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THE RELATIONSHIP BETWEEN INTERPARENTAL CONFLICT, FAMILY  
ATTACHMENT STYLE, AND YOUNG ADULT EMOTION  
REGULATION

KAYLEE C. ENEVOLD

75 Pages

The purpose of the current study was to explore the relationship between interparental conflict, family attachment style, and young adult emotion regulation. Family attachment anxiety and avoidance (i.e., mother, father, and sibling) were expected to moderate the relationship between interparental conflict and young adult emotion regulation, such that better quality of mother, father, and sibling attachment anxiety and avoidance would indicate a weaker association between interparental conflict and difficulties in emotion regulation. There were 397 individuals from Illinois State University aged 18 to 22 who participated in the online survey. Three hierarchical multiple regression analyses were used to determine if the six family attachment variables were moderators for interparental conflict and young adult emotion regulation. Only sibling attachment avoidance was found to be a moderator since it was the only construct to have a significant interaction with interparental conflict. Looking at the simple slopes, a higher level of sibling attachment avoidance was found to have a weaker association between interparental conflict and difficulties in emotion regulation. The results of the current study were unexpected and should be replicated before being considered valid. Limitations and future direction were also discussed.

**KEYWORDS:** Interparental conflict, Attachment, Emotion Regulation, Sibling

THE RELATIONSHIP BETWEEN INTERPARENTAL CONFLICT, FAMILY  
ATTACHMENT STYLE, AND YOUNG ADULT EMOTION  
REGULATION

KAYLEE C. ENEVOLD

A Thesis Submitted in Partial  
Fulfillment of the Requirements  
for the Degree of

MASTER OF SCIENCE

Department of Psychology

ILLINOIS STATE UNIVERSITY

2022

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THE RELATIONSHIP BETWEEN INTERPARENTAL CONFLICT, FAMILY  
ATTACHMENT STYLE, AND YOUNG ADULT EMOTION  
REGULATION

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K. C. E.

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## CHAPTER I: INTRODUCTION

Child adjustment has been recognized to be impacted by parental interactions. Research indicates that destructive interparental conflict can negatively impact a child's adjustment emotionally, behaviorally, and physiologically (Zemp et al., 2016). Interparental conflict is inevitable in any relationship but is a problem for children when it becomes destructive. Interparental conflict is considered destructive when it is frequent, verbally or nonverbally hostile, unresolved, and when the offspring's perceptions of the interparental conflict is negative (Zemp et al., 2016). Adults have also been found to have adjustment problems from the exposure of interparental conflict. Individuals have reported having high levels of distress and internalizing problems, less satisfaction in life, and higher levels of anxiety and depression (Kumar & Mattanah, 2018).

Attachment style has also been linked to interparental conflict because interparental conflict can impact the relationship between a child and parent. If a child perceives a change in caregiving, the attachment to that caregiver can be altered (Faber & Wittenborn, 2010). However, attachment can also play a role in how a child perceives the interparental conflict and in turn moderates the effects of destructive interparental conflict on adjustment (Camisasca et al., 2017; El-Sheikh & Elmore-Staton, 2004). Therefore, the current study examined whether family attachment moderates the relationship between interparental conflict and a type of young adult emotional adjustment called emotion regulation.

## CHAPTER II: LITERATURE REVIEW

### **Interparental Conflict**

Children from divorced families are more likely to exhibit behavioral and emotional problems, lower social competence and self-esteem, less socially responsible behavior, and poorer academic achievement (Faber & Wittenborn, 2010). Divorce has been found to have a plethora of adverse effects on a child's adjustment, but interparental conflict may be the specific process that explains this connection (Faber & Wittenborn, 2010). Ross and Fuertes (2010) state that there is empirical evidence supporting the notion that late adolescent's perceptions of interparental conflict during childhood is linked to their emotional adjustment. Therefore, interparental conflict should be investigated further to determine its relationship with young adult adjustment.

Interparental conflict is defined by Ross and Fuertes (2010) as "oppositional behavior between parental figures that acts as a stressor leading to an attempt by the child or adolescent within the family system to understand and cope with the conflict" (p. 1052). There are two common features of interparental conflict including (1) dimensions of interparental conflict and (2) an individual's perception of the interparental conflict. Research has indicated four prominent dimensions of interparental conflict: conflict frequency, hostile interparental conflict, constructive interparental conflict, and child-related conflict (van Eldik et al., 2020). Research has also indicated two perceptions of interparental conflict include the appraisals of threat and self-blame (Grych et al., 2000).

### **Interparental Conflict Dimensions**

There are four prominent interparental conflict dimensions that have been found to play an important role in child and adult outcomes, which are conflict frequency, hostile interparental

conflict, constructive interparental conflict, and child-related conflict. Evidence consistently indicates a relationship between the four interparental conflict dimensions and the child outcomes of externalizing behavior, internalizing behavior, emotional response, and cognitive appraisals. Externalizing problems consist of an individual acting negatively on the external world, which is shown through behaviors such as aggression and delinquency (van Eldik et al., 2020). Internalizing problems affect an individual's internal psychological environment, which is captured through constructs such as anxiety and depression (van Eldik et al., 2020). The emotional response of an individual is thought to be negatively impacted following interparental conflict. More specifically, interparental conflict is thought to elevate levels of distress and emotional dysregulation (van Eldik et al., 2020). Finally, cognitive appraisals consist of the interpretation of the interparental conflict and family functioning due to interparental conflict. Cognitive appraisals can be thought of as internal representations of interparental relations (van Eldik et al., 2020).

van Eldik et al. (2020) conducted a meta-analysis to examine the connection between interparental conflict and child adjustment problems by utilizing the four interparental conflict dimensions (i.e., conflict frequency, hostile interparental conflict, constructive interparental conflict, and child-related conflict) as predictors of various child outcomes. The authors found that all four interparental conflict dimensions had average effect sizes that were significantly different from zero within externalizing behavior and internalizing behavior. The emotional response and cognitive appraisals categories only had studies that included conflict frequency, hostile interparental conflict, and constructive interparental conflict dimensions. All three of these dimensions were found to have average effect sizes significantly different than zero for both emotional response and cognitive appraisals. The combination of these results and the

results of numerous other studies provide evidence for various relationships between the four interparental conflict dimensions and the four individual outcome types.

Conflict frequency refers to how often parents have conflicts or disagreements (van Eldik et al., 2020). van Eldik et al. (2020) found that conflict frequency had small, but significant effect sizes for all four child outcomes: externalizing behavior, internalizing behavior, emotional response, and cognitive appraisals. The effect sizes ranged from .17 to .25. In another study, El-Sheikh (2005) suggested that children express higher emotional reactions when they witness frequent interparental conflict. Additionally, Harold and Sellers (2018) described frequent interparental conflict as destructive continua for cognitive and emotional processing. Cusimano and Riggs (2013) conducted a study with undergraduate students to analyze the relationship between perceived interparental conflict in childhood and adult psychological distress. The findings indicated that frequent interparental conflict was significantly related to phobic anxiety.

Hostile interparental conflict refers to the amount of intense forms of nonverbal and verbal expressions of anger during interparental conflict (van Eldik et al., 2020). In van Eldik et al.'s study, hostile interparental conflict had small significant effect sizes for all four child outcomes ranging from .14 to .20. Other research indicated that children who witness intense interparental conflict obtain damage to their cognitive and emotional processing (Harold & Sellers, 2018) and express higher emotional reactions (El-Sheikh, 2005). Using an adult sample, intense interparental conflict was found to be significantly related to phobic anxiety (Cusimano & Riggs, 2013). Richardson and McCabe (2001) analyzed the relationship between perceived verbal interparental conflict during adolescence and current adult adjustment. Verbal interparental conflict was found to be significantly negatively correlated with life satisfaction and global self-concept, while being significantly positively associated with anxiety (Richardson &

McCabe, 2001). The authors also found that higher levels of verbal interparental conflict predicted lower levels of life satisfaction and global self-concept, and higher levels of anxiety.

Constructive interparental conflict refers to the amount of positive tactics used when handling disagreements, which usually results in a resolution (van Eldik et al., 2020). In van Eldik et al.'s study, all four child functioning outcomes had small, significant effect sizes that ranged from .12 to .20. In another study, resolved interparental conflict was found to be significantly related to phobic anxiety with an adult sample (Cusimano & Riggs, 2013). In a review of the literature, Harold and Sellers (2018) also indicated that cognitive and emotional processing is harmed by poorly resolved interparental conflict. Another study conducted by Silva et al. (2016) used a sample of Portuguese adolescents ranging from 10 to 16 years-old to examine emotional insecurity in the context of dimensions of interparental conflict (i.e., frequency, intensity, and resolution). The study found that the combination of these dimensions of interparental conflict significantly predicted emotional reactivity and emotional withdrawal (Silva et al., 2016).

Child-related conflict refers to the extent to which parents have disagreements concerning their children (van Eldik et al., 2020). In van Eldik et al.'s study, child-related conflict was only analyzed for externalizing and internalizing behavior, and both were found to have significant effect sizes of .27 and .19, respectively. Additionally, Harold and Sellers (2018) suggested child-related interparental conflict is destructive to both cognitive and emotional processing.

The literature indicates that conflict frequency, hostile interparental conflict, constructive interparental conflict, and child-related conflict are all associated with the four child outcomes: externalizing behavior, internalizing behavior, emotional response, and cognitive appraisals. Table 1 provides an overview of van Eldik et al.'s meta-analysis findings. Across all evidence

provided, conflict frequency compared to the other dimensions had the most consistent association with all four child outcomes, but the other three dimensions still contributed to the other dimensions in a valuable way.

**Table 1**

*van Eldik et al.'s Effect Sizes for Child outcomes Across Interparental Conflict Dimensions*

| Child Outcome Type     | Interparental Conflict Dimension |                                |                                     |                        |
|------------------------|----------------------------------|--------------------------------|-------------------------------------|------------------------|
|                        | Conflict Frequency               | Hostile Interparental Conflict | Constructive Interparental Conflict | Child-Related Conflict |
| Externalizing behavior | *                                | *                              | *                                   | **                     |
| Internalizing behavior | *                                | *                              | *                                   | *                      |
| Emotional response     | **                               | *                              | *                                   |                        |
| Cognitive appraisals   | **                               | **                             | **                                  |                        |

*Note.* \* = lower effect size (0.12 - 0.19) and \*\* = stronger effect size (0.20 - 0.27).

### **Perceptions of Interparental Conflict**

There have also been studies which focus solely on the relationship between an individual's perceptions or appraisals of interparental conflict and adjustment. The cognitive-contextual framework suggests a child's perception of threat and self-blame within the conflict are particularly important for future adjustment (Grych et al., 2000) because an individual's appraisals of interparental conflict provide the evaluation and meaning towards their own well-being with respect to the interparental conflict (Kim et al., 2008). Therefore, appraisals of interparental conflict can offer an explanation of why or how interparental conflict dimensions and child adjustment are linked (Kim et al., 2008). Perceived threat is thought of as the personal



relevance of the conflict and categorizes the emotional intensity (Grych et al., 2000). Therefore, a child who perceives interparental conflict as harmful to themselves or any family member is expected to be more distressed than a child who does not view interparental conflict as threatening (Grych et al., 2000). Perceived self-blame is described as viewing the cause of the interparental conflict to be the child themselves (Grych et al., 2000). Children who blame the interparental conflict on themselves are more likely to feel shame and guilt, which can ultimately lead to adverse effects for the child (Grych et al., 2000).

In a study done by Grych et al. (2000), the researchers used a sample of 10- to 14-year-olds to examine whether perceived threat and self-blame mediated the relationship between dimensions of interparental conflict (i.e., frequency, intensity, and resolution) and child outcomes. The findings suggested that perceived threat was a mediator for internalizing problems, but not for externalizing problems (Grych et al., 2000). Self-blame was found to be a mediator for internalizing problems with boys but not girls and was not a significant mediator for externalizing behaviors for boys or girls (Grych et al., 2000). DeBoard-Lucas et al. (2010) also investigated how appraisals of threat and self-blame might be mediators of dimensions of interparental conflict (i.e., frequency, intensity, and resolution) and child adjustment. The findings revealed that these dimensions of interparental conflict strongly, positively predicted perceived threat, and threat predicted internalizing problems (DeBoard-Lucas et al., 2010). Additionally, these dimensions of interparental conflict moderately, positively predicted self-blame, and self-blame predicted both externalizing problems and internalizing problems.

Another study conducted by Beuhler et al. (2007) utilized a sample of adolescents with a longitudinal design. The authors analyzed the relationships between marital hostility, emotional responses, appraisals of threat and self-blame, externalizing behavior, and internalizing behavior.

Results suggested that adolescent appraisals of threat and self-blame mediated the relationship between marital hostility and externalizing behavior, and the appraisal of self-blame mediated the relationship between marital hostility and internalizing behavior. The results also indicated that the appraisals of threat and self-blame were significantly positively correlated to emotional dysregulation.

The effects of perceived threat and self-blame were not only prevalent in childhood but also in adulthood. Keeports and Pittman (2017) explored the relationship between appraisals of threat and self-blame, dimensions of interparental conflict (i.e., frequency, intensity, and resolution), and internalizing problems for young adults. The researchers found that threat and self-blame were significantly correlated to both the dimensions of interparental conflict and anxiety (Keeports & Pittman, 2017). Cusimano and Riggs (2013) found in their study that perceived threat of interparental conflict was related to anxiety, hostility, and somatization in adulthood.

Evidence across multiple studies supported the notion that many aspects of interparental conflict were related to externalizing behavior, internalizing behavior, emotional response, and cognitive appraisals for children, adolescents, and adults. However, the relationship between interparental conflict and individual outcomes could possibly be modified by family relations, more specifically, attachment.

## **Attachment**

### **Infant and Adult Attachment**

Attachment theory (Bowlby, 1982) describes how the relationship between a caregiver and infant can shape the infant's future personality and relationships with others. More specifically, the concept of attachment was proposed to explain the bond between an infant and a

caregiver. An infant remains physically close to an individual who can provide protection, and this person is often referred to as an attachment figure (Bowlby, 1982). Initially, Bowlby suggested that individuals usually have an attachment bond with one person (i.e., mother) but can still show attachment behavior to others (Bowlby, 1982). Later, research indicated that infants and children form multiple attachment bonds with multiple people (Doherty & Feeney, 2004).

The main feature of attachment theory can be explained by the attachment behavioral system, which is organized by an individual's internal working model of the self and the world around them (Cassidy et al., 2013). Repeated interactions between a caregiver and an infant within the first year of the infant's life are the building blocks to develop an individual's internal working model (Faber & Wittenborn, 2010). An internal working model allows an individual to generalize their experiences in infancy to how others will behave and perceive the individual later in life. Therefore, the experiences an infant has with their caregiver have a lasting effect on an individual's perceptions of the self and others.

The generalizations an infant holds by means of the internal working model are representations of secure base support in the attachment system (Waters et al., 2015). A caregiver can provide a secure base for an infant by providing protection and a sense of comfort when an infant perceives a threat. However, infants do not always have the same experience with a secure base, and this can ultimately shape an individual's attachment type (i.e., secure and insecure) (Collins & Feeney, 2000). For example, a child with a secure attachment can use a caregiver (i.e., mother) to feel secure throughout their environment (Cassidy et al., 2013). If a child is exploring and feels threatened by another person or object, he or she will seek out an adult to gain a sense of comfort and will reach a sense of security after being comforted. Then,

the child is free to explore their environment once again knowing the caregiver is available when needed (Waters & Waters, 2006). A caregiver who has close proximity to the child is most beneficial because he or she is more accessible to the child. This sense of security creates an internal working model that represents a secure attachment and allows a person to have a positive perception of the self and others (Zeanah & Anders, 1987). An individual with an insecure attachment will experience inconsistencies or an absence in the experience of a secure base or being comforted during a threat (Cassidy et al., 2013; Waters & Waters, 2006). When the child perceives a threat, their caregiver would not be accessible to the child or would not comfort the child when accessible. This experience shapes an individual's internal working model that represents an insecure attachment, which means that individual will have a negative perception of the self and/or others (Zeanah & Anders, 1987). Secure and insecure attachment describe the overarching difference in security felt by children with beneficial and unbeneficial experiences of a secure base, but insecure attachment can take several forms.

Ainsworth and colleagues (1978) define three attachment styles during infancy including secure, anxious-resistant, and anxious-avoidant. Ainsworth utilized the Strange Situations to analyze the behavior of infants during the separation of a caregiver and being reunited with that same caregiver. The majority of infants were found to display similar behaviors, which Ainsworth categorized as secure attachment. Secure attachment involves an infant wanting close proximity to a caregiver. When separated from a caregiver, the infants showed distress and sought out the caregiver. During the reunion, the infants actively sought contact and were easily comforted by the caregiver (Ainsworth et al., 1978). Later studies indicated a secure attachment style is associated with a caregiver who is sensitive and responsive to their child (Faber & Wittenborn, 2010). Another set of less commonly observed behaviors using the Strange Situation

was categorized as anxious-resistant attachment, which is one type of insecure attachment. During the separation of a caregiver, the infants displayed extreme distress and seemed angry at the caregiver when reunited. The infants often showed a mixture of resisting contact and wanting proximity to the caregiver, and when contact was made, it was difficult to comfort the infant (Ainsworth et al., 1978). Infants who displayed anxious-resistant attachment tended to have parents who were inconsistent in their response to the infant's needs (Faber & Wittenborn, 2010). Finally, Ainsworth categorized the smallest grouping of infants as anxious-avoidant attachment, which is another type of insecure attachment. An anxious-avoidant infant showed little distress when separated from a caregiver. When reunited with the caregiver, the infants avoided interaction and showed no sign of resistance or wanting to be comforted when contact was made with the caregiver (Ainsworth et al., 1978). Infants who displayed anxious-avoidant attachment tended to have parents who neglected their child's needs (Faber & Wittenborn, 2010).

There is another subgroup of insecure attachment which was later established by Main and Solomon (1986) called disorganized attachment (Duschinsky, 2015). The disorganized attachment style included a few infants who could not be classified using Ainsworth's three categories. The infants in this grouping briefly displayed strange behaviors including fear of the caregiver, contradictory behaviors, jerky movements, freezing, and apparent dissociation (Duschinsky, 2015). Disorganized attachment is related to abusive or neglectful parenting which are frightening to the child (Duschinsky, 2015).

Contrary to the established categorical measurements of attachment style, recent research has indicated that attachment should not be measured categorically, but dimensionally. Ainsworth's Strange Situation set the standard for attachment to be measured categorically (i.e.,

secure, anxious-resistant, anxious-avoidant), but these categories were created using continuously scaled behavioral ratings (Fraley & Spieker, 2003). Fraley and Spieker (2003) sought to answer the question of whether infant attachment is better represented continuously or categorically. Utilizing the Strange Situation procedure, Fraley and Spieker (2003) found that data were most consistent with a dimensional framework rather than a categorical one. Fraley and Spieker (2003) then suggested a two-dimensional framework to represent the continuum of security where the dimensions include (1) Proximity-Seeking Versus Avoidant Strategies and (2) Angry and Resistant Strategies. The Proximity-Seeking Versus Avoidant Strategies refer to the degree of an infant's goal to seek proximity to a caregiver (Fraley & Spieker, 2003), which is referred to as attachment avoidance. Individuals who score high in the attachment avoidance dimension after infancy typically feel uncomfortable with emotional closeness and are more self-reliant. Through early interactions with caregivers, these individuals have learned to deactivate the attachment system to avoid distress because a caregiver is unavailable (Mikulincer & Shaver, 2016). The Angry and Resistant Strategies refer to the amount of anger displayed toward the caregiver (Fraley & Spieker, 2003), which is referred to as attachment anxiety. Individuals who score high in the attachment anxiety dimension after infancy typically want a strong emotional closeness and worry about their own value in the eyes of the attachment figure. These individuals have learned to hyperactivate the attachment system to increase proximity seeking attempts because an attachment figure is unreliably responsive (Mikulincer & Shaver, 2016). The dimensions have similar qualities to Ainsworth's categories, but individuals can fall anywhere on a continuum within the two dimensions rather than placed in a restrictive category to define their unique attachment style.

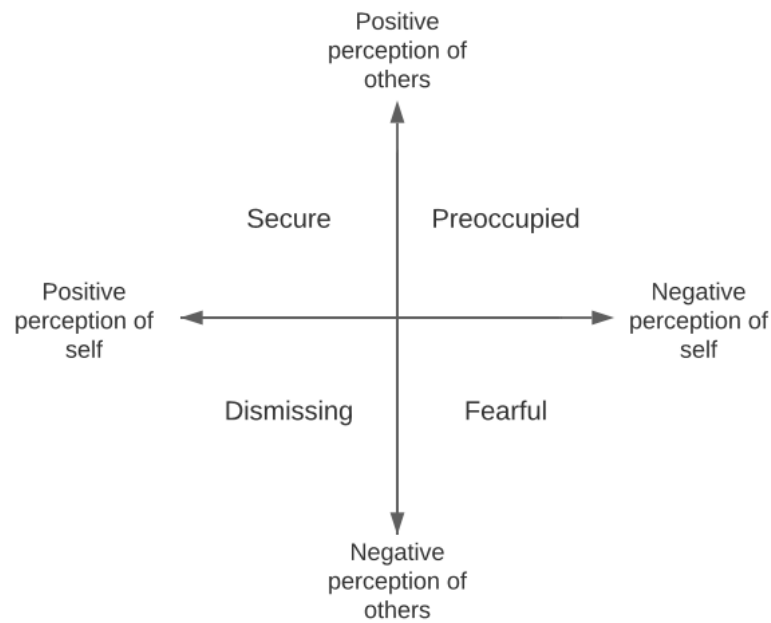
Infants and children are not the only ones who experience attachment. Research has indicated that adults show attachment related behavior and desires as well (i.e., proximity seeking, safe haven, and secure base) (Doherty & Feeney, 2004). An adult attachment figure is most often thought of as a romantic partner but can also be a parent or a sibling. Attachment to a parent in adulthood, however, is different than in infancy. During adulthood, attachment to a parent evolves from an adult-child relationship to an adult-adult relationship with mutual support provided by both parties. An individual, especially a young adult, still relies on a parent in certain situations, but not in every situation. In some cases, parents can be replaced as a prominent attachment figure by another important relationship such as a sibling who can provide closeness, security, and comfort (Doherty & Feeney, 2004). Adults, just like infants, commonly have multiple attachment bonds. On average, adults can have 5.38 attachment bonds (Trinke & Bartholomew, 1997). Therefore, an adult could potentially have an attachment bond with each parent and multiple siblings. However, the strength of each bond is not equal, and one bond is usually relied on the most (Doherty & Feeney, 2004).

Not only do adults show similar attachment behaviors as infants and children, but they also have similar attachment styles. Attachment styles tend to carry over into adulthood (due to the internal working model) and affect later interpersonal relationships. Bartholomew and Horowitz (1991) described adult attachment based on four categories including secure, preoccupied, dismissing, and fearful. These categories are based on the perception of the self and others in the internal working model. Thus, there can be a positive or negative perspective for both the self and others, which is developed from an individual's internal working model. For example, an individual who has a positive perspective of both the self and others would be considered secure. Figure 1 displays the stipulations for each category based on the internal

working model. However, adult attachment is now most often measured dimensionally rather than categorically for the same reasons as infant attachment. The present research made use of the two dimensional measurement to capture attachment style of individuals because differences need to be distinguished across relationships with the individual.

**Figure 1**

*Bartholomew's Four Adult Attachment Style Categories*



*Note.* Bartholomew's adult attachment categories are based on the positive and negative perception of the self and others (internal working model).

Adult attachment style can then influence the relationships of those around them (i.e., family members). More specifically, an individual's communication and emotional expression can be influenced by attachment style (Mikulincer & Shaver, 2012). A person with a secure attachment style is more likely to have open communication, whereas a person with an insecure attachment struggles to maintain open conversation (Mikulincer & Shaver, 2012). Individuals



with insecure attachment are also more likely to foster poor emotional expression. Those with a negative sense of others (i.e., dismissing and fearful) do not seek out emotional closeness with others; rather, these individuals are more prone to emotionally distancing themselves from others. Therefore, these individuals do not encourage affection in relationships and are less likely to disclose personal information. Those with a negative sense of the self (i.e., preoccupied and fearful) tend to focus on their own emotional state compared to another person's emotional state because of their insecurities and anxiety towards themselves. Thus, these individuals have no issue disclosing information to a person, but they have difficulty accepting the information disclosed from others; making satisfaction in a relationship difficult (Mikulincer & Shaver, 2012). Securely attached individuals tend to have better emotional expression and more open communication because their beliefs about conflict and conflict resolution have been shaped in a positive way (Mikulincer & Shaver, 2012). Overall, adults with a secure attachment tend to have greater satisfaction in their relationships whereas people with an insecure attachment tend to feel undervalued by significant people in their lives (Safyer et al., 2019).

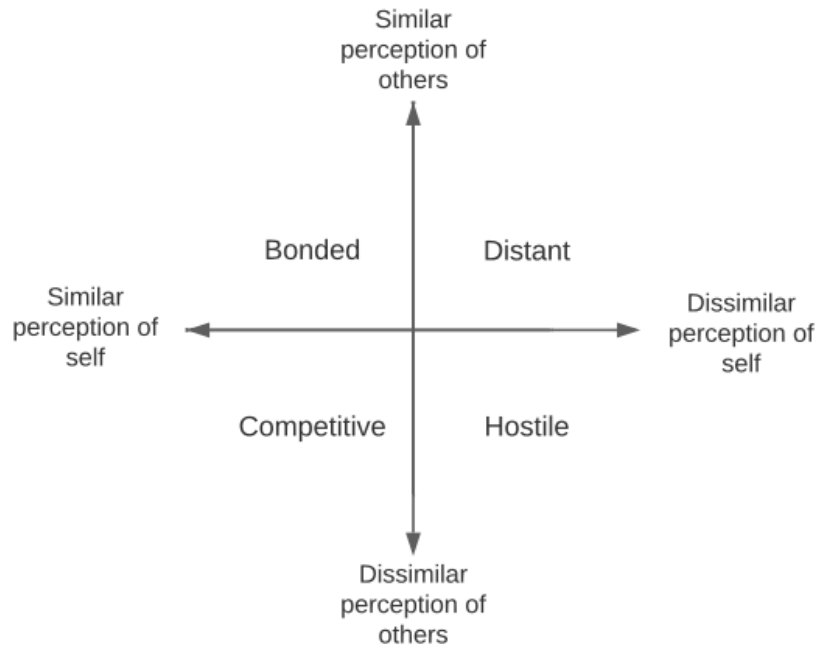
### **Attachment Relationship with Siblings**

Most studies concerning siblings and attachment consider the individual attachment styles of each sibling toward their mother. There is little research about how a sibling can be an attachment figure for another sibling during emerging adulthood. Kriss et al. (2014) suggest that the relationship between siblings is fostered by how a sibling fits into the other sibling's internal working model of self, and how the internal working model of others is created by individual parent-child interactions for each sibling. Furthermore, Kriss et al. (2014) suggested four categories of sibling relationships based on this theory, which include bonded, competitive, distant, and hostile. Bonded siblings have the same conceptualizations of the self and others

within their internal working model. In other words, the siblings can see themselves in the other sibling, and their parents have similar interactions with both siblings. Siblings who share a similar environment and parent interactions throughout their childhood can foster a sense of relatability between each other, which ultimately can lead to a unique bond between the siblings that can be warm and supportive (Kriss et al., 2014). However, there are siblings that do not form this bond because their sense of self and others are not aligned. For example, a sibling who feels they were treated differently by a parent compared to another sibling may not have a similar conceptualization of others as their sibling. This difference in perception of others may foster competition with that sibling (Kriss et al., 2014). Another suggested category of sibling relationship style is distant. Siblings who cannot recognize themselves in another sibling may not have a similar conceptualization of the self as their sibling. Thus, a sibling may feel distant from the other sibling (Kriss et al., 2014). Finally, siblings who do not conceptualize both the self and others similarly are suggested to have a hostile relationship where a sibling harbors feelings of hostility towards the other sibling (Kriss et al., 2014). Figure 2 provides the categorization of sibling relationships based on the internal working model. The relationship styles suggested by Kriss et al. (2014) seem to reflect the four adult attachment styles. For example, a sibling who feels bonded to another sibling may reflect a secure attachment style, and a sibling who feels hostile toward another sibling may reflect a fearful attachment style.

## Figure 2

### *Kriss et al.'s Four Categories of Sibling Relationships*



*Note.* The sibling categories are defined by similar or dissimilar perceptions of the self and others between two siblings.

There are also some sibling characteristics that can increase or decrease the likelihood of a sibling serving as an attachment figure. For example, older aged adult siblings tend to feel less attached to a sibling compared to younger-aged siblings (Fraley & Tancredy, 2012). Thus, an individual who is 65 might feel less attached to a sibling compared to an individual who is 20. A possible explanation is that older adults may rely on others as a secure base (i.e., spouse) as compared to younger less established adults. Another study found that the quality of attachment is higher for same-sex relationships (Buist et al., 2002). For example, a female sibling is more

likely to have a secure attachment to another female sibling compared to a female sibling and her male sibling.

### **Attachment Relationship and Interparental Conflict**

Bowlby describes attachment as a relatively stable force in an individual's life. However, attachment style can be modified when large changes in an individual's environment occur. Divorce can be a huge lifestyle change for a child, and therefore, can affect attachment. For example, a parent experiencing the dissolution of their marriage may be unable to provide emotional support or be as responsive to their child's needs prior to the divorce. Persistence in this changed parenting style could cause a child to modify their internal working model to reflect a negative perspective of the self and others. The changes in parenting style can take many forms such as investing less time, showing less affection, implementing fewer rules, dispensing harsher discipline, providing less supervision, and engaging in more conflict (Faber & Wittenborn, 2010). Any of these changes in parenting style can have a negative effect on children's attachment.

Research has indicated that children from divorced families are more likely to have an insecure attachment compared to children from nondivorced families (Faber & Wittenborn, 2010). Child attachment has also been linked to interparental conflict before, during, and following a divorce. One study found that greater levels of interparental conflict predicted an insecure attachment for a child during infancy (Laurent et al., 2008). The authors explain the finding by suggesting that interparental conflict could possibly impact a child's view of a parent as a secure base. If a child is not receiving sensitive and responsive parenting due to high levels of interparental conflict (Laurent et al., 2008), the perspective of their parent and ultimately of others in their internal working model could change. Additionally, Davies and Cummings (1994)

indicated that interparental conflict predicts an insecure attachment between a child and parent. Thus, interparental conflict seems to be a possible factor underlying divorce that could increase the likelihood of children developing an insecure attachment.

There is also evidence that suggests attachment can influence an individual's perspective on destructive interparental conflict. Camisasca et al. (2017) conducted a study to analyze how interparental conflict, attachment style, and coping skills interact. Children between the ages of 8 and 11 and their parents completed a series of questionnaires and interviews for this study. The children provided self-reports regarding interparental conflict, distress, coping strategies, coping efficacy, and internal working models of attachment, and the parents provided self-reports of interparental conflict. Securely attached children were found to utilize more effective coping strategies compared to insecurely attached children (Camisasca et al., 2017). The authors suggested that securely attached children were more likely to believe their caregivers were willing to listen to and protect them, which made the children better equipped at using effective coping strategies such as support seeking (Camisasca et al., 2017). The researchers also found that children with anxious-avoidant attachment utilized distraction and avoidance coping strategies when distressed by interparental conflict. The authors suggested this finding was due to children with this attachment style being more likely to assume that their parents were unavailable to listen and protect them. A study conducted by Gloger-Tippelt and Konig (2007) found anxious-avoidant attachment to be more common for children from divorced families compared to anxious-resistance attachment. Later, Faber and Wittenborn (2010) suggested that the reason anxious-avoidant attachment is more common may be because it can be used as a protective factor for the child and can even relieve some caregiving responsibilities for the parents. However, Camisasca et al. suggested that the coping strategies seen in anxious-avoidant

children can be beneficial in the short-term, but not long-term. Camisasca et al. also found that children with an anxious-resistant attachment used a variety of coping strategies, but seeking support for their feelings was not one of those strategies. The authors assumed this finding occurred because anxious-resistant attached children tend to have experience with a caregiver providing little sensitivity and inconsistent reactions to distress, which could be a reason why these children do not find it useful to seek out support from their caregiver (Camisasca et al., 2017). This study has implications that interparental conflict not only impacts attachment style, but attachment style could be a moderator between interparental conflict and negative outcomes

There is very limited research including the moderating effects of family attachment on the relationship between interparental conflict and both emotional response and cognitive appraisals, but there is one study that found evidence of attachment moderating the effects of interparental conflict on externalizing and internalizing problems. El-Sheikh and Elmore-Staton (2004) found results suggesting mother and father attachment are moderators for perceived interparental conflict and child adjustment including internalizing and externalizing problems. A more secure child-father attachment suggested a weaker relationship between interparental conflict and externalizing problems compared to a less secure child-father attachment (El-Sheikh & Elmore-Staton, 2004). Only mother attachment had significant moderation effects between interparental conflict and child reported internalizing problems (El-Sheikh & Elmore-Staton, 2004). Results showed that a more secure child-mother attachment suggested an extremely weak relationship between interparental conflict and internalizing problems, and a less secure child-mother attachment indicated a much stronger relationship between interparental conflict and internalizing problems (El-Sheikh & Elmore-Staton, 2004). Therefore, secure father attachment may decrease the effect of interparental conflict on externalizing problems, and secure mother

attachment may decrease the effect of interparental conflict on internalizing problems for children.

Externalizing and internalizing behaviors have been researched quite extensively, but these are not the only contributing factors to an individual's adjustment. Emotional response is another important facet in adjustment and seems to be consistently affected by interparental conflict since interparental conflict is thought to initiate emotional distress and dysregulation of a child.

### **Emotion Regulation**

van Eldik et al. (2020) described emotional responses to interparental conflict as an individual's emotional reactivity by ways of anger, sadness, fear, or intense, prolonged, and dysregulated distress. Since the definition of emotional response is so broad and complex, this study sought to analyze one component of it, that being emotion regulation (Thompson, 1994). According to Gratz and Roemer (2004), emotion regulation should be conceptualized by the awareness, understanding, and acceptance of emotions; when negative emotions arise, controlling impulsive behaviors and behaving in conjunction with specified goals; and using appropriate emotion regulation strategies to meet desired goals. With this framework in mind, Thompson (1994) defines emotion regulation as "extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (pp. 27-28).

Emotion regulation contributes to an individual's overall adjustment and functioning. Healthy emotion regulation can aid an individual in utilizing emotion for adaptive, organized behavioral strategies (Thompson, 1994). These behavioral strategies can take the form of effective social strategies, successful cognitive performance in tasks involving delay, inhibition,

or long-term goals, and management of stressful experiences at home (Thompson, 1994). However, dysregulation of emotions has been suggested to be linked to poor individual functioning such as emotional and behavioral problems (Morris et al., 2007) and psychopathological problems including anxiety, aggressive behavior, and eating pathology (McLaughlin et al., 2011). Therefore, emotion regulation and what contributes to the dysregulation of emotions are important constructs to study.

Interparental conflict could be a contributing factor to the difficulties in an individual's emotion regulation. Research has indicated that children who experience destructive interparental conflict demonstrated more difficulty controlling negative affect, and interparental conflict predicted emotion regulation a year later (Gong & Paulson, 2017). Another contributing factor to the difficulties in emotion regulation pertain to family interactions. Morris et al. (2007) suggested that emotion regulation is affected by the emotional climate of the family, which is defined as the quality of attachment relationships, styles of parenting, family expressiveness, and the emotional quality of the marital relationship. Past research also indicated that a more secure attachment to a parent was related to better emotion regulation, and a more insecure attachment to a parent was related to emotional expressive suppression and dysregulation (Gong & Paulson, 2017).

### **Current Study**

The purpose of this study was to analyze the relationship between interparental conflict, family attachment, and young adult emotional adjustment. The examination of this relationship could be beneficial in providing an understanding of protective factors against destructive interparental conflict.



Research has indicated that secure father and mother attachment could be potential protective factors for destructive interparental conflict (El-Sheikh & Elmore-Staton, 2004). A secure attachment style could protect against interparental conflict since securely attached children are less distressed by interparental conflict (Camisasca et al., 2017). Additionally, Grych et al. (2004) found that adolescents more securely attached to their mothers perceived interparental conflict as less threatening, and adolescents more securely attached to their fathers predicted lower levels of self-blame. DeBoard-Lucas et al. (2010) also suggested that securely attached individuals are more likely to develop better self-esteem and in turn reduce self-blame within interparental conflict. Most research pertains to internalizing and externalizing problems, which indicates a gap in the literature regarding attachment moderating the effects of interparental conflict on emotional adjustment. The emotional security hypothesis is a well-developed theory that suggests a child's psychological state can be threatened by interparental conflict (Davies & Cummings, 1994). The emotional security hypothesis also posits that the emotional security of an individual can be enhanced or undermined by the relationship between a child and parent (Davies et al., 2002), which provides implications that a secure attachment to a parent could protect against the negative effects of interparental conflict on the emotional adjustment of children, adolescents, and young adults. As mentioned before, there is very little research regarding sibling attachment during emerging adulthood, but there has been research that indicates adults can use siblings as another attachment figure (Doherty & Freeney, 2004). Taken together, this research suggests that sibling attachment could also serve as a protective factor for interparental conflict and emotional adjustment. Therefore, the current study assessed whether mother, father, and sibling attachment can be protective factors against the relationship between destructive interparental conflict and young adult emotional adjustment. Family

attachment consisted of attachment anxiety and avoidance levels for an individual's mother, father, and a sibling. Interparental conflict consisted of three categories: conflict properties (frequency, intensity, resolution), threat, and self-blame (including the content of the conflict). Difficulties in emotion regulation was used in the current study to examine the emotional adjustment of young adults, which consisted of five categories: nonacceptance, strategies, goals, clarity, and impulse. I proposed three moderation models, one analyzing mother attachment anxiety and avoidance levels (Figure 3), the second analyzing father attachment anxiety and avoidance levels (Figure 4), and the third analyzing sibling attachment anxiety and avoidance levels (Figure 5).

**Hypothesis 1:** Mother attachment anxiety and avoidance will separately moderate the positively correlated relationship between perceived interparental conflict and young adult difficulties in emotion regulation. Therefore, individuals with low levels of mother attachment anxiety and avoidance will have a weaker relationship between perceived interparental conflict and difficulties in emotion regulation.

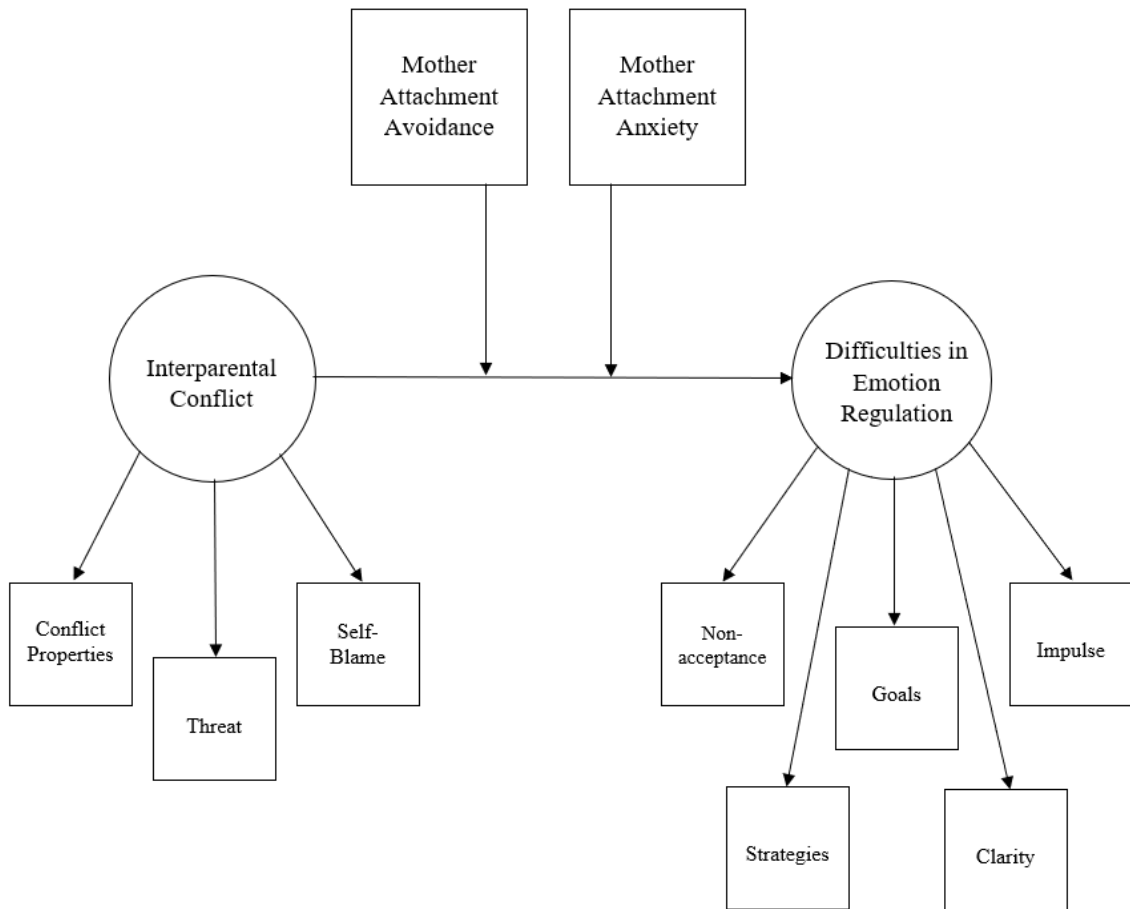
**Hypothesis 2:** Father attachment anxiety and avoidance will separately moderate the positively correlated relationship between perceived interparental conflict and young adult difficulties in emotion regulation. Therefore, individuals with low levels of father attachment anxiety and avoidance will have a weaker relationship between perceived interparental conflict difficulties in emotion regulation.

**Hypothesis 3:** Sibling attachment anxiety and avoidance will separately moderate the positively correlated relationship between perceived interparental conflict and young adult difficulties in emotion regulation. Therefore, individuals with low levels of sibling attachment anxiety and

avoidance will have a weaker relationship between perceived interparental conflict and difficulties in emotion regulation.

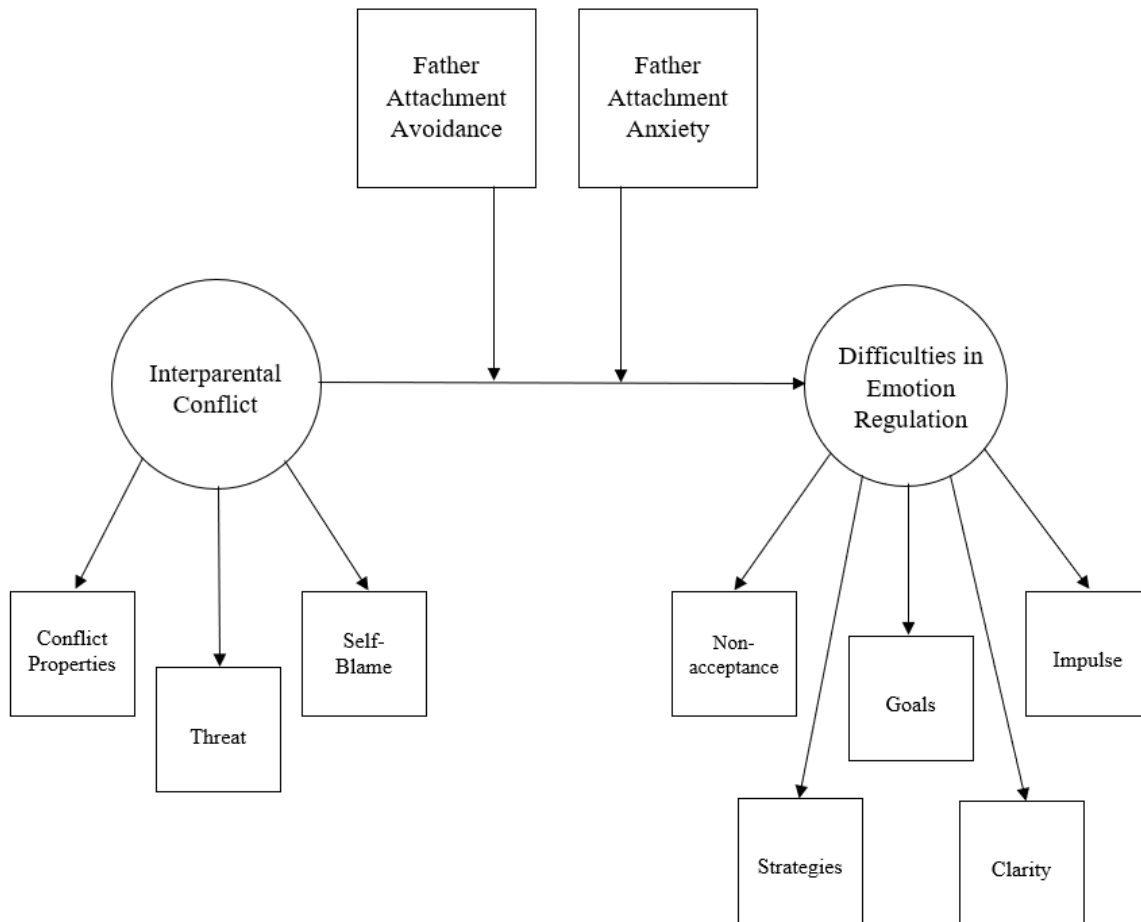
**Figure 3**

*A Model of Mother Attachment Anxiety and Avoidance Moderating Interparental Conflict and Young Adult Difficulties in Emotion Regulation*



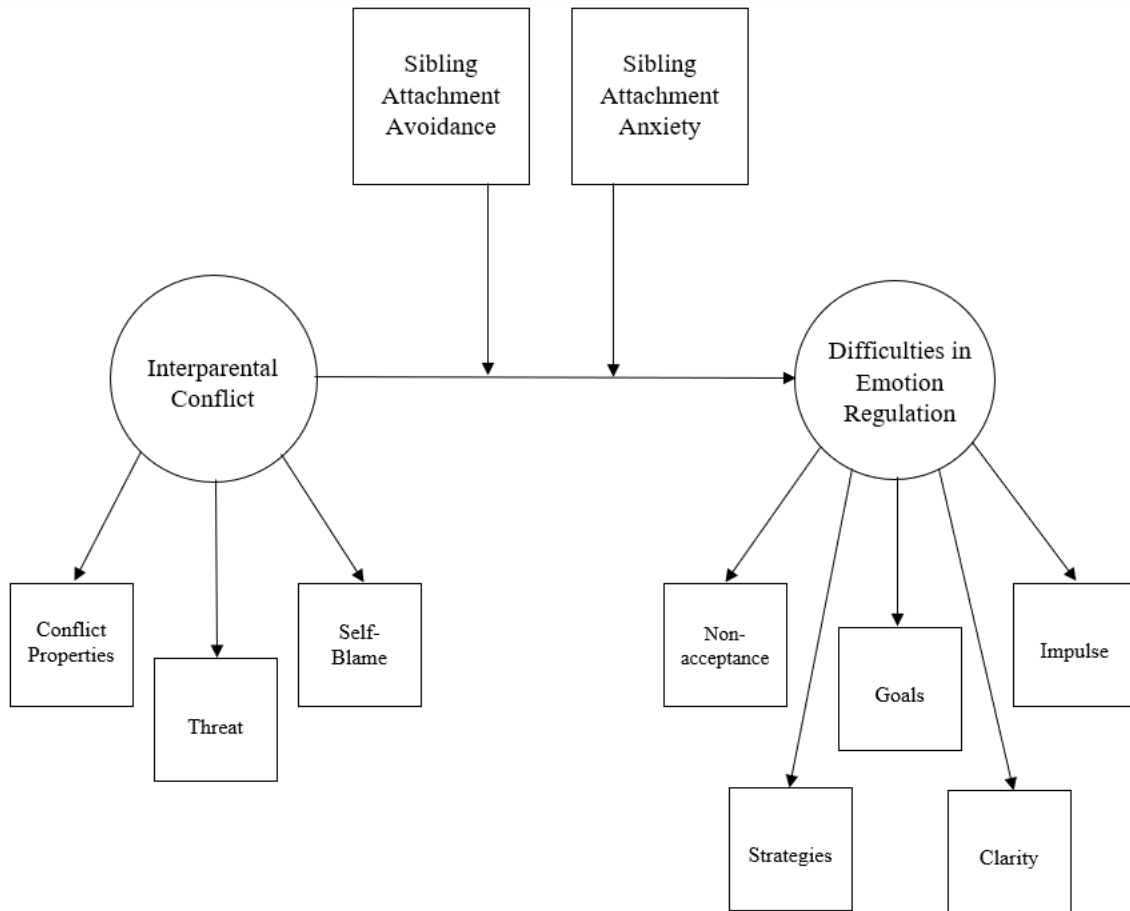
**Figure 4**

*A Model of Father Attachment Anxiety and Avoidance Moderating Interparental Conflict and Young Adult Difficulties in Emotion Regulation*



**Figure 5**

*A Model of Sibling Attachment Anxiety and Avoidance Moderating Interparental Conflict and Young Adult Difficulties in Emotion Regulation*



## CHAPTER III: RESEARCH METHODOLOGY

### Participants

Individuals who were between 18 and 22 years of age were sampled from Illinois State University. This age group represents a group of young adults who have recently left home, which means these individuals had more recent direct contact with interparental conflict. Recruitment efforts involved sending a mass email through Illinois State University inviting them to participate. Participants were given the opportunity to enter a drawing for two \$20 Amazon gift cards as compensation for participation. IRB approval and participant consent were received prior to the start of the study. All participation in this study was voluntary.

There were 618 responses to the survey, but several responses were eliminated. There were two people who did not give consent in the survey by responding “I am under 18 years of age.” Individuals who gave this response were immediately taken to the end of the survey, so no data were collected for these individuals. There were 19 individuals who were over the age of 22 and were eliminated. There were 161 individuals who did not answer at least one entire questionnaire and were eliminated. There were only 30 individuals who had no biological, step, or half sibling, but did have a sibling-like figure. There were also 9 individuals who did not have either a sibling or sibling-like figure. Due to these small sample sizes, responses from these 39 individuals were removed. Overall, there were 221 individuals excluded from the dataset leaving a sample size of 397 for data analyses.

The 397 participants reported a mean age of 19.50 ( $SD = 1.33$ ). There were four individuals who did not report their age. There were 74 (18.6%) participants who identified as a man; there were 302 (76.1%) participants who identified as a woman; there were 19 (4.8%) participants who identified as “other;” and there were 2 (4.8%) participants who preferred not to

answer. Of the 19 individuals who identified as “other,” written in responses included non-binary, female, gender nonconforming, agender, genderfluid, trans, and questioning. A majority of participants identified as White/Caucasian (80.9%), followed by Hispanic/Latino (6.3%), Black/African American (3.8%), Asian American (3.5%), mixed ethnicity (3.5%), Middle Eastern (0.5%), and other (1.0%). There were 2 (0.5%) participants who preferred not to disclose their ethnic background.

Table 2 shows the frequencies for parent relationship, participant’s current living arrangement, and participant birth order. Table 3 shows frequencies for the participants who do not live with either parent. On average, participants had 2.23 siblings ( $SD = 1.57$ ). The age, gender and birth order for the participants’ target sibling was also analyzed. Target sibling age ranged from 4 years to 36 years with a mean of 20.04 years ( $SD = 4.79$ ). The difference in age of the participant from the age of the target sibling ranged from 0 years to 17 years with a mean of 3.55 years ( $SD = 2.98$ ). The gender of the target siblings consisted of 55.9% men, 42.3% women, and 1.5% other. The majority of target siblings were born second in their family (50.1%), followed by first born (28.2%), third born (11.3%), fourth born (4.3%), and beyond fourth born (6.0%).

**Table 2***Participant Demographic Frequencies*

|              |                                      | n   | %     |
|--------------|--------------------------------------|-----|-------|
| <hr/>        |                                      |     |       |
| Parent       |                                      |     |       |
| Relationship | Married                              | 258 | 65.0% |
|              | Divorced                             | 89  | 22.4% |
|              | Separated                            | 14  | 3.5%  |
|              | Never married                        | 22  | 5.5%  |
| Living       |                                      |     |       |
| Arrangement  | Lives with both parents              | 123 | 31.0% |
|              | Lives without either parent          | 124 | 31.2% |
|              | Lives with mother                    | 54  | 13.6% |
|              | Lives with father                    | 9   | 2.3%  |
|              | Lives with parents at separate times | 43  | 10.8% |
| Birth Order  | First born                           | 147 | 37.0% |
|              | Second born                          | 132 | 33.2% |
|              | Third born                           | 63  | 15.9% |
|              | Fourth born                          | 27  | 7.1%  |
|              | Higher than fourth born              | 28  | 6.8%  |

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**Table 3***Frequencies for Participants Living Without Either Parent*

|                         |                        | n  | %     |
|-------------------------|------------------------|----|-------|
| <hr/>                   |                        |    |       |
| When did participant    |                        |    |       |
| move out?               | Less than 3 months ago | 70 | 56.5% |
|                         | Three to 6 months ago  | 9  | 7.3%  |
|                         | Six to 9 months ago    | 1  | 0.8%  |
|                         | Nine to 12 months ago  | 5  | 4.0%  |
|                         | Over a year ago        | 39 | 31.5% |
|                         |                        |    |       |
| How often do you visit? | Almost every day       | 1  | 0.8%  |
|                         | 3-4 times per week     | 2  | 1.6%  |
|                         | 1-2 times per week     | 6  | 4.9%  |
|                         | 3-4 times per month    | 17 | 13.8% |
|                         | 1-2 times per month    | 55 | 44.7% |
|                         | Several times a year   | 27 | 22.0% |
|                         | Only major holidays    | 9  | 7.3%  |
| <hr/>                   |                        |    |       |

## Measures

### Demographics

The demographics questionnaire included the participant's gender, age, ethnicity, birth order, both parents' education levels, parental relationship status, who the participant currently lives with or lived with before the participant turned 18, and how many siblings the participant has. Additionally, participants were asked if the participant had at least one sibling (biological, step, or half). If the participant did have a sibling, participants answered specific questions about one particular sibling who lived with them and is the closest in age to them (target sibling) including age, gender, and birth order. If participants did not have a sibling, the participant was asked if there was a sibling-like figure in their life (such as a cousin or neighbor who spent substantial time in the participant's home). If the participant did have a sibling-like figure, participants answered specific questions about one particular sibling-like figure who is the closest in age to them (target sibling-like figure) including age and gender.

### Interparental Conflict

Interparental conflict was measured using 40 items of the Children's Perception of Interparental Conflict Scale (CPIC; Grych et al., 1992). Due to a clerical error, one of the items within the frequency subscale was missing on the survey. The CPIC has a three-factor scale with seven subscales: Conflict Properties (frequency, intensity, and resolution), Threat (threat and coping efficacy), and Self-Blame (content and self-blame). There were a total of 39 items with 18 items for Conflict Properties, 12 items for Threat to Self, and 9 items for Self-Blame. Items were evaluated with a 3-point Likert-scale with responses of *true*, *sort of true*, and *false* (Bickham & Fiese, 1997). Higher scores on the CPIC indicate higher levels of interparental conflict. The CPIC was originally designed for children but has been assessed using a sample of

late adolescents ranging from 17 to 21 years old. The reliability of the CPIC with a late adolescent sample was measured by analyzing internal consistency and test-retest methods. The Cronbach's alphas were found to be .95 for the Conflict Properties scale, .88 for the Perceived Threat scale, and .85 for the Self-Blame scale. The Pearson correlation coefficients between a 2-week period were found to be .95 for the Conflict Properties scale, .86 for the Perceived Threat scale, and .81 for the Self-Blame scale (Bickham & Fiese, 1997). Additionally, Ross and Fuentes (2010) found Cronbach's alphas for a sample of adults whose ages ranged from 18 to 22 years-old to be .94 (conflict properties), .83 (threat to self), and .79 (self-blame). The original CPIC validity was supported by correlating it with parent reports of marital conflict (Ross & Fuentes, 2010). For this study, the total reliability for interparental conflict is .95. The Cronbach's alpha for the subscales were .94 (conflict properties), .87 (threat), and .85 (self-blame).

### **Attachment Style across Relationships**

Attachment style for each family relationship type (i.e., mother, father, sibling) was measured with a modified version of the Experiences in Close Relationships – Relationship Structures questionnaire (ECR-RS; Fraley et al., 2011). The original ECR-RS measures attachment style across four different relationships including mother, father, romantic partner, and a best friend by utilizing the same 9 items for all relationships. The items are measured with a 7-point Likert-scale where 1 = *strongly disagree* and 7 = *strongly agree* (Fraley et al., 2011). For the current study, the ECR-RS was modified such that the best friend section was changed to assess a sibling relationship, and the romantic partner section was eliminated. All three relationship types (i.e., mother, father, sibling) were assessed at the same time across the 9 items, rather than assessed separately in the original ECR-RS. Therefore, the 9 items were presented only once with a mother, father, and sibling category within each item to be assessed. The ECR-

RS has consistently shown a two-factor structure with anxiety and avoidance as the factors, which results in two separate scores of attachment anxiety and avoidance. The first 6 items in the questionnaire measure an individual's attachment avoidance, and the last 3 items measure attachment anxiety. Higher scores on both factors of the ECR-RS indicate a higher levels of both attachment anxiety and attachment avoidance. The ECR-RS was found to be reliable with Cronbach's alphas scores of .88 and .92 for mother, .90 and .90 for father, and .90 and .88 for a close friend for the anxiety and avoidance factors respectively. Construct validity was measured by comparing the ECR-RS to a depression scale and a measure of relationship quality and functioning. Results were as expected, as measures of anxiety and avoidance positively correlated with depressive symptoms and negatively correlated with commitment, satisfaction alternatives, and investment pertaining to all four relationship types (Fraley et al., 2011). For this study, the reliability of mother attachment avoidance was .90 and .87 for mother attachment anxiety. The reliability of father attachment avoidance was .91 and .89 for father attachment anxiety. The reliability of sibling attachment avoidance was .91 and .82 for sibling attachment anxiety.

### **Emotion Regulation**

Emotion regulation was measured using five of the subscales (i.e., non-acceptance, goals, impulse, strategies, clarity) in the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004). All 36 items in the scale were included in the survey to maintain the scale's reliability, but since only five subscales were included in the data analysis, only 30 items were used in the analysis. The DERS is a self-report questionnaire designed to measure emotional dysregulation in adults. The five scales being utilized in this study measured an individual's goal directed behavior, understanding, acceptance, strategy use, and impulse control toward their

emotions. The items were measured on a 5-point Likert-scale where 1 = *almost never* and 5 = *almost always*. Higher scores on the DERS indicate higher levels of dysfunctional emotion regulation. One of the subscales (awareness) did not have high intercorrelations with the other five subscales to create a latent variable. The awareness subscale in the DERS has significant and nonsignificant intercorrelations ranging from .08 to .46, while the other five subscales had significant intercorrelations ranging from .32 to .63 (Gratz & Roemer, 2004). Overall, the DERS was found to have high internal consistency with a Cronbach's alpha of .93 (including the awareness scale). The subscales of the DERS had Cronbach's alphas ranging from .80 to .89, where the lowest value represents the awareness factor, which is not included in this study. Construct validity was examined by finding the correlations between the DERS and the Negative Mood Regulation Scale (NMR), measures of experiential avoidance, and measures of emotional expressivity. All correlations across the three comparison measurements and both the overall DERS score and subscale scores resulted in the expected correlations. The DERS and both the NMR and measures of emotional expressivity ranged from low to moderately strong negative correlations, whereas the correlations between the DERS and measures of experiential avoidance ranged from low to moderately strong positive correlations (Gratz & Roemer, 2004). For this study, the total (five subscales) reliability for emotion regulation was .94. The Cronbach's alpha for the subscales were .90 (non-acceptance), .88 (goals), .86 (impulse), .90 (strategies), and .84 (clarity).

### **Procedure**

Participants were recruited through Illinois State University's email system. The email asked for students between the ages of 18 and 22 to voluntarily participate in this study by completing a 20-min survey pertaining to interparental conflict and their difficulties with

emotion regulation. All participants completed the online survey through Qualtrics after being recruited. Before participants started the survey, the individuals were informed about the details of the study, that participation in the survey was voluntary, and participation could be halted at any point during the survey. All participants were asked to read an informed consent document and agree to participation of the study. The participants then completed the survey, which included the demographics questionnaire, the entire Difficulties in Emotion Regulation Scale, the Children's Perception of Interparental Conflict Scale, and the modified version of the Experiences in Close Relationships – Relationship Structures, in this order. A debriefing statement was provided at the end of the survey with my contact information for any questions pertaining to the study. Then, a link was displayed for the individuals who wanted to enter into the gift card raffle. The link redirected participants to a separate survey where they were only asked to report their email address. The data from the main survey, and the data from the gift card raffle were kept separate. Data collection started on September 1<sup>st</sup> and ended on October 1<sup>st</sup>. After data collection had been stopped, two individuals were randomly selected by means of a random number generator, and each were emailed a \$20 Amazon gift card.

## CHAPTER IV: RESULTS

### **Preliminary Analysis**

All preliminary analyses were conducted using SPSS. Correlations were computed to analyze the relationships between interparental conflict, attachment avoidance, attachment anxiety, and difficulties in emotion regulation. The results of the correlational analysis are shown in Table 4. All the correlations across the eight constructs were significant and positive. Since the emotion regulation measurement used in this study measured the difficulty in emotion regulation, this means that as interparental conflict and any of the attachment constructs increase, difficulties in emotion regulation increases as well. The strongest correlation found was between father attachment anxiety and father attachment avoidance, followed by the association between mother attachment anxiety and mother attachment avoidance. Interestingly, the relationship between sibling attachment anxiety and mother attachment anxiety was slightly stronger than the relationship between sibling attachment anxiety and sibling attachment avoidance.

**Table 4***Correlations, Means, and Standard Deviations Among Constructs (N = 397)*

| Construct                   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|-----------------------------|------|------|------|------|------|------|------|------|
| 1. Interparental Conflict   | --   |      |      |      |      |      |      |      |
| 2. Emotion Regulation       | .36* | --   |      |      |      |      |      |      |
| 3. Mother Attach Anxiety    | .43* | .30* | --   |      |      |      |      |      |
| 4. Father Attach Anxiety    | .53* | .28* | .54* | --   |      |      |      |      |
| 5. Sibling Attach Anxiety   | .32* | .23* | .55* | .47* | --   |      |      |      |
| 6. Mother Attach Avoidance  | .39* | .24* | .66* | .28* | .33* | --   |      |      |
| 7. Father Attach Avoidance  | .53* | .33* | .32* | .71* | .35* | .40* | --   |      |
| 8. Sibling Attach Avoidance | .24* | .20* | .24* | .20* | .54* | .35* | .39* | --   |
| <i>M</i>                    | 1.74 | 2.63 | 1.97 | 2.30 | 2.01 | 2.88 | 3.70 | 3.21 |
| <i>SD</i>                   | 0.42 | 0.71 | 1.50 | 1.77 | 1.34 | 1.56 | 1.69 | 1.62 |

*Note.* \*  $p < .001$ 

The effects of the participant's gender and the gender of the participant's target sibling on sibling attachment anxiety and sibling attachment avoidance were compared using two separate analyses of variance (ANOVA). Table 5 provides the cell sizes, means, and standard deviations for both 2 x 2 between-subjects designs. An examination of the means for sibling attachment anxiety showed a non-significant main effect of participant gender,  $F(1, 366) = 2.16, p = .143$ , a non-significant main effect of target sibling gender,  $F(1, 366) = 0.03, p = .873$ , and a significant interaction effect of participant gender and target sibling gender,  $F(1, 366) = 5.64, p = .018$ . Based on the mean scores of sibling attachment anxiety, same-gendered sibling pairs have lower



levels of sibling attachment anxiety compared to opposite-gendered sibling pairs, which can be seen in Figure 6.

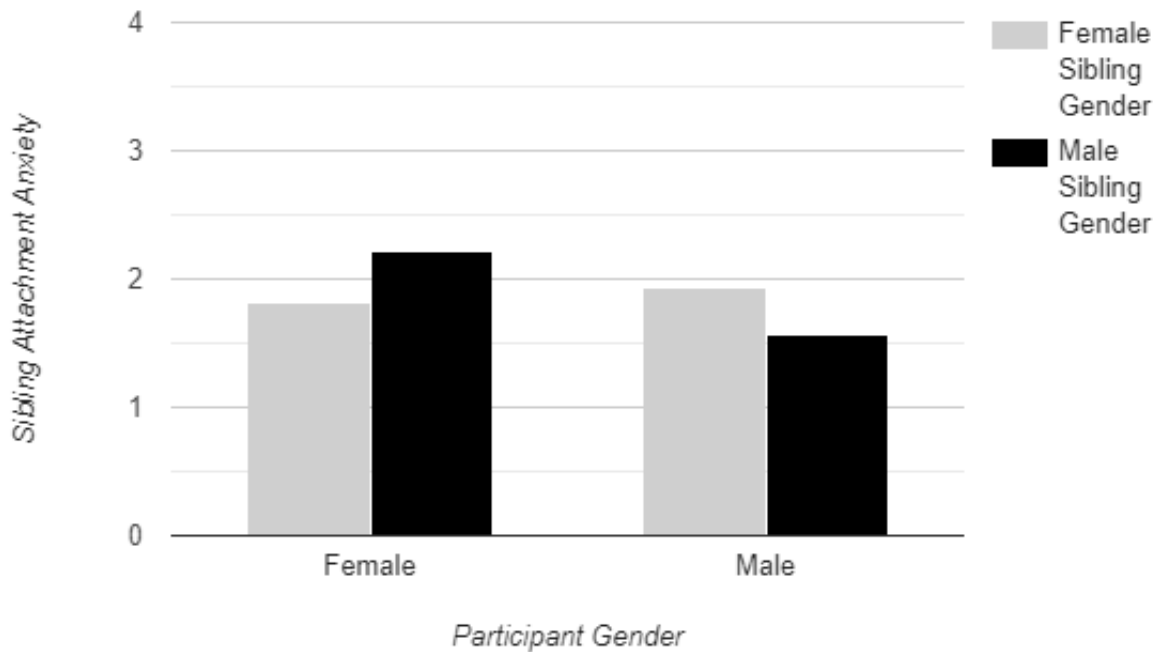
**Table 5**

*ANOVA Descriptives With Sibling Attachment Anxiety and Avoidance as Dependent Variables*

| Participant Gender | Sibling Gender | N   | Sibling Attachment Anxiety |      | Sibling Attachment Avoidance |      |
|--------------------|----------------|-----|----------------------------|------|------------------------------|------|
|                    |                |     | M                          | SD   | M                            | SD   |
| Male               | Male           | 40  | 1.56                       | 1.04 | 3.19                         | 1.57 |
|                    | Female         | 34  | 1.94                       | 1.3  | 3.36                         | 1.32 |
|                    | Total          | 74  | 1.73                       | 1.17 | 3.27                         | 1.46 |
| Female             | Male           | 169 | 2.22                       | 1.51 | 3.61                         | 1.68 |
|                    | Female         | 129 | 1.82                       | 1.15 | 2.65                         | 1.44 |
|                    | Total          | 298 | 2.05                       | 1.38 | 3.19                         | 1.65 |
| Total              | Male           | 209 | 2.1                        | 1.45 | 3.53                         | 1.67 |
|                    | Female         | 163 | 1.84                       | 1.18 | 2.79                         | 1.44 |
|                    | Total          | 372 | 1.99                       | 1.35 | 3.21                         | 1.61 |

**Figure 6**

*Mean Scores of Sibling Attachment Anxiety Using Participant Gender and Sibling Gender*



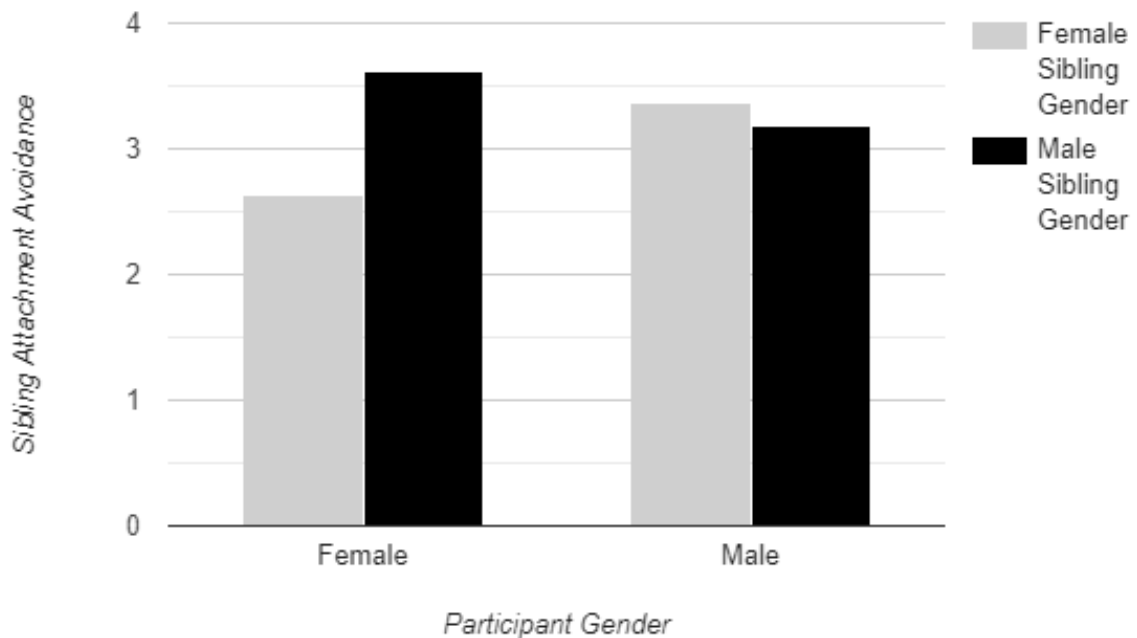
*Note.* Male participant  $N = 74$  and female participant  $N = 296$ .

An examination of the means for sibling attachment avoidance showed a non-significant main effect of participant gender,  $F(1, 366) = 0.57, p = .452$ , a significant main effect of target sibling gender,  $F(1, 366) = 3.94, p = .048$ , and a significant interaction effect of participant gender and target sibling gender,  $F(1, 366) = 8.01, p = .005$ . The significant main effect of target sibling gender indicates that the average sibling attachment avoidance towards brothers is higher than sibling attachment avoidance towards sisters. Additionally, the significant interaction term is also a crossover interaction which indicates that sibling attachment avoidance does not only depend on target sibling gender, but also depends on the gender of the participant. Based on the

mean scores of sibling attachment avoidance, same-gendered sibling pairs have lower sibling attachment avoidance compared to opposite-gendered sibling pairs, which can be seen in Figure 7.

**Figure 7**

*Mean Scores of Sibling Attachment Avoidance Using Participant Gender and Sibling Gender*



*Note.* Male participant  $N = 74$  and female participant  $N = 296$ .

The means of interparental conflict scores across various living arrangements were also compared with an independent samples  $t$ -test. First, interparental conflict scores between participants who live with at least one parent were compared to participants who do not live with any parent ( $N = 396$ ). The 229 participants who did live with at least one parent had an average

interparental conflict score of 1.72 ( $SD = 0.42$ ). The 167 participants who did not live with any parent had an average interparental conflict score of 1.76 ( $SD = 0.42$ ). These interparental conflict scores were not significantly different,  $t(394) = -1.09, p = .274$ . This indicates that living arrangement had no effect on the participant's perceived interparental conflict. Then, interparental conflict scores of participants who do not currently live with a parent were analyzed with an independent samples  $t$ -test ( $N = 123$ ). Interparental conflict scores between participants who moved away from their parents' home less than 1 year ago and participants who moved away from their parents' home more than 1 year ago were compared. The 84 participants who moved away less than 1 year ago had an average interparental conflict score of 1.77 ( $SD = 0.42$ ), and the 39 participants who moved away more than 1 year ago had an average interparental conflict score of 1.80 ( $SD = 0.46$ ). These interparental conflict scores were not significantly different,  $t(121) = -3.34, p = .732$ . This suggests that the passage of time after a participant moves away from their parents' home had no effect on the participant's perceived interparental conflict.

### **Main Analyses**

The lavaan package in R with the maximum likelihood method was used to conduct a Confirmatory Factor Analysis (CFA), and the lm function in R was used to conduct three hierarchical regression analyses for the three main hypotheses. Missing data were handled by substituting an average score of the other items within that particular questionnaire. The CFA was conducted to see if the indicator variables fit their corresponding latent variable. In the analysis, conflict properties, threat, and self-blame were entered as the indicators for interparental conflict, and non-acceptance, goals, impulse, strategies, and clarity were entered as the indicators for difficulties in emotion regulation. Table 6 displays the eight-indicator-variable

variance-covariance matrix. The fit of the model was tested using the  $\chi^2$  test, comparative fit index (CFI), root mean squared error of approximation (RMSEA), and standardized root mean squared residual (SRMR). A non-significant result of the  $\chi^2$  test would indicate good fit. The other tests should have a score falling in the range of 0 to 1. Hu and Bentler (1999) suggest cutoff criteria for these other tests when using the maximum likelihood method, which is  $\geq .95$  for the CFI,  $\leq .06$  for the RMSEA, and  $\leq .08$  for the SRMR. Since only the CFI and SRMR fell into the acceptable cutoff criteria given by Hu and Bentler (1999), the fit of the model was adequate,  $\chi^2(19, N = 397) = 70.05, p < .001, CFI = .96, RMSEA = .08, SRMR = .06$ . All factor loadings were found to be significant and are displayed in Figure 8. These results indicate that the three indicator variables (i.e., conflict frequency, threat, and self-blame) and the five indicator variables (i.e., non-acceptance, goals, impulse, strategies, and clarity) were a relatively good fit for the latent variables of interparental conflict and difficulties in emotion regulation, respectively. The correlation between interparental conflict and difficulties in emotion regulation was also found to be positively moderately strong.

**Table 6***Variance-Covariance Matrix of Indicator and Measured Variables*

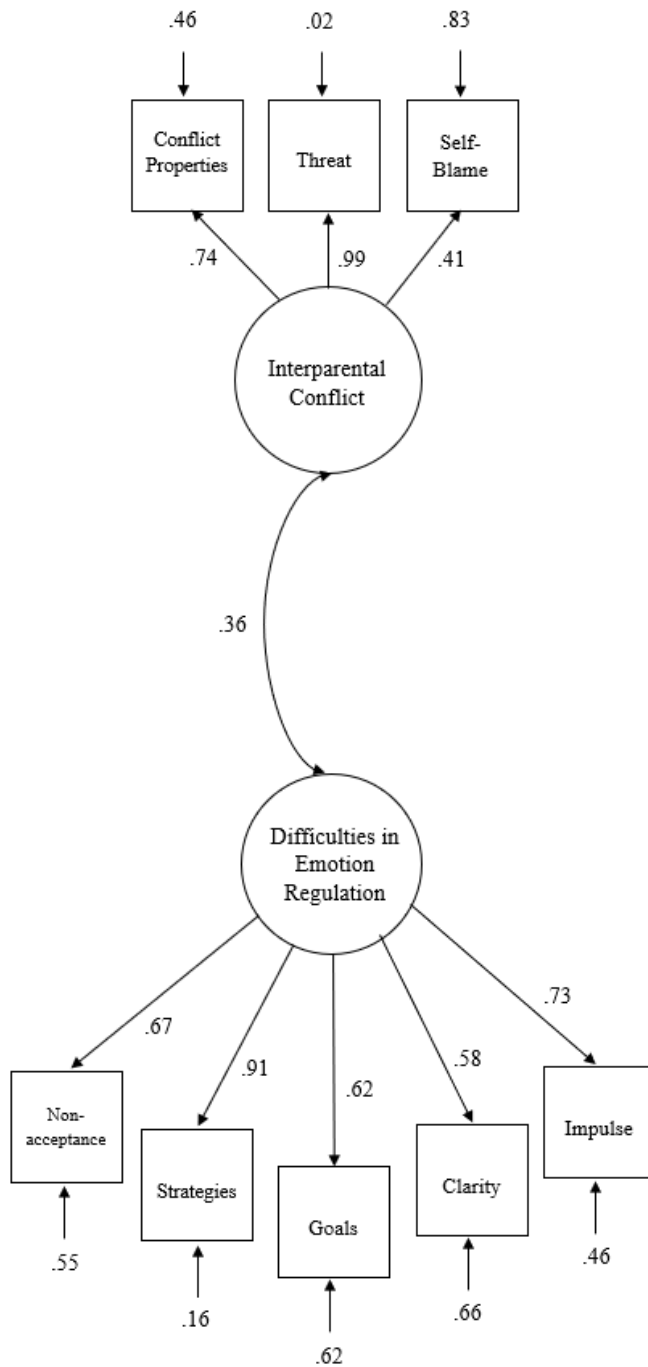
| Indicator                   | 1      | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-----------------------------|--------|-------|-------|-------|-------|-------|-------|-------|
| 1. CPIC Conflict Properties | 109.42 |       |       |       |       |       |       |       |
| 2. CPIC Threat              | 44.50  | 33.89 |       |       |       |       |       |       |
| 3. CPIC Self-blame          | 9.98   | 7.57  | 10.19 |       |       |       |       |       |
| 4. DERS Goals               | 7.59   | 7.40  | 2.68  | 22.56 |       |       |       |       |
| 5. DERS Impulse             | 9.15   | 7.73  | 4.46  | 10.97 | 24.62 |       |       |       |
| 6. DERS Clarity             | 12.10  | 6.88  | 2.71  | 4.88  | 9.14  | 16.28 |       |       |
| 7. DERS Nonacceptance       | 13.19  | 11.36 | 5.10  | 10.05 | 14.18 | 12.06 | 37.48 |       |
| 8. DERS Strategies          | 15.64  | 14.33 | 5.86  | 20.51 | 24.34 | 15.28 | 27.30 | 53.48 |
| <i>M</i>                    | 35.44  | 21.23 | 11.21 | 16.33 | 13.10 | 13.03 | 15.81 | 20.74 |
| <i>SD</i>                   | 10.46  | 5.82  | 3.19  | 4.75  | 4.96  | 4.04  | 6.12  | 7.31  |

*Note.*  $N = 397$ . CPIC = Children's Perception of Interparental Conflict Scale. DERS =

Difficulties in Emotion Regulation Scale.

**Figure 8**

*Factor Loadings and Random Error of Latent Variables*



*Note.* All factor loadings, random errors, and correlations are significant at the  $p < .001$  level, except for the random error of threat, which was not significant. All values are standardized.

After the confirmatory factor analysis had been completed, unstandardized regression coefficients, standard errors, standardized regression coefficients, and  $R^2$  were found using hierarchical multiple regression in R. Interparental conflict was computed by summing all items on the conflict properties, threat, and self-blame scales. Difficulties in emotion regulation was computed by summing the items in the non-acceptance, goals, impulse, strategies, and clarity subscales. Interaction terms were created by taking the product of interparental conflict scores and the appropriate attachment scores, and a significant interaction term indicates moderation. Table 7, Table 8, and Table 9 provide the results of the hierarchical analyses for mother attachment, father attachment, and sibling attachment respectively.

**Table 7**

*Hierarchical Multiple Regression Analysis Predicting Difficulties in Emotion Regulation from Interparental Conflict and Mother Attachment*

| Model | Predictor                  | <i>B</i> | <i>SE B</i> | $\beta$ | $R^2$  |
|-------|----------------------------|----------|-------------|---------|--------|
| 1     | IPC                        | 0.18     | 0.02        | 0.36*** | .20*** |
|       | Attachment Anxiety         | 0.42     | 0.16        | 0.16**  |        |
|       | Attachment Avoidance       | -0.00    | 0.15        | -0.00   |        |
| 2     | IPC                        | 0.13     | 0.05        | 0.26**  | .21*** |
|       | Attachment Anxiety         | 0.45     | 0.17        | 0.17*   |        |
|       | Attachment Avoidance       | -0.05    | 0.15        | -0.02   |        |
|       | IPC * Attachment Anxiety   | -0.02    | 0.02        | -0.03   |        |
|       | IPC * Attachment Avoidance | 0.03     | 0.02        | 0.01    |        |

*Note.* IPC = Interparental Conflict, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .



In the first hierarchical analysis displayed in Table 7, interparental conflict, mother attachment anxiety, and mother attachment avoidance were entered in Step 1, and they explained a significant proportion of variance in difficulties in emotion regulation,  $R^2 = .20$ ,  $F(3, 393) = 32.76$ ,  $p < .001$ . The interaction between interparental conflict and mother attachment anxiety and the interaction between interparental conflict and mother attachment avoidance were entered in Step 2, and they did not explain a significant increase in variance in difficulties in emotion regulation above and beyond interparental conflict, mother attachment anxiety, and mother attachment avoidance as individual factors,  $\Delta R^2 = .006$ ,  $F(2, 391) = 1.46$ ,  $p = .234$ . Interparental conflict and mother attachment anxiety were found to significantly predict difficulties in emotion regulation in both Model 1 and Model 2.

**Table 8**

*Hierarchical Multiple Regression Analysis Predicting Difficulties in Emotion Regulation from Interparental Conflict and Father Attachment*

| Model | Predictor                  | <i>B</i> | <i>SE B</i> | $\beta$ | $R^2$  |
|-------|----------------------------|----------|-------------|---------|--------|
| 1     | IPC                        | 0.17     | 0.03        | 0.33*** | .20*** |
|       | Attachment Anxiety         | 0.05     | 0.14        | 0.02    |        |
|       | Attachment Avoidance       | 0.36     | 0.15        | 0.16*   |        |
| 2     | IPC                        | 0.24     | 0.06        | 0.48*** | .21*** |
|       | Attachment Anxiety         | 0.05     | 0.16        | 0.02    |        |
|       | Attachment Avoidance       | 0.35     | 0.15        | 0.15*   |        |
|       | IPC * Attachment Anxiety   | 0.01     | 0.02        | 0.03    |        |
|       | IPC * Attachment Avoidance | -0.02    | 0.02        | -0.01   |        |

*Note.* IPC = Interparental Conflict, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

In the second hierarchical analysis displayed in Table 8, interparental conflict, father attachment anxiety, and father attachment avoidance were entered in Step 1, and they explained a significant proportion of variance in difficulties in emotion regulation,  $R^2 = .20$ ,  $F(3, 393) = 32.88$ ,  $p < .001$ . The interaction between interparental conflict and father attachment anxiety and the interaction between interparental conflict and father attachment avoidance were entered in Step 2, and they did not explain a significant increase in variance in difficulties in emotion regulation above and beyond interparental conflict, father attachment anxiety, and father attachment avoidance as individual factors,  $\Delta R^2 = .004$ ,  $F(2, 391) = 1.07$ ,  $p = .345$ . Interparental conflict and father attachment avoidance were found to significantly predict difficulties in emotion regulation in both Model 1 and Model 2.

**Table 9**

*Hierarchical Multiple Regression Analysis Predicting Difficulties in Emotion Regulation from Interparental Conflict and Sibling Attachment*

| Model | Predictor                  | <i>B</i> | <i>SE B</i> | $\beta$ | $R^2$  |
|-------|----------------------------|----------|-------------|---------|--------|
| 1     | IPC                        | 0.19     | 0.02        | 0.38*** | .20*** |
|       | Attachment Anxiety         | 0.23     | 0.15        | 0.08    |        |
|       | Attachment Avoidance       | 0.20     | 0.13        | 0.08    |        |
| 2     | IPC                        | 0.31     | 0.05        | 0.61*** | .21*** |
|       | Attachment Anxiety         | 0.19     | 0.16        | 0.07    |        |
|       | Attachment Avoidance       | 0.24     | 0.13        | 0.10    |        |
|       | IPC * Attachment Anxiety   | 0.01     | 0.02        | 0.03    |        |
|       | IPC * Attachment Avoidance | -0.05    | 0.02        | -0.02** |        |

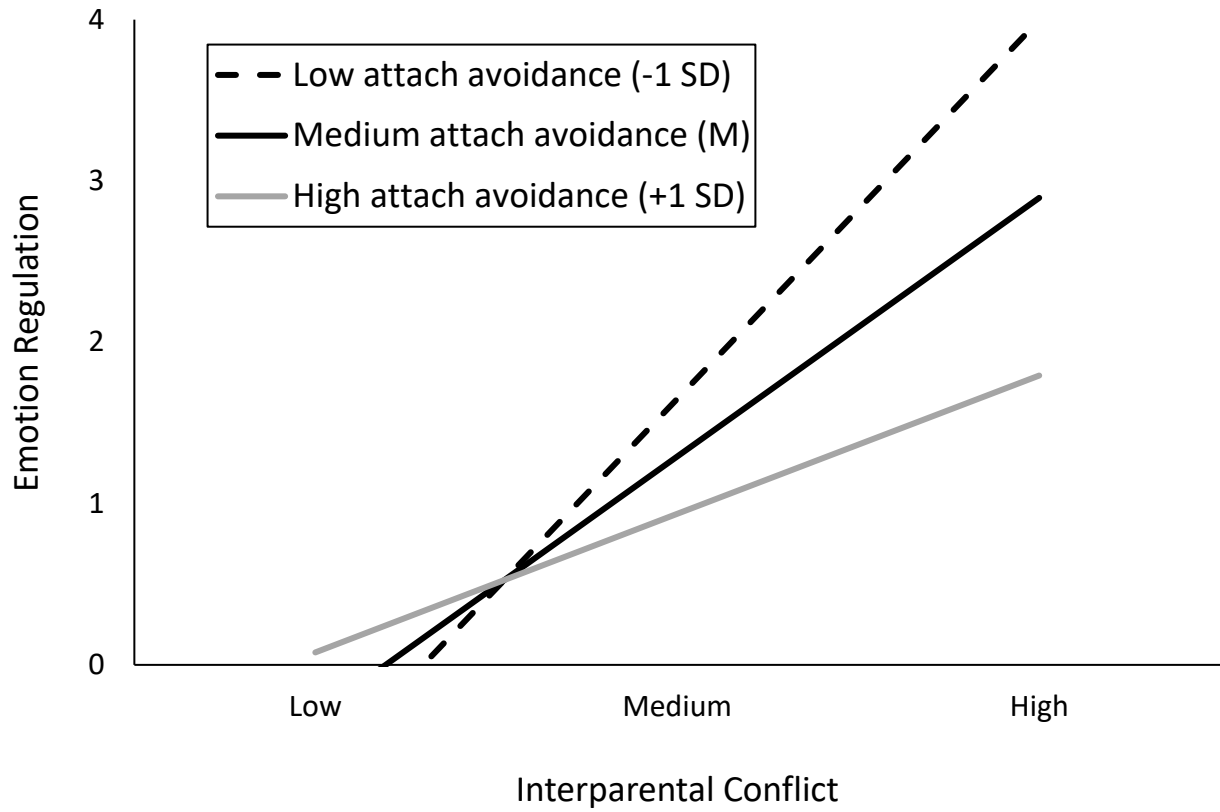
*Note.* IPC = Interparental Conflict, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

In the third hierarchical analysis displayed in Table 9, interparental conflict, sibling attachment anxiety, and sibling attachment avoidance were entered in Step 1, and they explained a significant proportion of variance in difficulties in emotion regulation,  $R^2 = .20$ ,  $F(3, 393) = 31.96$ ,  $p < .001$ . The interaction between interparental conflict and sibling attachment anxiety and the interaction between interparental conflict and sibling attachment avoidance were entered in Step 2, and they explained a significant increase in variance in difficulties in emotion regulation above and beyond interparental conflict, sibling attachment anxiety, and sibling attachment avoidance as individual factors,  $\Delta R^2 = .019$ ,  $F(2, 391) = 4.61$ ,  $p = .010$ . Interparental conflict was found to significantly predict emotion regulation in model. The interaction between interparental conflict and sibling attachment avoidance significantly predicted difficulties in emotion regulation in Model 2,  $b = -.05$ ,  $\beta = -.02$ ,  $t(393) = -2.87$ ,  $p = .004$ .

The interaction between interparental conflict and sibling attachment avoidance was the only significant interaction found from the analyses. The interaction slope of  $-0.05$  represents the change in slope for interparental conflict per 1-unit increase in sibling attachment avoidance. Therefore, as sibling attachment avoidance increases, the strength of association between interparental conflict and difficulties in emotion regulation decreases. This is not what was expected since lower attachment avoidance was hypothesized to be a protective factor against interparental conflict. Figure 9 displays the simple slopes found for the significant interaction. At 1 *SD* below the mean, sibling attachment avoidance = 1.59; the conditional effect of interparental conflict = 0.26, 95% C. I. [0.20, 0.33],  $p < .01$ . At the mean, sibling attachment avoidance = 3.21; the conditional effect of interparental conflict = 0.19, 95% C. I. [0.14, 0.24],  $p < .01$ . At 1 *SD* above the mean, sibling attachment avoidance = 4.83; the conditional effect of interparental conflict = 0.12, 95% C. I. [0.04, 0.19],  $p < .01$ .

**Figure 9**

*Simple Slopes for the Moderation Effects of Sibling Attachment Avoidance between Interparental Conflict and Difficulties in Emotion Regulation*



## CHAPTER V: DISCUSSION

The purpose of this study was to determine if mother, father, and sibling attachment anxiety and avoidance moderate the relationship between interparental conflict and young adult difficulties in emotion regulation. Previous research indicates that mother and father attachment moderate the relationship between interparental conflict and internalizing behaviors, while father attachment moderates the relationship between interparental conflict and externalizing behaviors (El-Sheikh & Elmore-Staton, 2004). In the present study, mother and father attachment were expected to be moderators of interparental conflict and young adult difficulties in emotion regulation. The presented expectation was based on the emotional security hypothesis, which states that an individual's emotional security can either be enhanced or undermined by a child-parent relationship (Davies et al., 2002). Because a sibling can also act as an attachment figure (Doherty & Freeney, 2004), sibling attachment was expected to moderate the relationship between interparental conflict and young adult emotion regulation. The current study found that mother and father attachment did not moderate the relationship between interparental conflict and young adult difficulties in emotion regulation, but sibling attachment avoidance did moderate the relationship. The interaction found between sibling attachment avoidance and interparental conflict did not have the expected direction of relationship.

Before the main analyses were completed, preliminary analyses were conducted to examine whether sibling attachment varied by gender and whether perceived interparental conflict varied by living arrangements. Results indicated that same-gender paired siblings had lower levels of sibling attachment anxiety and attachment avoidance compared to opposite-gender paired siblings. Additionally, there were no significant findings regarding differences in living arrangements across the participants. However, caution should be taken when interpreting

these results. Participant rationale behind reports of living accommodations was not taken into account. There could be some students who thought living on campus for part of the year qualifies as moving away from their parents, while others could believe that this would not qualify as moving out of their parents' home.

The preliminary analyses also included correlations between interparental conflict, family attachment, and difficulties in emotion regulation. All correlations across the various constructs were expected. Emotion regulation was chosen as the dependent variable in the current study because it is essential to an individual's overall adjustment. Without healthy emotion regulation, an individual can have difficulty developing beneficial behavioral strategies (Thompson, 1994), struggle with emotional and behavioral problems (Morris et al., 2007), and have complications with their psychopathology (McLaughlin et al., 2011). The emotional security hypothesis proposes that parent-child relations can positively or negatively impact the emotional security of an individual depending on the relationship between the parent and child (Davies et al., 2002). Family attachment provides a specific type of measurement for the quality of relationship between an individual and family member, which theoretically should predict an individual's emotion regulation. Emotion regulation should also not only be impacted by family attachment, but research also indicates other family factors such as interparental conflict can play a role in an individual's emotion regulation (Gong & Paulson, 2017). The current study did find evidence that interparental conflict and difficulties in emotion regulation are related, which supports other research (Gong & Paulson, 2017; Morris et al., 2007).

Additionally, correlations between family attachment and both interparental conflict and difficulties in emotion regulation in the current study were consistent with past research. There were positive, moderate correlations between interparental conflict and all types of family

attachment anxiety and avoidance, which supports past research that found similar results (Davies & Cummings, 1994; El-Sheikh & Elmore-Staton, 2004; Gong & Paulson, 2017; Laurent et al., 2008). All types of family attachment anxiety and avoidance were also positively, moderately correlated to difficulties in emotion regulation, which also supports past research (Gong & Paulson, 2017, Morris et al., 2007). Not all results of the current study were expected, such as the moderation analyses.

After the preliminary analyses, the main analyses were conducted to examine whether mother, father, and sibling attachment were moderators between perceived interparental conflict and young adult difficulties in emotion regulation. Attachment anxiety and avoidance with a mother, father, and sibling were hypothesized to moderate the relationship between interparental conflict and difficulties in emotion regulation. More specifically, lower levels of attachment anxiety and avoidance should result in a weaker relationship between interparental conflict and difficulties in emotion regulation. The weaker relationship between interparental conflict and difficulties in emotion regulation was expected to occur because an individual could use a more secure attachment style as a protective factor against the negative effects interparental conflict potentially have on young adult emotion regulation.

The data did not fully support any of the three hypotheses. Mother attachment anxiety and avoidance along with father anxiety and avoidance were not moderators of the relationship between interparental conflict and difficulties in emotion regulation. Sibling attachment avoidance was found to be a moderator for the relationship between interparental conflict and difficulties in emotion regulation, but sibling attachment anxiety was not found to be a moderator. Looking further into the interaction between interparental conflict and sibling attachment avoidance, the results of the study indicated that higher sibling attachment avoidance

resulted in a weaker relationship between interparental conflict and difficulties in emotion regulation. The moderation results regarding family attachment in the current study are not consistent with previous findings.

Previously, El-Sheikh and Elmore (2004) found that both mother and father attachment were moderators of marital conflict and externalizing behaviors, but only father attachment had the expected direction of relationship. Mother attachment was also found to moderate the relationship between marital conflict and internalizing behaviors in the expected direction. Even though only mother attachment was found to be a protective factor between marital conflict and internalizing behaviors, and only father attachment was found to be protective factor between marital conflict and externalizing behaviors in the El-Sheikh and Elmore study, in the current study, both mother and father attachment were expected to have similar moderation effects between interparental conflict and emotion regulation. Morris et al. (2007) suggested that emotion regulation is affected by the emotional climate of the family, which includes parenting style and attachment security. Nowhere in the literature was it suggested that one parent has more connection to an individual's emotion regulation over the other.

One possible explanation for these unexpected findings could stem from how attachment was measured in the current study. In the current study, attachment was measured by using two factors, namely attachment anxiety and attachment avoidance. Research has indicated these constructs measure two separate aspects of attachment and therefore should have separate scoring (De Meulenaere et al., 2021). However, mother and father attachment were not measured this way in the previously mentioned El-Sheikh and Elmore (2004) study. Instead, they measured mother and father attachment using the Inventory of Parent and Peer Attachment, which gives a single score of attachment for both a mother and father. The difference between how attachment



was measured in the current study and El-Sheikh and Elmore's study could be one reason for the differences seen in significant interactions for mother and father attachment. Another reason for these findings could stem from attachment theory rather than methodological reasons. If the interparental conflict within a family was extreme, maybe an individual would remove themselves from their family system and as a consequence no longer use their parents as the most prominent attachment figures. Past research has also indicated a natural shift of attachment figures during adolescence. According to Markiewicz et al. (2006), peers can take the place of parents functioning as a safe haven usually at the time of an individual's adolescence, and Doherty and Freeney (2004) suggest that siblings can replace a parent as a prominent attachment figure during adulthood. The literature reinforces the notion that parents can become less prominent attachment figures for an adult.

Not only was it surprising that no interaction between interparental conflict and either form of mother or father attachment was found to be significant in the current study, but not all variables were significant as individual factors either. In the mother attachment hierarchical multiple regression analysis, only interparental conflict and mother attachment anxiety significantly predicted difficulties in emotion regulation in both step 1 and step 2. On the other hand, only interparental conflict and father attachment avoidance significantly predicted difficulties in emotion regulation in both step 1 and step 2 of the father attachment hierarchical regression analysis. Interestingly, attachment anxiety was a significant predictor of difficulties in emotion regulation for mothers, and attachment avoidance was a significant predictor of difficulties in emotion regulation for fathers.

A study done by Ross and Fuertes (2010) could offer an explanation to these findings. These researchers concluded that mother and father attachment should be assessed separately

since they predicted different constructs. Specifically, the study found that mother attachment predicted conflict resolution, while father attachment predicted social skills. The authors suggest this finding is consistent with previous research which has shown mothers function more as a secure base during a threat and fathers play a role in a child's exploration of new environments. Mothers who do not offer a secure base may lead a child to feel abandoned or rejected in times of need, which in turn could lead to a more anxious attachment. Fathers who offer no support while exploring a new environment could lead a child to become self-reliant and shut down the feeling of wanting closeness, which in turn could lead to a more avoidant attachment (Mikulincer & Shaver, 2016). Mothers and fathers do not exclusively play these roles for their children, but the research above points out a mother is more likely to be a secure base, while fathers are more likely to aid a child in exploration of an environment.

Only sibling attachment avoidance was found to be a moderator of interparental conflict and young adult difficulties in emotion regulation. A possible explanation for these results could be linked to family relations being interdependent rather than independent. Research indicates that families are systems within which the elements are connected. For example, the interparental relationship can shape other relationships such as sibling relationships, which have also been found to be positively associated (Zemp et al., 2021). Social learning theory suggests that by witnessing dysfunctional interparental conflict, children may assume this is the way to deal with conflict (Zemp et al., 2021). Thus, through modeling, mothers and fathers may unintentionally teach their children to interact with their sibling in a dysfunctional way.

When looking further into the interaction between interparental conflict and sibling attachment avoidance, higher levels of sibling attachment avoidance indicated a weaker relationship between interparental conflict and difficulties in emotion regulation, which was

unexpected. One would expect poorer quality attachment, such as high levels of attachment avoidance, between siblings to amplify the positive connection between interparental conflict and difficulties in emotion regulation rather than decrease the connection. These particular results are inconsistent with theory and research, which makes this finding very unusual. An explanation for these unusual results could stem from an individual's disengagement from their family. If the issues in a family system are extreme, it is possible that an individual could remove or distance themselves from the entire family. The individual would then display an avoidant attachment to a sibling because the individual is avoiding that particular sibling. The individual would also not surround themselves with the occurring interparental conflict, so the effect of the conflict could be null. The results for sibling attachment in the current study should be replicated prior to being considered valid.

### **Limitations and Future Directions**

There are a few limitations to the current study that should be mentioned. The study included students at Illinois State University, which makes it difficult to claim the results are generalizable to the general population. This study may only be generalizable to other undergraduate students across the midwestern region of the United States. Additionally, the study was designed to collect data from self-reported online questionnaires. This is not an experimentally designed study, so causation should not be assumed here. Self-reported data can also be biased to only show how an individual thinks of themselves or of other people rather than how an individual actually acts. The self-report bias indicates that individuals tend to report in a socially desirable way rather than how they actually act in reality (Donaldson & Grant-Vallone, 2002). In the current study, because we were interested in how interparental conflict and attachment was perceived by a young adult, the disconnect between perceived and actual action

in self-report data would be potentially problematic for the emotion regulation variable only. Emotion regulation could have been measured by additional questionnaires completed by a parent or sibling to distinguish if there were differences in how a participant perceived their emotion regulation versus how others see them handle their emotion regulation. Using self-reported questionnaires always runs the risk of intentionally dishonest information as well. There is another layer of limitation added when the questionnaires are taken online. People could have taken the survey multiple times, lied about their age to qualify for the survey, or not even read the questions while answering. Unfortunately, there were no attention checks added to the survey to combat the last concern mentioned. These are broad limitations that could interfere with how the data should be interpreted, but there were also specific limitations related to the questions asked in the survey.

First, there was one item from the CPIC which was not included in the Qualtrics survey due to a clerical error. This item was part of the Conflict Properties scale and states “My parents hardly ever argue.” There are 18 other items in this scale, so it is unlikely this clerical error made a large difference in the reliability of the scale. Second, the definition of a mother, a father, and a sibling was not provided clearly. Family dynamics are complex and look different to different people. A participant could view a stepfather as more of a father figure than their biological father. The current study has no way of knowing whether the participant chose the person in their life who felt most like a mother, a father, or a sibling. The study should have specified to choose the person in their life who felt most like a mother, a father, or a sibling-like figure even if it was not a biological family member.

The current study paves the way for future research including sibling attachment, moderating effects of different family constructs, and other aspects of adult adjustment. Research

could delve into sibling attachment since there are very few studies centered around this construct during emerging adulthood. Sibling attachment could play a vital role in the adjustment of a young adult enduring interparental conflict. Family relations are interdependent, so parents are not the only family members who have lasting effects on an individual. There are other people in an individual's life (i.e., teachers, extended family, friends) who can also have an impact on that individual's adjustment. Research should expand past mother and father attachment to explore how sibling relationships are related to young adult adjustment outcomes, especially since the current study showed that sibling attachment plays a role in young adult adjustment. Since there is so little research on the topic of sibling attachment, there are numerous areas yet to be explored. One particularly interesting area of sibling attachment would be the effects of birth order and gender. Based on the literature, same-gender paired siblings would most likely have a more secure attachment than opposite-gender sibling pairings (Buist et al., 2002). In terms of birth order, a younger sibling with an older sibling attachment figure would be more plausible than an older sibling with a younger sibling attachment figure. Future research could analyze whether these hypothesized effects stay consistent from childhood to adulthood, or if there are differences across development.

There may not have been strong evidence of family attachment moderating the relationship interparental conflict and young adult emotion regulation in the current study, but past research indicates a tie between family relations and emotion regulation (Morris et al., 2007). Other constructs involving family could instead show strong evidence for moderation with interparental conflict and emotion regulation such as parenting styles, family expressiveness, and the emotional quality of the marital relationship, which have all been shown to be related to emotion regulation (Morris et al., 2007).

Emotion regulation is also not the only way to measure an individual's emotional functioning. Emotional insecurity may have been a better choice for an outcome variable since it is a broader construct of emotion. Emotion regulation is only a component of emotion security (Morris et al., 2007), so analyzing emotional insecurity could provide a fuller view of emotion. Davies et al. (2002) described individuals with emotional insecurity from experiencing interparental conflict as having high levels of emotional reactivity, regulating exposure to parent affect, and perceiving negative internal representations of interparental relations. The construct of emotional insecurity has also been found to be associated with both interparental conflict and child maladjustment (Davies et al., 2002). In the van Eldik et al. (2020) meta-analysis, a large portion of the emotional response outcome that was analyzed included emotional reactivity while another outcome called cognitive appraisals focused on internal representations of interparental relations, and both outcomes were found to be related to the interparental conflict dimensions used in the current study. Future research could focus on emotional insecurity as an outcome, or even other emotional functioning constructs to detect whether family attachment does moderate the relationship between interparental conflict and other forms of emotional functioning.

There are also other areas of young adult adjustment to study as well. Research has been conducted with mostly externalizing and internalizing behaviors, but other areas of adjustment such as cognition, social development, and physiological responses are important contributing factors to an individual's adjustment. Even the research conducted on externalizing and internalizing behaviors could be done again with attachment measures utilizing the two-dimensional framework of anxiety and avoidance. The two largest studies contributing to the research of the current study utilized a single score of attachment rather than two separate scores of attachment anxiety and attachment avoidance (Camisasca et al., 2017; El-Sheikh & Elmore-

Staton, 2004). A comparison of these studies with studies utilizing the two-dimensional framework of measurement for attachment would be useful to distinguish any differences in results.

### **Strengths and Conclusions**

The current study sought to explore the effects that not only parental attachment has, but whether sibling attachment could also be important to the relationship between interparental conflict and young adult emotion regulation. Emotion regulation and sibling relationships typically take a backseat to other forms of individual adjustment (i.e., externalizing and internalizing behaviors) and other relationships (i.e., mother, father, romantic partner). Surprisingly, sibling attachment avoidance was the only construct to be a significant moderator in the current study, which indicates parental relations are not the only attachment relationship that should be explored within a family (Kriss et al., 2014; Trinke & Bartholomew, 1997). Researchers in the area of interparental conflict and family attachment may want to continue including sibling attachment in studies since family relations are so connected. Attachment was also measured using two dimensions rather than as a single facet in the current study, which gives a more complete look into family attachment. Research indicates that a two-dimensional framework is the best way to accurately measure attachment (Fraley & Spieker, 2003), while also measuring each relationship separately. The current study helped to advance research within the realm of interparental conflict, family attachment, and emotion regulation.

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APPENDIX A: CHILDREN'S PERCEPTION OF INTERPARENTAL CONFLICT SCALE  
(CPIC)

Scores are summed, so higher scores indicate an increasingly negative form of conflict.

Reverse score \*

1 = False

2 = Sort of True

3 = True

- 1) \_\_\_ I never see my parents arguing or disagreeing. \*
- 2) \_\_\_ When my parents have an argument, they usually work it out. \*
- 3) \_\_\_ My parents often get into arguments about things I do at school.
- 4) \_\_\_ My parents get really mad when they argue.
- 5) \_\_\_ When my parents argue, I can do something to make myself feel better. \*
- 6) \_\_\_ I get scared when my parents argue.
- 7) \_\_\_ I'm not to blame when my parents have arguments. \*
- 8) \_\_\_ They may not think I know it, but my parents argue or disagree a lot.
- 9) \_\_\_ Even after my parents stop arguing they stay mad at each other.
- 10) \_\_\_ When my parents have a disagreement, they discuss it quietly. \*
- 11) \_\_\_ I don't know what to do when my parents have arguments.
- 12) \_\_\_ My parents are often mean to each other even when I'm around.
- 13) \_\_\_ When my parents argue, I worry about what will happen to me.
- 14) \_\_\_ It's usually my fault when my parents argue.
- 15) \_\_\_ I often see my parents arguing.
- 16) \_\_\_ When my parents disagree about something, they usually come up with a solution. \*
- 17) \_\_\_ My parents' arguments are usually about something I did.
- 18) \_\_\_ When my parents have an argument, they say mean things to each other.
- 19) \_\_\_ When my parents argue or disagree, I can usually help make things better. \*
- 20) \_\_\_ When my parents argue, I'm afraid that something bad will happen.
- 21) \_\_\_ Even if they don't say it, I know I'm to blame when my parents argue.
- 22) \_\_\_ My parents hardly ever argue. \*
- 23) \_\_\_ When my parents argue they usually make up right away. \*
- 24) \_\_\_ My parents usually argue or disagree because of things that I do.
- 25) \_\_\_ When my parents have an argument, they yell a lot.
- 26) \_\_\_ When my parents argue, there's nothing I can do to stop them.
- 27) \_\_\_ When my parents argue, I worry that one of them will get hurt.
- 28) \_\_\_ My parents often nag and complain about each other around the house.
- 29) \_\_\_ My parents hardly ever yell when they have a disagreement. \*
- 30) \_\_\_ My parents often get into arguments when I do something wrong.
- 31) \_\_\_ My parents have broken or thrown things during an argument.
- 32) \_\_\_ After my parents stop arguing, they are friendly toward each other. \*
- 33) \_\_\_ When my parents argue, I'm afraid that they will yell at me too.



- 34) \_\_\_\_ My parents blame me when they have arguments.
- 35) \_\_\_\_ My parents have pushed or shoved each other during an argument.
- 36) \_\_\_\_ When my parents argue or disagree, there's nothing I can do to make myself feel better.
- 37) \_\_\_\_ When my parents argue, I worry that they might get divorced.
- 38) \_\_\_\_ My parents still act mean after they have had an argument.
- 39) \_\_\_\_ Usually it's not my fault when my parents have arguments. \*
- 40) \_\_\_\_ When my parents argue, they don't listen to anything I say.

## APPENDIX B: EXPERIENCES IN CLOSE RELATIONSHIPS – RELATIONSHIP STRUCTURES (ECR-RS)

Two scores, one for attachment-related avoidance and the other for attachment-related anxiety, should be computed for each interpersonal target (i.e., mother, father, sibling). The avoidance score can be computed by averaging items 1 - 6, while reverse keying items 1, 2, 3, and 4. The anxiety score can be computed by averaging items 7 - 9. These two scores should be computed separately for each relationship target.

1. It helps to turn to this person in times of need.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
2. I usually discuss my problems and concerns with this person.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
3. I talk things over with this person.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
4. I find it easy to depend on this person.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
5. I don't feel comfortable opening up to this person.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
6. I prefer not to show this person how I feel deep down.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
7. I often worry that this person doesn't really care for me.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree
8. I'm afraid that this person may abandon me.  
Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree

Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree

9. I worry that this person won't care about me as much as I care about him or her.

Mother: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Father: strongly disagree 1 2 3 4 5 6 7 strongly agree  
Sibling: strongly disagree 1 2 3 4 5 6 7 strongly agree

## APPENDIX C: DIFFICULTIES IN EMOTION REGULATION SCALE (DERS)

Total score for emotion regulation was found by summing all the scores, excluding items 2, 6, 8, 10, 17, and 34. Higher scores indicate greater difficulties with emotion regulation.

Reverse code \*

- 1 = almost never
- 2 = sometimes
- 3 = about half the time
- 4 = most of the time
- 5 = almost always

- \_\_\_\_\_ 1) I am clear about my feelings. \*
- \_\_\_\_\_ 2) I pay attention to how I feel. \*
- \_\_\_\_\_ 3) I experience my emotions as overwhelming and out of control.
- \_\_\_\_\_ 4) I have no idea how I am feeling.
- \_\_\_\_\_ 5) I have difficulty making sense out of my feelings.
- \_\_\_\_\_ 6) I am attentive to my feelings. \*
- \_\_\_\_\_ 7) I know exactly how I am feeling. \*
- \_\_\_\_\_ 8) I care about what I am feeling. \*
- \_\_\_\_\_ 9) I am confused about how I feel.
- \_\_\_\_\_ 10) When I'm upset, I acknowledge my emotions. \*
- \_\_\_\_\_ 11) When I'm upset, I become angry with myself for feeling that way.
- \_\_\_\_\_ 12) When I'm upset, I become embarrassed for feeling that way.
- \_\_\_\_\_ 13) When I'm upset, I have difficulty getting work done.
- \_\_\_\_\_ 14) When I'm upset, I become out of control.
- \_\_\_\_\_ 15) When I'm upset, I believe that I will remain that way for a long time.
- \_\_\_\_\_ 16) When I'm upset, I believe that I will end up feeling very depressed.
- \_\_\_\_\_ 17) When I'm upset, I believe that my feelings are valid and important. \*
- \_\_\_\_\_ 18) When I'm upset, I have difficulty focusing on other things.
- \_\_\_\_\_ 19) When I'm upset, I feel out of control.
- \_\_\_\_\_ 20) When I'm upset, I can still get things done. \*
- \_\_\_\_\_ 21) When I'm upset, I feel ashamed at myself for feeling that way.
- \_\_\_\_\_ 22) When I'm upset, I know that I can find a way to eventually feel better. \*
- \_\_\_\_\_ 23) When I'm upset, I feel like I am weak.
- \_\_\_\_\_ 24) When I'm upset, I feel like I can remain in control of my behaviors. \*
- \_\_\_\_\_ 25) When I'm upset, I feel guilty for feeling that way.
- \_\_\_\_\_ 26) When I'm upset, I have difficulty concentrating.
- \_\_\_\_\_ 27) When I'm upset, I have difficulty controlling my behaviors.
- \_\_\_\_\_ 28) When I'm upset, I believe there is nothing I can do to make myself feel better.

- \_\_\_\_\_ 29) When I'm upset, I become irritated at myself for feeling that way.
- \_\_\_\_\_ 30) When I'm upset, I start to feel very bad about myself.
- \_\_\_\_\_ 31) When I'm upset, I believe that wallowing in it is all I can do.
- \_\_\_\_\_ 32) When I'm upset, I lose control over my behavior.
- \_\_\_\_\_ 33) When I'm upset, I have difficulty thinking about anything else.
- \_\_\_\_\_ 34) When I'm upset, I take time to figure out what I'm really feeling. \*
- \_\_\_\_\_ 35) When I'm upset, it takes me a long time to feel better.
- \_\_\_\_\_ 36) When I'm upset, my emotions feel overwhelming.