Blended Family Resilience: Communication Practices in Positive Adult Half Sibling Relationships

by

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ABSTRACT

Blended families including half siblings (brothers/sisters who share only one biological parent, most likely a product of divorce and remarriage) are becoming increasingly prevalent in Western societies. Studies have determined the negative outcomes of sharing only one biological parent on familial relationships, but less so on how half siblings may be resilient in the wake of restructuration and cultivate positive relationships overtime and into adulthood. This study applied a systems and resilience perspective to understand how blended family structure influences this unique sibling dyad. This research includes two studies. First, seventeen older half siblings who define their current sibling relationship as positive participated in a retrospective turning points interview. The second study required sixteen additional participants to keep a two-week daily diary on their communication with immediate family members, including half siblings. These two studies combined shed light on the typical communication practices between positive half siblings, including which behaviors contribute to prosocial relational sibling maintenance. Results detailed 23 prosocial relational maintenance behaviors. The maintenance behaviors positivity, joint activities, openness, and parental intervention were most significant in contributing to a positive half sibling relationship. Three novel maintenance behaviors (parental intervention, awareness of maturity, and mentoring behavior) were also identified to contribute to existing maintenance literature. Theoretical and practical implications for scholars and practitioners alike are discussed.

DEDICATION

To Blake, Morgan, and V. J. (the best siblings blood or marriage could provide).

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CHAPTER 1

INTRODUCTION

Traditional definitions of family imply the presence of two heterosexual parents and their biological children (Holtzman, 2008). However, families today are more likely to have an unconventional family structure such as single-parent, same-sex parenting, divorced, step, or blended families (Baxter, Braithwaite, Bryant, & Wagner, 2004). In the U.S., nearly 42 percent of the population is a part of a step or blended family structure (Parker, 2011). Over half of all stepfamilies form complex households with biological children from both parents (Ganong & Coleman, 1994), and an estimated two-thirds of stepfamilies produce half siblings within the first four years of stepfamily formation (Bumpass, 1984). Half siblings are siblings who share only one biological parent and have 25% genetic relatedness (Mikkelson, Floyd, & Pauley, 2011). Although half siblings may also form due to bereavement or extra relations of a biological parent, half siblings most likely are part of a remarried, blended family dynamic (Coleman, Fine, Ganong, Down, & Pauk, 2001).

Although half siblings are a common dyad within prevalent modern family structures, research has yet to uncover the unique characteristics of half sibling relationships. Specifically, research has yet to describe the typical ways half siblings communicate into adulthood. Moreover, research that has identified tensions common to half siblings largely does so by conflating half sibling relationships with stepsibling relationships—or by briefly mentioning half sibling dyads within larger biological sibling studies (e.g. Roe, Bridges, Dunn, & O'Connor, 2006; White & Riedman, 1992). Consequently, little is known about how half sibling relationships function in adulthood

and what conflict is specific to this sibling form. For these reasons, a study that focuses primarily on the half sibling relationship is worthwhile so that family research can better understand how individuals in this unique sibling dyad foster constructive communication practices into adulthood.

Researchers have dedicated considerable effort to highlighting the challenges to blended family relationships, including half sibling dyads. Blended family researchers argue that half sibling relationships are negatively impacted by complex family subsystems, unclear boundary structures, and unmet role expectations. For example, Stewart (2005) found having co-resident half and/or stepsiblings increases the ambiguity of family relationships and leads to more uncertainty about appropriate family roles for the restructured family. Therefore, family members (including parent-child and sibling dyads) suffer from poor communication practices.

Half siblings also are likely to grieve the absence of a noncustodial biological parent or family and feel caught between their biological relatives (Afifi & Schrodt, 2003). Feeling caught can cause boundary confusion regarding what information to reveal to or conceal from various parental figures, or even sibling types such as noncustodial siblings (siblings living with different biological parents, Golish, 2003). Indeed, step and blended families are likely consumed by the complex task of negotiating both internal (within the new blended system) and external (between blended family members and noncustodial parents or sibling) boundaries (Coleman et al., 2001). In addition, conflict between a family subsystem (between a stepparent and stepchild) has the potential to "spill over" or negatively influence other subsystems within the family (such as half siblings) (Bray & Hetherington, 1993).

Despite the problems that can occur, existing studies have concluded that blended family structures have the ability to cultivate positive family relationships through constructive communication practices, and that they hold the potential to be resilient in the wake of adversity common to restructuration (Braithwaite, Waldron, Allen, Oliver, Berquist, Brockhage, Marsh, Swords, & Tschampl-Diesing, 2018; Golish, 2003). Resilience is the ability of an individual, dyad, family or group/community to adapt and recover from situational stressors (Zautra, 2009). As existing half sibling research clearly dictates, half sibling relationships are negatively affected by restructuration. Consequently, research should focus on how half siblings can be resilient (or adapt and recover) from the negative stressors or adversity associated with it. Moreover, focusing on the positive or prosocial ways half siblings communicate and maintain their relationship into adulthood may shed further light on the resilience of children within a blended dynamic.

Research has yet to adequately study half sibling relationships into adulthood. Moreover, research typifies this relationship as inherently negative and conflict-ridden at the expense of exploring the positive communication practices that can contribute to resilient half sibling relationships after family restructuration. The half sibling form is also unique in its placement within mostly blended family structures. For these reasons, research should look to the system in which this sibling relationship develops to better understand the current and past trajectories of the half sibling relationship. Therefore, this study attempts to address past research limitations by exploring: a) the common ways adult half siblings communicate within their blended system and across the trajectory of their family's development; b) the topics and possible conflict common to adult half

sibling relationships; c) and the communicative practices that foster positive and even resilient half sibling relationships after the hardship of restructuration. The following chapter provides a rationale, discussion of existing literature, and overarching research questions to study resilient adult half sibling relationships.

CHAPTER 2

LITERATURE REVIEW

Study Rationale and Significance

Sibling relationships are typically the longest relationships individuals have throughout their lives. Sibling relationships also essential in providing individuals the necessary resources to survive and thrive across the lifespan. Siblings offer identity comparisons and serve as role models in childhood (Whiteman, McHale, & Soli, 2011), provide companionship and emotional support in times of crisis in early and mid-adulthood, and increase forms of support as they enter into old age (Cicirelli, 1995). As adults, siblings report their relationships are generally close and satisfying, but they also experience moderate levels of uncertainty due to not spending as much time together compared to when they were adolescents (Myers, Byrnes, Frisby, & Mansson, 2011). Nevertheless, sibling relationships remain close sources of support throughout the lifespan, especially in times of high conflict or transition (Cicirelli, 1995). For these reasons, sibling relationships are important and significant relationships that call for the attention of family researchers, especially as siblings move into adulthood.

Siblings come in many different forms, usually determined by their family structure. Sibling forms include identical twins, fraternal twins, full biological siblings, half biological siblings, stepsiblings, and non-genetic adoptive siblings (Mikelson, Floyd, & Pauley, 2011). Indeed, siblings may share genetic relatedness or be bound by marital or custodial ties only. Interestingly, all these varied sibling types generally keep in contact as they transition into adulthood (White & Reidman, 1992).

All adult sibling relationships are likely to be affected by influences such as residence, proximity, gender, and age (White & Riedman, 1992). However, restructured (often referred to in psychology as 'reconstituted') families may also include sibling dyads who experience more negatively, less warmth, and heightened rivalry in their relationships (Anderson, 1999). Thus, the complex family forms within step or blended families create unique obstacles for sibling bonds over and above influences on intact or first marriage biological sibling dyads.

Reconstituted family structures are becoming more salient, especially in Western cultures (Holtzman, 2008). Stepfamilies have become a prevalent and fast-growing postmodern family form, and first marriage or intact families are rapidly becoming the minority (Galvin, 2006). Nonetheless, first marriage families that include two heterosexual parents and their biological children are still idealized or normalized in definitions used by most children and adults when describing what a "family" is (Roe et al., 2006; Holtzman, 2008). Although families today are more likely to have an unconventional family structure (Baxter et al., 2004), private and public discussions appear to reinforce traditional definitions of family (Holtzman, 2008). Because of this, researchers should attempt to unpack this paradox and provide greater focus to a prevalent, yet largely misunderstood sibling form.

When researchers do focus on half siblings and blended families, findings typically highlight the obstacles members of restructured families face. For instance, Menaghan, Kowaeski-Jones, and Mott (1997) conclude that family structure change threatens a child's sense of security, reduces their access to parental and emotional resources, and can disrupt their behavior and academic performance. Moreover, Stewart

(2005) concludes that the presence of co-resident half or stepsiblings increases the complexity of a family and heightens uncertainty about appropriate family roles. This uncertainty is assumed to lead to poor family relationships due to negatively affected communication practices. Unfortunately, such studies do not always offer the next step or inform how restructured families can cope with such challenges. Researchers such as Golish (2003) and Braithwaite (et al., 2018, 2001), however, have begun to answer this call with research that explores the resilience of restructured families *in addition* to locating structural challenges. The field of family communication would benefit if more researchers shared their focus on the relational maintenance behaviors, conflict management, and constructive communication practices that contribute to more positive and resilient nontraditional family relationships. Such a focus could have many practical implications, including identifying the prosocial practices that contribute to healthier relationships and improve psychological and physical health for individuals (Hetherington & Jodi, 1994).

The goal of this study was to respond to existing holes in reconstituted (also known as restructured) family research. Specifically, current research falls behind in providing adequate descriptions of half sibling relationships when it comes to their communication into adulthood. Moreover, researchers should attend to how conflict may be a result of a half sibling's blended family form and explore how conflict is managed and responded to in this familial context. Finally, researchers should explore the *dark-side* of restructured family relationships primarily to understand the *light-side* of resilient family relationships. Overall, the purpose of this study was to provide a detailed and

complex description of how half sibling communication can contribute to resilient relationships in the wake of the hardship of restructuration into adulthood.

Sibling Conflict

Research on siblings in general lags far behind parent-child relational research and studies of marital dyads. The majority of existing sibling research is empirical and focuses on the individual psychological development and behavioral adjustment of each sibling within the dyad (Whiteman, McHale, & Soli, 2011). Moreover, minimal research exists on varying sibling types, including stepsiblings and half siblings. In the following section, an overview of existing sibling, blended family, and half sibling literature will be discussed to ground the present research. First, research on sibling conflict will be discussed within three overarching paradigmatic perspectives: an evolutionary-psychoanalytic approach, social psychology, and a family systems perspective. An overview of sibling conflict is needed to foreground the present research, as half sibling dyads have been specifically studied in the context of the hardship and conflict resulting from their family structure and unique sibling relationship.

Evolutionary-Psychoanalytic Perspectives of Sibling Conflict

Evolutionary psychologists dedicate attention to the adaptive value of sibling relationships, where siblings potentially contribute to the survival of their brothers and sisters by providing support and preserving their genetic line. Mikelson, Floyd, and Pauley (2011) studied siblings under the evolutionary assumption that a fundamental motive of human nature is to maximize evolutionary fitness by having offspring and/or aiding relatives in their production of healthy offspring. In essence, an allocation of resources should be reserved for those who are most capable and likely to pass on one's

own genetic code. Within this evolutionary perspective, Mikelson, Floyd, and Pauley (2011) hypothesized biological siblings would be more likely to invest in their biologically similar sibling relationships than other less-genetically related sibling dyads. Indeed, findings show identical twins provided more social support (emotional, network, informational, and tangible support) to their siblings, followed by fraternal twins, full biological siblings, half siblings, and then stepsiblings. Importantly, biological relatedness is only one such influence on sibling investment, closeness, and overall connection. For instance, residence, gender, family structure, proximity, and age all contribute to the valence/success of a sibling relationship (White & Riedman, 1992).

Additionally, scholars have used attachment theory to explain sibling relationship dynamics through an evolutionary lens. Grounded in literature from the early 1900's in the field of psychoanalysis, early attachment theorists focused on instinctual patterns of behavior typical to early human interaction. Moreover, attachment theorists attend to how social interaction (specifically between caregivers and their offspring) can provide or hinder survival functions of individuals (Whiteman, McHale, & Soli, 2011). Attachment theory primarily targets the early bond between infants and their caregivers, noting that the characteristics and behaviors of such a bond are critical to the child's survival (Bowlby, 1969). For instance, children who exhibit a secure attachment with their caregiver (i.e. parent) are likely to employ more harmonious and constructive conflict management strategies in their parent-child relationship (Trees, 2006). However, scholars also have found that in addition to primary caregivers, infants and children can form attachments to other familial relationships, including their siblings (Whiteman, McHale,

& Soli, 2011) testifying attachment dynamics extend from the cradle to the grave and include a variety of relationships, including sibling relationships.

Although sibling attachment research is limited, scholars such as Samuels (1980) and Jenkins (1992) found that siblings often serve as a secure base or as a source of comfort during stressful and high conflict times. Siblings also seek emotional support from each other when their parents encounter marital conflict (Jenkins, 1992). In contrast, if children have an insecure attachment to their parent(s), their sibling relationships are also more likely to be characterized by high conflict (Volling, 2001). In addition, many half siblings are part of a reconstituted family where negative feelings from the divorce still linger after their parents remarry (Bray & Hetherington, 1993). An older half sibling who is still mourning the loss/distance of their biological parent may exhibit a more insecure attachment style, leading to greater conflict in their half sibling relationship.

From these perspectives, we understand that conflict arises in half sibling relationships due to genetic relatedness and attachment to a biological parent. Thus, an evolutionary perspective concludes half sibling conflict can arise due to the lesser investment to each other compared to full biological sibling dyads. Moreover, because they are only half biologically related, a half sibling's attachment to a parent may be weaker because the older sibling may be torn across two different families and have less attachments to siblings who do not share their same full genetic code.

Social Psychology Perspectives of Sibling Conflict

In contrast to an evolutionary-psychoanalytic focus on adaptive features in sibling relationships, social psychologists instead direct attention to explaining the meaning-making process of claiming causation through cognition. For example, social

psychologists have applied attribution theory to explore how siblings explain their own behavior as well as their sibling's actions toward them. For attribution theorists, harmony and conflict in social relationships is affected by how individuals perceive the motivations for a partner's behavior (Whiteman, McHale, & Soli, 2011). Sibling researchers argue that negative sibling attributions largely contribute to rivalry and comparisons between dyads, which can have both negative and positive effects on individual identity (Feinberg, Neiderhiser, Simmens, Reiss, & Hetherington, 2000; Connidis, 2007).

Further, Wilson and Whipple (2001) conclude that inconsistent or troubling family experiences may lead to high attribution error, where individuals are likely to make incorrect attributions to explain a family member's behavior. Research also suggests that half-siblings are more likely to be part of a blended family that experiences elevated conflict, high uncertainty, ambiguous roles, and renegotiated boundaries than are siblings in first-marriage or "intact" families (Afifi & Schrodt, 2003; Golish, 2003; Coleman et al., 2001). Moreover, family structure change can threaten a child's sense of security and disrupt their performance in behavioral and academic areas (Menaghan, Kowaaleski-Jones, & Mott, 1997).

Overall, half siblings typically experience more tension and conflict due to their blended structure, making them more likely to employ negative attributions to family members' actions (Whilson & Whipple, 2001). For example, an older sibling who is still grieving the divorce of their biological parents may make negative attributions for a subsequent half sibling's behavior. In essence, the older half sibling may displace their anxiety over family restructuration onto a half sibling, who they view as a direct result of

their parents' remarriage (born to a biological and stepparent). Indeed, Stratton (2003) saw blame was used as a defense mechanism for stepchildren against unwanted family structure change. When conflict occurred in their family, stepsiblings blamed one another and attributed negative actions to internal characteristics of their stepsiblings to make sense and cope with the ambiguous role and boundaries within their new family form (Anderson, 1999).

Individual attributions influence how dyads and groups communicate (Spitzberg & Manusov, 2015). For instance, research reveals that individuals' internal cognitions and attributions affect how they act and interact toward others. Myers and Goodboy (2013) found that adult siblings who perceive their relationship to be equitable use more openness in their disclosure with their sibling, as opposed to sibling(s) who believe they are underbenfitted in their sibling relationship. If a child makes the attribution that their half sibling receives more attention from their shared biological parent because they are favored, the child may feel underbenefitted, and, if so, the communication between the half siblings is likely to include more dysfunctional communication patterns (Stewart, 2005).

Importantly, communication outcomes (such as being open with a sibling) resulting from internal cognitions (such as perceived equity) can produce negative or positive relational outcomes. For instance, an equitable sibling relationship including openness has been seen to lead to higher reported levels of commitment, trust, satisfaction, liking, and even loving actions within the dyad (Myers & Goodboy, 2013). For social psychologists, sibling conflict such as rivalry and dysfunctional communication patterns can be explained through an individual's cognitive attributions

for their siblings' and their own behavior. As such, analyzing the conflict present within adult half sibling relationships and identifying the communicative responses to this conflict, may inform us of the cognitive attributions adult half siblings make.

Half siblings cannot be understood by a purely social psychology perspective however, because blood relatedness does appear to impact how they communicate inside and outside their family unit. For example, half siblings share only 25% genetic relatedness (Mikelson, Floyd, & Pauley, 2011), yet they describe themselves as brothers and sisters (Hetherington & Jodi, 1994). Moreover, half sibling relationships are influenced by most of the same factors as full biological siblings (White & Reidman 1994), yet are characterized as less warm and more conflict-ridden (Anderson, 1999).

In addition, half siblings are a complex sibling form that also cannot be understood by a purely evolutionary perspective because it appears factors outside genetic relatedness affect their connection (such as residence, perceived privacy boundaries, societal role expectations, etc.). Instead, a theoretical perspective that encompasses the many features that influence a family system, including how genetics influence sibling and parent-child subsystems (evolutionary-psychoanalytic perspective) *and* how internal cognitions explain sibling behavior (social psychology perspective), *as well* as how these factors affect an entire family's functions should be applied. One such perspective, and the theoretical perspective utilized in the present research is the family systems perspective.

Family Systems Perspectives of Sibling Conflict

When half siblings are discussed in research, their relationship frequently is described as conflict-ridden, which is attributed to their complex family dynamic (Bray &

Hetherington, 1993). For example, when blended families include co-resident step or half siblings, the complexity of the family dynamic may lead to poor family communication and difficulty in both sibling and parent-child relationships (Stewart, 2005). Popenoe (1994) found that stepparents often withdraw attention from their stepchildren after a half sibling is born, transferring attention to their new biological child. This increased parental involvement and "favoring behaviors" toward a biological half offspring leads to strained relationships among sibling forms within the structure (Lightcap, Kurland, & Burgass, 1982; MacDonald & DeMaris, 1996; Flinn, 1988;). In essence, the complexity of the family system increases conflict amongst half siblings. This focus on the whole (the family) to understand the dyad (siblings) explains why much of early family communication literature utilizes a family systems perspective to study sibling relationships.

A systems perspective has been applied to a large majority of family research (Galvin, Dickson, & Morrow, 2006). General Systems Theory (GST), put forth by Bertallanffy (1950), was developed to explore how a variety of complex systems share fundamental organizational principles. GST focuses on the interactive nature of relationships and argues systems are integrated wholes that can be reduced to their component parts because the whole is more than (or greater than) adding together (the sum of) its parts. Later, family therapists including Bateson, Jackson, Haley, and Weakland (1956) saw the potential use of General Systems Theory concepts to explain the systematic functioning of families, thereby creating Family Systems Theory (FST). FST views families as a system of interrelated, individual parts that interact through patterned ways to inform a synergetic whole (Metts & Ashbury, 2014). In FST

communication is the means by which families create patterns to connect individual units (or family members) to overarching system performance (the family) (Galvin, Dickson, & Morrow, 2006). In essence, to understand how the individual functions within the system *and* how the system functions as a whole, researchers should investigate the ways in with these units communicate.

FST is characterized by eight theoretical assumptions: systems are *open* to outside influence, systems function due to *patterns*, systems include *interactive complexity* across *interdependent* parts to inform the *whole*, and systems must manage *boundaries*, *subsystems*, and *coalitions/alliances* within system parameters (Metts & Ashbury, 2014). These assumptions highlight how a change in one individual part or subsystem (i.e. the sibling relationship) can affect overall system functioning (i.e. the blended family) as well as how a change in one individual part or subsystem (i.e. the parent-child bond) can affect other individual or subsystem functioning (i.e. the sibling relationship) (Minuchin, 1985).

Theorists such as Bronfenbrenner (1994) have utilized systems theory as a perspective to understand families without necessarily noting the connections between these eight original assumptions. Utilizing a system perspective to understand child development, Bronfenbrenner defined his "ecological systems theory" as a way to understand how children develop into adulthood by describing how individuals interact within a larger environment that simultaneously forms them. Bronfenbrenner identified five subsystems (or levels) that have contextual influence on individual development, and these subsystems were later applied to the development of dyadic relationships, including siblings (Whiteman, McHale & Soli, 2011). He argues that individuals and dyads are

subject to influence from the following systematic levels: microsystems (the immediate environment of an individual, including with whom they live), mesosystems (how aspects of an individual's microsystems work together), exosystems (settings an individual may not interact directly with but still affect them, such as a parent's workplace), macrosystems (cultural values and norms expected by the larger society), and chronosystems (developmental transitions and environmental changes overtime that impact an individual) (Bronfenbrenner, 1994).

Clearly, Bronfenbrenner's ecological systems theory is one of many adaptions of Bertalanffy's (1955) General Systems Theory. More commonly, present day scholars apply a systematic perspective to studying families, without applying specific theory principles (e.g. Golish, 2003). The present research applies a family systems perspective in the same vein, where the researcher views siblings as inherently connected to and embedded within their blended system. In essence, to study the sibling dyad requires a study on the entire system as well. The following section provides literature pertinent to studying half siblings within a blended system and the various thematic influences on blended system functioning.

First, a blended system may be influenced by residence. Indeed, residence appears to heavily impact half sibling bonds. Whiteman and Reidman (1992) found that the presence of a full biological sibling alters how adult siblings communicate. In short, half siblings and stepsiblings were found to keep in contact with all sibling types into adulthood, but half and stepsibling contact was less when participants also had full biological siblings. The researchers speculate that full biological sibling contact was heightened over other sibling forms because these siblings likely had the longest

relationship and were most likely to be co-residents with the participant. Importantly, the lack of a *full* biological sibling encourages *more* contact between half and stepsiblings in adulthood.

Half sibling relationships may also be affected by sharing a residence with multiple sibling types, where individuals have to compete for resources. Golish (2003) found a prominent challenge in stepfamily households is vying for resources. The presence of many siblings made it more difficult for stepchildren to access resources such as money, territory, and privacy (including having to share a room). Moreover, when resources *were* dispersed, children received less of the share than in their previous family form (before having stepsiblings). The struggle to locate resources within a stepfamily can also affect subsequent half sibling dyads. For example, an older half sibling who experienced previous residential challenges after a divorce and remarriage may be additionally hesitant to further residential changes once a half sibling is born. This new residential addition holds potential to affect how siblings communicate when resources are scarcer than before (Whiteman, McHale, & Soli, 2011).

The gender and age of same-residence siblings also has significant influence on sibling communication and conflict within a blended system (White & Reidman, 1992; Whiteman, McHale, & Soli, 2011). Same gender dyads are likely to experience more rivalry and competition in adolescence (Whieman, McHale, & Soli, 2011). Moreover, female siblings (sisters) who share a residence are more likely to keep in contact into adulthood than are brothers, due to their gendered roles as expected "kin keepers" (Braithwaite, Marsh , Tschampl-Diesing, & Leach, 2017; White & Reidman, 1992). The expectation of females as kinkeepers appears to lead to more communication between all

female sibling forms, including female half and stepsiblings, into adulthood (White & Reidman, 1992).

Age also serves as an influence on dyads within family systems. Older siblings often serve as comforters in mixed dyads as opposed to same gender dyads, which are more plagued by rivalry and aggression. Moreover, younger siblings are more likely to emulate the behavior of their older, same sex siblings as opposed to younger, cross-sex siblings. Specifically, older siblings of the same gender serve as role models for their younger brothers and sisters. Age difference and birth order appear to effect sibling communication and support into adulthood as well (Whiteman, McHale, & Soli, 2011) such that siblings who were emotionally closer in childhood provided more emotional and social support in middle and older adulthood (Cicirelli, 1995).

A founding assumption of a systems perspective is that systems include smaller subsystems within them (Minuchin, 1985). For families, subsystems refer to the dyads within families: marital partners, parent-child dyad, siblings, stepparent-stepchild dyad, etc. According to a systems perspective, the functioning of one subsystem has the potential to alter or affect the functioning of other subsystems. For example, Boll, Ferring, and Filipp (2003) found that conflict or discord in the marital dyad often "spills over" into the sibling dyad, causing heightened tension and strained sibling relationships.

Half siblings are likely to be part of a blended family that include multiple subsystems (biological sibling dyads, half sibling dyads, stepsibling dyads, biological parent dyads, stepparent-dyads, etc.). This more complex family form may contribute to the presence of more "spill over" where conflict in one relationship affects conflict within other family dyads. For instance, the presence of jealousy and rivalry between

stepsiblings can "spill over" or cause more awkward, uncooperative stepfamily relationships and interactions (Bray & Hetherington, 1993). Thus, understanding half sibling relationships should not be viewed apart from the other influential subsystems within blended families.

For half siblings who share only one biological parent, their blended system may be further complicated by family subsystems across blood and residential ties. For instance, one subsystem (the relationship between a biological child and their residential parent) may influence another subsystem (their relationship with a nonresidential parent with whom they only live part time). Half siblings must manage the various family subsystems that include their shared biological parent *and* their non-residential biological parent who does not parent or live with their half sibling(s). This calls attention to the fact that living with only one biological parent can affect how a child communicates with their nonresidential parent. A prominent finding in step and blended family research is the tension children experience with "feeling caught" between their old and new family forms (Braithwaite & Baxter, 1998). In short, children usually feel a struggle between being loyal to their biological residential parent and being loyal to the biological parent with whom they do not share a residence after the divorce (Afifi, 2003).

This struggle appears to be amplified in step and blended families, where children "feel caught" between their "old" and "new" families. The dialectic of the old and new family appears to be specifically salient around ritual events, where great stress is likely placed on performing rituals that represent new family forms, while also maintaining old family expectations (Braithwaite & Baxter, 1998). These ritual events are also significant after a half sibling's birth, where older half siblings desire their rituals to stay the same,

but also want them to adapt to include their new half biologically related sibling (Oliver, 2015). Moreover, "feeling caught" can lead children to report more uncertainty and anxiety in all their blended familial relationships than intact families (Afifi & Schrodt, 2003). In essence, children within blended families may experience negative psychological states when they feel torn between biological parents and siblings. In response, half siblings may utilized avoidance to protect themselves and preserve their separate parent-child subsystems within a step or blended family, in hopes to not be forced into parental or sibling alliances (Golish, 2003). For half siblings, negative experiences such as "feeling caught" between their divorced biological parents or between the old and new family units in their blended family, may lead to conflict "spill over" and high uncertainty and anxiety within their sibling dyad (Boll, Ferring, & Filipp, 2003).

Family systems are also impacted by indirect, often invisible influences (Bronfenbrenner, 1994), including broader cultural and social contexts (Whiteman, McHale & Soli, 2011). This level of influence encompasses the societal, political, and economic influence of cultural forces on family relational development, with a focus on how overarching patterns impact family relationships (Bronfenbrenner, 1994). This level of influence is particularly salient for half siblings, where their lack of full biological relatedness is viewed differently by society than are full biological brother and sister sibling dyads. For instance, half siblings do not always feel they fit into presubscribed and dominant definitions of what a family *should* look like and that their blended, non-fully genetic relatedness is less normative than full biological, intact families.

Braithwaite, Olson, Gloish, Soukup, and Turman (2001) conclude stepfamilies are often preoccupied by an adaption challenge, where family members feel pressure to replicate traditional family roles and norms out of a need to adapt to traditional definitions of family. Unfortunately, the need and practice of replicating traditional roles prematurely can lead to less closeness and more struggles within stepfamilies. Because children may still be grieving a divorce or the perceived "loss" of a biological parent, they often are more hesitant to perform their restructured family roles (Golish, 2003). This hesitation may be amplified when additional sibling forms are created and affect how half siblings communicate. Moreover, increased involvement by a stepparent after restructuration may be viewed as intrusive by a stepchild and lead to more conflict than family integration (Stewart, 2005).

Additionally, relationships among half sibling are often strained when they attempt to explain their complex family dynamic to those outside the family. Although half siblings usually feel their blended family is not abnormal in today's society, they still feel socially stigmatized at times for not fitting the traditional definition of family (Oliver, 2015). This struggle often leads half and step siblings to adopt "code switching" behaviors when introducing family members. Dependent on audience, context, and relationship, blended family members may utilize more formal addressing terms (i.e. "this is my mom and stepdad's son, Blake), familiar addressing terms (i.e. "this is my *half* brother, Blake"), or familial terms (i.e. "This is my *brother*, Blake") (Koenig Kellas, LeClair-Underberg, & Normand, 2008). Importantly, half siblings often use familial terms (i.e. "brother" and "sister" without the presence of "half") because they do share

some biological relatedness (Hetherington & Jodi, 1994) and because they wish to be shielded from social stigmatization (Oliver, 2015).

Furthermore, step and blended family members are impacted by socially pervasive role expectations. For instance, a common cultural family expectation pervasive in societal stories and literature is the myth of the "wicked stepmother" and consequential "evil stepsisters" (Christian, 2005). Cultural role expectations such as these can influence how family members communicate. As White and Reidman (1992) conclude, remarriage is more stigmatized and not as institutionalized as first marriage families are; therefore, maintaining half and stepsibling relationships into adulthood will likely be more voluntary than involuntary. In essence, full biological siblings may keep more so in contact into adulthood because they feel a cultural expectation to connect with their biological family members, but dyads such as stepsiblings keep in contact for reasons above and beyond these expectations.

Unfortunately, research on half siblings' relationships into adulthood is lacking. Specifically, research has yet to identify how frequently siblings who are half biologically related stay in contact and the communicative challenges unique to this sibling form into adulthood. One way to understand an adult half siblings' current relationship is to examine the relationship trajectory over time and the various levels of influence on the dyads' development within the blended family system. Doing so will permit scholars to better understand how half siblings create resilient relationships (Bronfenbrenner, 1994). Exploring the trajectory of a half siblings' relationship allows researchers to trace how they developed the positive relationship they now report, and

permits scholars to recognize how other systems influence the development of this ultimately positive relationship.

It is evident in the literature that the structure of blended families can negatively influenced relationships and conflict can ensue. Residence, managing multiple family subsystems, and cultural expectations for family composition all are likely to influence half siblings' conflict within this family form. Moreover, poorly managed conflict can have negative implications for the individual, dyad, or entire family system (Fincham & Beach, 1999). Therefore, another goal of this study was to uncover the conflict processes unique to adult half siblings within a blended system. Therefore, the present study also seeks to determine how blended family members communicatively respond to and/or manage conflict.

Moreover, research clearly substantiates that the early years of blended family formation are afflicted by challenges such as mourning the old family form, unclear role expectations, and negotiating boundaries, which are likely to lead to unsatisfactory experiences for children and parents alike (Bray & Hetherington, 1993; Ganong & Coleman, 1994;). Importantly, the *successful* navigation of such challenges can lead to more constructive communication and conflict management as well as improve the overall valence of sibling and parent-child dyad experiences into adulthood. Baxter, Braithwaite, and Nicholson (1999) explored how families adapt to challenges across the first four years of their unit's transition into a stepfamily. They determined that five trajectories illustrate the transition from family of origin to stepfamily members coming to "feel like family" (FLF). These five are: accelerated (quick movement toward high levels of FLF), prolonged (progressed to high levels of FLF, but more slowly over time),

declining (began at high levels of FLF then declined), high-amplitude turbulent (experienced both high and low levels of FLF with no clear pattern), and stagnating (beginning and ending at relatively the same level of FLF). These findings reflect both the positive and negative trajectories stepfamilies perform as they adapt to their new family structures over time. Importantly, trajectory paths were largely affected by the inclusion of either destructive or constructive communication, which argues for the importance of studying communication patterns that lead to more positive/constructive blended family relationships past the first few years of development.

A vast majority of current family research on blended families highlights the challenges they face, but fewer studies explore how these families mitigate, manage, or prevent such communicative challenges in reconstituted families. Though limited, existing research has confirmed that members of blended families have the potential to create positive, satisfying, and rewarding family relationships and are resilient in the wake of divorce and restructuration (Golish, 2003). However, this approach has not been used to study the resilience of half siblings and blended families.

Resilience Theory

Resilience is defined as the ability of an individual, dyad, or group/community to adapt and recover from situational or chronic stressors (Zautra, 2009). For example, a situational stressor may be budding conflict due to sharing a new residence with many siblings (and sibling types). Chronic stressors refer to tensions that exit across an enduring period of time, such as the tension that is likely to exist during the first few years of blended family formation when negotiations of role expectations and boundaries occur (Stewart, 2005). Moreover, resilience is often conceptualized as first order and

second order. First order refers to the ability to bounce back or return to normal after adversity, and second order refers to the ability to endure and push forward after adversity (the ability to thrive in the aftermath). In essence, a resilience framework is concerned with how individuals and relationships alike *survive* and *thrive* (Zautra, 2009). For half siblings within blended families, a resilience perspective calls attention to not only how conflict is managed, but also how constructive communication practices cultivate strong familial relationships that safeguard family members from future conflict or adversity.

Importantly, resilience is largely accomplished through the ways in which people communicate. For example, Buzzanell (2010) claims individuals communicate resilience into being, meaning it is through how people communicate with each other that they build up protective factors that help them respond to future adversity and to recover from past adversity. For example, Golish (2003) found that communicating more openly in parent-child dyads can lead to more resilient stepfamily relationships. Similarly, Masten (2001) argues that resilience is ordinary magic that is embedded within mundane, everyday communicative processes. For example, children of competent and loving caregivers that contribute to their positive view of self tend to foster resilient children later in life if and when adversity occurs (Masten, Hubbard, Gest, Tellegan, Garmezy, & Remirez, 1999). Indeed, resilience theory calls attention to the ways in which individuals communicate, especially during difficult times. Given the importance of communication to creating resilient children and families, researchers should look to the everyday communicative processes of families and the ways in which a family communicates resilience into being. Indeed, research has begun to answer this call to explore and

understand what leads blended family relationships (such as half sibling relationships) to be more positive, constructive, and resilient over time.

Blended family resilience. Families are considered a social system that are bound together by communication (Galvin, Dickson, & Morrow, 2006). When one aspect of that system is altered, changed, or affected, the whole system must work together to restore proper functioning (Minuchin, 1985). To do so, the whole system must utilize constructive communication practices to bounce back and move forward after adversity threatens the whole (Zautra, 2009). Managing subsystem conflict, such as conflict between half siblings, should therefore be amended through whole-family efforts. Blended family resilience is therefore dependent on whole family communication habits.

Golish (2003) applied a systems perspective to explore stepfamily resilience and found that interacting and spending more time together as a family, being more open to stepfamily members, confirming rules to manage ambiguous boundaries, whole-family problem-solving, and maintaining a positive view of the nonresidential parent through constructive communication were all significant in pushing stepfamilies to a more positive trajectory. Other practices that contribute to family resilience include successfully navigating ritual events (Waldron, Braithwaite, Oliver, Kloeber, & Marsh, in press; Braithwaite et al., 2018; Baxter, Braithwaite, & Nicholson, 1999), and communicating forgiveness in the wake of conflict (Braithwaite et al., 2016).

To this point research suggests that a system can influence how individuals and dyads (such as siblings) communicate and vice versa. For example, maintaining a blend of existing rituals around holidays and special events (where both old and new family rituals were included) or creating new distinct rituals as a blended family are important

practices that foster resilient family relationships (Baxter, Braithwaite, & Nicholson, 1999). Indeed, the successful transition of a blended family system from family of origin to step/blended family influences individual family members, as well as the dyadic relationships within the family system (such as half sibling dyads).

The strength of reconstituted families is largely contingent upon the communication strategies used to manage the challenges of blended family life (Golish, 2003). Research has begun to uncover the practices that lead to whole family resilience and the resilience of parent-child dyads in blended families, but the resilience of sibling dyads has largely been ignored. Moreover, half sibling dyads are further complicated by both marital *and* biological relatedness. Consequently, research should seek to determine the communication practices that foster resilience in this unique sibling relationship. The present study aims to amend such gaps in family research by applying both a systems and resilience framework to explore half sibling relationships. Utilizing both theoretical perspectives allows one to understand how families communicate and the value of their communicative responses to systematic stressors (such as conflict or restructuration). It is the hope of this research that scholars can push past existing literature's focus on the negative outcomes of divorce and restructuration to highlight the ways in which blended family relationships such as half siblings are resilient against these odds.

Relational maintenance behaviors. Resilience is often cultivated through the ways in which people communicate to maintain satisfying relationships. A specific type of communication, relational maintenance behaviors, explains the communication approaches people use to sustain desired relational definitions. Relational maintenance behaviors can also be the communicative responses to turbulence (Canary & Stafford,

1992) such as conflict or adversity in relationships. The assumption of relational maintenance is that particular types of interaction behaviors function to preserve ongoing relationships in antisocial and prosocial ways (Dindia, 1989). For example, maintenance strategies may include statements of positivity and assurances of a relational future, or include behaviors such as sharing tasks and being open (Stafford & Canary, 1991). These behaviors may contribute to the resilience of a relationship where they help a dyad recover from a conflict (first-order), or thrive as better communicators after the conflict is resolved (second-order).

Relational maintenance behaviors are not always associated with resilience, as there are both antisocial and prosocial ways to maintain relationships (Stafford & Canary, 1991). Prosocial maintenance refers to positive behaviors that promote closeness, trust, and liking (Canary & Daiton, 2006; Myers & Weber, 2004). Antisocial maintenance refers to behaviors that seem unfriendly or coercive and that function to maintain a relationship at a desired level (Stafford & Canary, 1991). For example, avoidance may be used to mitigate or prevent conflict within a relationship to maintain a desired relational satisfaction level. For the present research, the prosocial relational maintenance behaviors that contribute to a positive half sibling relationship were of focus.

Moreover, theorists define relational maintenance in various ways, from strategies to stabilize the continuation of a relationship (Dindia & Baxter, 1987), to a communication exchange pattern that becomes established and accepted (Ayres, 1983), to affinity enhancing lines of behavior (Bell, Daly, & Gonzalez, 1987). For the present research, relational maintenance was defined as those behaviors with the intent of preserving or improving a relationship (Stafford, Dainton, & Haas, 2000).

Indeed, the communication practices that cultivate positive or resilient half sibling relationships can be understood as *relational maintenance behaviors*. Moreover, the systems perspective of this study illuminates whole-family maintenance behaviors that also affect half sibling development and resilience. Indeed, literature has determined that communicating forgiveness (Waldron et al., in press), openness (Golish, 2003), and successful ritual management (Braithwaite & Baxter, 1998) are all communicative relational maintenance behaviors that foster resilient, positive, step and blended family relationships.

Research Questions

With this expansive literature grounding the present research, the following research questions are proposed to investigate positive half sibling relationships within a blended structure into adulthood:

RQ 1: How do adult half siblings describe their communication practices with their half sibling(s)?

RQ 2: What relational maintenance behaviors do adult half siblings use?

RQ 2a: How do adult half siblings manage their relationships during conflict into adulthood?

RQ 3: How do half siblings create positive relationships into adulthood?

RQ 3a: How does the systematic nature of blended families influence the development of positive half sibling relationships?

CHAPTER 3

METHOD

The present research aimed to discover how half siblings who view their relationships positively have communicated over the course of their lives together and function in adulthood, as well as how half siblings cultivate resilient relationships overtime in the wake of divorce and restructuration. In order to address both of these areas, a two-part study design was used to investigate how half siblings communicate with each other and within their blended structure. Study One collected retrospective accounts from individuals who currently identify as having a positive relationship with a half sibling. Study Two gathered temporal diary data from participants who report a positive relationship with a half sibling across two weeks.

Importantly, participants for both studies were required to identify as an older half sibling who experienced the divorce and remarriage of the biological parent they share with a half sibling to insure data reflects resilient communication after the adversity of restructuration. As such, data collected across both studies reflects how half siblings communicate in adulthood and what communication practices associate with positive, resilient half sibling relationships.

In Study One, participants were interviewed regarding their communication practices with a younger half-sibling while in Study Two, participants kept a diary of their daily conversations with blended family members to capture those communication practices as well as how siblings understand them. Both studies included participants recalling past conversations, which differs from "objective" reality given that people filter and interpret their experiences both in the moment and over time. The use of

subjective recall is not a weakness of this research but rather a strength, since researchers have found that subjective recall can be a stronger predictor of future behavior than what actually occurs (Wirtz, Kruger, Napa Scollon & Diener, 2003).

Study One

Criteria for Participation

As mentioned above, the first criterion to participate required participants to be older than all of their half siblings. This requirement ensured the sample reflects children who experienced the hardship to restructuration (due to witnessing the divorce, remarriage, and blending of their family). A younger half sibling may see themselves as part of an "intact" family where they have only ever known both of their biological parents being married. This research applies a systems perspective to studying sibling relationships, denoting the system structure may effect subsystem functioning (i.e. the relationship between siblings) (Minuchin, 1985). Therefore, this first criterion also ensured participants were part of a blended structure, the most frequent type of family system half siblings typically reside within (Coleman et al., 2001).

Second, participants were required to be between the ages of 18 and 35. This research is specific in filling a hole in existing research that fails to explore half siblings as they transition into adulthood. Therefore, the second criterion located participants who are in an "adult" age range from young adults to past emergent adulthood. Third, participants were required to have a younger half sibling resulting from a parental divorce and subsequent remarriage, not the death of a parent. This criterion was required to ensure participants reflect half siblings within a step or blended structure, the systematic focus of this research. This criterion also served to exclude outliers in study findings,

such as half siblings who exist after the death of a parent. To further focus on this unique structure, the fourth criterion stated participants were also required to have living (and not deceased) biological parents, and the biological parent they share with a half sibling was required to still be married to a stepparent. This requirement again confirmed findings within the sample reflect restructuration, and not bereavement. The fifth and final criterion required participants to currently describe a half sibling relationship as overall positive.

Pre-qualifying assessment. This study not only required participants to report a positive relationship with a younger half sibling, but participants were also assessed to determine if a positive sibling relationship indeed existed. An adapted version of Stocker, Lanthier, and Furman's (1997) Adult Sibling Relationship Questionnaire (ASRQ) (see Appendix D) was used as a pre-qualifying survey to assess for a positive sibling relationship. The adapted ASRQ consisted of 69 items spread over 12 scales: similarity, intimacy, quarreling, affection, antagonism, admiration, emotional support, instrumental support, competition, dominance, acceptance, and knowledge. Further, the items combined to form two higher-order factors: warmth and conflict (see Appendix E). Rated from 0 (*Never* or *Not at all*) to 5 (*Very frequently* or *Quite a Lot*), participants reported on their current communication with a half sibling. If participants had multiple half siblings, they were instructed to answer the questions with the half sibling they feel they have the most positive relationship with in mind. This specific half sibling was also instructed to be the sibling whom they refer to in all subsequent segments of the research.

Averages across all items for each individual scale were determined and participants who scored a 2.75 or higher on each scale were determined to have a positive

relationship with their half sibling and allowed to participate in the study. Scoring a 2.75 or higher on all scales determined a participant presently perceived their relationship with their half sibling as positive with 2.5 being a neutral relationship and <2.5 a negative relationship. It is important to note that scores for the conflict factor (represented by the scales quarreling, antagonism, competition, and dominance) were inverted when determining averages to reflect a positive valence.

The original ASRQ included scales for maternal and paternal rivalry, which combine to form a third higher-order factor "rivalry". This factor and subsequent scales were excluded from this research because participants only share one biological parent. Therefore, assessing for both maternal and paternal rivalry may not accurately reflect the blended structure of these half sibling participants.

Because participants are required to meet specific criteria to participate, samples for both studies are defined as purposive samples. Purposive sampling refers to selecting particular units (e.g., individuals, groups of individuals, institutions) based on specific purposes associated with answering a research study's questions (Teddlie & Yu, 2007). In essence, being an older half sibling who experienced the disruption of family restructuration (e.g. Menaghan, Kowaeski-Jones & Mott, 1997; Stewart, 2005) but currently perceives the half sibling relationship positively was vital to answer the research questions.

Recruitment and Sample

Upon receiving approval form the Institutional Review Board (see Appendix A), participants for this study were recruited through network (Baxter & Babbie, 2004) and snowball sampling techniques (Lindlof, 2002) and advertisements. Network sampling is a

technique that calls for participants through a researcher's social and professional networks (Baxter & Babbie, 2004). Network sampling was conducted by distributing emails through the academic and professional listservs of the lead researcher. Social media advertisements were also created and posted by the lead researcher and shared by others to locate participants. The lead researcher also posted to community social media pages to gather potential participants. Listserv emails and social media posts alike included the recruitment script (see Appendix B) and other general information about the study including incentives, criteria for participation, and the lead researcher's email address to inform of willing participation.

Snowball sampling is a recruitment technique that uses possible participants as a source for locating additional participants who meet the criteria (Lindlof, 2002). Committed participants (those who completed the study) were instructed to forward study contact information to others they know who meet the criteria and were willing to participate. Participants were also given the recruitment flyer (see Appendix C) to distribute if they so desired. This flyer served as the final recruitment strategy for this study, where flyers were posted around a large South-Western University campus and within local coffee shops and libraries in the same area.

Seventeen participants who met all study requirements were included in the data set. Twelve participants identified as female (71%) and five as male (29%). However, the majority of participants reflected on a cross-sex sibling relationship (n = 13, 76%). The remaining four participants equally reported on a brother-brother dyad (n = 2, 12%) and sister-sister dyad (n = 2, 12%). Participants ranged in age from 18-32 years, with an average age of 23.94. The siblings' participants were reporting on ranged in age from 2-

24 years, with an average age of 14.82. Participants identified themselves as Caucasian (*n* = 13, 76%), Hispanic (*n* = 2, 12%), African-American (*n* = 1, 6%), and Asian (*n* = 1, 6%). All participants shared the same race/ethnicity with the half sibling they were reporting on except one dyad that included an African-American-Caucasian mixed race sibling and a fully Caucasian sibling.

Eight participants (47%) were from a blended family that included half, full, and stepsiblings; five (29%) only reported having half siblings; three (18%) had half and full siblings; and one (6%) reported having half and stepsiblings only. The majority of participants (*n* = 13, 76%) reported sharing a biological mother with a half sibling, and the remaining four (24%) shared a biological father. 3.71 (range = 1-15) was the average age of participants when their biological parents divorced and 6.74 (range – 3-18) their age when their shared biological parent and the other parent of their half siblings were remarried. As required to participate, all participants scored a 2.75 or higher average on all scales, with a 3.81 as an average sum across all scales for participants.

Procedures

Willing participants were instructed to contact the lead researcher via email and were then sent the link for the pre-qualifying survey. If their answers met the 2.75 threshold, participants were emailed the study consent form (see Appendix F) and further information about scheduling an interview (see Appendix G). Participants who preferred an in-person interview were instructed to bring the consent form with them to the interview, and those opting for an online interview were asked to print, sign, scan, and email the consent form back before their interview time.

Data for Study One originated from seventeen semi-structured turning point interviews with adult half siblings. Interviews lasted in average 53 minutes in length (range = 23 – 73 minutes) and were conducted either in person (n = 4, 24%) and via the video conferencing software *Skype* (n = 13, 76%). Data collection continued although theoretical saturation (Strauss & Corbin, 1990) was met after analysis of the first eleven interviews. In essence, no new themes emerged after analyzing the first eleven interviews, but additional participants were included in the data set to further validate and confirm findings.

Similar to Braithwaite et al.'s (2018) study on positive stepparent-stepchild relationships, each interview included the construction of a turning points graph (see Appendix I) to encourage disclosure about how a participant's family experiences contributed to their presently positive half sibling relationship. Importantly, the presence of a current positive sibling relationship did not imply the relationship had always been so. Instead, turning point interviews not only capture both the positive and negative experiences of interviewees, but also expose the communication practices and conflict management strategies that help reverse a negative trajectory to a more positive relational trajectory (e.g. Braithwaite et al., 2018). If a half sibling relationship had not been consistently negative in the past, relational maintenance behaviors that contribute to a positive sibling relationship was still significant in understanding how half siblings cultivate positive relationships in their unique blended structure.

Participants were briefed on the meaning of "turning points" in the scheduling email (Appendix G) and were further reminded at the start of each interview, including instructions for how turning point graphs (see Appendix I) would be completed. For this

research, turning points were identified as any significant or pivotal events or experiences at a particular moment or time in a participant's life that were important in bringing their relationship with a half sibling to where it is today. This definition and the interview protocol (see Appendix H) were adapted from Braithwaite et al.'s (2018) study. However, the use of turning points in this study was as a methodological tool to elicit stories from participants, and the actual turning points were not of focus in the present research. In short, plotting turning points allowed participants to make meaning of their relationships and tell the stories pertinent to their relationship's trajectory.

Interviews consisted of five parts. First, the researcher clarified directions for interview procedures, went over signed consent forms, and answered any questions the participant had. Second, the researcher inquired about the participant's family structure by completing a family demographic tree (see Appendix J). This allowed the participant to explain their various family members and sibling relationships, as well as provide numerical information on how old they were when their family restructured to a divorced and then remarried family. This chart also allowed the researcher to gather demographic information about the participant and their family members.

Third, participants were asked to tell the researcher the "story of how their blended family came to be". This procedure provided detailed and descriptive information about the trajectory of the blended family's development and was a starting point for plotting turning points. This story naturally led to the fourth part of the interview, creating the turning points graph.

The participant and researcher co-created a turning points graph together. Turning point graphs serve as an analytic tool used by relational researchers who adopt a

retrospective interview technique (e.g., Baxter et al., 1999; Baxter & Bullis, 1986; Huston et al., 1981). Participants aided the interviewer in creating a visual graph of the turning points that influenced their half sibling relationship by answering probing questions and telling the story associated with each turning point. Participants were asked to provide the month and year of each turning point, explain what and who was involved in each event, give a name to each turning point, and evaluate the percentage of perceived positivity with a half sibling at the time of each event. The graphs included an axis for the general dates of turning points and an axis for the perceived percentage of relational positivity. In short, participants were asked what turning points made their half sibling relationship positive, and the researcher then plotted each narrated turning point on the graph according to the time of occurrence and the retrospective view of "positivity" in their half sibling relationship. Of course this is a perceptional percentage, but was used to aid in exploring the relationship, not determining definitive changes in variables. Percentage of positivity ranged for 0% (not positive at all, with 50% being neutral) to 100% positive. Again, it is important to note that turning point graphs in this study were not used to identify specific turning points per se, but served as a way to illicit detailed information on the practices that propel half sibling relationships toward positivity. The amount, type, and name of turning points were less important than the stories participants told around each turning point while completing the graph with a researcher.

Fifth, the researcher asked a few open-ended questions about the half sibling relationship. Interviews can reveal a participant's true feelings, memories, and thoughts and using interviews provides comprehensive and detailed accounts of participant relationships (Charina & Ickes, 2006). Moreover, the semi-structured nature of these

open-ended questions allowed the researcher to have a general structure in advance and ask similar questions across all participants, while still allowing them to deviate from the prepared questions when necessary (Drever, 1995). As such, preset interview questions served as suggestions more so than definitive requirements to the interview protocol. See Appendix H for a full list of questions inquired during this portion of the interview.

All interviews were audio recorded with the permission of the participant and transcribed. All participant names (including names of family members and names within family demographic trees) were de-identified by providing numerical or pseudonym identifiers. The lead researcher then analyzed transcripts with a co-coder.

As advertised in recruitment materials, participants were compensated $30 for completing an interview. In addition, one participant was chosen in a drawing for an additional $50 Amazon gift card. Incentives were provided in a hard copy form ($30 Visa Gift card and $50 Amazon gift card) for those who participated in an in-person interview, and *Skype* participants were emailed digital versions of these gift cards upon completing an interview that served the same monetary purpose. The winner of the additional Amazon gift card was notified via email only after all data was collected.

Data Analysis

Interview transcripts were examined using an inductive analytic coding technique (Strauss & Corbin, 1998) adopted after Merolla's (2010) qualitative work on relational maintenance behaviors within the disclosure of military wives during deployment. Two coders who met continuously (four times across two months) to define and redefine analysis accomplished this inductive approach in five steps. First, an initial list of existing relational maintenance behaviors in sibling communication research was created. This

initial list served as a codebook (Tracy, 2012) of possible maintenance behaviors (or codes) pertinent to participant disclosures in the present study. According to Tracy (2012), codebooks should be defined and redefined across the analytic process as emerging codes within the data become apparent through the constant-comparison method (Charmaz, 2006). In short, the researcher(s) should compare emerging codes to the original list of codes and amend the codebook accordingly.

Second, the lead researcher viewed all transcripts holistically to gain familiarity with the data and to identify units. Units in this research were defined as "thought units" that included an enacted communication practice referring to a half sibling relationship. A thought unit refers to an utterance segment, which expresses a complete and autonomous idea (Sillars, 1986). According to Merolla (2010), thought units are typically conceptualized in relational maintenance as "communicative or cognitive activity, occurring strategically or routinely, that promotes or reflects a sense of connection between partners" (p. 10). Thought units generally include a single subject and predicate and may be a short phrase or longer statement that encompasses only a single thought (Alberts, Yoshimura, Rabby, & Loschiavo, 2005). For example, if a metaphor or simile was used to clarify a moment, it would be identified as one overall thought unit since it was used to describe a before mentioned subject and not to introduce a new thought. The quote, "I mean we would hang out. Like we would go on family trips and I would hang out and play with them and watch movies and do things" would be identified as a single thought unit because the second sentence is clarifying how the siblings "hung out".

As the present research is focused on how siblings communicate presently and their communication in the past, thought units in the data were concerned with performed

communication only, not hopeful future or imaged interaction. For the current research, thought units were required to: include a subject and predicate; include an enacted communication behavior; and refer to or involve a half sibling relationship. The definition of thought units used in analysis of this research was as follows: a communicative or cognitive activity, occurring strategically or routinely, that promotes or reflects a sense of connection between half siblings through an enacted communication behavior.

This second analysis step of identifying units in transcripts also required the lead researcher to train a co-coder on how to unitize. During this training, the lead researcher: explained what defines a unit, familiarized the co-coder with the initial codebook of relational maintenance behaviors, noted upcoming expectations and coder assignment due dates, and practiced alongside the co-coder in unitizing and coding using the initial codebook on an interview from a previous data set. After training, both coders then conducted line-by-line unitizing analysis of the first three interview transcripts (18% of the overall data set) and converged to seek inner-rater reliability in unitizing. Unitizing reliability was found to be acceptable (Guetzkow's $U = .051$) and both coders then conducted line-by-line analysis of all remaining interview transcripts to identify units. A total of 1,299 units (average 76.4 units per interview) were used in Study One analysis.

Third, both coders reviewed transcripts and assigned a code for each unit. To seek inner-rater reliability in coding, both coders assigned codes for all units in the first five interview transcripts (29% of the overall data set) simultaneously and then converged. Inner-rater reliability in coding was achieved (Scott's pi = .80) and the remaining transcripts were divided among the coders (seven analyzed by the main researcher and

five by the co-coder). Throughout this phase, the coders used constant comparison (Charmaz, 2006) to redefine the original codebook (Tracy, 2012) of relational maintenance behaviors. The original codebook included 26 relational maintenance behaviors with corresponding numerical codes (1-26) that were noted within the transcript via inserting a "comment" in Word for each unit. Coders were instructed to assign only one code per unit. A unit identified as "Code 27" referred to a novel code that was not already represented in the codebook. This novel code was then discussed during a weekly data meeting where both coders came together to discuss and refine emerging codes. This process is described by Braun and Clark (2006) as finding the "keyness" to emerging themes through open discussion. During these data meetings, the codebook was amended when appropriate (new codes were added and others removed) throughout three weekly data conferences, resulting in a final codebook reflecting the relational maintenance behaviors within adult half sibling interview disclosures.

It is important to note the final codebook represents code hierarchies. In line with past relational maintenance studies (e.g. Merolla, 2010; Canary et al. 1993; Dindia & Baxter, 1987), maintenance was categorized in superordinate and subordinate forms and represented in hierarchies where smaller behaviors contribute to an overarching relational maintenance category (e.g. Self-disclosure is a behavior that is categorized under "Openness maintenance"). See Table 1 in Appendix U for further clarity. These hierarchies were determined and revised during the coding process and discussed during data meetings.

The fourth stage of analysis involved both coders coming together for a final data meeting to engage in investigator triangulation as a validity checking procedure

(Braithwaite, Moore, & Abetz, 2014; Lincoln & Guba, 1985). In this final meeting, the coders discussed the final codes within the codebook, reached consensus on findings, proposed theoretical explanations for findings, and suggested final quotes and examples exemplifying findings.

After all units were assigned a code and the final codebook was created, the lead researcher reexamined all transcripts holistically again. This fifth and final step allowed the lead researcher to observe and identify overall themes in the data set that were possibly concealed through unitization. This final review also allowed the researcher to identify themes relevant to the first research question (e.g. mediums used in sibling contact) that will be addressed in the results section first before defining relational maintenance behaviors.

Validity

Validity of findings was sought through multiple strategies throughout the data analysis process. Weekly data meetings allowed open discussion of emerging themes, a process that Lincoln and Guba (1985) argue aids in triangulating study findings to seek validity of results (across both coders and the codebook). Moreover, statistical reliability was used to assess the validity of both the unitizing process and coding procedures.

Lastly, negative case analysis was used to seek validity of findings. Negative case analysis involves seeking out deviant data that originally appears to not support study assumptions (Morse, Barrett, Mayan, Olson, & Spiers, 2002). In essence, negative case analysis purposely attempts to find data that does not support a researcher's claim and utilizes these exemplars to explain why an outlier may exist. This process can be used to refine and confirm the patterns emerging from data analysis. In order to understand the

patterns emerging from the data, exceptions should be noted that do not fit emerging trends, and researchers should investigate why an outlier exists. Analyzing negative cases provds to further validate existing themes and account for caveats to study claims. For example, only one participant transcript within the data set did not include the "Confirmation" code. This transcript was further analyzed to determine why it did not fit within the rest, resulting in the researchers determining the different races of the siblings within this dyad as the cause. This negative case is further explained later in the discussion chapter.

Study Two

Daily diary studies are a subset within an overarching field of intensive longitudinal methods. Intense longitudinal methods (ILM) refer to studies that measure thoughts, feelings, physiology, and/or behaviors as they unfold in their natural, social context. Specifically, these methods look to how these variables correlate as they unfold over time (Laurenceau & Bolger, 2005). One significant ILM is the daily diary, also referred to as the daily process method (Gunthert & Wenze, 2011). Laurenceau and Bolger (2005) conclude diary methods are ideal for studying family relationships, because they access more specific and descriptive information for social phenomena than is possible with solely empirical cross-sectional studies.

A daily diary design is necessary to explore a complex family relationship in its natural and spontaneous setting. ILMs such as a daily diary study allows researchers to look at how behaviors, physiology, thoughts, and emotions of one individual changes across a time period, *but also* how these changes compare with other individuals in the study as well. Daily diary studies also increase ecological validity because what is being

observed is occurring in a natural setting, not influenced by the presence of a researcher or by a laboratory setting. Moreover, daily diary methods record observations of natural contexts such that findings serve as a form of direct observation and account for processes only inferred by cross-sectional empirical studies (Bolger & Laurenceau, 2013). By researching daily life, researchers have insight into events and the unfolding of activities as they occur in real time. Lastly, daily diary designs help reduce recall bias and retrospect error common in other types of research such as interviews. In daily designs, participants are encouraged to report and make meaning of their experiences shortly after they occur, in contrast to retrospective studies that ask them to look back and recall events from a long time ago. Such data are likely to be more valid, useful, and truthful because of this expedited recall process (Laurenceau & Bolger, 2005). This present research aims to account for both retrospective accounts (see Study One) and temporal participant experiences as they unfold in a natural setting (Study Two) to best understand the totality of half sibling relationships in adulthood.

Additionally, daily diary methods may be explored through either a quantitative or qualitative lens. Quantitatively, researchers using the daily diary method utilize statistical analysis of within-persons and between-persons variables to determine associations between behaviors as they unfold over time (Bolger & Laurenceau, 2013). However, daily diaries can also serve as a qualitative tool to describe and analyze social phenomena (Jones, 2000). Zimmerman and Weider (1977) identified diary method as a qualitative tool to locate thick description and investigate meaning-making in relationships. The present study is located within an interpretivist paradigm that dictates social science cannot definitively measure social life or interactions, but it can paint a

picture of how individuals experience a phenomena at a current time and place through analysis of their meaning-making (Abbot, 2004). The goal of Study Two was to gather descriptive data to better understand the processes and meaning making of participants, in contrast to making casual and generalized predictions.

Moreover, qualitative researchers are also likely to combine daily diaries with exit interviews or open-ended questionnaires. Zimmerman and Weider's (1977, 1982) "diary-interview-method" (DIM) has been used in multiple disciplines across many topics (e.g. Jones, 2000; Mackrill, 2007; Poppelton, Briner & Kieffer, 2008). DIM includes a daily diary potion with a follow up exit interview. This exit interview is used to ask clarifying questions of events mentioned during the diary study, general questions about the phenomena, and to serve as a self-correcting mechanism where researchers can confirm or deny hypotheses derived from the diary observation (Zimmerman & Weider, 1982). DIM also explores how a social phenomena works within a system of integrated parts. Specifically, DIM utilizes participants as both *performers* and *informants*. In short, participants not only report about their thoughts and performance but also are asked to include reflections on how those around them interact as well (i.e. What conflict have you experienced? Additionally, what conflict have you witnessed within your immediate household?). This allows richer, more descriptive data of the participant and the system or location in which they exist. Therefore, this study utilized an adaptive version of Zimmerman and Weider's "diary-interview method" to locate thick description of half sibling relationships, explore the systematic influence of conflict within blended families, and identify how siblings make meaning of their familial relationships. Specifically,

Study Two included a daily diary study with a follow up open-ended online exit questionnaire.

Criteria for Participation

The same criterion for Study One applied to Study Two participants: participants were required to be the oldest half sibling, aged 18 – 35, come from a blended family resulting after a prior divorce and remarriage, have living biological parents, and currently describe their relationship with a half sibling as overall positive. Participants were also required to reach the 2.75 threshold on all scales in the ASRQ (Stocker, Lanthier, & Furman, 1997). Lastly, in order to ensure participants were in adequate contact that would be reflected across a two-week period, participants in this study were also required to report being in contact with a half sibling at least once per week within their prequalifying survey.

Importantly, both studies in this research did not recruit both siblings of a dyad. The decision to not collect dyadic data is threefold. First, the performer and informant aspect of DIM accounts for systematic interactions among dyads from the view of an individual. Secondly, the knowledge that their half sibling was also included in the study may have lead to altered actions, behaviors, and reports within their natural settings. For instance, the knowledge that one's sister was also reporting on the conflict within the relationship may make one overtly aware of how they respond when tension occurs across the study timeline. Lastly, Galvin, Dickson, and Morrow (2006) claim families should be studied from both a systems and individual cognition standpoint, concluding research becomes more useful when researchers can incorporate both perspectives: the totality of the system and its individual components. As such, this overall research

utilized a singular perception (on sibling) to locate individual cognitions, but also an informant diary perspective to include how this individual functions within their sibling dyad and whole family system.

Recruitment and Sample

Upon receiving approval from the Institutional Review Board (see Appendix K), participants for this study were also recruited through posting the recruitment script (see Appendix L) to listervs and social media via network sampling (Baxter & Babbie, 2004), through snowball sampling (Lindlof, 2002) from existing participants, and through advertisements via posted flyers around campus and surrounding community locations (see Appendix M). Additionally, participants were also recruited through Amazon.com's Mechanical Turk survey platform. Mechanical Turk requires users to be at least 18 years old to participate in online surveys and allows the researcher to determine other criteria for participation. All criterions to participate (see above) were assigned and qualified participants completed the pre-qualifying survey for $0.50. Amazon Turk survey takers were provided an online version of the consent form (see Appendix N) to agree to before completing the pre-qualifying assessment. Moreover, the final question for Mechanical Turk survey takers asked participants to leave their email address if they were interested in participating in the two-week diary process. Participants who met the 2.75 threshold and indicated interest in the diary study by leaving an email address were contacted by the lead researcher.

Data for this study originated from diary entries from 16 adult half siblings who currently hold a positive relationship with a younger half sibling. It is important to note that the sample for Study Two did not include participants from Study One in order to

mitigate reactivity. In essence, participants may be more likely to reach out to a half sibling after engaging in an interview study reflecting on the trajectory of their positive relationship. To ensure data reflected the typical daily communication practices between half siblings, a new set of participants were recruited.

In this study, eight participants identified as female (50%) and eight as male (50%). Consistent with Study One, the majority of participants reflected on a cross-sex sibling relationship (n = 8, 50%) and the remaining participants included six (38%) reporting on a sister-sister dyad and two (12%) on a brother-brother dyad. Participants in this study ranged in age from 22-35 years, with an average age of 29.38. The siblings participants were reporting on ranged in age from 12-30 years, with an average age of 21.06. Participants identified themselves as Caucasian (n = 8, 50%), Hispanic (n = 3, 19%), African-American (n = 3, 19%), and Asian (n = 2, 13%). All participants in Study Two shared the same race/ethnicity with the half sibling they were reporting on.

For family composition demographics, six (38%) reported having only half siblings; four participants (25%) were from a blended family that included half, full, and stepsiblings; three (19%) had half and stepsiblings; two (12%) included half and full siblings; and one (6%) reported having half, full, step, and adoptive siblings. Similar to Study One, the majority of participants (n = 12, 75%) reported sharing a biological mother with a half sibling, and the remaining four (25%) shared a biological father. 5.28 (range = 1-17) was the average age of participants when their biological parents divorced and 8.89 (range = 2-24) the age when their shared biological parent and stepparent remarried. As required to participate in this study as well, all participants scored a 2.75 or

higher average across on all scales of the ASRQ, with a 4.21 as an average sum across all scales for participants in this data set.

Procedures

Interested participants were instructed to email the lead researcher or indicate interest by leaving their email address on the Mechanical Turk survey. After pre-qualifying assessments were scored, qualifying participants were emailed information and instructions for the two-week diary study (see Appendix O). Participants not recruited through Mechanical Turk were also sent the consent form in this email to print, sign, scan, and email back to the lead researcher before the diary study could begin.

Participants were instructed to follow the same link each day for 14 consecutive days (two weeks) to compose an online daily diary. An online diary format was chosen because this medium is highly encouraged by other diary methodologists, where online diaries have been proven easier to access and provide a time stamp for researchers to keep record of each entry (Connor & Lehman, 2011). The daily diary method in this study spanned a two-week (14 day) period, in accordance with the proposed ideal timeline by daily process design researchers (Gunthert & Wenze, 2011; Zimmerman & Weider, 1977). Most diary studies range from seven to 30 days, with 14 assumed as the modal assessment period to identify changes over a temporal period from multiple instances and in a short enough time to not over-burden participants (Gunthert & Wenze, 2011). Participants were provided a participant number to use in each entry to identify their submissions and provide anonymity to their disclosures.

There are four types of daily diaries: interval-contingent, event-contingent, signal-contingent, and device-contingent (Bolger & Laurenceau, 2013). The present study

utilized an interval-continent design. Interval-contingent designs require participants to report at a certain time each day, and to reflect on the experiences they have had since their last diary submission. In short, participants in this research were asked to complete a journal entry every night that reported and reflected on their communication with all immediate family members since last entry. Moreover, participants were also asked to include their experience or first-hand witness of conflict between members of their immediate family. This sampling strategy was used to provide a detailed and comprehensive picture of how half siblings function within their blended family system. Moreover, sampling strategies must be informed by the frequency of a phenomenon, and just reporting on the communication or conflict between half siblings may be too infrequent to record across the short span of two weeks (Conner & Lehman, 2011). Consequently, participants were instructed to compose entries about their whole (immediate) family communication, including the conflict present in these bonds.

As such, participants were instructed to compose an online diary at the end of each day for 14 consecutive days, writing about all interactions they had with immediate family members. Immediate family members were defined as any sibling and/or parent, not significant others/spouses, nor extended family members. Further clarity explained participants should reflect on all sibling and parent types, including full, half, and step siblings/parents. Moreover, participants were instructed to write in narrative, full-sentence, diary format and diary prompts encouraged participants to include as much detail as possible and to not omit mundane events (Zimmerman & Weider, 1977). Similar to Braithwatie, et al.'s (2017) diary work on kinkeepers, instructions asked participants to reflect on the topics, mediums, and possible conflict related to their daily family

interactions, as well as asked them to expand on one specific interaction that occurred that day that stuck out to them as significant. Lastly, these detailed instructions also signified the importance of their participation in half sibling research, a rapport-building technique encouraged in daily process designs (Gunthert & Wenze, 2011). Diary instructions, links, and procedures were beta tested with three non-paid voluntary participants prior to the start of official data collection to insure instructions were clear and the online format was efficient. See the full diary instructions in Appendix Q.

The start date of the consecutive two-week time period was at the discretion of the participants, but they were encouraged to start within a few days of receiving the instructional email and were required to indicate their start date in a response email to the lead researcher. Data collection periods identified nine participants reported on communication from December 5th to 18th, one participant from December 15th to 29th, and the final six participants from December 29th to January 11th. However, no distinguishing differences in data were identified across these differing collection times.

Participants were emailed each night during the two-week time period by the lead researcher to remind them to complete that night's entry. Each reminder email also provided the web link to locate the diary entry submission portal with ease (see Appendix P). Using daily reminders has been proven to increase the likelihood of compliance (Conner & Lehman, 2011) in ILMs. Although not all participants completed all fourteen entries, 13.6 was the resulting average of diary submissions per participant. Only participants who completed at least twelve of fourteen entries and the exit questionnaire were included in the final data set. This requirement concurs with Conner and Lehman (2011) who argue participants who complete fewer than half of the expected entries

should be dropped from the data prior to analysis. Upon completing their fourteenth diary entry, participants were thanked for their participation thus far and emailed instructions for completing an exit questionnaire (see Appendix R).

Exit questionnaire. As noted above, qualitative daily diaries are encouraged to include an exit interview or questionnaire to further locate meaning and clarify events reported (Zimmerman & Weider, 1977). This additional step allows participants to engage in further meaning-making and reflect on their relationships in more depth. This step also allows researchers to ask pertinent questions in regards to the subject at hand (Zimmerman & Weider, 1982). As such, this study also included an exit-questionnaire with clarifying, procedural, open-ended, and demographic questions (see Appendix S).

For Study Two, participants were encouraged to diary about their whole family communication across the two-week diary study. This was necessary to locate how sibling communication was informed by or functions uniquely within a blended family system. However, exit questionnaires included questions more pointed to the half sibling relationship than whole system. The exit questionnaire also served as further verification to the emerging themes of half sibling communication within daily diary entries. For example, the researchers identified if the same mediums reported in sibling contact questions in the exit questionnaire were also present in diary entries. The exit questionnaire included four parts: clarifying questions about individual participant entries, methodological experience questions about study procedures, open-ended questions pertaining to the half sibling relationship, and demographic and family composition questions.

According to Zimmerman and Weider (1977), diary entries should be analyzed (at least partially) prior to the exit interview or questionnaire. Specifically, researchers should become familiar with the data to formulate questions to ask in exit studies. As such, the exit questionnaire first asked any clarifying questions necessary after an initial review of individual diary entries (e.g. If a participant reported talking to their sister Sarah, they were asked to clarify if Sarah was a half, full, or step sibling).

Second, participants were asked about their experiences with the diary study procedures, including questions inquiring if participants felt the time period of data collection (near the holidays) effected their disclosure; questions asking participants to identify anything that surprised them over the two-week diary experience; and to reflect on the mediums and topics within their communication with a half sibling across the two-week period. Third, open-ended questions about the half sibling relationship mirrored many of the same open-ended questions within the interview protocol form Study One to use in possible future research and analysis. It is important to note that units for relational maintenance for this study were not identified within exit questionnaires, but questionnaires were merely used to clarify, confirm, and verify maintenance behaviors and themes represented within diary entries. Lastly, concluding questions in the exit questionnaire asked demographic and family composition questions, similar to information collected in the family demographic tree completed by participants in Study One. If participants had multiple half siblings, they were again encouraged to answer exit questions in reference to the half sibling they referred to in the pre-qualifying survey.

Participants were compensated $60 for completing at least 75% of the diary entries (10 days) and the exit questionnaire. In addition, one participant was chosen in a

drawing for an additional $50 Amazon gift card. The decision to use monetary incentives and the requirement of 75% completion derived from diary methodologists who conclude more extensive studies (such as requiring daily/multiple reports across a two-week span) should be balanced with incentives to promote participation (Conner & Lehman, 2011). Incentives were emailed in electronic versions ($60 Visa e-Gift card and $50 Amazon electronic gift card) after completing their exit questionnaire. The winner of the additional Amazon gift card was notified via email only after all data in this study was collected.

All diary entries and exit questionnaires were downloaded into Word documents, each individual document reflecting all entries and the exit questionnaire for the corresponding participant. All participant names were excluded as participants used their given participant number to identify their entries. However, any names of family members present within entries were de-identified and given pseudonyms. The lead researcher then analyzed these documents with a co-coder.

Data Analysis

Diary entries were examined and analyzed using the same inductive analytic coding technique (Merolla, 2010; Strauss & Corbin, 1998) as Study One. Two coders again met continuously to define and redefine analysis through a five step inductive approach. First, the final list of relational maintenance behaviors resulting from Study One analysis was used as an initial codebook (Tracy, 2012) for possible maintenance behaviors (or codes) identified in Study Two data. The two-study nature of this research was designed to confirm that relational maintenance behaviors reported in retrospect across the trajectory of a relationship (Study One) are also occurring in the day-to-day

communication between half siblings (Study Two). As such, using the concluding list of relational maintenance behaviors from Study One as an initial codebook allowed the researchers to identify those behaviors that were represented across both data sets. This initial codebook was defined and redefined across the analytic process as emerging codes within the data become apparent through the constant-comparison method (Charmaz, 2006).

Second, the lead researcher viewed all diary entries holistically to gain familiarity with the data and to identify units. Units were defined and identified identically to Study One analysis procedures (thought units were required to include a subject and predicate, an enacted communication behavior, and refer to or involve a half sibling relationship), again to remain consistent in using both study data sets in reporting overall study findings. To establish unitizing reliability in this data set, both coders again conducted line-by-line unitizing analysis of the first three participants' diary entries (19% of the overall data set) and converged to seek inner-rater reliability in unitizing. Unitizing reliability was again found to be acceptable (Guetzkow's $U = .052$). The main researcher then conducted line-by-line analysis of all remaining participant diaries to identify units. A total of 842 units (average 53 units per participant) were used in Study Two analysis.

Third, both coders reviewed units and assigned a code for each unit. To seek inner-rater reliability in coding, both coders assigned codes for all units in the entries for the first five participants (31% of the overall data set) simultaneously and then converged. Inner-rater reliability in coding was also again achieved (Scott's pi = .80) and the remaining participant diaries were coded by the lead researcher. Similar to Study One, throughout this phase coders used constant comparison (Charmaz, 2006) to redefine

the final codebook (Tracy, 2012) from Study One and noted new or "novel" codes present in Study Two data. Importantly, relational maintenance codes reflected in the initial codebook (present in Study One) that were not also present in Study Two were still included in the final codebook and their omission will be discussed in the Results chapter below. This stage resulted in a revised and final codebook that reflects the relational maintenance behaviors utilized in both retrospective and temporal accounts of half sibling communication (see Table 1 in Appendix U).

The fourth stage of analysis involved the lead researcher to work between participant diary entries and exit questionnaires to confirm and verify that themes were reflected across both (such as the mediums of communication reported in both diaries and exit questionnaires). The lead researcher also input needed clarifying information from exit questionnaires into diary entries when necessary.

The fifth and final stage of analysis of Study Two data involved the lead researcher reexamining all diary entries holistically again. This fifth and final step allowed the lead researcher to observe and identify overall themes in the data set that were possibly concealed through unitization. This final review also allowed the researcher to identify themes relevant to the first research question, such as frequency of contact, common topics, and mediums of communication used.

Validity

Validity of diary entries and exit questionnaires analysis was sought through triangulation and negative case analysis. Triangulation requires comparing the constructs/themes as a whole with the data in diaries, exit questionnaires, and the themes developed by a coder (Mackrill, 2007). In essence, themes present in the diary study, exit

questionnaires, *and* in the analytic codes of a researcher were deemed the most valid. Indeed, Zimmerman and Weider (1977) argue an exit interview (or questionnaire) in addition to a larger diary method can serve as a self-regulating, hypothesis-checking device where postulations formed during diary analysis can be answered (Zimmerman & Weider, 1977). This process was accomplished in the fourth stage of analysis mentioned above. Moreover, negative case analysis was again used to identify deviant data that did not support study assumptions (Morse et al., 2002). For instance, one participant in Study Two communicated significantly less with their sibling compared to others. Moreover, this participant did not include any antisocial behavioral codes. The researcher sought out this negative case and identified the participant suffered from a severe illness and was even hospitalized during his two-week diary period. He also noted in his diary that he turned off his phone for days on end at the instruction of a doctor to heal more quickly. Moreover, he lived in a different country than his parents and siblings and was not able to be visited by them. This participant's data likely differed from other participants because his illness hindered him from typical sibling contact.

CHAPTER 4

RESULTS

The purpose of the two-study method of this research was to confirm the relational maintenance behaviors reflected across retrospective and temporal accounts of half sibling communication. As such, data from both studies were used to determine the overall results for the present research project and, therefore, are discussed collectively. To see the combined demographics for participants across both studies, see Appendix T. Specific findings from each study also are detailed in the presentation of each research question's findings

Research Question One

The first research question sought to determine how adult half siblings in positive relationships communicate. Inductive coding of both interview transcripts and written diaries identified the common topics discussed, frequency of contact, and the most common mediums used to communicate. As expected, the diary study (Study Two) more clearly identified frequency and medium of contact given these data were collected in real-time across a two-week period.

Frequency of contact. Half siblings across both studies reported being in moderate to moderately high contact with one another. On average, the 16 diary participants reported being in touch on 9.69 out of 14 days, with a range of 3 to 14 days. Likely due to the differing criteria required for participation, contact among interview participants and their half siblings was much less frequent. Of the 17 interview participants, two (12%) reported communicating with a half sibling at least once every

six months, five at least once a month (29%), and the remaining 10 (59%) recounted being in contact with their half sibling at least once a week.

Medium of contact. Participants across both studies reported communicating with their half siblings using multiple mediums. In the exit-survey, diary participants identified the various ways they typically communicate with their half sibling, and those answers were triangulated with the mediums referenced in diary entries. Text messaging was the most frequently reported way participants communicated with a half sibling (n = 14; 88%). In-person and phone-call contact tied as the second most mentioned medium participants used to communicate with a half sibling (n = 11; 69% each). Social media sites and apps were the third most reported forms of contact (n = 9, 56%) and included the use of *Snapchat, Facebook, Instagram,* and *Reddit.* Lastly, video calls through *FaceTime*, *Skype*, or the video call feature on *WhatsApp* were the fourth most frequent way respondents communicated with a half sibling (n = 6; 38%).

Common topics. In both studies, respondents reported discussing the following topics with their half siblings: mundane topics (ranging from the weather to politics to "what did you do today"); planning upcoming family events or dyadic events between the half siblings themselves; shared interests; gift-giving suggestions for sibling, parents, or other network members; conflict within their family unit or between the dyad, and referencing past interaction/memories. More specifically, participants in the diary study indicated they and their half siblings were motivated to contact one another or communicate to: receive/give daily wellbeing check-ins ("are you feeling better", "how is work treating you?"); seek/provide advice; seek/provide informational, emotional, or esteem support; vent about other family members/social networks; and seek/provide

updates about other family members/social networks. Similarly, interview participants retrospectively noted conversations with half siblings involved offering or receiving advice or support, discussion past family interactions or memories (including ritual events), and provided/sought updates on a siblings school, professional, or personal lives. Overall, half siblings discussed a range of topics when recording their day to day sibling communication and when referencing their past communication during retrospective accounts.

Research Question Two

The second research question addressed the types of relationship maintenance behaviors half siblings used to sustain their relationship. When appropriate, relational maintenance behaviors are presented under an overall maintenance category (i.e. "Self-disclosure" is a specific behavior under the overall maintenance category of "Openness") as seen in Table 1. Table 1 presents the categories and subordinate behaviors for each category in descending order by the percentage of total participants (n = 33). Table 1 also provides the percentage of participants referencing each category and behavior for Study One, Study Two, and across all participants. The number and percentage of total units (n = 2,141) per category and behavior are also included.

Each category and behavior will be discussed in turn, including participant exemplars from both interviews and diary entries. Pseudonyms are used when appropriate to protect participants' identities and quotes are identified only by assigned participant numbers (i.e. P#1 refers to Participant 1). Excerpts from participant disclosures also include more than the coded thought unit to provide richer context to their statements. Across a total of 2,141 units, sixteen categories were located. These included positivity,

joint activities, openness, parental intervention, anti-social behavior, advice, confirmation, avoidance, mediated communication, networks, conflict management, sharing tasks, assurances, awareness of maturity, mentoring behavior, and instrumental support.

Positivity

Positivity tied with Joint Activities and Openness as the most commonly reported maintenance strategy for participants, which is akin to previous findings regarding how (full?) sibling maintain their relationships (Myers & Weber, 2004). Positivity refers to communicating with a sibling in a cheerful, optimistic, and uncritical manner, and it was reported by all 33 participants (100%) and identified in 442 (21%) of the units across both studies. Positivity was composed of the subcategories Positive Thinking/Reminiscing, Social Support, Prosocial Actions, Affectionate Communication, and Humor.

Positive thinking/reminiscing. Positive Thinking/Reminiscing describes occasions when siblings interact in a joyful manner, including communicating optimistically and referencing old memories in an affirmative manner. Thirty-one participants (94%) and 150 (7% of all units) units referenced day-to-day positive interactions with a half sibling, including cheerful banter and light-hearted conversation. For example, one participant wrote in her diary that she had an overall positive interaction with her half sibling by noting, "No conflict today, just pleasant conversation about daily happenings, upcoming vacations, and homeschooling my children." (P#22).

Social support. Twenty-seven participants (82%) reported and 83 (4%) units detailed that a half sibling communicated social support. This code was assigned when a

participant enacted the behavior, or when a participant referenced a sibling offering social support. Social support refers to the exchange of emotional or psychological resources intended to enhance the wellbeing of a recipient where one sibling sees another in need of aid and offers that aid in some manner (Myers & Weber, 2004). Participants attributed great significance to half sibling's offers of emotional or esteem support ("She was just cheering me up. She knew how I had struggled to keep up my grades. She consoled me. P#16), and felt great pride in being able to offer aid in return. Many interview participants revealed that offering social support to a half sibling was a turning point in their relationship becoming a positive one. An older half-sister explains:

> My senior year of high school, our grandpa passed away and that was the first death in our family actually. Everyone was just very upset obviously, but I would say my relationship with [my half sibling] was really positive at that time, because she was so young and it was interesting to see her experience death as such a young girl. I could fully understand it, but she didn't. It was just kind of interesting because I was able to… [it felt positive because] I was there for her and comforting her and could actually do, offer that [to her]. (P#28)

This participant felt her ability to offer her younger half sibling support in a time of grieving indicated a positive relationship.

Prosocial actions. Twenty-six participants (79%) and 127 (6%) units revealed that out-of-the-ordinary actions or favors by a sibling contributed to their ability to maintain a positive relationship. Prosocial actions ranged from asking a half sibling to serve in a participant's wedding to meaningful gift-giving ("He asked me what I wanted for my Birthday. I know my brother is a broke college student, [so] it meant a lot of him

to think of me". P#3). One participant reflected on a prosocial gesture that occurred many years ago, but still stands out as a way her younger half brother communicated his connection and admiration for her as a sibling.

> I used to get really sick, each year in February, and my birthday is in February, and I remember I mentioned to him one time that I was sick on my birthday. I had bronchitis, 'cause that's something that would happen to me every year, and he looked at me, and he was like, "You were sick on your birthday?" And I'm like, "Yeah," so he made me this little letter, and he was like, "Robin, you are the best Robin that I know. I am so glad you're not sick on your birthday," and then, he gave me a picture of the family, and he did that kind of stuff all the time, and it was just the best thing ever because I knew I meant a lot to him. (P#29)

Prosocial actions usually involved a behavior or action that was observed and then later was characterized as being meaningful to the sibling relationship.

Affectionate communication. Twenty participants (61%) and 59 (3%) units highlighted the significance of communicating affection to a half sibling. This relational maintenance behavior refers to intentional and overt enactments or expressions of feelings of closeness, intimacy, care, and fondness for a sibling in verbal and/or nonverbal ways (Floyd & Morman, 1998; Myers, Byrnes, Frisby, & Mansson, 2011). Participants viewed showing love for their half sibling (or being shown love by a half sibling) as important to maintaining their relationship, especially if previously they felt apprehension about the birth of their half sibling. One participant explains.

> I really didn't know what to think [then] I saw [my half brother's] face for the first time and he was so red, and he was all scrunched up, but he was the most

> beautiful thing, and I think that's one of my most vivid memories. I think I experienced love at first sight, at that point. Seeing someone and just having so much love for them, even though I hadn't really met them before, and was nervous for [their arrival], and that was just amazing. (P#29)

Many participants reported communicating their love for their half sibling in their daily conversations to ensure that their sibling knew they were important to them. Participants referenced affection frequently in phone calls ("I told him I love him". P#13) and even in video conversations ("I told [my half sibling and mom] that I miss their presence and seeing their faces rescues me a little". P#16).

Humor. The last behavior under the Positivity category was referenced by 14 (42%) participants and was present in 23 (1%) units. Humor as a relational maintenance behavior included jokes and sarcasm that were intended to be entertaining or amusing. Half siblings utilized humor in their communication with a half sibling to them feel good ("She immediately changed my mood by cracking jokes". P#16) and/or to participate in sibling teasing to build rapport and connection.

> I do remember calling him within two or three weeks of moving and he jokingly told me that I had such a southern accent and I was like, that is not even true! There is no way I have one within two or three weeks! [laughter] So that broke the ice [after he was sad she moved away]. (P#23)

Although less frequent than the other behaviors composing the Positivity category, Humor allowed half siblings to engage in pleasant and upbeat conversations and appeared to bond them.

Joint Activities

Joint Activities were tied with positivity and openness in terms of frequency and are especially important in building a strong, positive relationship with a half sibling (Stafford & Canary, 1991). All 33 participants (100%) and 248 (12%) units described half siblings spending time with one another, taking trips together, doing activities together, and/or discussing shared interests in hobbies or activities. Half siblings found discussing joint activities to be important in their communication, because doing so allowed them to focus on commonalties as opposed to their differences (such as sharing a different biological parent or residence). One participant disclosed the importance of discussing shared activities with her younger half-sibling.

> Today, we talked about something we have in common, our jobs. She is a high school Spanish teacher and I am an elementary teacher. Having this common ground has given us another way to connect with each other. Although we might have been complaining a little about our students' behavior today, we were finding similarities and discussing them together. It also helps me feel connected with her since this is something we are doing together. (P#2)

Spending time together signaled to half siblings that respondents enjoyed sharing time with them and that they were worth the effort. When diary participants were asked to identify one interaction each day that stood out to them the most, many referenced simply spending time together as the most significant communication they shared with a half sibling that day. One participant wrote, "[My half sibling and I] just stayed up to watch the New Year's countdown and played a few card games and watched *Jeopardy* until about 4 in the morning". (P#19). Another chose to write, "We went to the mall together".

(P#10). Similarly, another participant elaborated on why spending time together stood out as significant in building and maintaining a positive half sibling relationship.

> When [my half brother] moved to Arizona, he started coming on errands with me so we'd get to spend time just the two of us, and we get that time to talk and hang out, and get out of the house for a bit which is nice and actually quite important. (P#32)

In addition, sharing interests in an activity or spending time together signaled that a half sibling relationship could function without other family members (such as a shared biological parent) and illustrated the enjoyment half siblings found in spending one on one time with one another.

Openness

The maintenance category of Openness was also represented across all participants (n = 33, 100%) and was accounted for in 222 (10%) units. This category refers to open dialogue and in-depth discussions between siblings. Openness was composed of two subordinate behaviors: Self-Disclosure and Empathetic Listening.

Self-disclosure. Siblings saw great importance in their ability to have open, honest conversations with their half sibling. Thirty-two participants (97%) reported and 196 (9%) units characterized direct discussions and listening to a half sibling as being significant, and these discussions often included speaking honestly to one another. Self-disclosure referred to open conversations on a breath of topics as well as in-depth conversations about vulnerable and sensitive topics. One participant noted that her half sibling's willingness to disclose at length to her revealed that the half sibling cared to spend time with her and not another sibling or family member.

> We chatted for close to 2 hours. We really had time to get caught up on everything that's been going on in each other's lives. She told me how nervous she was becoming over her wedding. She said it suddenly feels so real because she is finally making definite plans. This particular conversation was so important to me because I felt like she really opened up to me and confided in me something that she hasn't shared with anybody else. (P#15)

Another participant mentioned the importance of the depth of self-disclosure and stated that this communication practice allowed her to shed light on and answer questions about her previous family unit (before the divorce, remarriage, and birth of her half sibling).

> My half sister asked a lot of questions about Christmases and gatherings from before our mom's divorce from *my* dad, when I was just a kid. It was nice to look back on all of that and be honest and open to reflect on how they are still happy memories, and also share some more of that past with my sister since she wasn't around for it. (P#10)

Empathetic behavior. Empathetic Behavior refers to actively listening to a sibling without placing judgment, and it is focused on listening only as opposed to an exchange (as is likely to occur during Self-Disclosure). Fifteen participants (45%) and 26 (1%) units demonstrated the importance of a half sibling's ability to listen ("Especially if it's just me and him, he's very receptive to just sitting and hearing my perspective". P#5), even if they disagreed or were unsure of the topic their half sibling was discussing ("I didn't really know much about what he was talking about, but I was very happy for him and listened. P#25). Showing empathy and engagement through listening when a half sibling "needed to vent" was memorable to participants.

Parental Intervention

While most maintenance categories in the present research are derived from existing research, Parental Intervention was identified as an additional and previously undiscovered relational maintenance category. Parental intervention highlights the influence a family system has on the communication between siblings. Parental Intervention was evident as both a prosocial and antisocial maintenance behavior and was mentioned by 32 participants (97%) and appeared in 272 (13%) units.

Prosocial intervention. Parents (biological or step) appeared to play a vital role in cultivating positive half sibling relationships. Twenty-nine participants (88%) identified and 161 (8%) units illustrated how a parent's actions had a positive impact on a sibling relationship. These behaviors varied, but they often included a participant describing how a shared parent planned or even forcing half siblings' interaction. For example a diary participant wrote, "Today, my (half) brothers, sisters, and I went over to my mother's house because she asked us to begin shopping in preparation for the New Year feast and to all come help cook. Our mother later invited us all to have dinner at a fancy restaurant together". (P#19) Another participant reflects on how her shared biological parent encouraged her to interact with her half sibling.

> When we moved [to] the new house, we were sad because we used to live five minutes from our grandparent's house. Getting used to everything was hard and [my half-brother] was crying because he was sad about not being with our grandparents and he just ... I just remember as a kid he didn't really like to talk to people about things. So my mom was like, "Maybe you can go talk to him. You've moved a lot before so you could talk to him." And so I just remember

> going after she said that, going in his room and saying, "Yeah, it's sad but it's what happened so we have to deal with it." And at the end we just talked about how he felt. So I think once I said that to him and it wasn't our parents at least, well not directly coming from our parents, I think that was a turning point because he started talking to me more about his everyday problems. (P#11)

Participants applauded when their shared biological parent made it a point to bring them together with their half sibling, disclosing that this intervention highlighted how they were connected as a dyad (through relying on similar familial networks).

Prosocial Parental Intervention was also celebrated when a parent intervened with the intent to reiterate the "normalcy" of half biological relatedness. One participant spoke at length about how his mother was pivotal in cultivating a positive relationship amongst her half biological offspring, specifically throughout childhood and adolescence.

> When I had my graduation party from high school. Of course there was a lot of family there that [my half sibling] just didn't really know and my mom was really good about sort of normalizing it. "This is just how it is. Like it's not out of the norm". It wasn't treated any differently… My mom was really, she just emphasized, normalizing just like the way that our family was set up. I mean, she was very, very keen and was very active with making sure that I had positive relationships with my half-siblings... she says all the time, "You have to have a relationship with them because those are your people for the rest of your life." And so, because that was sort of the norm throughout our entire relationship, my mom wouldn't really allow there to be any ornery negative energy between me and [my half siblings]. (P#27)

Another participant repeated the significance of Prosocial Parental Intervention, even on the part of a stepparent.

> [My stepdad] loved our family so much that he wanted to be a part of it, which is amazing, and I have a really great relationship with him, and another reason why I was so excited with my mom getting married and having a baby, when she was pregnant both times actually, was getting to see my (step)dad in another fatherly role, and really getting to help him with the baby, and do stuff with the baby with him … I would say the positive relationship I had with my stepdad is what makes [my half sibling relationships] work. (P#11)

Additionally, other participants stressed the significance of positive intervention from their other biological parent who is not related to their half sibling. One participant related in her diary how she felt when her biological father reached out to include her maternal half sibling in a family ritual event.

> My conversation [with my dad] shifted to Christmas plans - I was asking him if he was looking forward to coming to Christmas dinner at my mom and step dad's house (this will be the first Christmas where my biological father and step mom come and join us at my mom and step dad's house). He said he was very much looking forward to it. He asked me for suggestions on what to get my younger half sister for Christmas since he doesn't know her very well, wanted to know what sort of stuff she is interested in. I told him about some books she has had her eye on and some of her favorite movies to give him an idea of some merch he could get. He told me that she reminds him a lot of me from those interests, that made me happy. This conversation stuck out to me because my dad was showing

> so much interest in getting to know my younger half sister, that made me really happy. My dad and my younger half sister have always been two of my favorite people but they haven't known each other well, so hearing him talk about her and how excited he is to get to know her and get her a cool gift made my day. (P#10)

This theme echoes similar findings in existing but as yet unpublished half sibling research where adult children report a desire for their non-shared biological parent to meet and maintain relationships with their half sibling. It also suggests that maintenance may beneficial when enacted across the extended blended structure (Oliver, 2015).

Antisocial intervention. Although parents often had a positive impact on half sibling relationships, the opposite was also true. Similar to exiting research on the negative "spillover effects" of parental conflict onto sibling communication (e.g. Bray & Hetherington, 1993; Krishnakumar & Buehler, 2000), 21 participants (64%) and 112 (5%) units detailed how a parent's actions negatively impacted half sibling relationships. Specifically, a turbulent or strained relationship between a stepparent and respondent often negatively affected or soured the half sibling relationship. One participant explains, "I started to see [my half brother] less because it was during high school when I stopped communicating with my stepdad for a while, and so I stopped going to visit my mom because I wasn't allowed in the house and didn't want to see my stepdad. So I think that negatively hurt [my half brother relationship] too". (P#5). Another participant reflected on possible causes for why she felt differently about the her half sibling relationships on her biological mother's side (positive) versus those on her biological father's side (negative).

> Yeah, [my half siblings on my father's side] even lived in the same town and even went to the same school I did, but what I personally think [is the reason we have a negative relationship is] because they're from my biological father's side. And because that relationship between me and him isn't good. Or really I'd say present at all. So he was always a sensitive subject and I didn't want anything to do with him. And they were indirectly something to do with him. (P#11)

Other participants noted that seeing their parents raise a younger half sibling using a perceived different parenting style than the one they experienced when they were young, (such as spoiling them or not erecting as strict bedtimes, curfews, or general rules during adolescence) negatively affected how they communicated with their sibling.

Antisocial Behaviors

Not surprisingly, many participants reported experiencing aggressive or coercive communication with their half sibling. Antisocial maintenance refers to behaviors that seem unfriendly or coercive and that function to maintain a relationship at a desired level (Stafford & Canary, 1991). For example, bickering and harsh teasing can prevent half siblings from developing a more intimate relationship than is desired by one or both of them. Antisocial behaviors made up 126 (6%) of all units and were reported by 30 participants (91%). Antisocial Behaviors include the subordinate categories of verbal and nonverbal aggression.

Verbal aggression. 24 participants (73%) and 97 (5%) units described verbal expressions of aggression between siblings. Verbal aggression typically included heated exchanges ("I told my sister how crazy she is to drop $600 on a *Nintendo Switch* game system. P#12), and aggressive responses to siblings typically led to additional verbal

aggression ("He went off. It always irritates him when I scold him. P#13). Although they made a point to mention these antisocial outbursts, many interview participants said this was typical of any sibling relationship, especially at certain ages in sibling development. An older half-brother offered the following comments as he reflected on his relationship with his younger half-sister.

> [My relationship with my half sibling], was pretty good but we were for sure the quintessential bickering younger siblings. I distinctly remember a fight we had when we were supposed to be cleaning, but [instead] yelling, getting my other brother involved and everything. (P#21)

Nonverbal aggression. Not all antisocial behavior was characterized by verbal expressions; participant disclosures also included outbursts of nonverbal aggression. Fourteen participants (42%) and 29 (1%) units highlighted the nonverbal ways in which siblings lash out. In his diary, one participant stated that he did not appreciate how his half sibling reacted to his admission that he wanted to donate his body to science after death. He wrote, "He kind of looked at me and acted like I was absolutely crazy. It was kind of depressing [he] reacted that way". (P#19). Another participant reflects on how she "bullied" her half brother in their early years due to resenting her new blended family structure: "We had a lot of arguments growing up… Like, I was brutally resentful. Like I really did not like him when he was little. I used to just like, go and lock him in the closet". (P#31) Across both studies, antisocial behavior was referenced as: a common element in any sibling relationship, especially when sharing a residence; more prevalent during adolescence; and as a typical retaliation to restructuration in the early years of blended family development.

Antisocial behaviors have been indicated in past relational maintenance research as negative behaviors that maintain a relationship at a specific level (Daiton & Gross, 2008). As such, the maintenance behaviors within this category (and others indicated in Table 1 by an asterisk) appear to be used to maintain normative sibling expectations ("typical "quintessential bickering siblings") but do not contribute to a positive relationship or increased liking and commitment (Meyers & Weber, 2004).

Advice

Offering and/or communicating advice to a half sibling was referenced in 28 (85%) of total participant disclosures and 76 (4%) units. Advice ranged from outfit choices ("[My half sibling] FaceTimed me because she wanted outfit advice for a concert she's going to this weekend with her friends". P#10) to how to complete a video game level ("He was asking me about *Zelda*. He knows I beat the game already and he was asking me about what I did at a certain part." P#13). However, even the seemingly insignificant advice seeking topics illustrated the importance of a half sibling's availability and input. One participant wrote about the importance of her half sister's willingness to advise her on home décor.

> I texted her a picture of pillows, as I am having a hard time deciding on what colors to go with in my living room. I have such a hard time deciding on anything and my sister is just a straightforward person and I know that I can go to her with any advice and she will be able to steer me in the right direction. (P#22)

Similarly, another participant mentioned the significance of a half sibling seeking advice from her on colleges.

> When [my half-brother] graduated high school, I feel like we got really close at that point because he was looking to me to get advice about college because I had been there, done that kind of thing… he wanted to get advice from me specifically about it which [felt] good. (P#5)

Although this maintenance behavior appeared to be similar to that of any older/younger half sibling relationship, some advice was specific to half siblings in that the advice stemmed from hardships related to their former family structure's divorce. One participant noted that he hopes to advise and protect his much younger brother if his biological parents ever were to divorce.

> I guess everything that I've been through with [the] divorce allows me to kinda give him advice, and show him things. Being a much older brother, and [having] gone through all that, everything, I know from like step one all the way to the end step on what to do, what not to do, in case he ever needs that kind of advice. I'd be able to give that. (P#33)

The desire to shield one's younger half sibling, illustrates what Buzzanell (2010) calls "communicating resilience into being." That is, half siblings can communicate with each other such that they build up protective factors that help them respond to potential future adversity.

Confirmation

Confirmation tied with Avoidance in frequency and was reflected across 27 (82%) participants and 116 (5%) units. This relational maintenance category refers to behaviors that endorse, reinforce, and/or validate the importance of a sibling in an individual's life and includes communication that confirms the value of a half sibling or a

half sibling's feelings (Meyers & Weber, 2004). Confirmation behaviors ranged from everyday commonplace interactions that verified the importance of a half sibling bond ("Her text this morning was simple, but made me feel needed" P#2) to pivotal conversations. For example, a male participant reflected on how his half sister's openness validated the important role he plays in her life, "This [conversation] was so important to me because out of all of the people she could open up to about this, she chose me. She wanted my opinions and my thoughts over everyone else, and that made me feel really good". (P#10). The behavior of choosing the participant over other siblings, family members, and even friends to share an important piece of information with was perceived as signaling the significance of that half sibling bond and connection.

Although present in exiting sibling relational maintenance literature (Myers & Weber, 2004), Confirmation among half siblings appeared to function in a unique and novel way with regard to terms of address. Specifically, units coded as Confirmation included participants identifying a half sibling as not "half" at all. Participants across both studies disclosed the importance of not using the addressing term "half" as they felt it made them feel less connected to their half sibling. A participant wrote in her diary, "Even though two of my brothers and one sister are half-siblings, I see them as no less than I see my full brother and sister and make sure they know that." (P#19). Another participant (age 26 with a younger half sibling age 7) stated in her interview how important addressing terms are in confirming the importance of a sibling, even at a very young age.

> When people ask [how we're related] it's just, it's a weird situation. But [my half sister] will immediately say, "I have sissies, this is my sissy!." And when she

> draws pictures of the family, it's almost always mommy, daddy, and me. And sometimes she'll put [our stepsisters in there], but it's almost always me that's in there. Because, I don't know. I don't even know why, 'cause she sees [her other siblings] a lot more than she sees me, but I am always in the drawing. (P#8)

Another participant echoed this sentiment when discussing how she introduces her half sibling to those outside the family unit.

> Whenever we introduce people we don't say, like, "That's my half-brother." I'm just going to say, "Yeah, they're my brother and sister." I just remember thinking, even though they're a half-sibling, it's like you still share at least one parent, so they're still technically blood related to you, you know? I've said to them, and when we introduce, like this is my brother, this is my sister, this is someone who is a part of my family. So, I'm going to do, you know, just like the same as with any of my other family members. (P#30)

Indeed, not using the "half" label communicated and confirmed to siblings that they are important in participants' lives; further, it conveys that they are just as important as *any* other sibling relationship.

Avoidance

Consistent with existing theory and literature (Stafford & Canary, 1991; Canary, Stafford, Hause, and Wallace, 1993), many siblings reported using avoidance to maintain their relationships. Avoidance refers to evading a sibling or an issue related to a sibling and was tied in frequency with Confirmation. Avoidance was represented across 27 (82%) participants and 83 (4%) units. The subordinate behaviors illustrating this category

include Topic Avoidance, Antisocial Avoidance, Alternate or Separate Activities, and Negotiated Autonomy.

Topic avoidance. Eighteen participants (55%) and 33 (2%) units included participants' descriptions of avoiding specific topics or conversations with a sibling. Units under this maintenance behavior included avoiding conversations because the half siblings were of different genders or there was a large age gap. For example, a female participant stated, "There's still a lot of stuff that I don't tell him. Just because I'm like, that's not maybe age appropriate. Or maybe just because it's my brother I think there should be some boundaries." (P#11). Other participants mentioned avoiding a topic they knew would likely lead to conflict. One participant explains.

> We don't really have much conflict. But again, I know that [my half sibling] and I, I know that we have different political views, but because of that, I just choose not to talk about them. So, I'm not sure we're ever actually had real conflict about that. (P#23)

Lastly, topic avoidance was occurred because a topic was not relevant to the present conversation ("I didn't mention being sick because it wasn't relevant and we were short on time and that would have changed our conversation midway through." P#25). Thus, Topic avoidance appeared to primarily be a function of gender, age, or conversational objectives.

Antisocial avoidance. Another subcategory of avoidance, antisocial avoidance, refers to a participant purposefully distancing themselves from a sibling or an issue related to a sibling. It was mentioned by 12 (36%) participants and in 29 (1%) units. As mentioned above, antisocial behavior was more common during the early years of

blended family development where roles and expectations were still ambiguous (Coleman et al., 2001). Similarly, antisocial avoidance was often in response to resisting change/the new family form, adolescent angst, or as a typical sibling response to sharing a residence or living together. One participant noted, “I was not the best brother at that time. In not reaching out to my little [half] sister and not contacting her, I knew that that was hurting her.” (P#21).

Alternate or separate activities. Unlike topic or antisocial avoidance, alternate or separate activities refers to avoidant maintenance behaviors that are likely unintentional rather than purposeful yet can result in neutral or positive outcomes. For instance, one participant discussed how half sibling avoidance created, or at least is illustrative of, a more positive relationship.

> I think [our half sibling relationship] is good where it is right now. In all honesty, I love him, he's a great guy, but at the same time I'm happy with the distance that we have. I'm happy that we're both two individuals who don't depend on each other and can have our own “things”. (P#14)

Another participant referenced that accidental avoidance occurred in her half sibling relationship but did not appear to negatively affect the relationship.

> [My half sibling and I] didn't really have much contact while we were in different states. You know, when you're 18 and 19 and 20, you're, like, in college and you're just like, "Family is irrelevant, I should only call when I need money." And honestly he didn’t feel motivated to reach out either for the same reasons [at the time]. (P#31)

Alternate or separate activities was mentioned by 11 participants (33%) and in 14 (1%) total units.

Negotiated autonomy. The last and least common behavior under the Avoidance category describes siblings who have reached an agreement to take time apart from one another, usually with the intention to improve the relationship. Negotiated autonomy requires both siblings be aware of the negotiated distance, and accounted for 7 participants (21%) and 7 (<1%) units overall. A participant noted in a diary entry, "We agreed that we should just leave well enough alone and let it be." (P#22) after being at odds on a family conflict. Diary entries note these siblings did not speak for the next few days after this disclosure.

Mediated Communication

The first research question highlighted the various communication practices and mediums common to adult half sibling relationships, including through mediated means. Mediated Communication refers to interactions that occur through communication technology as opposed to face-to-face interaction. Mediated talk was viewed as a convenient and equally meaningful way to maintain half sibling relationships. Mediated Communication was especially important if siblings were geographically distant; at times such communication signaled a turning point in the development of half sibling relationships because half siblings could communicate free from parental intervention. Mediated Communication allowed for more frequent contact between half siblings and was referenced discussed by 26 (79%) participants and was present in 149 (7%) units. Mediated Communication included the subordinate behaviors of communicating through Phone/Video Call/Texts, Social Media/Email, and Card/Letters/Care Packages.

Phone, video calls, and texts. Twenty-four participants (73%) and 115 (5%) units mentioned communicating with a half sibling through phone calls, text messages, or video calls such as *Skype* or *FaceTime*. Although mentions of mediated maintenance interactions occurred much more frequently in diary entries, mediated communication through was also referenced in retrospective interviews as being significant in changing a half sibling relationship for the better. One participant explains how the addition of a phone improved his half sibling relationship and individualized it from his relationship with their shared-biological parent.

> [My half brother] getting a phone, like I said, would be a turning point too, just because that gave us the ability to have a relationship outside of our parents, you know, like instead of my dad just handing the phone off to him, or them initiating things [we could] like have our own thing going on. (P#26)

Another participant echoes this sentiment, further adding that the addition of a personal phone allowed her half brother to stay in more frequent contact.

> [My half brother] has a phone now, an iPhone, so he's always calling me, texting me, and we Face Time and stuff!... It's so cute because he would randomly text me, and call me, and Face Time me really random, sporadic things. It wasn't really, "Hey sis, how are you doing, I miss you." He's like, "Oh look what I drew. Look what happened," send me something weird and funny so just things like that. (P#7)

Phone ownership appeared to provide a newfound freedom for younger half siblings, but also positively affected their connection with their older half sibling because they could have a more active (and often enjoyable) role in contacting their sibling.

Social media and email. Twelve participants (36%) and 29 (1%) units referenced using social media and/or email to maintain their relationship with a half sibling. The innovative nature of social media and social networking apps that incorporate text, photos, and video simultaneously positively impacted half sibling relationships, particularly when siblings did not share the same residence or even geographic location. One participant explained the significance *Snapchat* has in her sibling relationship, writing, "My (half) sister and I frequently communicate via *Snapcha*t because it's quick and allows us to send pictures and videos. I enjoy communicating with her like this since we live in different cities. It makes me feel like we are a little closer." (P#2). Another participant echoed this appreciation for the app.

> [My half sibling and I] have a *SnapChat* streak lately, and that's literally us just sending pictures of our feet. [Laughter]… I think it's just, that [*Snapchat*] reminds us that we're there, because we're not around each other a lot in person. We don't have that day-to-day brother sister relationship like people who live together do. Yeah, it's just a way to have a contact with each other each day. Like I said, it's something stupid, but that's our generation. Yeah, I think it's just nice, to just be there. Then we're sending pictures, of like oh, we're in school. Now we're going here. I know what he's doing throughout the day. It's nice. (P#26)

Other participants mentioned the role *Facebook* has played in cultivating a positive half sibling relationship. One participant, when asked to include all interaction he had with a half sibling that day, included the sentence, "My half brother liked my post on Facebook." (P#25), illustrating that "likes" were perceived as "interaction" that

contributed to a positive half sibling relationship. Another participant mentioned the significance of this social networking site in his relationship.

> Thank goodness for the rise of social media, because that's where ...Through Facebook and whatnot, even though I wouldn't really see my little [half] sister as much, we would spend a lot of time just talking. That's where we had to have some harder conversations. (P#21)

Card, letters, and care packages. Lastly, some participants (although few, $n = 5$, (15%)) also communicated in the more traditional sense of the term "mediated" via sending cards, letters, and care packages to one another, a behavior previously identified by relational maintenance scholars (Stafford & Canary, 1991; Canary et al., 1993). One participant noted, "I just sent out holiday cards to family members (including my half sibling) so that should brighten their holiday, as if I were there." (P#3), while another stated she, "Wrote him letters while he was in boot camp, things like that to keep in touch. (P#5). Although less common than phone and social media use, participants also maintained their relationship through general (non-electronic) mail delivery.

Networks

Tied in frequency with Mediated Communication (26 participants, (79%); 136 units, (6%)), Networks refers to siblings interacting with or relying on common affiliations and relationships that advance or maintain their relationship (Stafford & Canary, 1991). This category typically did not refer to a shared parental network but other networks, including other siblings, extended family members, shared schools, or friend groups. Network maintenance behaviors included a half sibling meeting or engaging with a spouse or friend group of their sibling, engaging in whole family rituals,

and interacting with nieces and nephews. Connecting with a half sibling over shared networks and/or showing an interest in a sibling's social network suggested a sibling was interested in learning about and putting in effort to cultivate a positive relationship.

Participants' diaries included entries such as, "[My half sister and I] talk about her daughter every day. (P#19)," and "Today was one my daughter's birthday and my [half] sister called to wish her a happy birthday." (P#22). These two examples illustrate the importance of shared blood-related networks. Other participants emphasized the importance of marriage-bound networks, "[My half-sister] has been lonely because her husband has been working a lot lately. My wife and her get along good so we all enjoy talking to each other." (P#17). Another participant identified his half sibling meeting his romantic partner as a turning point in their half sibling relationship, contributing to its current positive valence.

> When I came back home, I really tried to make sure I hung out with them, did things with them, but then especially as I started dating, making sure that I did things with my girlfriend *and* them so that they felt a part of that. My little [half] sisters feel very connected to her and so I think that was a huge part of bringing my friends into that realm. And my friends did too, they certainly, know my little sisters. (P#27)

Conflict Management

Although all participants in Studies One and Two commented on a positive half sibling relationship, it is not surprising that conflict occurred as conflict management is a common maintenance feature in close relationships (Stafford, Daiton, & Haas, 2000). Although Conflict is common in most sibling relationships (Cicirelli, 1995), it appeared

to function in unique ways above and beyond typical sibling conflict. Twenty-one participants (64%) referenced conflict in their relationships, resulting in 77 (4%) coded units. Coded nits identified as Conflict Management included partners managing or coping with conflict and included three subordinate behaviors: Understandings, Time/Patience, and Forgiveness.

Understandings. Twenty participants (61%) and 56 (3%) units identified reaching mutual understandings over a conflict with a half sibling, typically in reference to perceived finite or somewhat 'resolved' conflict. Understandings at times illustrated how half siblings helped other family members (such as a half sibling and shared biological parent) cope with conflict.

> We sort of had a talk with the three of us trying to come to fully resolve the issue from last night. I played a bit of a mediator as I usually do between my younger half sister and my mom. My mom was voicing her concerns about last night and my sister was trying to explain her side, and I was showing them both to see each other's perspectives on it. P10

Others reported similar experiences, although their role in managing conflict through Understandings included identifying common goals among blended family members. This behavior highlighted that one way half siblings manage conflict is to have open and honest discussions about similar interests, an applauded strategy in conflict and negotiation research (Fischer, Ury, & Patton, 2011).

> My sister and mother kept talking about our options of hotels to choose from for our upcoming vacation. They were in a bit of disagreement over which one to choose due to different tastes and prices, but they ended up reaching an agreement

> because I reminded them how this vacation was entirely about spending time with one another and enjoying the moment, not those other things. (P#18)

A theme unique to maintenance within a blended family included half siblings coming to understand their relatedness. One participant explains.

> So my mother and my stepfather got married after [my half sibling] was born… The reason I mention that, just because I think when they did get married, that was the first time [my half brother] really got to understand the concept of the structure of his family, and he didn't know what a half sibling was, but I think on that day, he began to understand that there was a bit of structure to his family in some way, and just the idea of marriage, and what it meant for our mom and his dad to come together like that, so it was important for him in knowing his family make-up. (P#29)

Indeed, coming to fully understand the blended nature of their family structure was significant for participants, and appeared to positively impact their communication with a half sibling. Furthermore, participants reported the positive implications of both half siblings coming to fully understand the varied and often opposing perspectives of their different family experiences (for the older half sibling, family experiences prior to the divorce, remarriage, and birth of a half sibling; for the younger half sibling, experiences growing up in an "intact" family form). One participant specifically detailed coming to understand these unique familial perspectives as a turning point in his positive relationship with his younger half sister.

> We really had to hash a lot of things out, but that's where we really started, I think from there, being able to gain more of an understanding of each others'

> experiences. We really had more of a positive relationship coming out [of that conversation] because I began to understand that she won't have the same perspective about [our parents] as I do. That's where I realized I never want to be the person that's like ... I don't want to tear down her nuclear family, but at the same time, I want her to know where I'm coming from too. We've now gone to a point where now she understands where I'm coming from too (P#21)

Coping with conflict through reaching mutual understanding contributed to whole-family conflict management and provided a unique glimpse into how half siblings fully come to understand their family structure, including the distinctive experiences of siblings born pre and post restructuration.

Time and patience. When detailing how they manage conflict within their family structure, many participants in Study One voiced the need for time to pass in order for them to cope with familial conflict and mend relationships. Importantly, this relational maintenance behavior was not reported in the diary study but was prevalent in retrospective interviews only, likely because the two-week diary study did not allow sufficient time to pass. Nevertheless, nine interview participants (27% of total participants) and 15 (1%) units referenced Time and Patience.

This theme echoes exiting research on the benefits of time in cultivating resilient stepfamily relationships (Braithwaite et al., 2018; Waldron et al., in press). Time may be especially important for older half siblings who may be reluctant to or even resist their new family form early on during restructuration. Time and Patience as a relational maintenance behavior often emphasized the passing of months or even years as vital in getting use to a new family structure and/or overcoming envy toward a half sibling who

was perceived to take up resources (such as a parent's attention) once reserved for the participant alone. One participant reflected on how Time and Patience eventually contributed to a positive change in her half sibling relationship.

> When [my half brother] showed up, I was like, "I hate everybody. Go!" Because I was from a previous marriage, I felt like I was kind of on the back burner for a really long time. I always felt like it was me joining my mom's new family. It took a long time and took me probably about 15 years to not feel that way anymore. (P#31)

Similarly, another participant mentioned how this maintenance behavior helped with her envy and jealousy toward her younger half sibling.

> [My half sibling] was sick a lot and required a lot of attention. I felt like [my half brother] was taking [my mom] away from me a little bit as a [any] young kid would think. It was just the typical 'trying to figure out how to deal with this interruption of our everyday lives'. Then it just seemed to get better. [My half brother's] health got better and our relationship and how [I felt] got better. (P#5)

Forgiveness. The last way participants referenced conflict management was to discuss offering or receiving forgiveness in their half sibling relationship. Although important, only 3 participants (9%) and 6 units (<1%) were characterized by forgiveness communication. These units encompassed both verbal/direct and/or nonverbal/indirect ways of communicating forgiveness (Waldron & Kelley, 2008). One participant disclosed in her journal the importance forgiveness had in her half sibling relationship, specifically after a half sibling committed a perceived transgression.

> [This] communication with my half sister stuck out the most to me because she texted me to thank me for something, which does not always happen very often. She thanked me for the food I cooked for her at the start of the weekend. She had invaded my house prior to the big storm last week, although she pretended like she was just dropping by. She texted me to say thank you for the food, which is her [way of] apologizing. (P#24)

Forgiveness also appeared to offer a way to not only repair a half sibling relationship but also to potentially preserve it from future conflict. These examples illustrate how forgiveness may foster resilient relationships (e.g. Waldron et al., in press; Carr & Wang, 2012; Kloeber & Waldron, 2017). An interview participant explains.

> [After she reached out to me] I was just like, "I know that I've not been the best brother. I know that I've not always been there, but ... " That's where I started saying, "I am sorry you feel this way…. But [my half sibling relationship] is now probably one of the closest sibling relationships that I have because we've gone through that tumultuous relationship and come out the other side. We've had to work through some really, really ugly things. (P#21)

Sharing Tasks

Twenty participants (61%) and 40 (2%) units referenced siblings performing responsibilities specific to or expected of the sibling relationship. Sharing Tasks has previously been found as a common relational maintenance behavior among romantic partners (Stafford & Canary, 1991), but Canary et al. (1993) also suggest sharing tasks may be used by other types of relatives more frequently than expected. The most frequently reported task within this category was babysitting that participants mentioned

was a shared expectation for the sibling relationship. For older half siblings, babysitting was an expected task that included interacting with their younger half sibling. Participants saw this task as beneficial to building their relationship with a half sibling. A participant wrote in her diary:

> My [half] sister, who just had a daughter back in October, said she is going to find a second job to get an apartment for her and her daughter. I told her I am going to babysit for her whenever she needs to work, as will my twin brother as we should and she would do the same [for us]. (P#19)

For this participant, babysitting was something she "should" do due to a sibling bond. The participant also noted this was a task that would be done in return ("would do the same") if and when she needed it in the future. Another participant echoed the prevalence of sharing time with a half sibling due to this expected shared task, "[My twin brother and I] were always spending time with [our half sibling] because we were always babysitting. We babysat [our half sibling] a lot, obviously, since my mom would never pay for babysitters when she has two kids. (P#27)". Babysitting appears to be a common activity and way to maintain sibling bonds, including half biologically related sibling relationships.

Assurances

Assurances are future-based message that captured how half siblings communicate their intention to continue in the relationship (Stafford & Canary, 1991). Seventeen participants (52%) and 39 (2%) units included communication practices where siblings stressed their desire to continue their positive half-sibling relationship into the future. Assurances also included a sibling emphasizing that sibling resources would

continue into future interaction (such as social support, affection, and self-disclosure). For example, one participant wrote in her diary, “I also spoke to my half sister and asked her what she wanted [for Christmas], and she said ‘Love’. I told her I will always give that to her.” (P#4). This participant is assuring and communicating to her half sibling that the resource of love and affection will always be available to her when needed.

Another participant reported in her diary a conversation she had with her mother and half sister, where they emphasized the importance that their relationship remain strong and positive in the future.

> That conversation led into us talking about staying close as a unit, us girls needing to stick together. The whole conversation meant a lot to me because it is the perfect example of how lucky I am to have my mom and sister in my life and how we were all saying we need to make sure to keep doing that. (P#10)

Similarly, another participant signaled the importance of staying together as a tight sibling unit in the future, and used the statement as validation that their relationship would improve from a former transgression.

> I distinctly remember this really positive conversation with my little [half] sister [after we hadn’t spoken in a while]. I distinctly remember that conversation being one that I was like and told her, "Okay, I want to be better. I want to do better. I want to be able to be this brother that you can turn to and always rely on." (P#21)

Assurances served as a way to reduce uncertainty and ensure half siblings that one intended to remain in their life and in a positive way.

Awareness of Maturity

Awareness of Maturity emerged as a new maintenance category in the data. Fifteen participants (45%) and 45 (2%) units referenced how an older half sibling's awareness of their younger half sibling's maturation positively contributed to relational maintenance. Participants reported noticing similarities they now shared with a sibling that were not noticed before, as a result of the younger sibling becoming more mature and therefore able to share common interests with an older sibling. Awareness of Maturity also included seeing a sibling as more of a peer/friend than a younger sibling. Although this maintenance category is likely a result of all participants being older than the sibling they reported on, some participants mentioned maturity and age as contributing positively to the relationship if a large age gap made the family's "blendedness" obvious to outsiders. One participant explains this theme.

> Then just our relationship I think developed more after that. I think it just came from him being older, and then yeah, just being older I think helped a lot… Just so we could relate to each other more, I guess. It's hard to relate to a six year old, and I guess we could just be more like friends in a way, than maybe only his big sister. Yeah, [we] just developed more as friends. (P#26)

Another theme central to this new maintenance behavior included bonding over venting about a shared parent, but only once the younger half sibling reached sufficient maturity to be able to discuss such a topic.

> I think it wasn't until I left for college that I got the chance to sort of connect with [my half sister] more because she's older and she can sort of understand what's happening a lot better. I mean, I can talk to her about our parents and like why our

> mom is frustrating sometimes and why my dad is frustrating and why our situation is frustrating at times versus before I didn't really get a chance to talk to them [about these things]. IV 9

Seeing a younger half sibling as mature contributed to a positive half sibling relationship, where siblings could speak more openly about shared family networks and in a friendlier manner.

Mentoring Behavior

Mentoring Behavior was another addition to existing sibling relational maintenance research. Fifteen participants (45%) and 54 (3%) units articulated moments where participants mentored a sibling by modeling behaviors typically reserved for parents or caregivers. Units coded in this category went above and beyond advice and included performing responsibilities typically performed by parents. Some participants simply stated they, “felt a responsibility to make sure [my half sibling] is on the right path” (P#13), including “always checking on how [they] are doing in school”. (P#13). Others enacted these behaviors to replace mentoring their younger half sibling was not receiving from his or her parents.

> [For my half sister], I'm sister/aunt/mom thing and friend all wrapped into one… Because she is so young… My feelings to her are very protective, and in some ways I'm way more protective than her [biological] mom is. I'm just like, "No, don't do that. You get down. Don't you do that!." I just want her to be safe and happy and healthy, and to continue to grow up. And I want to be there for her to grow up. (P#8)

Participants felt responsible for the wellbeing of their younger sibling, possibly in an attempt to shield them from negative outcomes the respondent experienced from a lack of mentoring as a child. One participant describes this behavior below.

> [My half brother] asks me about politics and sexism and whiteness. And I explain it to him. It's my job, because my mom's not going to do it, clearly never did it for me, to like guide him in this way because my mom doesn't understand that stuff either. That's unfortunate for our family, but whatever it's helped [my half sibling and I] bond on teaching moments like that". (P#4).

For this participant, filling in to mentor her younger half sibling when she felt her parent failed to do so was perceived upon as helping bond and maintain their positive sibling relationship. Mentoring Behavior was not just a function of being an older sibling, but was a way older half siblings taught their younger sibling to be resilient by learning from and recalling the hardship of their own childhoods where they experienced a lack of mentorship.

Instrumental Support

Instrumental Support maintenance behaviors refer to exchanges of tangible resources intended to enhance the well-being of a recipient, and seven participants (21%) and 15 (1%) units described this type of support. Instrumental Support included providing material support such as money ("She reminded me of the money I agreed to loan her in order to help pay her deposit and other moving expenses". P#18), transportation ("He works at the same place I do, and since I don't have a car right now, he is taking me to and from work every day, which really helps me out a lot in the freezing cold weather." P#19) or shelter ("I let her stay the night" P#24). Instrumental

Support was dropped as a code in Study One because the behaviors were not mentioned in retrospective accounts of half sibling development. However, the Instrumental Support code appeared in participants' daily diary entries in Study Two. Thus, instrumental support may not be viewed as significant (in comparison to social support for example) when respondents reflect on the overall trajectory of a half sibling relationship, but may be illustrative of the more common ways siblings offer support on a day-to-day basis.

Research Question Three

The final research question sought to ascertain how half siblings create positive relationships into adulthood and how the systematic nature of a blended family structure influences this positive relational development. To answer the first part of this research question, maintenance behaviors across both studies were identified as prosical and antisocial. Prosocial maintenance refers to positive behaviors that promote closeness, trust, and liking (Canary & Daiton, 2006; Myers & Weber, 2004) while antisocial behaviors are those that tend to be negative and do not increase relational satisfaction. Understandably, the maintenance behaviors within the present research that were identified as "antisocial" did not appear to contribute to positive half sibling relational development. Instead, these behaviors often negatively affected the half sibling relationship. Antisocial maintenance behaviors are indicated in Table 1 by an asterisk. The relational maintenance behaviors that did contribute to positive half sibling relationships into adulthood included: Positive Thinking/Reminiscing, Social Support, Prosocial Actions, Affectionate Communication, Humor, Joint Activities, Self-Disclosure, Empathetic Behavior, Prosocial Parental Intervention, Advice, Confirmation, Topic Avoidance, Alternate/Separate Activities, Negotiated Autonomy, Phone

Calls/Video Calls/Texts, Social Media/Email, Cards/Letters/Care Packages, Networks, Understandings, Time/Patience, Forgiveness, Sharing Tasks, Assurances, Awareness of Maturity, Mentoring Behavior, and Instrumental Support.

The latter part of this research question inquired about the systemic influence blended families have on half sibling relational development. Findings determined that many of the reported relational maintenance behaviors functioned uniquely in a blended structure, as compare to full and step sibling relationships. For instance, the addition of the maintenance behavior Parental Intervention illustrated how half siblings benefitted from parental prosocial intervention that normalized and encouraged interaction between half siblings. Prosocial Parental Intervention also included efforts to increased half siblings contact and relationships with the parent of a half sibling that they were not biologically related to. Making connections across blood and marital lines proved beneficial in cultivating a positive sibling relationship within a blended structure.

Moreover, a theme within Self-Disclosure maintenance included half siblings being open and honest about how their family came to be, including honest discussions about the family prior to divorce, restructuration, and a half sibling's birth. Confirmation maintenance also included how a blended structure's typical forms of address, such as "half" sister or "half" brother, were transformed. Participants chose not use these markers of blended structure and instead omitted the address term "half" to confirm that a sibling was important in their lives, no matter the percentage of blood-relatedness. The behaviors of Understandings and Time/Patience within the Conflict Management category were also reflective of unique conflict practices in blended structures. Understandings maintenance included the theme of half siblings coping with conflict by coming to

understand their relatedness and Time/Patience appeared essential in cultivating resilient blended family relationships where the passing of time is especially important for older half siblings who at first resisted or were reluctant to embrace their new family form.

Lastly, Awareness of Maturity and Mentoring Behavior were two types of maintenance that functioned in unique ways in a blended structure. Awareness of Maturity allowed older half siblings to see their younger sibling in a new light and provided a newfound awareness of the varying perceptions each sibling held of their family (the older half sibling's perspective of the experiences prior to restructuration, and the younger sibling's perspective of only knowing an intact family form). Moreover, Mentoring Behavior highlighted how a half sibling may have felt the need to step in to serve a role they feared their shared biological parent was failing at during childrearing.

CHAPTER 5

DISCUSSION

The two studies conducted for this project shared one purpose: to locate the communication practices within positive half sibling relationships. This project arose in response to the numerous studies that focused on the heightened levels of conflict associated with divorce, remarriage, and blending families (e.g., Baxter, Braithwaite, Bryant, & Wagner, 2004; Schrodt, 2006; Ganong & Coleman, 2017). Although it is true family restructuration rarely occurs without considerable hardship or conflict (Baxter, Braithwaite, & Nicholson, 1999), recent studies indicate that many families adapt to change and display high levels of functioning as they transition (Golish, 2003; Coleman, Ganong, & Russell, 2013; Jamison, Coleman, Ganong, & Feistman, 2014; Papernow, 2013). Using this research as starting point, the current project sought to determine the prosocial maintenance behaviors that contribute to positive blended family development.

A drawback of current blended and half sibling research is not only its focus on conflict at the expense of how to cultivate positive relationships, but also its focus on early development instead of the overall trajectory of a blended family. The current research contributes to this gap in literature by focusing how and to what extent half siblings communicate into adulthood and which of their communication practices contribute to resilient relationships in the wake of family restructuration.

To determine behaviors associated with positive half sibling relationships, participants reported on the maintenance strategies used in their relationships. Myers and Weber's (2004) measure of sibling relational maintenance has identified confirmation, humor, social support, family visits, and verbal aggression as behaviors individuals use to

maintain their full sibling relationships. Myers and Weber also investigated the link between such behaviors and the relational outcomes of liking, commitment, and trust. They found that confirmation, humor, social support, and family visits (attendance at shared family events) were all correlated positively with liking, commitment, and trust. The present project found these behaviors were common within adult half sibling relationships and argues that such prosocial behaviors may lead to more positive relationships. That is, the study confirms the importance of siblings supporting each other and using humor positively, which may result in increased liking, commitment, and trust, likely relational features of a positively perceived relationship.

Myers and Weber (2004) also determined that verbal aggression did not positively correlate with postive relational outcomes, arguing that verbal aggression may have little impact on sibling liking, commitment, and trust. The authors speculated this might be a result of siblings not considering verbal aggression to be strategic maintenance, but rather a routine and common function of siblinghood. The present research also found that antisocial behaviors such as verbal and nonverbal aggression did not contribute to a positive bond among half siblings. For example, in the construction of turning point graphs participants identified a negative or neutral/no change in relational positivity when referencing a turning point event including antisocial behaviors. Furthermore, participants across both studies discussed antisocial behaviors as typical of any sibling relationship, especially the "quintessential bickering" (as one participant put it) occurring during adolescence. Indeed, antisocial behaviors may not contribute to a positive half sibling relationship because they may be assumed as typical (although not necessarily helpful) features of any sibling relationship. This is an interesting insight as antisocial

behaviors such as avoidance or allowing control may in fact be useful in maintaining relationships.

Given that the relational maintenance behaviors in this research are evident in past research on other types of relationships (including romantic relationships and platonic friendships, Stafford & Canary, 1991; Guerrero, Eloy, & Wabnik, 1993), the current studies also point to the usefulness of evaluating existing maintenance categories across various relationships. Myers et al. (2001) was the first to confirm Stafford and Canary's (1991) original typology for romantic partners was transferable to research on full siblings, finding positivity, openness, assurances, networks, and sharing tasks were all used to maintain sibling relationships. Indeed, the maintenance categories of Positivity, Joint Activities, Openness, Advice, Avoidance, Networks, Conflict Management, Sharing Tasks, and Assurances found in this research are also evidenced in past relational maintenance research, although they were originally part of typologies for *romantic* or *platonic friend* relationships (Stafford & Canary, 1991; Canary et al., 1993, Stafford, Daiton, & Hause, 2001; Guerrero, Eloy, Wabnick, 1993).

The overlap in maintenance strategy use across romantic, friendship and sibling relationships is an interesting yet puzzling finding, because in many ways siblings do not function in the same way as romantic or platonic friend relationships. Unlike romantic or platonic relationships, sibling relationships are assigned as opposed to being earned relationships (Cicirelli, 1995). Where romantic partners may use maintenance to continue a relationship (Dindia & Canary, 1993) and platonic friends may use maintenance to keep a relationship at a specific state (Guerrero, Eloy, Wabnick, 1993), siblings may engage in maintenance for reasons unique to their involuntary nature. However, Stafford and

Canary (1991) argue *all* on-going relationships require maintenance and generally such behaviors are believed to be proactive, constructive, and rewarding (Canary & Stafford, 1994) and to lead to liking, commitment, and trust, all essential results features of any functional interpersonal relationship (Canary & Stafford, 1994; Myers & Weber, 2004).

Myers and Weber (2004) argue these similarities across relationship types may exist because sibling, romantic, and platonic relationships all are rooted in intimacy (Myers & Weber, 2004); that is all of them involve a mutual exchange of closeness that contributes to affection, mutual trust, and cohesiveness between partners (Prager, 1995). Sibling intimacy, unlike other relationship types, is typically forged in childhood and often remains steadfast into adulthood such that unique family experiences contribute to feeling closer with a sibling (Cicirelli, 1991), and *positive* family specifically are likely to lead to closer, more intimate adult sibling relationships (Pulakos, 1987). To ensure that participants in these studies did, in fact, have positive relationships, respondents were assessed on an intimacy scale using the ASRQ and were determined to be in intimate, warm sibling relationship prior to data collection. Therefore, the findings regarding relational maintenance behaviors evidence that prosocial maintenance between half siblings may be a function of the intimate relationship and, therefore, existing maintenance typologies can be applied.

It is important to note there were a few differences in the maintenance behaviors identified in Study One and Study Two. Study Two identified an additional maintenance behavior (Instrumental Support) not present in Study One. Additionally, respondents in the second study did not include the maintenance behaviors of Time/Patience and Awareness of Maturity. The differences across the two studies can be explained in two

ways. First, the methodological differences between recording diary entries and giving an interview may have led to this discrepancy. A diary allows a participant creative freedom to write about topics they wish (although they were provided a prompt and instructions). In contrast, a semi-structured interview is guided in structure by the researcher. The more structured nature and face-to-face involvement of a researcher may have led participants to disclose differently. For instance, the researcher asked participants to look back on how their relationship changed over time, possibly encouraging siblings to take a broader view on time and maturity that was not stipulated as such within the diary method.

Second, reporting about one's daily experiences versus offering a retrospective account of the trajectory of a relationship in its entirety may lead to differing outcomes. For instance, the shortened temporal nature of the two-week diary may not have allowed enough time to elapse for half siblings to become aware of a change in maturity of their younger siblings, nor were they able to observe how time/patience contributed to solving conflict. The diary study specifically asked participants to journal about what they did that day, but it did not ask participants to reflect on how their present day communication differed from prior days or years. Thus, participants were neither encouraged nor allotted enough time to reference the maintenance categories of Time/Patience and Awareness of Maturity. Indeed, these two maintenance behaviors require that a considerable amount of time pass in order for them to be enacted. Waldron et al. (in press) argues that a prolonged passage of time (even years from adolescence into adulthood) is needed for some stepfamilies to offer forgiveness which led to resilience. Thus that an extended time period may be needed to note these relational maintenance behaviors, and therefore cannot be accounted for within in a brief daily diary method.

Additionally, Instrumental Support was identified in diary entries but not in retrospective interviews. This finding suggests that tangible support such as financial assistance, cooking a meal for a sibling, or offering a ride are noted in day-to-day interaction with a sibling but do not "stand out" as significant when one looks back over the entire trajectory of a relationship. Instrumental support may be enacted by individuals within a positive half sibling relationship, but it may be less central to a retrospective view of the relationship when referencing what pushed a relationship toward positivity overtime. Instead, *social* support may be more significant during stressful life events (e.g. Cluck & Cline, 1986; Lehman, Ellard, & Wortman, 1986) and even within the everyday communicative contexts of individuals' daily interactions. For instance, Duck (1994) argues social support emerges from the everyday behaviors that make up our relationships, noting that experiencing the routine behaviors of, and engaging in everyday talk with, another person provides us knowledge needed to assess when social support is needed or useful. According to Duck, everyday talk between relational partners offers a supportive function in that it provides a context for individuals to transition from everyday talk to "crisis" talk (Duck, 1994), where support would prove useful and even necessary. As such, when referencing the everyday communication that was memorable to participants over time, social support conversations may be more significant/memorable than exchanges of tangible support.

Theoretical Implications

Relational maintenance. Previous researchers (e.g. Myers & Weber, 2004; Myers et al., 2001) also have called for researchers to examine *additional* sibling maintenance behaviors not already present in relational maintenance typologies. A

significant contribution of the current research is its answer to this call by identifying behaviors unique to *half sibling maintenance* not already represented by existing maintenance typologies. The present research located three new maintenance behaviors that focus on the influence of a blended structure on how siblings maintain their relationships. Parental Intervention (Antisocial and Prosocial), Awareness of Maturity, and Mentoring Behavior are all novel contributions to sibling relational maintenance research. Moreover, these findings extend existing relational maintenance research and should further be explored by future scholars.

Parental Intervention specifically appears to provide an important addition to relational maintenance research in its connection to existing family research on "spillover effects". Previous scholars note that a "spillover effect" occurs when emotions and affect in a marital realm transfer to a parent-child relationship (Krishnakumar & Buehler, 2000; Buehler & Gerard, 2002) and vice versa. Spousal conflict and negative emotions are most noted to "spillover" into parent-child relationships (Crockenberg & Langrock, 2001). For example, family scholars have repeatedly found that continued parental conflict adversely affects children, possibly even more so than divorce (Afifi et al., 2010; Rhodes, 2008). relationship. For instance, the present research shows Antisocial Parental Intervention (such as having a strained relationship between one In contrast, the present research argues that "spillover" can occur from parents into the *sibling* sibling and a shared biological parent or stepparent) negatively affects the half sibling relationship.

Interestingly, this research also indicates that "spillover" does not always involve negative emotions and/or involvement as previously argued (e.g. Krishnakumar & Buehler, 2000; Fosco, & Grych, 2010), but rather that a *positive* spillover effect occurs

within blended families as well. Few scholars have viewed spillover in this way (e.g. DeBoard-Lucas et al., 2010), but the present findings show that when parents positively intervened in their children's' relationship, the siblings were likely to reap positive benefits. For example, participants referenced parents encouraging half sibling contact (such as suggesting them to reach out and provide comfort to a sibling in need) that in turn served to help the sibling dyad maintain their relationship. Moreover, having a positive relationship with a biological or step parent had a positive effect on half sibling bonds, showing the potential value of exploring the positive side of "spillover" within family systems.

Indeed, prosocial intervention of a parent may solidify the positive relationship between half siblings. As the figure in Appendix V indicates, relational maintenance behaviors connect half siblings together, but the prosocial intervention of parents may act to further secure this relationship. In the figure, two half siblings are represented as the first links in the opposing ends of a chain. The additional chain links that connect the two siblings represent the maintenance behaviors found in this research that contribute to a positive relationship. Without the presence of the lock figure, these siblings would still be "connected" through the maintenance links that connect them together. In essence, siblings may be able to maintain their relationships with these behaviors alone. However, the lock represents how prosocial intervention on the part of the parents within a blended family may further solidify this connection to make the sibling chain strong and durable. As such, this figure indicates the connection between relational maintenance and the systematic nature of blended family development on half sibling bonds.

Resilience theory. This research also contributes to existing literature examining the connection between relational maintenance and resilience. In Canary, Stafford, and Semic's (2002) research on maintenance amongst marital dyads, they argue resilience in marriage is linked to the manner in which partners maintain their relationships. According to the authors, maintenance allows spouses to preserve or continue their relationship in the wake of normative relational stressors. They further argue resilience not only concerns how partners or individuals adapt in the wake of major adversity, but also refers to how individuals respond in resilient way to everyday challenges (such as conflict or adapting to change).

The above argument is similar to Zautra's (2009) discussion of the two domains of resilience, typically referred to as first and second order resilience. First order resilience refers to the ability of individuals to *recover* or bounce back after a challenging event (Masten, 2001, Zautra, 2009). In essence, resilient people are more capable of regaining equilibrium in a variety of areas, including the physical, psychological, and social realms (Zautra, 2009). Similarly, Dindia and Baxter (1987) found that maintenance strategies can repair relationships that have gone through difficult or even troubling , which Canary, Stafford, and Semic (2002) argue promotes relational resilience. Similarly, the maintenance behaviors in this research (such as disclosing the backstory of how a family came to be or communicating to an older half sibling that past familial hardship was not their fault) appear to aid half siblings in recovering from hardship related to restructuring a family form. This finding was further illustrated in Study One when participants referenced the hardship of divorce and remarriage at the start of retrospective interviews (when asked to tell the story of how their half sibling relationship came to be)

and then continued on to describe how turning points (including stories that reference maintenance behaviors) contributed to a positive change in relational perception with a half sibling (as they indicated on the turning points graph). This evolution of participant disclosure may reveal how such behaviors contribute to a positive relational trajectory as they adapt from the adversity of restructuration. Moreover, this research further identifies the explicit communication practices that contribute to positive half sibling relationships, such as how not using the addressing term "half" (found across both studies), can be used after restructuration to help promote positive half sibling relationships. These explicit practices may also assist a family to recover in the wake of adversities common to restructuration.

Second order resilience refers to *sustainability*, or the capacity to continue forward and endure after adversity (Bonanno, 2004; Zautra, 2009). According to Zautra (2009), second order resilience calls for researchers to look at how people maintain their psychological wellbeing and their relationships amongst the ongoing challenges life poses. Indeed, maintenance strategies are defined as activities that repair, sustain, and continue relationships in desirable ways (Canary & Stafford, 1994). They also can be interpreted as markers of resilient relationships because of their ability to sustain wellbeing and normative relational functioning. For example, interacting with a half sibling frequently and in a positive manner appears to sustain the positive half sibling relationship. Indeed, family scholars (e.g. Patterson, 2002) argue the key to studying family resilience is in identifying how family's "show competence in accomplishing family functions" (p. 17, Patterson, 2002).

The present study argues the identified relational maintenance behaviors of positive half sibling relationships can: explain how older siblings are resilient in the wake of restructuring hardship (recover); and describe ways half siblings use maintenance to be resilient against the common everyday stressors of typical sibling/familial relationships (sustain). Relational maintenance may, therefore, demonstrate both first and second order resilience, contributing both to the ability to recover or return to normal after adversity and the ability to thrive in the aftermath (Zautra, 2009). This two-fold implication is especially helpful to family resilience scholars who are interested in the various interpretations of resilience. Indeed, research on family resilience is important, as families are likely to encounter various conflicts across their trajectory and life-course (Waldron, 2017) as they adapt to change, deal with conflict, and attempt to maintain satisfying relationships.

The connection between resilience and relational maintenance in this research also supports new conceptualizations of resilience theory, including the Theory of Resilience and Relational Load (TRRL) (Afifi, Merril, & Davis, 2016). Afifi and Harrison (2018) argue relational maintenance serves as a "booster shot" that helps manage stress and fosters resilience in relationships. The authors also state that resilience is a process that is created and maintained through communication, and, therefore, is a process that can be learned and changed over time through enacted behaviors. Moreover, they argue a focus should be placed on how people maintain their close relationships and how this maintenance affects how stressed relational partners (such as family members) feel while communicating with their loved ones. In essence, even though individuals deal

with stress internally, they often talk about stress with their relational and social systems thereby making the system itself a stress multiplier or reducer.

TRRL (Afifi, Merril, & Davis, 2016) is grounded in emotional capital theory (Feeney & Lemay, 2012), which states couples create emotional capital overtime through sharing positive emotional experiences which protect them when future relational threats occur. Above and beyond positive emotional experiences, TRRL focuses specifically on how relational partners and family members use maintenance behaviors to influence how they appraise stress and the communication patterns they use during stressful moments (Afifi & Harrison, 2018). TRRL argues having a communal family orientation (a focus on caring for the wellbeing of the whole system, not just the individual) and maintaining relationships on a daily basis allows partners or family members to appraise stress in a more positive way, including enacting more positive communication patterns during or in response to stressful moments. Investing in relationships via maintenance overtime builds emotional reserves that can be drawn from in future relationally stressful moments, preventing participants from experiencing depleted resources or relational load (the burnout experienced after prolonged chronic stress on a relationship) (Afifi & Harrison, 2018). The maintenance behaviors found in the present study may also contribute to these emotional reserves and may serve as stress ameliorators, leading to more positive sibling and whole family relationships.

In addition to first and second order resilience and TRRL, participants sharing the backstory or origin of their blended family to a younger half sibling also extends past findings on how sharing "war stories" contributes to resilient relationships (Beck & Torres, 2015) as families engage in sensemaking over traumatic events (Koeing, Kellas,

& Trees, 2006). For instance, the maintenance behavior Awareness of Maturity suggests that the passing of time and increasing maturity of a younger half sibling allows siblings to have conversations about how their family came to be, including disclosing about the hardship of a divorce and remarriage that led them to their relationship today. These stories not only help blended family members affirm their shared identity as a family but can be passed down to additional or future family members as resilience-promoting lessons (Beck & Torres, 2015), as seen in the Mentoring Behavior strategy where participants referenced mentoring a younger half sibling on how to deal with parental conflict should their biological parents also experience a divorce.

The present research also suggests resilient blended families engage in systemic resilience, where prosocial parental intervention positively impacted sibling relationships. This finding echoes past research on restructured families (Braithwaite et al., 2018; Waldron et al., in press) that found that the whole family system benefitted from perceived repaired or constructive parent-child (or stepparent-stepchild) relationships. Identifying Parental Intervention as a maintenance behavior is especially important as it notes the importance of exploring sibling relationships from a systems perspective, where when one aspect of that system is altered, changed, or affected, the whole system must work together to restore proper functioning (Minuchin, 1985). Indeed, to manage conflict or adversity common to restructuration, the whole family must engage in prosocial communication practices to promote resilient relationships, including half sibling relationships. Moreover, Parental Intervention (as discussed above) shows "spillover" can occur from spouses or parents (step or biological) into the sibling relationship in both negative and positive ways, explicating the systematic nature of these unique sibling

dyads. The findings in this research exemplify Zautra's (2009) claim that a whole system must utilize constructive communication practices to bounce back and move forward after adversity threatens the whole.

Lastly, one of the findings of this research is that resilient and positive half sibling relationships do not require extraordinary acts or specific gestures but are accomplished through daily and frequent communication. Half siblings in both studies indicated the importance of having daily or at least weekly conversations, even over trivial topics such as the weather or check-ins on how their day went. This feature of blended family resilience echoes the work of scholars such as Masten (2001), who argues resilience is made up of ordinary rather than extraordinary processes that are embedded within mundane, everyday communicative processes such as having supportive and 'normalizing' family interactions. Buzzanell (2010) also claims individuals "communicate resilience into being" through how they communicate with each other (such as refusing the "half" addressing term in discussions to or about their sibling). This research contends that resilience is enacted through relational discourse and is, therefore, a relational accomplishment and not a personal quality (Zautra, 2013; Waldron et al., 2018).

Practical Implications

This research offers guidance on how blended families and half siblings themselves can cultivate positive relationships as siblings grow into adulthood. First, blended family resilience appears to be cultivated through everyday relational discourse (Masten, 2001; Buzzanell, 2010), such as being open with one another via self-disclosure or spending time discussing shared interests or engaging in joint activities. This research

clearly illustrates the important yet often overlooked significance of everyday conversations.

Furthermore, the mere frequency of contact between the half siblings in this research may have contributed to their positive bond. For instance, diary participants referenced checking in on a sibling multiple times a week, even if just to hear what they did that day. Moreover, participants across both studies indicated using various communication mediums such as *Snap Chat* and video calls, which allowed them to feel as if they "interacted" with their half sibling, especially if they were geographically distanced. Thus, frequently communicating with a half sibling may be essential to cultivating and/or maintaining a positive relationship into adulthood. Similarly, Goodboy and Meyers (2010) found intimate adult sibling dyads were characterized by using relational maintenance behaviors at a higher frequency and engaging in various communication channels, concurring with the present study that the frequency of contact or maintenance influences sibling relationships. As such, practitioners might then consider encouraging half siblings to interact more to build stronger relational bonds.

Third, the present study offers insight into the constructive conflict management strategies used by half siblings in positive relationships. The conflict management maintenance behaviors of Understanding and Time/Patience signify the importance of the passage of time in the life-course of blended families. The first few years of restructuration are likely plagued by heightened levels of conflict due to ambiguous roles and boundaries (Fine, 2001), grieving of the previous family unit (Bray & Hetherington, 1988; Ganong & Coleman, 1994), and vying for resources (Whiteman, McHale, & Soli, 2011). Research that fails to focus on the longer trajectory of blended family

development overlooks the importance of time for this unique family structure. In short, blended family members benefit from patience and allowing their relationships to mature to help them cope with the hardships of restructuration, similar to past findings (Waldron et al., in press).

Fourth, the most significant practical implication of these findings is the systemic nature of blended family resilience. Biological and stepparents should ensure they are positively intervening in their children's relationships. For example, parents could encourage half sibling contact and normalize connections by emphasizing blood relatedness over half-blood relatedness. Moreover, it would serve half siblings well if parents were aware that their relationships with either child might negatively affect the sibling relationship; therefore, parents should be encouraged to maintain positive parent-child and stepparent-stepchild relations. Consequently, practitioners may see a benefit from involving the whole family in family therapy or counseling.

Limitations and Future Directions

Although this research adds to existing literature on sibling relational maintenance and resilient restructured families, several limitations should be acknowledged. First, participants in this research were asked to select a half sibling with whom they were in frequent contact. Therefore, these findings may be more indicative of high contact half siblings and not half siblings in general. Although the frequency of contact appears to be a contributing factor to these positive and resilient half sibling relationships, this research does not include half sibling maintenance evident within negative half sibling relationships in comparison to see if high frequency, yet negative interactions impact such findings.

Second, the research is also limited because data were collected from only one sibling. The non-dyadic nature of this study does not allow triangulation of data across both siblings within the dyad. Moreover, the focus of the present research was on the older half sibling who had experienced restructuration. Consequently, the findings may be indicative of an older half sibling but not that of their younger counterparts. However, the resilience focus of this study called for investigating the perspective of the individual who most notably experienced the corresponding hardship. Nonetheless, it would be useful if future studies employed a dyadic methodology to confirm these relational maintenance behaviors occur across both siblings and are not just perceived by an older half sibling.

Third, gender may also have played a role in study findings. Myers et al. (2001) state that female siblings may use relational maintenance behaviors at a higher rate than male siblings. Although the majority of siblings referenced within this research are cross-sex dyads, more of the older siblings were female. Thus, it would beneficial if future studies determine whether the relational maintenance behaviors identified here are more frequent or prevalent among half sisters or half brothers. Moreover, the majority of participants in this research identified their biological mother as the parent they share with a half sibling. Research shows mother-daughter relationships to be closer than other parent-child dyads (Fisher & Miller-Day, 2006; Guerrero & Afifi, 1995), and are often characterized in research as being inherently codependent, supportive, and emotionally bonded (Fischer, 1991). Future research should explore how the gender of a shared biological parent hinders or aids in the development of half sibling bonds, a conclusion that may be especially significant in discussing parental intervention.

In addition to birth order and gender, the race of participants may also limit findings. The majority of participants identified as the same race as their sibling. The one negative case in the study revealed that the participant communicated in unique ways because she was of a different race than her half sibling. Specifically, this individual was the only participant in Study One who did not include the Confirmation maintenance behavior and did not feel a need to avoid using blended addressing terms such as half sibling. Rather, the participant noted she always makes sure to use the word "half" because it was obvious to her sibling and others that they are not full biological siblings because she is of mixed African-American race and her sibling is fully Caucasian. Future studies should explore this unique and possibly additional hardship to restructuration, especially given the prevalence of this family form.

Finally, collecting diary data around the holiday season may have limited or influenced results. Of the sixteen participants in Study Two, seven (44%) composed daily diaries across the Christmas and New Year's holidays, when family interaction is expected to be amplified in comparison to other times during the year. Therefore, data in Study Two may reflect participants in high frequency contact with a sibling due to the time of year and not the typical nature of their relationship. However, the exit questionnaire inquired about this possibly limitation and asked participants if they thought they communicated more in the past two weeks due to it being the holiday season. Four participants (25%) agreed they felt they communicate more with immediate family members across the two-week period due to the holidays, and the remaining 12 (75%) stated they felt the holiday season had no effect or change on how they typically communicate with immediate family members.

Although limitations exist, the present research contributes significantly to existing family literature and practices by identifying the relational maintenance behaviors present in half sibling relationships. Moreover, the findings extend existing maintenance research by the addition of three novel categories (Parental Intervention, Awareness of Maturity, and Mentoring Behavior) that could be productively explored in future studies. These maintenance behaviors may be specific to the blended family structure, and future research should assess if they are present within other sibling types and family forms. Furthermore, resilience research often indicates the added benefits of communicative acts such as forgiveness on the physical health of individuals (Silton, Flannelly, & Lutjen, 2013) and the relational satisfaction of families after transgressions (Carr & Wang, 2012). Therefore, future studies should investigate if the maintenance behaviors within this research correlate with any health outcomes or overall relational family satisfaction.

Moreover, Ganong and Coleman (1994) state that the birth of a half sibling can integrate a stepfamily by "acting as a concrete baby" that solidifies stepfamily bonds, and some participants in Study One noted that the birth of their half sibling ultimately had a positive impact on their relationship with a stepparent. Future studies should explore the prevalence of this claim and investigate if individuals believe the mere birth of a half sibling contributed to their positive relationship with a stepparent, or whether a *positive relationship* with a half sibling led to solidified stepfamily bonds.

In conclusion, findings suggest that older half siblings who have experienced divorce, restructuration, and the blending of two family units *can* be resilient in the wake of the conflict and adversity resulting from this restructuration. Study findings contribute

to existing research on sibling relational maintenance, step and blended family development, resilience, and a systems perspective to studying family communication. Moreover, this research indicates resilient blended families may not hold specialized talents, but instead benefit from frequent and ordinary communicative practices over time. Future studies should continue this line of work and look to the communication practices that contribute to positive relationships across the trajectory of relational development.

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APPENDIX A

STUDY ONE IRB APPROVAL FORM

ASU Knowledge Enterprise Development

APPROVAL: EXPEDITED REVIEW

Janet Alberts
Human Communication, Hugh Downs School of
480/965-7141
JESS.ALBERTS@asu.edu

Dear Janet Alberts:

On 7/20/2017 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Blended Family Resilience and the Communication Practices in Positive Adult Half Sibling Relationships: An Interview Study
Investigator:	Janet Alberts
IRB ID:	STUDY00006271
Category of review:	(6) Voice, video, digital, or image recordings, (7)(b) Social science methods, (7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Recruitment Script JKA Edited, Category: Recruitment Materials; • Final Pre Survey Assessment .pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • IRB V2, Category: IRB Protocol; • Recruitment Flyer, Category: Recruitment Materials; • Interview Turning Point Graph, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Edited_Interview Protocol Script.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Consent V2 , Category: Consent Form;

The IRB approved the protocol from 7/20/2017 to 7/19/2018 inclusive. Three weeks before 7/19/2018 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 7/19/2018 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Bailey Oliver
Bailey Oliver
Vincent Waldron
Ashley Randall

APPENDIX B

STUDY ONE RECRUITMENT SCRIPT

My name is Bailey Oliver, and I am a graduate student in the Hugh Downs School of Human Communication at Arizona State University. I am part of a research team that is studying communication practices between adult half siblings who have an overall positive relationship.

To be included in the study, you must meet the following criteria:

1. You are between the ages of 18 and 35 years old.
2. You have at least one half sibling (a brother or sister with whom you share only one biological parent).
3. You are older than all of your half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive.
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you have any questions about meeting the qualifications for this study, please feel free to email me at Bailey.M.Oliver@asu.edu

If you meet the criteria listed above, you may qualify to take part in an interview study. This study includes a preliminary survey followed by an interview that consists of three parts. The preliminary survey is a questionnaire you take online that asks questions about your relationship with a half sibling. This preliminary survey should take you no more than 15 minutes to complete. Once the preliminary survey is taken, if you qualify, you may be emailed by the lead researcher to schedule a time, date and location for the interview. The interview consists of three parts. First, I will ask general questions about you and the members of your family, including age, ethnicity, number of siblings, and sibling types (i.e., gender). Second, you will be asked to tell the story of how your blended family developed and to identify turning points that occurred during this process. By "turning point," I mean the significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today. (If you have multiple half siblings, you will be asked to focus on the half sibling with whom you currently have the most positive relationship.) Third, I will ask you general questions about your communication with this half sibling and your family generally. The entire process will take approximately 60-90 minutes. Your interview will take place a) in a private office on the campus of Arizona State University, b) in another location of your choice, c) online via the video software Skype. Interviews will be audio recorded, but all

responses to these interview questions will be kept confidential, and at no time will your identity be revealed in the analysis and/or reporting of research results.

Your participation is completely voluntary. At any time throughout the interview you may choose not to answer specific question(s), and you are free to leave at any time if you would like to do so.

If you complete both the preliminary survey and the interview in full, you will receive a $30 Visa gift card. You also will be entered in a drawing to potentially receive an additional $25 Amazon gift card.

Thank you for considering being a part of this study.

If you are interested in participating, please contact me at Bailey.M.Oliver@asu.edu

APPENDIX C

STUDY ONE RECRUITMENT FLYER

Paid Interview Study - Looking for Half Siblings within a Blended Family!

My name is Bailey Oliver, and I am a graduate student in the Hugh Downs School of Human Communication at Arizona State University. I am part of a research team that is studying communication practices between adult half siblings who have an overall positive relationship.

We are looking for participants to participate in a 60 – 90 minute interview via Skype or in person.

To be included in the study, you must meet the following criteria:

1. You are between the ages of 18 and 35 years old.
2. You have at least one half sibling (a brother or sister with whom you share only one biological parent).
3. You are older than all of your half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive.
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you fit the requirements above and wish to participate, please email the lead researcher at Bailey.M.Oliver@asu.edu. You will be emailed a pre-qualifying survey to see if you are right for the study!

If you participate in both the preliminary survey and the interview, you will receive a $30 Visa gift card. You also will be entered in a drawing to potentially receive an additional $25 Amazon gift card.

Thank you for you for considering being a part of involvement this study!

Half Sibling Study Bailey.M.Oliver@asu.edu

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ASU IRB IRB # STUDY00006271 | Approval Period 7/20/2017 – 7/19/2018

APPENDIX D

PRE-QUALIFYING ASSESSMENT

Instructions and Basic Information

Adapted from Stocker, Lanthier, & Furman, 1995

Please fill out this questionnaire to the best of your ability. The questionnaire should take roughly 30 minutes to complete. This questionnaire is concerned with your relationship with your half sibling. If you have multiple half siblings, please think of the half sibling with whom you have the most positive relationship. Answer the following questions only as it pertains to that half sibling. Each question asks you to rate to what degree different behaviors and feelings occur in your relationship. Please answer each question as quickly and accurately as possible. Answer the questions as your relationship is now, not how it was in the past, nor how you think it might be in the future. Throughout the questionnaire, whenever you see THIS SIBLING or YOUR SIBLING, we are asking about the specific half sibling you have selected to discuss. We begin by asking you some general questions about your sibling and yourself. Please choose or fill in the response that most closely reflects your experiences and feelings.

1a) Your age: _____ 1b) This sibling's age: _____

2a) Your gender: Male Female 2b) This sibling's gender: Male Female

3a) How far does this sibling live from you? (Choose one response.)
1) same city
2) different city, fewer than 100 miles
3) between 101 & 200 miles
4) between 201 and 500 miles
5) between 501 and 1000 miles
6) more than 1,000 miles

3b) How often do you and this sibling see each other?
[ ] 1 Less than once a year [ ] 2 At least once a year [ ] 3 At least once every 6 months
[ ] 4 At least once a month [ ] At least once a week

3c) How often does this sibling contact you on the phone (via texting, phone call, or social media messaging apps)?
[ ] 1 Less than once a year [ ] 2 At least once a year [ ] 3 At least once every 6 months
[ ] 4 At least once a month [ ] 5 At least once a week

3d) How often do you phone this sibling (via texting, phone call, or social media messaging apps)?
[ ] 1 Less than once a year [ ] 2 At least once a year [ ] 3 At least once every 6 months
[ ] 4 At least once a month [ ] 5 At least once a week

3e) How often do you and this sibling see each other for holidays and family gatherings?
[ ] 1 Less than once a year [ ] 2 At least once a year [ ] 3 At least once every 6 months
[ ] 4 At least once a month [ ] 5 At least once a week

Click next to begin the Adult Sibling Relationship Questionnaire

1) How much do you and this sibling have in common?
[ ] 1 Nothing at all [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Almost Everything

2) How often do you talk to this sibling about things that are important to you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

3) How often does this sibling talk to you about things that are important to him or her?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

4) How often do you and this sibling argue with each other?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

5) How much does this sibling think of you as a good friend?
[ ] 1 Not at all [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

6) How much do you think of this sibling as a good friend?
[ ] 1 Not at all [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

7) How often do you irritate this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

8) How often does this sibling irritate you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

9) How much does this sibling admire you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

10) How much do you admire this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

11) How often does this sibling try to cheer you up when you are feeling down?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

12) How often do you try to cheer this sibling up when he or she is feeling down?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

13) How competitive are you with this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

14) How competitive is this sibling with you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

15) How often does this sibling go to you for help with non-personal problems?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

16) How often do you go to this sibling for help with non-personal problems?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

17) How much do you dominate this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

18) How much does this sibling dominate you?
[[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

19) How much does this sibling accept your personality?

[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

20) How much do you accept this sibling's personality?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

21) How much does this sibling know about you?
[ ] 1 Nothing [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

22) How much do you know about this sibling?
[ ] 1 Nothing [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

23) How much do you and this sibling have similar personalities?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

24) How often do you discuss your feelings or personal issues with this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

25) How often does this sibling discuss his or her feelings or personal issues with you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

26) How often does this sibling criticize you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

27) How often do you criticize this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

28) How close do you feel to this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

29) How close does this sibling feel to you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

30) How often does this sibling do things to make you mad?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

31) How often do you do things to make this sibling mad?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

32) How much do you think that this sibling has accomplished a great deal in life?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

33) How much does this sibling think that you have accomplished a great deal in life?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

34) How much can you count on this sibling to be supportive when you are feeling stressed?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

35) How much this sibling count on you to be supportive when he or she is feeling stressed?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

36) How often does this sibling envy you?
[ ] 1 Never[ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

37) How often do you feel envious of this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

38) How often do you give this sibling practical advice? (e. g., household or car advice)
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

39) How often does this sibling give you practical advice?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

40) How often is this sibling bossy with you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

41) How often are you bossy with this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

42) How much do you accept this sibling's lifestyle?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

43) How much does this sibling accept your lifestyle?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

44) How much do you know about this sibling's relationships?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

45) How much does this sibling know about your relationships?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

46) How much do you and this sibling think alike?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

47) How much do you really understand this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

48) How much does this sibling really understand you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

49) How often does this sibling disagree with you about things?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

50) How often do you disagree with this sibling about things?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

51) How often do you let this sibling know you care about him or her?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

52) How often does this sibling let you know he or she cares about you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

53) How often does this sibling put you down?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

54) How often do you put this sibling down?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

55) How proud do you feel of this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

56) How proud does this sibling feel of you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

57) How often do you discuss important personal decisions with this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

58) How often does this sibling discuss important personal decisions with you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

59) How much does this sibling try to perform better than you?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

60) How much do you try to perform better than this sibling?
[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

61) How likely is it you would go to this sibling if you needed financial assistance?
[ ] 1 Never [ ] 2 Very Unlikely [ ] 3 Unlikely [ ] 4 Likely [ ] 5 Very Likely

62) How likely is it this sibling would go to you if he or she needed financial assistance?
[ ] 1 Never [ ] 2 Very Unlikely [ ] 3 Unlikely [ ] 4 Likely [ ] 5 Very Likely

63) How often does this sibling act in superior ways to you?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

64) How often do you act in superior ways to this sibling?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

65) How often do you accept this sibling's ideas?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

66) How often does this sibling accept your ideas?
[ ] 1 Never [ ] 2 Very Rarely [ ] 3 Rarely [ ] 4 Frequently [ ] 5 Very Frequently

67) How much do you know about this sibling's ideas?
[ ] 1 Nothing [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

68) How much does this sibling know about your ideas?
[ ] 1 Nothing [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

69) How much do you and this sibling lead similar lifestyles?

[ ] 1 Not at All [ ] 2 A Little [ ] 3 A Moderate Amount [ ] 4 A Lot [ ] 5 Quite a Lot

APPENDIX E

ASRQ ITEMS, CORRESPONDING SCALES, AND FACTORS

Scale	Items	Factor
Similarity	1, 23, 46, 69	Warmth
Intimacy	2, 3, 24, 25, 47, 48	Warmth
Quarreling	4, 26, 27, 49, 50	Conflict
Affection	5, 6, 28, 29, 51, 52	Warmth
Antagonism	7, 8, 30, 31, 53, 54	Conflict
Admiration	9, 10, 32, 33, 55, 56	Warmth
Emotional Support	11, 12, 34, 35, 57, 58	Warmth
Competition	13, 14, 36, 37, 59, 60	Conflict
Instrumental Support	15, 16, 38, 39, 61, 62	Warmth
Dominance	17, 18, 40, 41, 63, 64	Conflict
Acceptance	19, 20, 42, 43, 65, 66	Warmth
Knowledge	21, 22, 44, 45, 67, 68	Warmth

APPENDIX F

STUDY ONE CONSENT FORM

Informed Consent: Blended Family Resilience and the Communication Practices in Positive Adult Half Sibling Relationships: An Interview Study

We are studying the communication between adult half siblings (brothers and/or sisters who share only one biological parent) who have an overall positive relationship with one another. The following information is provided in order to help you make an informed decision about whether or not to participate. To be included in the study, you must meet the following criteria:

1. You are between the ages of 18 and 35 years old
2. You have at least one half sibling (a brother or sister with who you share only one biological parent).
3. You are older in age than all of you half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive .
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you do not meet the above criteria, you do not qualify for this particular study and should not proceed.

If you meet the criteria listed above, you may qualify to take part in an interview study. This study first includes a preliminary survey and then an interview that consists of three parts. The preliminary survey is a questionnaire you take online that asks questions about your relationship with a half sibling. (If you have multiple half siblings, we ask you to focus on only the half sibling with whom you currently have the most positive relationship. This will be the half sibling you selected to answer questions about in the preliminary study and to discuss during the interview). This preliminary survey should take no more than 30 minutes to complete. Once this preliminary survey is completed, you may be emailed by the lead researcher to schedule a time, date and location for the interview. **Note: Not all participants who take the preliminary survey will qualify to participate in the interview. This survey assesses the relationship quality of willing participants and their half sibling, and all pre-survey participants may not qualify or be chosen for the interview study, which offers monetary compensation. Only participates who participate in *both* the pre-survey and the interview will be compensated. Those who do not attend an interview will not receive compensation.**

Interviews consist of three parts. First, I will ask you general questions about you and the members of your family, including age, ethnicity, number of siblings and sibling types. Second, I will ask you to tell me the story of how your blended family developed, and then I will ask you to identify turning points in that relationship. By "turning point," I mean the significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today. (If you have multiple half siblings, we ask you to focus on the half sibling with whom you currently have the most positive relationship. This will be the only half sibling for whom you will discuss turning points.) We will draw these turning points on a graph together so we can see the development of your relationship overtime from you half sibling's birth to the present day. Third, I will ask you general questions about your communication with this half sibling and with your family in general. The entire process will take approximately 60-90 minutes. These interviews will take place a) in a private office on the campus of Arizona State University, b) in another location of your choosing, c) online via the video software Skype. If you

ASU Knowledge Enterprise Development

ASU IRB IRB # STUDY00006271 | Approval Period 7/20/2017 – 7/19/2018

Informed Consent: Blended Family Resilience and the Communication Practices in Positive Adult Half Sibling Relationships: An Interview Study

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1. You are between the ages of 18 and 35 years old
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3. You are older in age than all of you half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive .
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

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Interviews consist of three parts. First, I will ask you general questions about you and the members of your family, including age, ethnicity, number of siblings and sibling types. Second, I will ask you to tell me the story of how your blended family developed, and then I will ask you to identify turning points in that relationship. By "turning point," I mean the significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today. (If you have multiple half siblings, we ask you to focus on the half sibling with whom you currently have the most positive relationship. This will be the only half sibling for whom you will discuss turning points.) We will draw these turning points on a graph together so we can see the development of your relationship overtime from you half sibling's birth to the present day. Third, I will ask you general questions about your communication with this half sibling and with your family in general. The entire process will take approximately 60-90 minutes. These interviews will take place a) in a private office on the campus of Arizona State University, b) in another location of your choosing, c) online via the video software Skype. If you

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1. You are between the ages of 18 and 35 years old
2. You have at least one half sibling (a brother or sister with who you share only one biological parent).
3. You are older in age than all of you half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive .
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you do not meet the above criteria, you do not qualify for this particular study and should not proceed.

If you meet the criteria listed above, you may qualify to take part in an interview study. This study first includes a preliminary survey and then an interview that consists of three parts. The preliminary survey is a questionnaire you take online that asks questions about your relationship with a half sibling. (If you have multiple half siblings, we ask you to focus on only the half sibling with whom you currently have the most positive relationship. This will be the half sibling you selected to answer questions about in the preliminary study and to discuss during the interview). This preliminary survey should take no more than 30 minutes to complete. Once this preliminary survey is completed, you may be emailed by the lead researcher to schedule a time, date and location for the interview. **Note: Not all participants who take the preliminary survey will qualify to participate in the interview. This survey assesses the relationship quality of willing participants and their half sibling, and all pre-survey participants may not qualify or be chosen for the interview study, which offers monetary compensation. Only participates who participate in *both* the pre-survey and the interview will be compensated. Those who do not attend an interview will not receive compensation.**

Interviews consist of three parts. First, I will ask you general questions about you and the members of your family, including age, ethnicity, number of siblings and sibling types. Second, I will ask you to tell me the story of how your blended family developed, and then I will ask you to identify turning points in that relationship. By "turning point," I mean the significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today. (If you have multiple half siblings, we ask you to focus on the half sibling with whom you currently have the most positive relationship. This will be the only half sibling for whom you will discuss turning points.) We will draw these turning points on a graph together so we can see the development of your relationship overtime from you half sibling's birth to the present day. Third, I will ask you general questions about your communication with this half sibling and with your family in general. The entire process will take approximately 60-90 minutes. These interviews will take place a) in a private office on the campus of Arizona State University, b) in another location of your choosing, c) online via the video software Skype. If you

ASU Knowledge Enterprise Development

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APPENDIX G

EMAIL AFTER QUALIFYING FOR STUDY ONE PARTICIPANTS

Hello,

Thank you so much for your willingness to participate in the Half Sibling Interview Study and for completing the pre-qualifying survey. After reviewing you answers, the research team has determined you fit the study requirements and we can now set an interview time, date and location at your convenience.

Interviews are offered both in person on campus and online via the video software *Skype*. Please let me know which you would prefer.

Interviews may last anywhere from 1 hour to 1.5 hours. Below are some of the time slots for interviews I have available in the next few weeks, but please let me know if any of these do not work with your schedule and we can find a time at your convenience. Saturday, August 2nd at any time of your convenience

[Times listed here]

As you are aware, we are interviewing individuals who currently have a positive relationship with a younger half sibling. Interviews will include three parts: filling out a family demographic tree, creating a turning points graph, and answering some open-ended questions about your half sibling relationship.

During the interview **I will be asking you about turning points in the relationship with your half sibling.** It may help us if you would give this some thought before the interview.

What is a turning point?

First, by a "turning point," I mean the *significant or pivotal events or experiences at a particular moment or time in your life* that were *important* in bringing your relationship with your half sibling to where it is today.

Second, *turning points come in a variety of forms*. Some of these events might be a *major thing*--like a birth, death, illness, wedding, or big fight--or they may be what might at the time seem like a *minor or everyday event*, but in hindsight you later realize it was significant in changing your relationship (such as creating a pattern of behavior across a few months like scheduling a weekly phone call to keep in contact with a geographically distant sibling).

Third, most people experience *both positive and negative turning points*. We are interested in those events that changed your relationship with your half sibling in some positive way, *as well* as events that were hard or challenging after which you may have perceived the relationship with your half sibling as less positive.

To review, I want to talk about the major positive and negative turning points involved in the relationship with your half sibling. We will note each turning point by giving it a name, date, and rating for how positive your relationship was with your half sibling at

that time.

I will need a signed copy of the attached consent form before we can conduct an interview. If you chose for an in-person interview, please bring a signed copy with you to the interview. If via *Skype*, please print, sign, scan and email this back to me at your earliest convenience.

You will receive a $30 Visa Gift card once your interview is complete (either given in person or an electronic version emailed to you). You will also be entered into a drawing to win an additional $25 Amazon gift card and will be emailed once the research is complete if you won that additional incentive (only one participate will receive the Amazon gift card).

Please let me know what medium (*Skype* or in-person) and time for the interview works best for you. Please let me know if you have any questions about turning points and thank you again so much for your willingness to be a part of this research!

APPENDIX H

INTERVIEW PROTOCOL

Half Sibling Communication Interview Script

Protocol adapted from Braithwaite et al., 2018

Hi, I'm your interviewer for today. I want to learn more about how adult half siblings communicate within their blended families. We are going to talk about the blended family you currently are a part of with a focus on the half-sibling with whom you currently have the most positive relationship overall.

This interview will take about an hour to an hour and a half and will be composed of three parts. First, I'm going to talk with you about the study and the university guidelines and protections for you as a participant in this study. Second, I am going to ask you questions about you and your family to learn more about the structure of your family. **If you have more than one brother or sister, you may refer to them as "Sister 1 or Sister 2," based on their ages, in descending order.** Third, I am going to ask you to tell the story of how your blended family came to be and to discuss your relationship and communication with the half sibling with whom you have the most positive relationship overall. **This is the sibling you identified in the online questionnaire you previous completed.** We will then talk about the different turning points in your relationship with your half sibling. By "turning point" I mean the significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today (Braithwaite et al., 2018). As we talk about this, we are going to put together a graph that represents the different turning points in your relationship with your half sibling over time, and I'll ask you some questions about each turning point. We'll end with a few general questions about your communication with your half sibling.

But before we begin, first, I need to reaffirm that you qualify to be part of the study:

Criteria for Participation

To participate, you must meet all of the following criteria:

1. You are between the ages of 18 and 35 years old.
2. You have at least one half sibling (a brother or sister with whom you share only one biological parent).
3. You are older than all of your half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family)
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive.

6. Your half sibling's other biological parent (your stepparent) must be currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive

Consent Process

2) Second, I have a copy of the letter that you previously read and signed which explains the purpose of the study and your rights as a participant in the study. If you have any additional questions about this document, please let me know. [*Give them time to re-read their signed consent form*] Do you have any questions about the study before we begin?

[*Note: If on Skype, ask them to locate their online-signed consent form and review if they have any questions.*]

Compensation

3) Third, you will receive monetary compensation for your participation in this study. Upon completing this interview, I will provide you with a $30 Visa gift card. [*Note: If on Skype, ask them to what email their virtual Visa gift card should be sent*]. Your name will also be placed into a drawing at the conclusion of this research (after all data is collected) for a possible additional $25 Amazon gift card. What email is the best to contact you if you are selected in that drawing?

Blended Family Tree

Now I want to learn more about the structure of your family. To do this I am going to ask you some questions as I fill out a "Blended Family Tree" (see below) so that I know who the members of your family are and this may help later in the interview when you mention specific family members. I will ask you to review the "Tree" once I complete it and correct any errors that have occurred.

Interview

A. Story of how blended family came to be

1) Please tell me the story of how your relationship with your half sibling came to be. In other words, how did your family (that includes this half sibling) become blended?

[Be sure to ask]:

2) How did you feel when your biological parents divorced? What emotions did you experience?

3) How did you feel when your parent remarried? What emotions did you experience?

4) How did you feel when your half sibling was born? What emotions did you experience?

B. Turing Points

To better understand the trajectory of your blended family, especially the relationship between you and your half sibling, I am interested in your perceptions of all of the important turning points in the relationship with your half sibling that you identified as being overall positive in the pre-qualifying survey.

By turning point, I mean the "significant or pivotal events that were important in bringing your relationship with your half sibling to where it is today" (Braithwaite et al., 2018). Most people experience both positive and negative turning points. So I am interested in those events that positively changed your relationship with your half sibling in some way as well as events that were hard or challenging, after which you may have perceived the relationship with your half sibling as less positive. Talking about these turning points will hopefully allow you to tell me stories related to your relationship and I can better understand your present relationship with a half sibling.

To review, I want to talk about the major positive and negative turning points involved in the relationship with your half sibling. Do you have any questions about what I mean by a "turning point"?

Calibrating the Graph

As you talk about these turning points, I will mark them down for you on a turning points graph. The bottom of the graph marks your relationship with your half sibling from the point it began to today by years. The left axis of the graph will mark how positive you viewed you relationship with your half sibling at that particular time when the turning point occurred. This percentage ranges from 0% positive to 100% positive with 50% being neutral. This value/percentage is completely up to you – again, talking about turning points during this part of the interview is used to simply hear and learn more about your relationship with a half sibling at various points in the history of your relationship.

Think back to when your sibling was born, or when you learned you were about to have a half sibling – how did you feel about your relationship at that point in time? If you had to give it a percentage, what would that percentage be?

[Plot turning point of birth and ask probing questions about that event]

Great, thank you! Besides the birth, think back to the first time you experienced a significant or pivotal event that was important in the relationship with your half sibling.

[Be sure to ask:]

Describe this turning point for me. In your own words, what was this turning was all about. What happened?

Why was this event important to you? What made it stick out?

Relatively when was this turning point? (year or how old was the participant at this time?)

At the time of this turning point, how positive do you think you perceived your relationship with your half sibling? *[ask for a percentage]*

[Possible probing questions. Skip if answered above]

a. Who was there or involved in this turning point?
b. What was the occasion? What was happening?
c. Where did the turning point take place?
d. What did you and your half sibling (or others) talk about at this turning point?
e. What was not talked about and why?
f. Describe your emotions at the time of this turning point. What did you feel and experience?
g. How and why did this turning point make you feel more or less positive about your half sibling?
h. How did this situation turn out in the end?
i. What else should I know to understand this turning point?

[*Repeat this process until they cannot think of any other turning points.]*

[Skype interviews will have video and audio capabilities, so be sure to show them the chart as you graph points and to show the final completed graph to them at the end to amend if needed. (By holding up to the screen)]

C. Open-Ended Questions

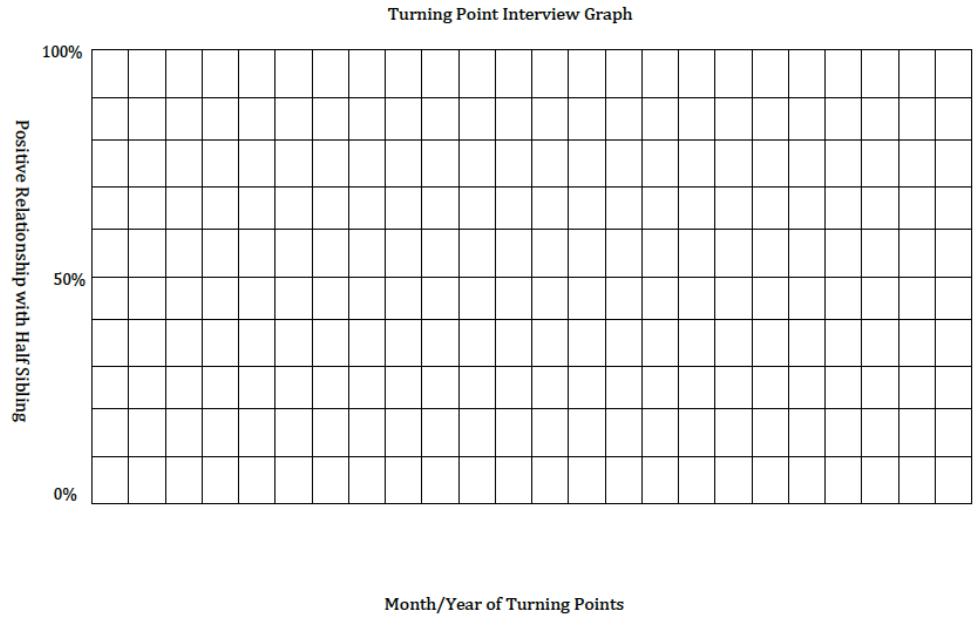
1. Describe your current relationship with your half sibling to me.
2. How involved in your life is your half sibling? How involved are you in your sibling's life?
3. Does your relationship with your half sibling differ from your other sibling relationship(s)? If so, how. Explain. (if applicable)
4. Describe your family's transition once your half sibling was born. [*omit if detailed earlier in this interview*]
5. Can you talk about the changes, if any, you've seen in your family r elationship since your half sibling was born? [*omit if detailed earlier in this interview*]
6. Describe ways having a half sibling impacts your relationship, if at all, with other family members of your immediate blended family.
7. If anything, what would you want to improve in your relationship with your half sibling?
8. Describe the most recent fight you had with your half sibling. (Describe it to me. Who or what did it involve? Was it resolved? If so, how was it resolved? What effect did this fight have on your relationship?) (If no fights, what is the most confrontational topic between you and your half sibling or what do you argue about the most?)
9. What challenges (if any) do you feel occur when a half sibling is introduced into the family? What do you think is the biggest challenge (if any) with having a sibling with whom you share only one biological parent?
10. We know that not all half siblings have a positive relationship. Talk about what is most positive about your relationship today. What do you believe best explains why you two have a positive relationship?
11. What advice would you give others who have a half sibling?
12. Describe the ideal half sibling relationship.
13. Do you have any additional comments to add regarding your family, siblings, or other family relationships?

Thank you so much for your time.

[*Provide the in-person interview participants with the Visa gift card now. If on Skype, inform them you will email the virtual Visa gift card to them before the end of the day and confirm the email address they want it sent to.*]

APPENDIX I

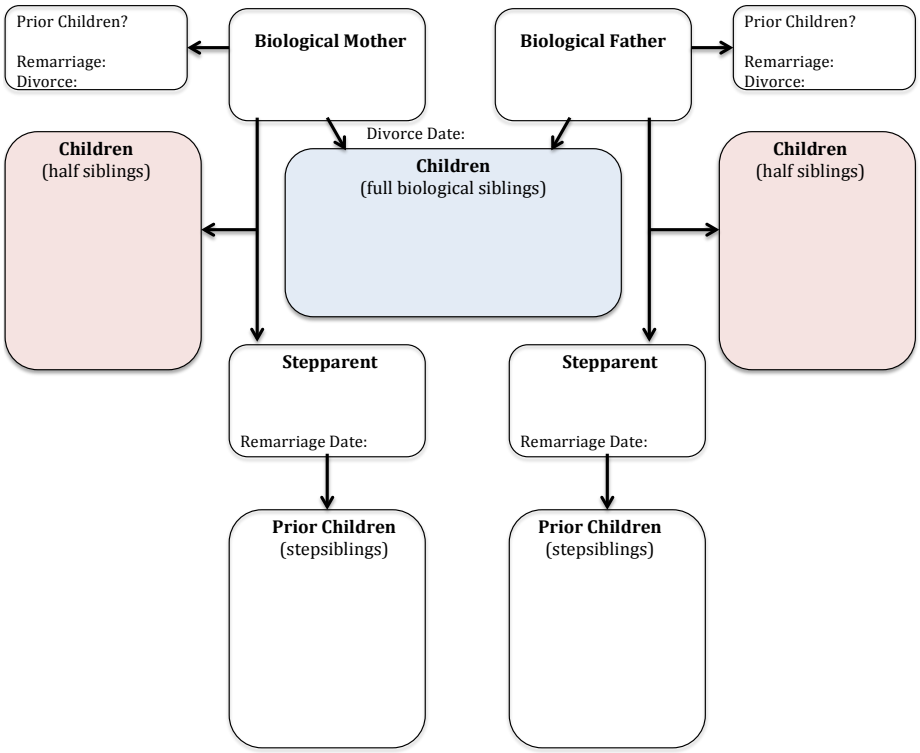
INTERVIEW GRAPH


Turning Point Interview Graph
100%
50%
0%
Positive Relationship with Half Sibling
Month/Year of Turning Points

APPENDIX J

FAMILY DEMOGRAPHIC TREE

Blended Family Demographic Tree



Date:
Participant:
Age:
Sex:
Ethnicity:

APPENDIX K

STUDY TWO IRB APPROVAL FORM

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Janet Alberts
Human Communication, Hugh Downs School of
480/965-7141
JESS.ALBERTS@asu.edu

Dear Janet Alberts:

On 12/14/2017 the ASU IRB reviewed the following protocol:

Type of Review:	Modification
Title:	Communication Practices in Positive Adult Half-Sibling Relationships: Diary Study
Investigator:	Janet Alberts
IRB ID:	STUDY00007366
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Consent Form for MTurk.pdf, Category: Consent Form; • IRB Protocol_Diary Study.docx, Category: IRB Protocol; • Recruitment Script.pdf, Category: Recruitment Materials; • Diary Prompt_Instructions.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Pre Qualifying Survey.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Exit Questionnaire.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • Flyer.pdf, Category: Recruitment Materials; • Consent Form.pdf, Category: Consent Form;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 12/14/2017.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Bailey Oliver
Vincent Waldron
Bailey Oliver
Ashley Randall

APPENDIX L

STUDY TWO RECRUITMENT SCRIPT

Recruitment Script

Communication Practices in Positive Adult Half-Sibling Relationships: Diary Study

My name is Bailey Oliver, and I am a graduate student in the Hugh Downs School of Human Communication at Arizona State University. I am part of a research team studying the communication between adults and their younger half siblings who have an overall positive relationship.

To be included in the study, you must meet all of the following criteria:

1. You are between the ages of 18 and 35 years old.
2. You have at least one half sibling (a brother or sister with whom you share only one biological parent).
3. You are older than all of your half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive.
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you have any questions about meeting the qualifications for this study, please feel free to email me at Bailey.M.Oliver@asu.edu

If you meet the criteria listed above, you may qualify to take part in a two-week diary study. This study will require participants to complete a preliminary survey, a 30-minute daily diary entry across two weeks, and an exit questionnaire. The preliminary survey is a questionnaire you take online that asks questions about your relationship with a half sibling. This preliminary survey should take you no more than 20 minutes to complete. Once the preliminary survey is taken, if you qualify, you may be emailed by the lead researcher to participate in the diary portion of the study. This part of the research will require you to complete an online diary entry about your communication with immediate family members each day for 14 days. By "immediate family members", we mean your siblings and parents (including biological, step, and half). Diary entries should take no more than 30 minutes a day to complete. Finally, after your two-week diary is complete, you will be asked to complete an exit questionnaire asking about your half sibling relationship. This exit questionnaire should take no more than 30 minutes to complete. Survey and diary entries will be transcribed, but all responses will be kept confidential, and at no time will your identity be revealed in the analysis and/or reporting of research results.

Your participation is completely voluntary. At any time throughout the pre-qualifying survey, 2-week diary period, or exit questionnaire you may choose not to answer

specific question(s), and you are free to leave the study at any time if you would like to do so.

If you complete the preliminary survey, 14 daily diaries, and the exit questionnaire, you will receive a $60 Visa gift card. You also will be entered in a drawing to potentially receive an additional $50 Amazon gift card.

Thank you for considering being a part of this study.

If you are interested in participating, please contact me at Bailey.M.Oliver@asu.edu

APPENDIX M

STUDY TWO RECRUITMENT FLYER

****Get Paid $60****

Study looking for **Half Siblings** within a Blended Family!

My name is Bailey Oliver, and I am a graduate student in the Hugh Downs School of Human Communication at Arizona State University. I am part of a research team that is studying communication practices between adult half siblings who have an overall positive relationship.

We are looking for participants who have younger half siblings to participate in a 2-week diary study completed entirely online. The study should only take you about 20 to 30 minutes a day.

To be included in the study, you must meet all of the following criteria:

1. You are between the ages of 18 and 35 years old.
2. You have at least one half sibling (a brother or sister with whom you share only one biological parent).
3. You are older than all of your half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive.
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you fit the requirements above and wish to participate, please email the lead researcher at Bailey.M.Oliver@asu.edu. You will be emailed a pre-qualifying survey to see if you are right for the study!

If you participate in the two-week study and the exit questionnaire, you will be emailed a $60 Visa gift card. You also will be entered into a drawing to potentially receive an additional $50 Amazon gift card.

Thank you for considering being a part of this study!

Half Sibling Study Bailey.M.Oliver@asu.edu
Half Sibling Study Bailey.M.Oliver@asu.edu
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APPENDIX N

STUDY TWO CONSENT FORM

Informed Consent: Communication Practices in Positive Adult Half-Sibling Relationships: Diary Study

We are studying the communication between adult half siblings (brothers and/or sisters who share only one biological parent) who have an overall positive relationship with one another. The following information is provided in order to help you make an informed decision about whether or not to participate. To be included in the study, you must meet all of the following criteria:

1. You are between the ages of 18 and 35 years old
2. You have at least one half sibling (a brother or sister with who you share only one biological parent).
3. You are older in age than all of you half siblings (i.e., your half siblings must be younger than you are).
4. Your half sibling must have been born after your biological parents divorced and then a biological parent remarried (i.e., you are part of a blended family).
5. Your half sibling, your biological parents, and both biological parents of your half sibling are alive .
6. Your half sibling's other biological parent (your stepparent) is currently married to the biological parent you share.
7. You currently describe your relationship with your half sibling as overall positive.

If you do not meet the above criteria, you do not qualify for this particular study and should not proceed.

Please click next if you meet all of these criteria.

You will receive 50 cents for completing the following preliminary survey. If the research team determines your survey answers meet study requirements, you may qualify to take part in a two-week diary study. If you qualify, you will be contacted via email and you will be asked to complete an online diary entry about your communication with immediate family members each day across 2-weeks (14 days). By "immediate family members", we mean your siblings and parents (including biological, step, and half). Each diary should take you no more than 30 minutes to complete. Finally, the study will require you to complete a final 30-minute online exit questionnaire about your half sibling relationship once your diaries are complete. **Note: Not all participants who take the preliminary survey will qualify to participate in the diary portion of the research. This survey assesses the relationship quality of willing participants and their half sibling, and all pre-survey participants may not qualify or be chosen for the diary study, which offers additional monetary compensation. Only participates who participate in the pre-survey, the diary study, and the exit questionnaire will be compensated additionally. Those who do not complete diary entries and an exit questionnaire will not receive the $60 compensation. However, you are guaranteed the 50 cents compensation for completing this preliminary survey on Amazon Turk.**

The information researchers obtain in this study will be kept strictly confidential. Your responses will not be associated with you individually in any way, and your name will not be tied to any of your answers. The only place your name will appear is in this consent blank below. Upon consenting, you will be provided with a participant ID and a link that will take you to the pre-qualifying survey. You will use this participant number to identify your individual diary entries and exit questionnaire participation as well if you participate in that portion of the study. In order for researchers to accurately retain all of the responses you provide in diary entries, entries will be downloaded into one large PDF. However, your name and family members' names and identities will not be linked in any way to any of the information you provide in the entries. When composing diary entries, please avoid using names, locations, or other details whenever reasonable in order to maintain confidentiality. The only individuals with access to your responses will be the researchers. Results will be used in a doctoral dissertation and possibly in future presentations at academic conferences and publications in a refereed academic journal. The names used in all of these venues will be changed to pseudonyms and will not reflect your identity in any way.

You will be participating in this research study for monetary compensation. You will receive 50 cents for completing this prequalifying survey. If you qualify, upon completing the additional diary study, and exit questionnaire, you will be provided with a $60 Visa Gift Card. You will be emailed an electronic Visa gift card that serves the same use and functions as a tangible card. After all exit questionnaires are completed, participants who completed the study will also be entered into a drawing for the chance to receive additional compensation. One participant will be randomly selected from this drawing and will receive a $50 Amazon gift card, which will be emailed to them. Your odds of winning this additional incentive are roughly 1 out of 20. The winner of the Amazon gift card will be notified by email within a month of completing the exit questionnaire.

You should also know that at any time throughout the surveys or diary entries you are free to leave the study or refuse to answer any questions. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or ASU. However, you may not be provided monetary compensation if you do not participate in the pre-survey, diary study, and exit questionnaire. You must complete the pre-survey, 14 diary entries, and the exit questionnaire to be compensated the $60 Visa gift card.

Other than monetary compensation, there are no direct benefits to you as a result of participating in this study except potentially gaining a greater understanding of your experience with positive relationships in your sibling relationships and family. However, talking about the relationship with your half sibling and family members may make you feel uncomfortable. In the event of problems resulting from participating in this study, please contact ASU Counseling Services between 8am to 5pm (602-543-8125) or after hours at 480-921-1006, or other comparable services. Treatment is available on a sliding

fee scale. It is the responsibility of each participant to pay for treatment if they choose to seek it out. The researchers will not be held liable for treatment expenses incurred. Yet, any responses, oral or written, will be regarded with the utmost confidentiality.

You may ask any questions concerning this research and have those questions answered before agreeing to participate or after the study is complete. If you have any questions about this research project, please feel free to contact the principal investigator, Bailey Oliver, at (205) 215-9317. If you have any questions about your rights as a research participant that have not been answered by the investigator or would like to report any concerns about the study, you may contact the Arizona State University Office of Research Integrity and Assurance, telephone (480) 965-6788.

You are voluntarily making a decision whether or not to participate in this study. Your electronic signature (clicking "Accept" and entering your full name below) certifies that you have decided to participate, having read and understood the information presented. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or Arizona State University. However, compensation is reserved for participates who fully complete the study. Your electronic signature also indicates that you are in fact at least 18 – 35 years old, are older than all your half siblings, experienced your biological parents' divorce before your half sibling was born, and that you currently conceptualize the relationship with your half sibling as positive.

I agree to these terms and conditions

Enter name in textbox below:

Your participant number is _____

Please use the following link to locate and begin the pre-qualifying survey.

Should you have any questions regarding your participation in this study, please feel free to contact any or all of the following people:

Bailey M. Oliver
Hugh Downs School of Human Communication
Phone: (205) 215-9317
Email: Bailey.M.Oliver@asu.edu

Dr. Jess Alberts
Hugh Downs School of Human Communication
Phone: (480) 965-7141
Email: JESS.ALBERTS@asu.edu

APPENDIX O

EMAIL AFTER QUALIFYING FOR STUDY TWO

Hello,

Thank you so much for your willingness to participate in the Half Sibling Diary Study and for completing the pre-qualifying survey and consent form. After reviewing your answers, the research team has determined you fit the study requirements, and we can now start the diary portion of the study.

What you will be doing is following the same link below once a day for 14 consecutive days (two weeks) to compose a daily diary. In short, you will be composing an online daily diary about your contact with all immediate family members for that day (siblings and/or parents – not your significant other/spouse, nor extended family members; stepsiblings and stepparents count as immediate family members). As such, it is most helpful to compose your diaries **at the end of the day/at night**. **Full instructions are provided upon clicking the link. Please include as much detail as you can in each diary entry and write in full sentence/narrative form.** You should not submit multiple entries in one day, but should go to the same link to enter a separate entry each day for 14 days (you will visit the link and submit answers to all prompts on this link 14 times). I will send you a daily email reminder to compose your diary with the link embedded for easy access. You should be able to submit entries using a laptop or a smart phone. All diary entries will be completely confidential.

To complete the diaries, your participant/identification number is: **P#__**
After you have completed your 14th diary entry, you will be emailed an exit questionnaire focusing more on your half sibling relationship. Once this is complete, you will be emailed a **$60 Visa gift card.** You will also be entered into a drawing to win **an additional $50 Amazon gift card** and will be emailed once the research is complete if you won that additional incentive (only one participate will receive the Amazon gift card).

Please respond to this email indicating the day you wish to start your diary period. This date should be within the next calendar week. You may choose to begin today if you wish, just let me know!

Please let me know if you have any questions and thank you again so much for your willingness to be a part of this research!

Bailey M. Oliver

Arizona State University

APPENDIX P

REMINDER EMAIL FOR STUDY TWO PARTICIPANTS

Good Evening,

This is just a friendly reminder to complete your diary for today for the Half Sibling Diary study. Use the link below to submit your diary entry. If you have already submitted an entry for today, please disregard this email.

Please let me know if you have any questions and thank you again so much for your willingness to be a part of this research!

(No need to reply to this message.)

Bailey

APPENDIX Q

DIARY ENTRY INSTRUCTIONS

Today's Date:
Your Participant ID Number:
Please use the following questions to guide the diary entry you will create in the text box below. You will complete a diary once a day for two weeks (14 days). Please write in narrative or diary form as opposed to yes and no answers. *(Note: *Immediate family members refer to those that are related to you only through parental and sibling ties (including biological, step and half), as opposed to extended family members such as aunts, cousins, grandparents, etc.)*

When composing diary entries, please avoid using names, locations, or other details whenever reasonable in order to maintain confidentiality. Instead, use terms such as "brother" or "father" instead of specific name. However, all names and identifying information you provide below will be de-identified if needed and not reported in final study materials. Your participation is completely voluntary and confidential.

In your diary please include what *immediate family members you communicated with today and their relation to you. Please include all interactions you had with an immediate family member today.

What medium was used to communicate for each interaction? (phone, text, in-person, Skype, etc.)

What topics were generally discussed in your communication today (with each individual family member)?

Think about *one* communication exchange you had with an immediate family member today. Make sure to answer all of the questions above, but elaborate in greater detail about what this communication included. What was the outcome of this communication?
Why did you choose this communication exchange to elaborate on? What made it stick out?

See an example below:

Today I sent a screenshot of a picture of the girls I nanny to my little half-brother through text. I chose text because it was the easiest way to send this picture to him and I wanted him to see how big the girls have gotten. I know he likes when he feels included in my job, so I wanted to be sure to show him what I was doing with the girls today. We talked about how cute the two girls are, and that prompted a conversation about what days I will be free during Christmas break, and what days I will be watching the girls as their nanny around the holidays instead. I know he was asking because he fears I will work too much and not spend enough one on one time with him during the holidays when he is off of school and free to do more things. The outcome of our conversation was that I told him I did not know my schedule yet, but would be sure to reserve time for us

to go to hockey games, make cookies, and hang out. This communication exchange stuck out to me the most today because I was updating my brother on what days I have free during an upcoming special time (Christmas) that I know was important to him. I needed him to know my schedule so we can maximize the time we spend together over the Christmas break when he is out of school. We don't get to see each other as much when he is at school and I have to nanny so it was an important conversation.

(If not mentioned above) Did you interact/communicate with your half sibling(s) today? If so, in what ways did you communicate? (the medium, topics discussed, outcome of interactions, etc.)

Did you witness/hear about/or are you aware of any conflict with immediate family members today? This may be conflict you were personally involved in *or* conflict you witnessed among immediate family members. **Use the questions below as a prompt for your discussion the conflicts you experienced/witnessed in your diary entry.**

Who was involved in the conflict?
What was the conflict about?
What was the outcome of the conflict? (was it resolved, are the individuals speaking again, etc.)

APPENDIX R

EMAIL AFTER COMPLETING DIARIES

Hello,

Thank you so much for completing your 14 daily diaries for the half sibling study. You are now one step away from completing the study in full and receiving compensation!

Please use the link below to take the exit questionnaire. This online questionnaire will ask you open ended questions about your diary experience and your relationship with your half sibling more specifically. This survey should take you roughly 30 minutes to complete. Please be sure to answer in full sentence form instead of yes or no responses.

Once I receive your exit questionnaire, I will email you your $60 Visa Gift card. Please respond to this email if you wish to have the card emailed to a different email address than the one I am contacting you at now.

Thank you again for your participation, your experience is highly valued in this research!

APPENDIX S

EXIT QUESTIONNAIRE

Please answer the following questions in full sentence form (as opposed to "yes" or "no" answers). Please answer each question in regards to the half sibling you chose to focus on in your pre-qualifying survey (your only half sibling, or if you have multiple - the half sibling you feel you have the most positive relationship with).

Tell me a little about your relationship with your half sibling (the one in which you focused your pre-qualifying survey on). Describe the relationship between you and your half sibling below.

What are the typical mediums through which you communicate with this half sibling? (phone calls, text, Skype, Instagram, in-person, etc.)

What topics are common in your communication with your half sibling? In other words, what do you and your half sibling typically talk about?

What topics, if any, are generally off limits in your communication with your half sibling? Further, why do you believe these topics are "off limits" in this relationship?

How do you feel in your relationship with your half sibling today? For example, what emotions do you experience in this relationship?

How, if at all, does your relationship with your half sibling differ from your other sibling relationships? (If you only have half siblings, write "N/A" below).

How, if at all, has your relationship with your half sibling changed over the years?

Do you find being a half sibling challenging? If so, in what ways? Explain. If not, why do you think you do not find this relationship challenging?

What do you find is the most rewarding aspect of being a half sibling, if any? Explain.

In a perfect world, what if anything would you want to improve upon or change in your relationship with your half sibling?

If you were constructing a brochure, what advice would you give others who have a half sibling?

Did anything shock or surprise you across the 2-week diary study in regards to your family relationships? If so, explain below.

Do you think you have communicated more in the past two weeks due to it being the holiday season?"

To end, we have a few demographic questions for you. No need to answer these in full sentences.

How old were you when your biological parent's divorced?

How old were you when the biological parent you share with a half sibling remarried your half sibling's other biological parent (your stepparent)?

Finish the following sentence: The half sibling I focused this study on and I share a...

Biological mother
Biological father

What is your race/ethnicity?

What is your half sibling's race/ethnicity?

Finish the sentence: In my immediate family, I have... (check all that apply)

Full biological sibling(s)
Half biological sibling(s)
Step sibling(s)
Adoptive sibling(s)

If you have any additional questions or comments to add regarding your experience as a half sibling, please write them below.

APPENDIX T

COMBINED DEMOGRAPHICS ACROSS BOTH STUDIES

***N* = 33**

Age
Participant age: *n* = 26.66 (range = 18 – 35)
Sibling age *n* = 17.94 (range = 2 – 30)
When parent's divorce: *n* = 4.5 (range = 1 – 17)
When parent's remarried: *n* = 9.01 (range = 2 – 24)

Sex
Female: *n* = 20, 61%
Male: *n* = 13, 39%

Gender of Dyads
Cross-sex sibling dyad: *n* = 21, 64%
Sister-sister sibling dyad: *n* = 8, 24%
Brother-brother sibling dyad: *n* = 4, 12%

Race/Ethnicity
Caucasian: *n* = 21, 64%
Hispanic: *n* = 5, 15%
African-American: *n* = 4, 12%
Asian: *n* = 3, 9%

Shared Biological Parent
Mother: *n* = 25, 76%
Father: *n* = 8, 24%

Family composition
Half, Full biological and Stepsiblings: *n* =12, 36%
Half siblings only: *n* =11, 33%
Half and full biological: *n* =5, 15%
Half and Stepsiblings: *n* =4, 12%
Half, full biological, step, and adoptive: *n* =1, 3%

APPENDIX U

TABLE 1

Relational Maintenance Behaviors

Overall			Study 1 Interviews		Study 2 Daily Diaries	
Maintenance Behavior Categories	# of participants (% of total units) *N* = 33	# of units coded (% of total units) *N* = 2,141	*N* = 17	*N* = 1,299	*N* = 16	*N* = 842
Positivity	**33 (100%)**	442 (21%)	**17 (100%)**	297 (23%)	**16 (100%)**	145 (17%)
Positive thinking	31 (94%)	150 (7%)	17 (100%)	108 (8%)	14 (88%)	42 (5%)
Social support	27 (82%)	83 (4%)	15 (88%)	52 (4%)	11 (69%)	31 (4%)
Prosocial actions	26 (79%)	127 (6%)	14 (82%)	80 (6%)	13 (81%)	47 (6%)
Affection	20 (61%)	59 (3%)	14 (82%)	45 (3%)	6 (38%)	14 (2%)
Humor	14 (42%)	23 (1%)	8 (47%)	12 (1%)	6 (38%)	11 (1%)
Joint activities	**33 (100%)**	248 (12%)	**17 (100%)**	121 (9%)	**16 (100%)**	127 (15%)
Openness	**33 (100%)**	222 (10%)	**17 (100%)**	134 (10%)	**16 (100%)**	88 (10%)
Self-disclosure	32 (97%)	196 (9%)	17 (100%)	122 (9%)	15 (94%)	74 (9%)
Empathetic behavior	15 (45%)	26 (1%)	8 (47%)	12 (1%)	7 (44%)	14 (2%)
Parental intervention	**32 (97%)**	273 (13%)	**17 (100%)**	182 (14%)	**15 (94%)**	91 (11%)
Prosocial	29 (88%)	161 (8%)	15 (88%)	90 (7%)	14 (88%)	71 (8%)
Antisocial*	21 (64%)	112 (5%)	14 (82%)	92 (7%)	7 (44%)	20 (2%)
Antisocial behaviors*	**30 (91%)**	126 (6%)	**15 (88%)**	85 (7%)	**15 (94%)**	41 (5%)
Verbal aggression*	24 (73%)	97 (5%)	12 (71%)	67 (5%)	12 (75%)	30 (4%)
Nonverbal aggression*	14 (42%)	29 (1%)	6 (35%)	18 (1%)	8 (50%)	11 (1%)
Advice	**28 (85%)**	76 (4%)	**15 (88%)**	42 (3%)	**13 (81%)**	34 (4%)
Confirmation	**27 (82%)**	116 (5%)	**16 (94%)**	77 (6%)	**11 (69%)**	39 (5%)
Avoidance	**27 (82%)**	83 (4%)	**16 (94%)**	57 (4%)	**11 (69%)**	26 (3%)
Topical	18 (55%)	33 (2%)	13 (76%)	24 (2%)	5 (31%)	9 (1%)
Antisocial*	12 (36%)	29 (1%)	8 (47%)	23 (2%)	4 (25%)	6 (<1%)
Alternate activities	11 (33%)	14 (1%)	5 (29%)	5 (<1%)	6 (38%)	9 (1%)
Negotiated autonomy	7 (21%)	7 (<1%)	5 (29%)	5 (<1%)	2 (13%)	2 (<1%)
Mediated communication	**26 (79%)**	149 (7%)	**13 (76%)**	45 (3%)	**13 (81%)**	104 (12%)
Calls/texts	24 (73%)	115 (5%)	11 (65%)	37 (3%)	13 (81%)	78 (9%)
Social media/email	12 (36%)	29 (1%)	4 (24%)	7 (1%)	8 (50%)	22 (3%)

Cards/letters/ packages	5 (15%)	5 (<1%)	1 (6%)	1 (<1%)	4 (25%)	4 (<1%)
Networks	**26 (79%)**	136 (6%)	**15 (88%)**	77 (6%)	**11 (69%)**	59 (7%)
Conflict management	**21 (64%)**	77 (4%)	**15 (88%)**	62 (5%)	**6 (38%)**	15 (2%)
Understandings	20 (61%)	56 (3%)	14 (82%)	44 (3%)	6 (38%)	12 (1%)
Time/patience	9 (27%)	15 (1%)	9 (53%)	15 (1%)	0 (0%)	0 (0%)
Forgiveness	3 (9%)	6 (<1%)	2 (12%)	3 (<1%)	1 (6%)	3 (<1%)
Sharing tasks	**20 (61%)**	40 (2%)	**13 (76%)**	24 (2%)	**7 (44%)**	16 (2%)
Assurances	**17 (52%)**	39 (2%)	**6 (35%)**	10 (1%)	**11 (69%)**	29 (3%)
Awareness of maturity	**15 (45%)**	45 (2%)	**15 (88%)**	45 (3%)	**0 (0%)**	0 (0%)
Mentoring behavior	**15 (45%)**	54 (3%)	**10 (59%)**	41 (3%)	**5 (31%)**	13 (2%)
Instrumental support	**7 (21%)**	15 (1%)	**0 (0%)**	0 (0%)	**7 (44%)**	15 (2%)

*****antisocial behavior, not perceived to contribute to the positive relationship*

APPENDIX V

FIGURE 1

Systemic Influence on Relational Maintenance

