findings shown in model 3 indicated that highest closeness is also associated with high self-acceptance ($\beta=0.13; t(366)=2.34; p=.02$). Results found in Model 4 indicated that gender acts as a moderator in the relationship between highest closeness with extended family and emerging adult self-acceptance ($\beta=-0.55; t(366)=-2.31; p=.02$). To visualize these results I graphed the interaction of the association between emerging adult gender, highest closeness, and emerging adult self-acceptance (see Figure 5). The association indicates that this association was stronger for men than for women.

**Discussion**

The purpose of this study was to examine the association between relationship quality with extended family members and emerging adult wellbeing (i.e., loneliness and self-acceptance). This work demonstrates the salience of relationship quality with extended family members, and its impact on emerging adult well-being.

**Relevant Findings**

The findings of this study indicated that both average conflict and highest conflict with extended family members are associated with higher levels of loneliness and lower levels of self-acceptance. These findings indicate that when relationships with extended family members are tense and strained emerging adults are more likely to report feelings of
loneliness and less likely to report feeling pleased with their achievements in life. These findings are consistent with the broader literature wherein researchers have documented the impact conflictual relationships with families of origin have on individual wellbeing (Lewis, Collishaw, Thapar, & Harold, 2014). Future research should consider additional well-being outcomes beyond loneliness and self-acceptance. For example, extended family relationships may impact emerging adult anxiety and depression. Considering multiple dimensions would provide a deeper understanding of the impact of relationship quality with extended family members and how it influences emerging adult well-being.

These results also demonstrated that emotional close relationships with extended family members were associated with lower levels of reported loneliness, and higher levels of self-acceptance. This implies that the more a relationship with an extended family member is characterized by emotional closeness the less likely emerging adults are to feel lonely, and the more likely they are to feel pleased with their achievements in life. These findings are consistent with the larger body of literature examining the impact of close relationships in families of origin, and their positive impacts on wellbeing (Harris et al., 2015). Gender acted as a moderator in the association between highest closeness and emerging adult self-acceptance. This finding was counter to what I expected. One possible explanation for this finding is that gender norms are changing and may take on different meaning for men and women in emerging adulthood (Arnett, 2014). Future research should include qualitative data would help to shed light on this association.

The present analysis was limited by the cross-sectional nature of the data. A limitation of this study was the bidirectional impact of familial relationships. As a result, the direction of the associations in this study cannot be specified. For example, relationship
quality with extended family may influence psychological well-being. However, psychological well-being may also influence relationship quality with extended family members. Future research should utilize longitudinal data to examine these associations across time. A second limitation of this data was its generalizability. The sample population was predominately white and female. Current research has indicated that race, ethnicity, and religion strongly influence the way we engage with our families. This has been documented in the literature regarding families of color, whose culture strongly influences their interactions with extended family (Gelman, 2014; Wilson 1989). Thus, these results do not account for the unique impact of cultural background. Future research should use more diverse samples when examining relationship quality between emerging adults and extended family members.

Despite these limitations, these data are unique because they explore relationship quality with family members outside of the family origin. Bowen’s family systems theory suggested that to understand one family subsystem it is relevant to consider it within the context of other family subsystems (Bowen, 1978). Therefore, to develop a clearer picture of the individual we must consider multiple systems in which they are situated — including the extended family. In this regard, these data serve as a particularly important resource to therapists and professionals who work with emerging adults. Therapists should note the importance of relationships with extended family members in the lives of emerging adults and include questions pertaining to these relationships when making assessments. Furthermore, my findings indicate that it may be beneficial for family therapists to further explore the role of extended family in well-being when working with emerging adults. By
including these relationships, professionals are able to make deeper connections with their clients and are able to provide more individualized and empathetic care and support.

These data may also be relevant to professionals working in college health and wellness, as these individuals interact with students and their families on a daily basis. As mentioned previously, college enrollment continues to rise. Because of the transition to college, students are more likely to experience mental health problems (Lyubomirsky et al., 2003). As a result, it is imperative for health and wellness professionals to understand what influences students, their well-being, and their experiences on campus. The results of this study indicated that relationships with extended family may be one way factor associated with student well-being and, therefore, should be taken into consideration when creating resources for student and families. Specifically, these results could be used to create a webinar training for students and their families to better prepare them for the transition to college. This might help both health and wellness professionals and family members to better support and empathize with students who are transitioning onto college campuses.

Consistent with the broader family of origin literature, the findings presented in this study highlight the association between relationship quality with extended family members and the well-being of emerging adults. Thus, these findings contribute to a growing literature demonstrating the ways in which emerging adult well-being may be influenced by relationship quality with extended family members.
References


Van T., & Bui, K. (2002). First generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*(1), 3-12.


Table 1. Demographic characteristics of the participants

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*Note*: Totals of percentages are not 100 for every characteristic due to rounding.
Table 2. Bivariate correlations among key study variables

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Note. *p < .05. **p < .01. ***p < .001. Gender: 1 = Female 0 = Male; Race: 1 = White 0 = Non-White; Romantic Relationship Status 0 = In a Relationship 1 = Single; First Generation College Student: 1 = Yes 0 = No
Table 3. Coefficients for average extended family conflict

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*Note.* *p* < .05. **$p < .01. ***p < .001. Gender: 1 = Female, 0 = Male; Race: 1 = White, 0 = Non-White; Romantic Relationship Status 0 = In a Relationship, 1 = Single; First Generation College Student: 1 = Yes, 0 = No
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Note. *$p < .05$. **$p < .01$. ***$p < .001$. Gender: 1 = Female 0 = Male; Race: 1 = White 0 = Non-White; Romantic Relationship Status 0 = In a Relationship 1 = Single; First Generation College Student: 1 = Yes 0 = No
Table 5. Coefficients for average extended family closeness

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*Note.* *p* < .05, **p* < .01, ***p* < .001. Gender: 1 = Female, 0 = Male; Race: 1 = White, 0 = Non-White; Romantic Relationship Status 0 = In a Relationship, 1 = Single; First Generation College Student: 1 = Yes, 0 = No
### Table 6. Coefficients for highest extended family closeness

|                     | Model 1 | Loneliness | Model 2 | Self-Acceptance | Model 3 | | Model 4 |
|---------------------|---------|------------|---------|------------------|---------| |        |
|                     | $b$     | SE         | $\beta$ | $b$              | SE      | $\beta$ | $b$   | SE   | $\beta$ |
| Constant            | 17.34   | 1.68       | --      | 19.88            | 2.40    | --      | 9.65  | 0.74 | --      | 7.95   | 1.04 | --      |
| Year in School      | -0.32   | 0.28       | -0.06   | -0.31            | 0.28    | -0.05   | 0.28  | 0.12 | 0.11   | 0.27   | 0.12 | 0.11   |
| First Generation College Student | 1.27   | 0.73       | 0.09    | 1.31             | 0.73    | 0.09    | -0.28 | 0.32 | -0.04  | -0.29  | 0.31 | -0.04  |
| Messaging Technology| -0.17   | 0.19       | -0.05   | -0.18            | 0.19    | -0.05   | 0.06  | 0.08 | 0.04   | 0.07   | 0.08 | 0.05   |
| In-Person Contact   | -0.22   | 0.27       | -0.04   | -0.22            | 0.27    | -0.04   | -0.02 | 0.11 | -0.00  | -0.01  | 0.11 | -0.00  |
| White               | -1.26   | 0.81       | -0.08   | -1.33            | 0.81    | -0.08   | 0.20  | 0.35 | 0.03   | 0.24   | 0.35 | 0.03   |
| Female              | 0.80    | 0.67       | -0.06   | -3.21            | 2.80    | -0.25   | -0.18 | 0.29 | -0.03  | 2.25   | 1.21 | 0.46   |
| Highest Closeness   | -1.41   | 0.45       | -0.18   | -2.22            | 0.70    | -0.28** | 0.46  | 0.19 | 0.13** | 0.98   | 0.30 | 0.28   |
| Female X Highest Closeness | --   | --        | --      | 1.26            | 0.85    | 0.36    | --   | --  | --      | -0.86  | 0.37 | -0.56* |
| R²                  | 0.07    | 0.08       | 0.04    | 0.05             |         |         |       |      |         |
| N                   | 347     | 347        | 366     | 366              |         |         |       |      |         |

*Note. *p < .05, **p < .01, ***p < .001. Gender: 1 = Female, 0 = Male; Race: 1 = White, 0 = Non-White; Romantic Relationship Status 0 = In a Relationship 1 = Single; First Generation College Student: 1 = Yes,0 = No.*
Figure 1. Conceptual model of gender moderating the relationship between emerging adult highest conflict and emerging adult well-being

Figure 2. Conceptual model of gender moderating the relationship between emerging adult average conflict and emerging adult well-being
Figure 3. Conceptual model of gender moderating the relationship between emerging adult average closeness and emerging adult well-being

Figure 4. Conceptual model of gender moderating the relationship between emerging adult highest closeness and emerging adult well-being
Figure 5. Gender moderation of highest closeness and self-acceptance
CHAPTER 4. GENERAL DISCUSSION AND CONCLUSIONS

The purpose of this dissertation research was to develop an understanding of the factors that are associated with relationship quality between emerging adults and their extended family members. The research also sought to examine how relationship quality between emerging adults and their extended family influence these emerging adults’ well-being.

Summary of Results

The results of both papers were informative to help understand the relationships between emerging adults and their extended family members. Paper 1 revealed that emerging adults’ gender is associated with emotional closeness in relationships with extended family members. Furthermore, that the quality of relationships found between emerging adults and their families of origin are highly correlated with relationship quality between emerging adults and their extended family members. Interestingly, paper 1 also demonstrated that emerging adults’ romantic relationship status was not associated with emotionally close relationships with extended family members. These results may be due to emerging adults’ stage of development.

According to Erikson’s theory of psychosocial development, individuals who are 18-25 are still developing a sense of personal identity (Montgomery, 2005). Furthermore, Erikson believed it is difficult for individuals in this stage to develop a mature romantic relationship as they are still identifying who they are. With this theory in mind, perhaps romantic relationships did not have a significant effect because emerging adults are still
developing their identity. Therefore, romantic/intimate relationships may not be as salient during this period.

Paper 2 revealed that conflict (e.g., average & highest) with extended family members was associated with higher levels of loneliness and lower levels of self-acceptance. Further, closeness (e.g., average & highest) with extended family was associated with lower levels of loneliness and higher levels of self-acceptance. Interestingly, gender only acted as a moderator in the association between highest closeness and emerging adult self-acceptance. This effect was stronger for men than it was for women.

**Limitations**

As stated previously, these analyses contain several limitations. First, these data were collected from emerging adults enrolled in college. As the experiences of emerging adult college students are unique, data should also be collected from emerging adults not enrolled in college. Doing so will help provide researchers with a clearer picture of what relationship quality with extended family members looks like within emerging adulthood as a whole. Second, the sample population used for both of these papers is predominately white and female. Current research has indicated that race, ethnicity, and religion strongly impact how we engage with family. For example, the African American family is commonly depicted as a family in crisis. Often these families are regarded as poor, fatherless, and dependent on government assistance (McAdoo, 1997; McAdoo & McAdoo, 2002). Due to these factors, African American families experience unique stressors that influence the members of a given family interact with one another. Latino families also experience unique stressors. Research on Latino families has highlighted the impact of immigration and acculturation and its impact on family dynamics (Miranda et al., 2006). Thus, these data do not account for the unique
impact of cultural background. Future research should use more diverse samples when examining relationship quality between emerging adults and extended family members. Additionally, cultural differences between rural and urban families were not accounted for. Work by Carr and Kefalas (2009) highlighted how common it is for rural young adults to leave their families and communities to seek educational and employment opportunities. Because of this move, these individuals may not choose to return to their communities. This shift in proximity has implications for relationship quality between emerging adults and their family members.

**Implications for Practice**

The results of this study are deeply impactful as they reveal the importance of extended family relationships in the lives of emerging adults. As mentioned previously, the majority of the literature has been dedicated to investigating the relevance and impact of parent-child relationships. However, results of the current indicated that relationships with extended family may be equally meaningful as well as beneficial to emerging adults. Therefore, this research has implications for professionals and therapists who engage with emerging adults. Specifically, health and wellness professionals who engage with emerging adults on college campuses. These professionals need to understand what influences students’ well-being and their experiences on campus. The results of this dissertation research indicated that relationships with extended family may be one factor associated with student well-being and, therefore, should be taken into consideration during initial intake assessments and in the creation of resources. These results could be used to create a webinar training for students and their families to better prepare them for the transition to college.
This will help both health and well-being professionals and family members better support and empathize with students who are transitioning to college campuses.

**Recommendations for Future Research**

The results of this dissertation research act as a foundation for future research related to the relationship quality with extended family. As a result, future work should continue to investigate relationships with extended family, as often these relationships are complex, and multifaceted. More specifically, researchers should investigate the association between emerging adults’ relationships with extended family and their life choices (e.g., romantic partners and work). Scholars should also evaluate if relationships with specific extended family members influence emerging adults’ life choices more than others (e.g., aunts vs. grandmothers). This may require researchers to employ diverse methodological approaches when investigating these relationships. It may be useful for scholars to utilize family mapping techniques to provide a clearer picture of whom an emerging adult is engaging with and how close or how conflicted their relationship is with them. It is also relevant to require participants to differentiate between family members when they are reporting on their feelings and experiences. As mentioned previously, measures that require differentiation among family members may account for subtle variations in relationship quality that are likely not seen when using overall measures. It would also be beneficial for scholars to include questions regarding emerging adults’ technology and social media usage. In the current study, messaging technology seemed to be associated with relationship quality. As our world’s technological capabilities expand and change, these forms of contact may become increasingly relevant in regards to our family relationships.
In the current study, I focused primarily on the perspectives of emerging adults. However, future researchers should expand and consider how extended family members may describe their relationships with emerging adults. The results indicated that these relationships are particularly salient for emerging adults. The collection of data from extended family members will facilitate the examination of reciprocal impacts and provide a complete picture of the family system.

Finally, I propose that future research should utilize a mixed-methods approach to studying relationship quality between emerging adults and their extended family members. Quantitative analyses allow researchers to see if closeness and conflict are present in these relationships. However, qualitative exploration would identify the specific reasoning for why relationships between emerging adults and extended family are reported as emotional close or conflictual and would shed light on the associations between extended family relationships and well-being.

Overall, the findings of this dissertation research are consistent with the broader family of origin literature. Nevertheless, these findings contribute to the growing scholarship on family relationships by examining a previously unexplored family ties between extended family members.
REFERENCES


APPENDIX A. INSTITUTIONAL REVIEW BOARD APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
2420 Lincoln Way, Suite 202
Ames, Iowa 50014
515-294-4566

Date: 11/1/2016
To: Marissa Hoist
1307 Coconino Rd #202
Ames, IA 50014

CC: Dr. Megan Gilligan
1356 Palmer

From: Office for Responsible Research

Title: Family Networks and Emerging Adulthood: The Modern Extended Family

IRB ID: 16-396

Study Review Date: 11/1/2016

The project referenced above has been declared exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) because it meets the following federal requirements for exemption:

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures with adults or observation of public behavior where
  - Information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subjects; or
  - Any disclosure of the human subjects' responses outside the research could not reasonably place the subject at risk of criminal or civil liability or be damaging to their financial standing, employability, or reputation.

The determination of exemption means that:

- You do not need to submit an application for annual continuing review.
- You must carry out the research as described in the IRB application. Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any modifications to the research procedures (e.g., method of data collection, nature or scope of information to be collected, charges in confidentiality measures, etc.), modifications that result in the inclusion of participants from vulnerable populations, and/or any changes that may increase the risk or discomfort to participants. Changes to key personnel must also be approved. The purpose of review is to determine if the project still meets the federal criteria for exemption.
- Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

Detailed information about requirements for submission of modifications can be found on the Exempt Study Modification Form. A Personnel Change Form may be submitted when the only modification involves changes in study staff. If it is determined that exemption is no longer warranted, then an Application for Approval of Research Involving Humans Form will need to be submitted and approved before proceeding with data collection.

Please note that you must submit all research involving human participants for review. Only the IRB or designees may make the determination of exemption, even if you conduct a study in the future that is exactly like this study.

Please be aware that approval from other entities may also be needed. For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. An IRB determination of exemption in no way implies or guarantees that permission from these other entities will be granted.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4566 or irb@iastate.edu.
APPENDIX B. INTERVIEW PROTOCOL

Month of Birth First, tell me a bit about yourself... In what month were you born? (select month)
- January (1)
- February (2)
- March (3)
- April (4)
- May (5)
- June (6)
- July (7)
- August (8)
- September (9)
- October (10)
- November (11)
- December (12)

Year of Birth In what year were you born? (select year)
- 1989 (1)
- 1990 (2)
- 1991 (3)
- 1992 (4)
- 1993 (5)
- 1994 (6)
- 1995 (7)
- 1996 (8)
- 1997 (9)
- 1998 (10)
- 1999 (11)

Gender of Part. What is your gender?
- Male (1)
- Female (2)
- Other. Please indicate: (3) ____________________

Ethnicity of Part. Please specify your ethnicity.
- White (1)
- Hispanic or Latino (2)
- Black or African American (3)
- Native American or American Indian (4)
- Asian/Pacific Islander (5)
- Other. Please Specify: (6) ____________________
Parent Who Raised Please indicate the parent(s) or guardian(s) who raised you. Check all that apply.
☐ Biological mother (1)
☐ Biological Father (2)
☐ Step Mother (3)
☐ Step Father (4)
☐ Adoptive Mother (5)
☐ Adoptive Father (6)
☐ Extended Family Member(s). Please indicate: (7) ____________________
☐ Other. Please indicate: (8) ____________________
☐ None (9)

Year in School What year are you in school?
☐ Freshman (1)
☐ Sophomore (2)
☐ Junior (3)
☐ Senior (4)
☐ Graduate Student (5)
☐ Other. Please indicate: (6) ____________________

First Generation Are you a first generation college student?
☐ Yes (1)
☐ No (2)
☐ I'm not sure (3)

Major What is your major?

Currently Live Where do currently live?
☐ On campus- (dorms, student housing) (1)
☐ Off campus- (An apartment on your own, with a roommate or partner) (2)
☐ Off campus- (With parent or family member) If so, with whom? (3) ____________________

Relationship Status Which best describes your current relationship status? Are you ...
☐ Married (1)
☐ Living with someone in a steady, marriage-like relationship (2)
☐ In a steady, romantic relationship with one person, but not living together (3)
☐ Dating, but do not have a steady, romantic relationship with one person (4)
☐ Not dating or seeing anyone right now (5)
☐ Does not apply (6)

Parent Living Are your parent(s) and/or caregiver(s) living?
☐ Yes (1)
☐ No (2)
If No Is Selected, Then Skip To Do you have any sibling(s)?
Parent Closeness The next series of questions will be asking you to report on your relationship with the people who raised you and your siblings. If you do not have any siblings, report on your relationship with your parents. Use any number from 1-7, where 1 is very distant and 7 is very close. Thinking about the people who raised you and your siblings, what number would you use to describe the relationship between you and

- Very Distant1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very Close7 (7)

Parent Closeness2 Thinking about the people who raised you and your siblings, how often does your family make you feel loved and cared for?

- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

Parent Conflict Sometimes, no matter how close we may be to someone, the relationship can also at times be tense and strained. Thinking about the people who raised you and your siblings, describe how tense and strained the relationship between you and your family is currently?

- Not at all tense and strained1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very tense and strained7 (7)

Parent Conflict 2 Thinking of the people who raised you and your siblings, how often would you say you and your family typically have disagreements or conflicts?

- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

Sibling Alive Do you have sibling(s)?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To List the first 3 people that come to ...
Sibling Demographic Please share some more information about all your brothers and sisters. Start by indicating whether or not your sibling(s) is living, their age, and gender. Many families include step-siblings, half-siblings, and adopted siblings. We are also interested in how each sibling is related to you.

<table>
<thead>
<tr>
<th>Sibling 1 (1)</th>
<th>Is sibling still living?</th>
<th>Sibling's age</th>
<th>Sibling's gender</th>
<th>Relationship to you</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 2 (2)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 3 (3)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 4 (4)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 5 (5)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 6 (6)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling 7 (7)</td>
<td>Yes (1)</td>
<td></td>
<td>Male (1)</td>
<td>e.g. full, twin, half-sib, adoptive (1)</td>
</tr>
<tr>
<td></td>
<td>No (2)</td>
<td></td>
<td>Female (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm not sure (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EF name List the first 3 people that come to mind when you think about your extended family. This can include: grandparents, aunts, uncles, and cousins, etc.

Person 1: (1)
Person 2: (2)
Person 3: (3)

EF Relation How are each of these individuals related to you?

${q://QID17/ChoiceTextEntryValue/1}$ is my ... (1)

${q://QID17/ChoiceTextEntryValue/2}$ is my ... (2)

${q://QID17/ChoiceTextEntryValue/3}$ is my ... (3)

EF1Close1 These next questions will be about your relationship with ${q://QID17/ChoiceTextEntryValue/1}$ Use any number from 1-7, where 1 is very distant and 7 is very close. What number would you use to describe the relationship between you and ${q://QID17/ChoiceTextEntryValue/1}$?
EF1Close2 How often does $q://QID17/ChoiceTextEntryValue/1$ make you feel loved and cared for?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF1Conflict1 Sometimes, no matter how close we may be to someone, the relationship can also at times be tense and strained. Use any number from 1 to 7, where 1 is not at all tense and strained and 7 is very tense and strained. What number would you use to describe how tense and strained the relationship between you and $q://QID17/ChoiceTextEntryValue/1$ is currently?
- Not at all tense and strained (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very tense and strained (7)

EF1Conflict2 How often would you say the two of you typically have disagreements or conflicts?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF1Ambiv1 Sometimes, we can feel torn in two directions, or conflicted, about a particular relationship. Thinking about your relationship with $q://QID17/ChoiceTextEntryValue/1$, how often do you feel torn in two directions or conflicted about him/her? Would you say you feel this way very often, fairly often, sometimes, rarely, or never?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)
EF1Ambiv2 How much do you agree with the following statement: I have very mixed feelings about ${q://QID17/ChoiceTextEntryValue/1}.

- Strongly agree (1)
- Agree (2)
- Neither agree nor disagree (3)
- Disagree (4)
- Strongly disagree (5)

EF1Close1OP Please describe a situation where ${q://QID17/ChoiceTextEntryValue/1} made you feel loved and cared for. Feel free to detail this situation(s) below:

EF1ConflictOP Describe a situation where you and ${q://QID17/ChoiceTextEntryValue/1} had a disagreement and / or a conflict. Feel free to detail this situation(s) below:

EF1AmbivOP Please describe a situation where you have had mixed emotions surrounding ${q://QID17/ChoiceTextEntryValue/1}, what happened? Feel free to detail this situation(s) below:

EF1Prox ${q://QID17/ChoiceTextEntryValue/1} lives ...

- in the same house as you (1)
- in the same neighborhood (2)
- less than 15 minutes away (3)
- between 15 and 30 minutes away (4)
- between 30 and 60 minutes away (5)
- more than an hour away from you (6)

EF1Contact1 How often do you talk with ${q://QID17/ChoiceTextEntryValue/1} on the telephone?

- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF1Contact2 Have you emailed, instant messages, text messaged, skyped or face-timed with ${q://QID17/ChoiceTextEntryValue/1} in the past year?

- Yes (1)
- No (2)
Display This Question:
If Have you emailed, instant messages, text messaged, or skyped with ${q://QID17/ChoiceTextEntryValue/1} in the past year? Yes Is Selected

EF1Contact3 How often do you email, instant message, text message, skype, or face-time with ${q://QID17/ChoiceTextEntryValue/1}?
- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF1Contact4 Have you physically spent time with ${q://QID17/ChoiceTextEntryValue/1} in the past year?
- Yes (1)
- No (2)

EF1Contact5 How often do you get together with ${q://QID17/ChoiceTextEntryValue/1} in person? That is you visit him/her, he/she visits you, or you go out somewhere?
- Every day (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF2Close1 These next questions will be about your relationship with ${q://QID17/ChoiceTextEntryValue/2} Use any number from 1-7, where 1 is very distant and 7 is very close. What number would you use to describe the relationship between you and ${q://QID17/ChoiceTextEntryValue/2}?
- Very Distant1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very Close7 (7)
EF2Close2 How often does ${q://QID17/ChoiceTextEntryValue/2} make you feel loved and cared for?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF2Conflict1 Sometimes, no matter how close we may be to someone, the relationship can also at times be tense and strained. Use any number from 1 to 7, where 1 is not at all tense and strained and 7 is very tense and strained. What number would you use to describe how tense and strained the relationship between you and ${q://QID17/ChoiceTextEntryValue/2} is currently?
- Not at all tense and strained1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very tense and strained7 (7)

EF2Conflict2 How often would you say the two of you typically have disagreements or conflicts?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF2Ambiv1 Sometimes, we can feel torn in two directions, or conflicted, about a particular relationship. Thinking about your relationship with ${q://QID17/ChoiceTextEntryValue/2}, how often do you feel torn in two directions or conflicted about him/her? Would you say you feel this way very often, fairly often, sometimes, rarely, or never?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF2Ambiv2 How much do you agree with the following statement: I have very mixed feelings about ${q://QID17/ChoiceTextEntryValue/2}.
- Strongly agree (1)
- Agree (2)
- Neither agree nor disagree (3)
- Disagree (4)
- Strongly disagree (5)
EF2CloseOP Please describe a situation where ${q://QID17/ChoiceTextEntryValue/2} made you feel loved and cared for. Feel free to detail this situation(s) below:

EF2ConflictOP Describe a situation where you and ${q://QID17/ChoiceTextEntryValue/2} had a disagreement and / or a conflict. Feel free to detail this situation(s) below:

EF2AmbivOP Please describe a situation where you have had mixed emotions surrounding ${q://QID17/ChoiceTextEntryValue/2}, what happened? Feel free to detail this situation(s) below:

EF2Prox ${q://QID17/ChoiceTextEntryValue/2} lives ...
- in the same house as you (1)
- in the same neighborhood (2)
- less than 15 minutes away (3)
- between 15 and 30 minutes away (4)
- between 30 and 60 minutes away (5)
- more than an hour away from you (6)

EF2Contact1 How often do you talk with ${q://QID17/ChoiceTextEntryValue/2} on the telephone?
- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF2Contact2 Have you emailed, instant messages, text messaged, skyped, or face timed with ${q://QID17/ChoiceTextEntryValue/2} in the past year?
- Yes (1)
- No (2)

Display This Question:
If Have you emailed, instant messages, text messaged, or skyped with ${q://QID17/ChoiceTextEntryValue/1}&nbsp;in the past year? Yes Is Selected

EF2Contact3 How often do you email, instant message, text message, skype, or face time with ${q://QID17/ChoiceTextEntryValue/2}?
- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)
EF2Contact4 Have you physically spent time with \${q://QID17/ChoiceTextEntryValue/2} in the past year?
- Yes (1)
- No (2)

Display This Question:
If Have you physically spent time with \${q://QID17/ChoiceTextEntryValue/1 in the past year?
Yes Is Selected

EF2Contact5 How often do you get together with \${q://QID17/ChoiceTextEntryValue/2} in person? That is you visit him/her, he/she visits you, or you go out somewhere?
- Every day (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month, (6)
- I do not contact them (7)

EF3Close1 These next questions will be about your relationship with \${q://QID17/ChoiceTextEntryValue/3} Use any number from 1-7, where 1 is very distant and 7 is very close. What number would you use to describe the relationship between you and \${q://QID17/ChoiceTextEntryValue/3} :
- Very Distant1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very Close7 (7)

EF3Close2 How often does \${q://QID17/ChoiceTextEntryValue/3} make you feel loved and cared for?
- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

EF3Conflict1 Sometimes, no matter how close we may be to someone, the relationship can also at times be tense and strained. Use any number from 1 to 7, where 1 is not at all tense and strained and
7 is very tense and strained. What number would you use to describe how tense and strained the relationship between you and $q://QID17/ChoiceTextEntryValue/3$ is currently?

- Not at all tense and strained (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6 (6)
- Very tense and strained (7)

**EF3Conflict2** How often would you say the two of you typically have disagreements or conflicts?

- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

**EF3Ambiv1** Sometimes, we can feel torn in two directions, or conflicted, about a particular relationship. Thinking about your relationship with $q://QID17/ChoiceTextEntryValue/3$, how often do you feel torn in two directions or conflicted about him/her? Would you say you feel this way very often, fairly often, sometimes, rarely, or never?

- Very often (1)
- Fairly often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

**EF3Ambiv2** How much do you agree with the following statement: I have very mixed feelings about $q://QID17/ChoiceTextEntryValue/3$.

- Strongly agree (1)
- Agree (2)
- Neither agree nor disagree (3)
- Disagree (4)
- Strongly disagree (5)

**EF3CloseOP** Please describe a situation where $q://QID17/ChoiceTextEntryValue/3$ made you feel loved and cared for. Feel free to detail this situation(s) below:

**EF3ConflictOP** Describe a situation where you and $q://QID17/ChoiceTextEntryValue/3$ had a disagreement and / or a conflict. Feel free to detail this situation(s) below:

**EF3Ambiv3** Please describe a situation where you have had mixed emotions surrounding $q://QID17/ChoiceTextEntryValue/3$, what happened? Feel free to detail this situation(s) below:

**EF3Prox** $q://QID17/ChoiceTextEntryValue/3$ lives ...
in the same house as you (1)
- in the same neighborhood (2)
- less than 15 minutes away (3)
- between 15 and 30 minutes away (4)
- between 30 and 60 minutes away (5)
- more than an hour away from you (6)

EF3Contact1 How often do you talk with ${q://QID17/ChoiceTextEntryValue/3} on the telephone?
- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF3Contact2 Have you emailed, instant messages, text messaged, skyped, or face-timed with ${q://QID17/ChoiceTextEntryValue/3} in the past year?
- Yes (1)
- No (2)

Display This Question:
If Have you emailed, instant messages, text messaged, or skyped with ${q://QID17/ChoiceTextEntryValue/1} in the past year? Yes Is Selected

EF3Contact3 How often do you email, instant message, text message, skype, or face-time with ${q://QID17/ChoiceTextEntryValue/3}?
- Everyday (1)
- Several times a week (2)
- At least once a week (3)
- 2-3 times a month (4)
- About once a month (5)
- Less than once a month (6)
- I do not contact them (7)

EF3Contact4 Have you physically spent time with ${q://QID17/ChoiceTextEntryValue/3} in the past year?
- Yes (1)
- No (2)
Display This Question:
If Have you physically spent time with ${q://QID17/ChoiceTextEntryValue/1 in the past year?
Yes Is Selected

EF3Contact5 How often do you get together with ${q://QID17/ChoiceTextEntryValue/3} in person? That is, you visit him/her, he/she visits you, or you go out somewhere?
○ Every day (1)
○ Several times a week (2)
○ At least once a week (3)
○ 2-3 times a month (4)
○ About once a month (5)
○ Less than once a month (6)
○ I do not contact them (7)

Q67 This next series of questions will asking you to describe how you may have felt or behaved in the past week. After each sentence please tell me how many days it has been since you felt this way.

Depression How many days has it been since you ...

<table>
<thead>
<tr>
<th>felt you could get going (1)</th>
<th>Within last day (1)</th>
<th>1-2 daysago (2)</th>
<th>3-4 daysago (3)</th>
<th>5-7 daysago (4)</th>
<th>Not Applicable (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>felt sad (2)</td>
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<tr>
<td>had trouble getting to sleep or staying asleep (3)</td>
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<tr>
<td>felt that everything was an effort (4)</td>
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<tr>
<td>felt lonely (5)</td>
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<tr>
<td>felt you couldn't shake off the blues (6)</td>
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<tr>
<td>had trouble keeping your mind on what you were doing (7)</td>
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</tbody>
</table>
Self-Acceptance Please indicate to what degree you agree with this statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>Strongly agree (5)</th>
<th>Not Applicable (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like most parts of my personality. (1)</td>
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<tr>
<td>When I look at the story of my life, I am pleased with how things have turned out so far. (2)</td>
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<tr>
<td>In many ways, I feel disappointed about my achievements in life. (3)</td>
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<tr>
<td>Loneliness</td>
<td>How often do you feel ...</td>
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</tr>
<tr>
<td>that you lack companionship? (1)</td>
<td>Never (1)</td>
<td>Rarely (2)</td>
<td>Sometimes (3)</td>
<td>Always (4)</td>
<td>Not Applicable (5)</td>
<td></td>
</tr>
<tr>
<td>that you have a lot in common with the people around you? (2) close to people? (3) left out? (4) that no one really knows you well? (5) isolated from others? (6) that there are people who really understand you? (7) that people are around you but not with you? (8) that there are people you can talk to? (9) that there are people you can turn to? (10)</td>
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<td>that you lack companionship? (1)</td>
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<td>that you lack companionship? (1)</td>
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<tr>
<td>that you lack companionship? (1)</td>
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