# Emerging Adults and Their Helicopter Parents:

# Communication Quality as Mediator between Affect and Stress

by

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ABSTRACT

With the establishment of the emerging adult developmental period and the rise of helicopter parents, attachment theory provides foundation for conceptualizing the continued involvement of helicopter parents in their emerging adults' emotion regulation processes. This study utilized dyadic data from 66 emerging adult children and their helicopter parents to examine the association of helicopter parent-emerging adult communication in mitigating the associations between experiences of affect and stress. Specifically, the purpose of the present study was to use dyadic data to examine how communication within the helicopter parent-emerging adult relationship associates with emerging adults' ability to regulate experiences of negative and positive affect. Both associations within the emerging adult and helicopter parent individually (actor effects) and how helicopter parents impact construct associations for emerging adults' (partner effects) were considered.

Two multilevel mediation models using Actor-Partner Interdependence Models were conducted to assess the relations between affect, stress, and helicopter parent-emerging adult communication quality for negative and positive affect separately. The positive direct effect between negative affect and stress was statistically significant for emerging adults, but not for helicopter parents, suggesting that, for emerging adults, higher perceptions of negative affect were associated with higher levels of stress. The direct and indirect effects for the mediation model examining actor and partner effects between negative affect, communication quality, and stress were non-significant for both emerging adults and helicopter parents. The direct effect between positive affect and

stress was statistically significant for helicopter parents but not for emerging adults; however, the directionality of the significant association was positive and not as hypothesized. Finally, the direct and indirect effects for the mediation model examining actor and partner effects between positive affect, communication quality, and stress were non-significant for emerging adults and helicopter parents. Considerations for future studies examining aspects of attachment within emotion regulation for the helicopter parent-emerging adult relationship and the importance of considering relationship characteristics, such the relational characteristics of social support and conflict, are discussed.

# DEDICATION

To my family.

To my mother, my helicopter parent. Thank you for all of your support, guidance, and love throughout my graduate school career. I feel so lucky to have had you along for this journey.

To my father. Thank you for the support and encouragement you provided. It was so nice to finally live in the same city as you again and to be able to share my day-to-day with you.

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# Chapter 1

## The Problem in Perspective

Developmental milestones for transitioning into adulthood, such as financial independence (Padilla-Walker, Nelson, & Carroll, 2012) and marriage (Cherlin, 2004), are increasingly postponed to later in life, most commonly in the late twenties (Hall & Walls, 2015; Sharon, 2015). For individuals between the ages of 18- and 25-years-old, adulthood is now conceptualized in terms of individualistic and psychological facets rather role transitions, such as marriage, having children, and owning a home (Sharon, 2015), which were tenets previously used to define adulthood. Current markers of adulthood incorporate more behavioral and emotional components, including independent decision-making, accepting responsibility, and establishing equal relationships with parents (Sharon, 2015). With the pursuit of higher education and prioritization of personal growth, financial, social, and occupational stability become increasingly difficult to secure prior to the age of 25, and many young adults continue to rely on parents for emotional and financial support (e.g., Fingerman, Cheng, Tighe, Birditt, & Zarit, 2012a). In light of these shifts in milestone attainment and conceptualization of adulthood, examination of how developmental markers and prolonged reliance on parents influence both personal (e.g., stress; Nelson & Barry, 2005) and interpersonal (e.g., parent-emerging adult relationship quality; Hammonds, 2015) well-being is important to consider for the emerging adult population.

Due to global delays in attaining the criteria of adulthood, a developmental period termed *emerging adulthood* (Arnett, 2000) was created to describe the extended

adolescence experienced by individuals between the ages of 18 and 25. As a consequence of societal changes initiated by the social movements of the 1960's and 1970's (Arnett, 2015), since the early 1990's, there has been a significant increase in the support offered by parents to their emerging adult children (Fingerman et al., 2012a). In a recent poll of adults and their grown children (ages 18- to 29-years-old), Arnett and Schwab (Sept. 2013) found that 67% of mothers and 51% of fathers contacted their emerging adults every day or almost every day and that parents financially supported their grown children in some way. Pizzolato and Hicklen (2011) found that 44.3% of their 18- to 24-year-old participants involved their parents in their decision-making, viewing this exchange as a form of consultation. These statistics highlight parents' persistent role in emerging adult functioning.

The occurrence of continued parental involvement well into adulthood is one example of a societal trend of parenting colloquially referred to as "helicopter parenting" (e.g., Settersten & Ray, 2010; Stokes, Oct. 2014). In the context of emerging adulthood, this parenting style describes parents who step in and solve dilemmas that emerging adults face while transitioning into adulthood. One example of this dynamic is parents intervening in emerging adults' professional issues (LeMoyne & Buchanan, 2011). Segrin, Givertz, Swaitkowski, and Montgomery (2015) further clarified this phenomenon as "overparenting," or "the application of developmentally inappropriate parenting tactics that far exceed the actual needs of adolescents and emerging adults" (p. 470). When considering the challenges (e.g., financial hardship, prolonged education) that today's emerging adults face when becoming independent from their parents, helicopter

parenting behaviors may be an additional obstacle for emerging adults in establishing their autonomy. Parents' over-involvement may further complicate and increase emerging adults' dependency on their parents (e.g., Arnett, 2000; Arnett & Schwab, Sept. 2013; Settersten & Ray, 2010), negatively impacting emerging adults' well-being and development of emotion regulation capabilities (i.e., their ability to modify emotional reactions to support goal attainment; Thompson, 1994). For instance, empirical evidence shows that parents' support of their emerging adults' autonomy plays a critical role in emerging adults' overall well-being (Kins, Beyers, Soenens, & Vansteenkiste, 2009) and adaptive emotion regulation practices, such as appropriate expression of emotion (Roth & Assor, 2012); however, helicopter parents undermine emerging adults' autonomy through overparenting practices. While parents appropriately serve as a safe haven for young children, scaffolding children's ability to regulate emotions through the parent-child relationship (Bell & Calkins, 2000), emerging adults of helicopter parents may continue to rely on their parents and forgo supports from peer and romantic-partner relationships that are considered developmentally appropriate (Erikson, 1968). Given the importance of parental support in emotion regulation (Thompson & Meyer, 2007), one behavior of particular importance in the parent-emerging adult relationship is consistent communication (e.g., Bland, Melton, Welle, & Bigham, 2012), which allows parents to continue to participate in their emerging adults' lives and decisions even after emerging adults leave the nest.

As helicopter parents increasingly step in to manage difficulties and hardships in their children's lives, they encourage emerging adults to seek and depend upon external

resources, such as their parents' support and advice. Additionally, practice for emerging adults in navigating obstacles independently seems rarely provided within the helicopter parent-emerging adult relationship. Therefore, the associations between helicopter parenting practices (i.e., over-involvement of parents), emotion regulation, and emerging adult well-being merit further exploration. The goal of the current study was to use dyadic data collected from emerging adult children and their helicopter parents to examine the relation of helicopter parent-emerging adult communication in mitigating (i.e., mediating) the associations between experiences of affect and stress. Due to parents' over-involvement within the helicopter parent-emerging adult relationship, examination of both individual associations by the emerging adult (actor effects) and the role of parents in these associations (partner effects) were evaluated.

**Theoretical Foundations: Attachment and Emotion Regulation**

In light of the continued importance of parents in their grown children's functioning, both practically and emotionally, two complementary theories guide conceptualizations of the interpersonal process of managing stress and experiences of negative and positive affect: attachment theory (Bowlby, 1973, 1980, 1982) and emotion regulation (Gross, 1998). While emotion regulation theory describes the processes by which individuals manage their emotions, attachment theory provides a foundation for understanding the interpersonal aspects of emotion regulation and the critical and foundational role that parents play in cultivating these skills. Each theory is described below, and studies highlighting the interplay between attachment and emotion regulation

throughout development are presented to emphasize the pervasive nature of the parent-child relationship in regulating affect.

**The role of parent attachment.** Attachment theory (Bowlby, 1982) describes the foundational role of parents in cultivating how their children relate to the world. Children's repeated interactions with their caregivers facilitate the development of expectations about themselves and others, referred to as "working models," that allow children to organize their experiences and process emotion information (see Cassidy, 1994; Mikulincer, Shaver, & Pereg, 2003 for reviews). Bowlby (1973, 1980, 1982) also suggested that emotion regulation capabilities originate from dependence on attachment figures starting at birth and extending into adulthood (i.e., cradle to the grave). While Bowlby originally tied these emotional attachments to the mother figure, Main, Kaplan, and Cassidy (1985) broadened this conceptualization of internal working models to include expectations related to important relationships throughout one's lifespan (e.g., fathers, siblings). These innate tendencies to seek proximity and safety from attachment figures in times of need were originally intended to facilitate survival; however, they also serve as the foundation for individuals seeking support, affection, and protection during times of distress (Bowlby, 1982). Interactions with early caregivers establish how individuals cope with emotions throughout the lifespan (Bartholomew & Horowitz, 1991; Bowlby, 1982). This longitudinal influence suggests that parents serve as the base for emotion regulation capabilities as children navigate and interact with their environment with assistance from their parents and develop enduring strategies for managing affect. For instance, Schore and Schore (2008) proposed that affective communications with

caregivers promote the development of brain systems involved in affect and self-regulation. The literature also demonstrates that attachment to parents remains consistent throughout development (Scharfe & Cole, 2006; Umemura, Lacinová, Macek, & Kunnen, 2017) and continually influences social development (Kreppner, 1987), which points to the persistence of parental influence on shaping a child's emotion regulation throughout development (Calkins & Dollar, 2014).

Interpersonal interactions in significant relationships, such as with parents, teachers, and significant others, are thought to serve as critical scaffolding for emotion regulation abilities throughout the lifespan (Bell & Calkins, 2000; Zaki & Williams, 2013). Coregulation, patterns of affect reciprocally shared across individuals (Butler & Randall, 2013), characterizes many important relationships, including the relationship between a child and parent (Feldman, 2003, 2006, 2007). Rimè (2007) introduced the notion of social sharing to explain individuals' tendency to share both emotionally taxing and emotionally uplifting events with others such that individuals socially share both positive and negative emotions in close proximity to the event that generated the affect. He argued that the phenomenon of social sharing is universal and can be understood through attachment theory as a means of satisfying attachment needs and making meaning of events. In their review of Rimè's theory, Butler and Gross (2009) emphasized the importance of social interactions in adult emotional experiences as social sharing facilitates generation of communal knowledge and joint adaptation to affect. This seems particularly important in parent-child relationships as parents are able to learn of their children's experiences and to assist them in navigating the ups and downs of

daily life, which influences how they may rely on others in the future (Mikulincer & Shaver, 2007). Therefore, people predominantly use conversations and shared activities to regulate emotion that, over time and within repeated interactions, inform individuals' perceptions of others' ability to support their needs (Lakey, 2013).

**Attachment and experiences with negative and positive affect.** As in infancy, adults continue to seek secure bases or close relationships they perceive they can trust. This is particularly true during times of perceived threat. This innate tendency demonstrates that the primary goal of attachment is to increase one's sense of security when functioning within the world (Bowlby, 1982; Shaver & Mikulincer, 2007). Mikulincer and colleagues (2003) asserted that the attachment system becomes activated during situations of physical or psychological threat. Therefore, in times of threat, individuals tend to utilize coping strategies that were formed within their relationship with their parents. For instance, Thompson and Meyer's (2007) review of the literature revealed that children with parents who accept and support their displays of negative emotions also develop more adaptive emotion regulation abilities. Additionally, internal working models and parental influence continue into emerging adulthood as Schiffrin (2014) found that both negative and positive affect serve as partial mediators for the association between anxious attachment (i.e., individuals who experienced inconsistent responses from their parents) and the outcome constructs of social and psychological well-being (i.e., resiliency, optimism, stress, and depression). While the literature on attachment may highlight the role of parents during times of distress, Schiffrin

demonstrated that parents' influence in emotion regulation can be seen in regulating experiences of both negative and positive affect.

Schwarz and Bohner (1996) described that, within the attachment framework, positive affect indicates safety and security that provide the encouragement and support necessary for children to navigate unfamiliar experiences and stimuli. Parent-child interactions have been shown to play an important role in regulating positive affect in early- to mid-childhood (e.g., Gentzler, Ramsey, & Black, 2015; Laible & Thompson, 2000). For example, in their study of mother-child dyads when the child was age 4, Laible and Thompson (2000) found that children who exhibited increased positive affect had mothers who viewed them as more conscious, compliant, and capable. The authors also found that mothers who made more frequent mention of positive emotions had children who more frequently referred to positive emotions. This result demonstrates the impact of parental modeling on children's emotion behavior. Additionally, Gentzler and colleagues (2015) examined the role of attachment in maternal responses to positive affect in mother-child dyads of 7- to 12-year-old children. How mothers responded to their children's positive affect was significantly related to their children's attachment security. In addition, children's predictions of maternal responses to positive events were significantly related to attachment such that minimization and reprimand were negatively related to child attachment and celebration of the event was positively related. Internalized working models of parent attachment relationships have also been identified as contributors to positive affect related to creativity and problem-solving in adulthood (Mikulincer et al., 2003). These studies highlight that how parents and their children

engage in discussion around negative and positive affect significantly impacts how children themselves address experiences of affect. This may have implications for how attachment figures are internalized with age and the manner in which emerging adults may depend on their parents for emotional support (Mikulincer et al., 2003).

**Attachment dynamics and emotion regulation.** Emotions and how individuals regulate their experience of positive and negative affect play an important role in everyday life. In his integrative review of the emotion regulation literature, Gross (1998) summarized that emotions are "flexible response sequences" based on individuals' reactions to situations (p. 272). He also described emotion as acute in nature and able to be modified, shaping the trajectory (i.e., type, length, and experience) of both positive and negative emotional responses through emotion regulation processes. This distinguishes emotion regulation from the construct of coping as the emotion itself is altered (Gross, 2015). Additionally, while emotion regulation processes can occur consciously or unconsciously, the overarching goal of these regulatory processes is to maintain, increase, or decrease emotional experiences, predominantly by increasing positive emotional experiences and decreasing negative emotional experiences (Gross, 1998). Empirical evidence demonstrates that individuals regulate negative emotion by down-regulating the emotional experience; however, the role of emotion regulation for positive emotions is still unclear (e.g., Gross, Richards, & John, 2006; Snyder, Hughes, & Simpson, 2006). These efforts to modify emotional expressions through regulatory processes demonstrate that individuals' play an active role in how their emotional experiences impact their well-being, such as their perceptions of stress.

Gross' (1998) "modal model" of emotion regulation asserts that individuals experience a situation, attend to the situation either internally and externally, appraise the value of the situation, and respond accordingly. The emotion experience, therefore, unfolds differently depending on when and how individuals intervene. This variation generates both immediate and long-term effects on how the emotion is felt. Gross (2015) expanded upon this model to include valuation systems, measuring emotional experiences and regulation strategies against whether they are helpful or hurtful to the individual. This model emphasizes the bidirectional nature of experiences of affect and perceptions of stress, which is found in the literature (e.g., Civitci, 2015; Corral-Frìas, Nadel, Fellous, & Jacobs, 2016; Dunkley et al., 2016; Folkman & Moskowitz, June 2000; Hamama, Ronen, Shachar, & Rosenbaum, 2013; Montpetit, Bergemann, Deboeck, Tiberio, & Boker, 2010; O'Hara, Armeli, Boynton, & Tennen, 2014), such that experiences of affect generate or buffer stress and experiences of stress can produce emotional responses. Therefore, the current study examined experiences of affect as the independent variable and perceptions of stress as the dependent variable to examine how experiences of affect may associate with overall perceptions of stress via the helicopter parent-emerging adult relationship.

As other researchers build upon this model and examine emotion regulation throughout the lifespan, knowledge regarding the role of parents in cultivating this process becomes increasingly prominent. For instance, in their review of the literature, Calkins and Hill (2007) noted that parent-child interactions and parental support influence individuals psychologically and biologically and shape the internal working

models of attachment regarding how individuals regulate their own emotions. Calkins and Hill also suggest that attachment relationships may influence the development of emotion regulation in several ways, such as the physiological responses associated with emotion regulation and the strategies of behavioral and emotional responses utilized both within and outside of the parent-child dyad. Thompson and Meyer's (2007) suggest that the fundamental form of extrinsic emotion regulation, or emotion regulation that occurs outside of the individual, is the manner in which parents intervene to direct the emotional experience of their children. Therefore, the strategies utilized by parents and the messaging around emotions and emotional expressiveness that parents relay to their children early in life have critical implications for the emotional responsiveness and strategies of their children throughout the lifespan. The authors highlight that children benefit from parents who utilize acceptance and support when scaffolding emotion regulation, which points to the importance of the parent-child attachment within the development of emotion regulation capabilities. For example, a parent who supports their child's display of negative emotion, instead of ignoring or shaming the affective experience, will scaffold their child's ability to acknowledge and cope with similar emotional experiences independently. The literature of attachment further supports that emotion regulation can be both intrapersonal and interpersonal and intrinsic and extrinsic in nature (Fox & Calkins, 2003).

In their review of the emotion regulation literature, Gross and Thompson (2007) noted that the literature attends to different processes of emotion regulation in childhood and in adulthood. The childhood literature primarily focuses on interpersonal (e.g.,

parental) dynamics of emotion regulation, while the adult literature primarily focuses on intrapersonal (i.e., internal) regulation. As parents continue to play an important role in the daily functioning of emerging adults well into adulthood and attachment relationships are believed to continue to play a role in the strategies individuals use to regulate emotions (Mikulincer & Shaver, 2007), considering the interpersonal aspects of emotion regulation seems essential to construct a more well-defined conceptualization of emotion regulation during emerging adulthood. This knowledge would allow for better understanding of how emerging adults regulate emotions individually and what, if any, role parents play in emerging adults' emotion regulation given parents' broadened emotional and financial support of their adult children.

**Summary.** Collectively, these theories and supporting empirical evidence suggest a psychosocial foundation for the association between how individuals regulate their emotions and the role of parental behaviors in promoting (e.g., support, responsiveness) or inhibiting (e.g., invalidation) these regulation strategies. They also point to the continued role of parents in emotion regulation processes as their children transition into adulthood and the potential importance of communication within the interpersonal process of emotion regulation. For instance, emerging adults with parents who supported their autonomy reported decreased feelings of separation anxiety from their parents, which contributed to more constructive emotion regulation strategies (e.g., Cabral, Matos, Beyers, & Soenens, 2012). Therefore, due to helicopter parents' active role in their children's lives (Collins & O'Brien, 2011; LeMoyne & Buchanan, 2011), emerging adults with helicopter parents may endorse increased reliance on their parental figures in

navigating emotion experiences; however, this has yet to be examined empirically. Therefore, the current study adds to the literature by exploring emotion regulation during emerging adulthood and examining the role of the helicopter parent-emerging adult relationship in the process of regulating both negative and positive affect.

**Understanding Emerging Adulthood**

In industrialized, Western countries, emerging adulthood is the proposed developmental period for young adults between the ages of 18- and 25-years-old (Arnett, 2000). Marked by exploration and change, emerging adulthood signifies a delay in obtaining developmental milestones, such as leaving home and marriage, that are historically utilized to define adulthood (Arnett, 2015). For example, the median age of when individuals marry has increased by six years over the past four decades to 26- and 28-years-old for women and men, respectively (Arnett, 2015). Arnett (2015) attributes these shifts in developmental norms to four social revolutions in the 1960's and 1970's: Technology Revolution; Sexual Revolution; Women's Movement; and Youth Movement. With each of these movements, more education was required to be successful, more rights were afforded to allow for increased self-focus, and the need for stabilization in life (e.g., marriage, career) was deferred. Therefore, the traditional milestones that were previously utilized to define transitioning into adulthood no longer complemented the developmental trajectories of young adults. In developed countries, such as the United States, Arnett (2015) suggested that one stage of emerging adulthood exists; however, there are "many paths to get to the end" (p. 26), and these paths differ based on identity facets and life experiences (Arnett, 2010).

Arnett (2015) proposed five defining features of the emerging adulthood period. The first, *identity exploration*, signifies that identity exploration continues (e.g., Arnett & Schwab, Sept. 2013), even though previous theorists (Erikson, 1968) argued that identity formation occurs during adolescence. The second feature is *instability*. This refers to the various transitions that emerging adults typically experience (e.g., annual changes in living arrangements). *Self-focus*, the third feature, refers to the ability of emerging adults to focus more on themselves due to decreased obligations and responsibilities to others. This time to focus on self contributes to their increased sense of autonomy. The fourth feature, *feeling in-between*, demonstrates the struggle emerging adults face during the shift from adolescence to adulthood as they attempt to attain the three criteria they believe make them adults: accepting responsibility for self, independent decision-making, and financial independence. The final feature includes *possibilities and optimism*, where emerging adults are encouraged to explore their options and to believe that their opportunities are endless.

Nelson and colleagues (2007) demonstrated the qualitative features of emerging adulthood in their study examining how parents and emerging adults conceptualize criteria for reaching adulthood. The authors found that parent and emerging adult participants categorized the "necessary" responsibilities of adulthood similarly: accepting responsibility for actions; establishing equal relationships with parents; becoming financially independent; and solidifying personal beliefs independent from their parents' beliefs. Additionally, both parent and emerging adult participants agreed that emerging adults were not yet "adults" in comparison to the criteria named, highlighting the "in-

between" nature of this developmental period. When considering the transitional period of emerging adulthood, identity exploration and feelings of instability appear to play an important role in emerging adults' perceived well-being.

**Personal and parental correlates of well-being in emerging adulthood.** While the literature points to general improved well-being during emerging adulthood when compared to during adolescence (Galambos, Barker, & Krahn, 2006), empirical evidence suggests that certain individual and family characteristics are associated with higher levels of negative emotional states in emerging adults (e.g., Bebko, Franconeri, Ochsner, & Chiao, 2011; Zambianchi & Ricci Bitti, 2014). For example, in their longitudinal study of depression, self-esteem, and anger during emerging adulthood, Galambos and her colleagues (2006) found that, overall, well-being improved from 18- to 25-years-old and that individuals who endorsed greater social support, employment, and being married reported higher levels of self-esteem and lower levels of depression and anger. Studying college students, Asberg, Bowers, Renk, and McKinney (2008) identified a significant, direct path between experiences of stress and perceptions of adjustment. They also found that social support mediated this association for both male and female participants. These studies highlight the importance of considering individual and relational characteristics in the examination of emerging adult well-being, particularly in relation to perceptions of stress.

When considering relational characteristics of emerging adult well-being, empirical evidence points to the importance of parents in facilitating emerging adult well-being (e.g., Fingerman et al., 2012b; Robinson, DiTommaso, Barrett, & Hajizadeh,

2013). For instance, when examining a large, national data set of emerging adult participants between the ages of 18- and 24-years-old, Fingerman and her colleagues (2012b) identified that emerging adults who reported increased parental support also reported higher life satisfaction. Emerging adults in their study described the most important support provided by parents as emotional support, advice, and discussion of their daily activities. In their emerging adult sample, Robinson and colleagues (2013) concluded that parental involvement enhanced emerging adult well-being in domains of environmental mastery, positive relations, and increased self-acceptance. Additionally, in their study of 455 adolescents between the ages of 14- to 19-years, Field, Lang, Yando, and Bendell (1995) found that adolescents' perceived intimacy with their parents, when compared to adolescents' perceived intimacy with same-sex friends, more significantly related to the positive variables, including increased self-esteem and decreased depression, suicidal ideation, and risk-taking behaviors.

While the literature points to the positive association between parent-emerging adult interactions and emerging adult well-being, research also demonstrates that parents have the ability to influence emerging adult well-being negatively. For instance, Cusimano and Riggs (2013) found that memories of parental conflict during childhood were significantly related to undergraduates' psychological distress during adulthood. In terms of helicopter parenting practices, Kouros, Pruitt, Ekas, Kiriaki, and Sunderland (2017) found that while emerging adult male participants with parents who supported their autonomy experienced decreased dysphoria and social anxiety, emerging adult female participants with parents who engaged in over-parenting practices endorsed

decreased perceptions of well-being. Over-parenting practices have also been related to decreased self-efficacy, life satisfaction, and physical health and to increased anxiety and depression in an emerging adult sample (Reed, Duncan, Lucier-Greer, Fixelle, & Ferraro, 2016). These studies demonstrate the continued influence of parenting practices on children into adulthood, suggesting that certain parenting styles may have deleterious effects on emerging adult well-being. Given this, the current study examined how the helicopter parent-emerging adult relationship was associated with emerging adults' experiences of stress.

**The Helicopter Parent: Over-Involvement in Emerging Adulthood**

As the global, generational decrease in independence during adulthood becomes increasingly common, the style of parenting referred to as "helicopter parenting" is becoming more prevalent in today's society (e.g., Settersten & Ray, 2010; Stokes, Oct. 2014), further conflating the idea of "reaching adulthood." *Helicopter parenting* is characterized by parents readily providing support and advice to their children, interceding for their children, and maintaining frequent contact with their children (Collins & O'Brien, 2011). When considering Baumrind's (1971) parenting styles, helicopter parenting is hypothesized to be similar to the authoritarian parenting style (LeMoyne & Buchanan, 2011), defined as providing clear expectations and emphasizing obedience and tradition. Both authoritarian and helicopter parenting styles reflect parental concern for their children's well-being, but helicopter parents tend to intervene to complete tasks with which children should struggle. This can diminish their children's sense of independence (LeMoyne & Buchanan 2011; Schiffrin et al., 2014).

While helicopter parents can be appropriately assertive in some life domains to ensure their children's well-being, they can be intrusive in others, most frequently documented in academic and competition settings (Stokes, Oct. 2014). The media points to two contributors to the helicopter parent-emerging adult dynamic, citing lack of motivation, resources, and maturity for emerging adults and overinvestment due to personal difficulties for parents (Fingerman et al., 2012a). Helicopter parenting is increasingly prevalent, particularly among those parenting "millennials" (e.g., Settersten & Ray, 2010), individuals born between 1982 and 2004 who "reached" adulthood at the start of the 21st century (Howe & Strass, 1991). A self-proclaimed helicopter parent, Lynthcott-Haims (2015) stated that "love and fear [are behind the] overinvolvement" of parents (p. 1). Additionally, while both mothers and fathers engage in these helicopter parenting behaviors, mothers tend to utilize this parenting style more often (e.g., Fingerman, Miller, Birditt, & Zarit, 2009; Fingerman et al., 2012b; Suitor & Pillemer, 2006).

Several historical shifts contributed to the establishment of helicopter parents. Lynthcott-Haims (2015) attributed this trend of overparenting to changes in parenting styles initiated by the Baby Boomer generation who hoped to "abolish the traditional hierarchy between parents and children," an artifact of the Youth Movement (Arnett, 2015, p. 65). In the 1980's, several events encouraged the escalated supervision of children and the structuring of their time: increase in child abductions; in homework assigned; in mothers working; and in importance placed on children's self-esteem (Lynthcott-Haims, 2015). Through these developments, parents began to supervise their

children more and view themselves as a primary player in their children's safety and success (Lynthcott-Haims, 2015).

In light of these parenting shifts in the U.S., it is important to acknowledge the role of race, ethnicity, and nationality when examining definitions of "overparenting" as "parenting is a social construct, created by social and cultural contexts and norms" (Bernstein & Triger, 2010, p. 1267). The phenomenon of overparenting has been examined in other countries (e.g., Israel; Rousseau & Scharf, 2017), and certain cultures may view tenets of helicopter parenting as the norm, such as Asian-heritage parents who use psychological control, obedience, and autonomy-undermining behaviors in their parent-child relationships (Juang, Qin, & Park, 2013); however, much of the empirical evidence of helicopter parents collected thus far pertains to predominantly White, American parents (e.g., Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Murphy, 2012). This American-centric focus is highlighted in both the historical roots of helicopter parenting presented by Lynthcott-Haims (2015) and the call from helicopter parent researchers to explore helicopter parenting behaviors in culturally diverse samples (Padilla-Walker & Nelson, 2012; Segrin et al., 2012).

The societal trend of overparenting was captured in a qualitative study by Kloep and Hendry (2010) where over half the parent participants were categorized into the cluster of "holding on," described as delaying the growth of the child for fear of losing the parental role. The literature indicates that helicopter parenting is a distinct form of parental control positively related to parental involvement, guidance, advice, disclosure, and emotional support, and negatively related to autonomy-granting behaviors, and

emerging adults' school engagement, competence, and ability to relate to others (e.g., Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014). Empirical evidence also documents that overparenting behaviors negatively influence emerging adults' satisfaction with life (Kins et al., 2009; LeMoyne & Buchanan, 2011), motivation to be autonomous (Kins et al., 2009), academic performance (Lamborn & Groh, 2009), self-esteem (Lamborn & Groh, 2009), and substance use behaviors (Padilla-Walker et al., 2012). Segrin, Woszidlo, Givertz, and Montgomery (2013) identified that overparenting behaviors negatively influenced emerging adults' experience of stress such that emerging adults' dysfunctional coping mediated the association between overparenting and emerging adults' stress. Additionally, Segrin and his colleagues (2012, 2013) found that overparenting was significantly related to anxiety and narcissism in emerging adults, as well as to less open and problem-free communication, which indirectly affected emerging adults' family satisfaction (Segrin et al., 2012; Segrin et al., 2013). The current study focused on experiences of stress, communication, and the helicopter parent-emerging adult relationship given the inclination of emerging adult children to emotionally rely on their parents. Overall, while helicopter parenting behaviors appear to impact several domains in emerging adults' lives, assessing the influence of helicopter parents on emerging adults' emotion regulation development is still a needed area of research.

**Associations between helicopter parenting behaviors and emotion regulation from early childhood to late adolescence**. As previously outlined, parents play an important role in how children regulate their emotions (e.g., Bowlby, 1973, 1980, 1982; Shaver & Mikulincer, 2002, 2007). Additionally, parent-child interactions affect

individuals' emotion regulation abilities and skills (e.g., Buckholdt, Parra, & Jobe-Shields, 2014; Morris, Silk, Steinberg, Myers, & Robinson, 2007; Otterpohl & Wild, 2015; Schulz, Waldinger, Hauser, & Allen, 2005). While no known study to date has specifically examined the impact of helicopter parenting behaviors on emotion regulation development, some of the characteristics that distinguish the helicopter parenting style have been considered for children and adolescents, particularly autonomy-undermining behaviors. In their review of the literature, Deci and Ryan (1987) concluded that, when compared to autonomy-supporting environments, controlling environments contribute to lower intrinsic motivation, prompting individuals to attribute daily activities to external sources. Empirical evidence also suggests that parental over-involvement impacts children's self-beliefs and abilities related to being successful in different domains. For example, Gronlick, Kurowski, Dunlap, and Hevey (2000) found that as 6$^{th}$ grade students transitioned to 7$^{th}$ grade, those who had mothers with increased school involvement and lower parental autonomy-supporting behaviors endorsed greater external behavior issues and lower levels of self-worth and control capabilities.

Several studies have pointed to the detrimental impact of parental control on children's emotion regulation abilities (Bronstein, Ginsburg, & Herrera, 2005; Calkins & Johnson, 1998; Calkins, Smith, Gill, & Johnson, 1998); however, in these studies, control was conceptualized as "negative" (i.e., scolding, threats, restriction of movement, and directing children's activity). While over-involvement and a sense of control regarding emerging adults' daily functioning are aspects of helicopter parenting, the "negative" conceptualization of this control does not wholly apply to the helicopter parenting

paradigm. Additionally, these studies involve young samples, ranging from infancy to mid-adolescence, which makes generalizability to emerging adults precarious. Nevertheless, these studies can inform how we conceptualize the impact of helicopter parents' control behaviors on emerging adults' ability to regulate their own emotions. For instance, in two laboratory studies of mother-toddler dyads, Calkins and his colleagues found that mothers who were overly controlling had children who had not developed the skills and repertoire necessary to regulate emotions independently (Calkins & Johnson, 1998; Calkins et al., 1998). Additionally, positive maternal guidance was found to be related to more positive behavior regulation strategies. Calkins and Johnson (1998) found that preemptive interference by mothers also infringed upon children's emotion regulation capabilities. These findings suggest that young children with controlling parents and with parents who readily intervene may rely on more extrinsic support when faced with emotional experiences rather than utilizing intrinsic, self-motivated strategies. This may be attributed to the lack of opportunities for young children to independently practice these skills.

While several studies highlight the deleterious effects of helicopter parents' autonomy-undermining behaviors on children's emotion regulation capabilities, the literature presents somewhat mixed findings of associations between helicopter parenting behaviors and emotion regulation as some research points to positive elements of helicopter parenting behaviors. For instance, in their laboratory study of mothers and their 2-year-old infants, Crockenberg and Litman (1990) found that moderate maternal control and maternal guidance jointly and significantly increased infant compliance in

completing tasks. Although the process is highlighted in a very young sample, we may infer that the helicopter parenting behaviors of control and guidance may be beneficial to a certain degree based on the well-being literature presented above. It is possible that these behaviors provide the scaffolding necessary for emerging adults to navigate their surroundings. These varied associations were also emphasized by Bronstein and colleagues (2005) in their study of 93 parent-child dyads during middle school. Parents who provided more autonomy-supporting behaviors, such as respecting their children's perspectives and encouraging children to voice their opinion, had children with higher academic achievement longitudinally. Parents who exhibited more controlling behavior or who did not offer guidance had children who later endorsed lower intrinsic motivation toward schoolwork. Control and guidance appear to elicit opposite effects, which reiterate the mixed findings regarding links between helicopter parenting behaviors and children's regulatory abilities. When considering the helicopter parenting behaviors of offering support and undermining autonomy, it is difficult to draw any clear conclusion about how helicopter parenting behaviors impact individuals' abilities to self-regulate, particularly within the emerging adult population. Therefore, although the media and several studies suggest that helicopter parenting behaviors may inhibit autonomy in emerging adults, some of the behaviors typically endorsed by helicopter parents (e.g., providing support and guidance) may actually serve as a buffer for emerging adults facing emotionally stressful situations.

**Parental role in emotion regulation during emerging adulthood.** The literature examining the interpersonal emotion regulation processes between helicopter

parents and emerging adults is scarce; however, several studies point to the importance of continued examination of parental relationships in emerging adults' ability to regulate their emotions. In their longitudinal study of parent-son relationships with Israeli adolescents, Scharf, Mayseless, and Kivenson-Baron (2004) found several positive relations for adolescents who possessed autonomous mindsets (i.e., maintain and value relationships, flexibility in coping). For instance, adolescents who were autonomous endorsed increased closeness with parents and increased support when compared to adolescents who exhibited more dismissive mindsets (i.e., minimize importance of relationships and emotional experiences). Autonomous adolescents also utilized more problem-focused coping and demonstrated increased competence in social functioning. The authors hypothesized that these associations were informed by more sensitive responding from parents and more positive affective relations over time. Studying freshmen in Portugal, Cabral and colleagues (2012) found that the quality of individuals' bonds with their parents and their experience of over-parenting and controlling behaviors played a critical role in participants' ability to regulate emotions. Higher perceptions of bond quality facilitated more positive means of emotion regulation (e.g., reflexive coping, clarity), while increased experiences of inhibited individuality promoted more detrimental modes of regulation (e.g., brooding, suppression). Together, these studies suggest that emerging adults' relationship with their parents and their parental attachment continue to play an influential role in how emerging adults cope with and regulate their emotions.

**The Role of Communication between Helicopter Parent and Emerging Adult**

The attachment literature points to the importance of parent-child communication in emotion regulation, such as with emotional dialogues (Denham, 1993) and social sharing (Rimé, 2007). Therefore, the quality of emotional exchanges serves as an important foundation for developing children's emotion regulation capabilities and for the continued regulation of emotions within social interactions throughout the lifespan (Cole, Martin, & Dennis, 2004). Fingerman and colleagues (2012a) identified a trend of frequent communication between emerging adults and their parents, particularly with mothers. This contact with parents and the forms of support identified as most frequently utilized by emerging adults (i.e., listening, emotional support, and advice) point to the importance of parent-emerging adult communication when regulating emotions. As emerging adults utilize their parents to make sense of their day, to garner support, and to navigate situations of uncertainty, they make use of their parental relationship as an external resource for managing affect. For individuals between 18- and 29-years-old, Schon (2014) found that frequency of that communication with mothers and with fathers had important implications for perceptions of communication and relationship satisfaction with parents. Miller-Ott, Kelly, and Duran (2014) found similar relations with cell phone usage, which was significantly related to emerging adults' relationship satisfaction with their mothers and fathers. Additionally, they found that undergraduates who had increased contact with their mother also endorsed increased perceptions of closeness within their parent-emerging adult relationship.

Several studies highlight the salience of communication within the helicopter parent-emerging adult relationship specifically. For instance, in their study of parent-young adult dyads, Givertz and Segrin (2014) found that increased parental control predicted decreased young adult self-efficacy, which was strengthened by openness of communication between parents and emerging adults. They also found communication positively predicted family satisfaction, demonstrating that increased lines of communication between parents and emerging adults played a significant role in how emerging adults viewed their familial relationships; however, given the former finding, this communication may be deleterious to emerging adults' perceptions of independence. In their study of parent-emerging adult dyads, Segrin and colleagues (2012) identified a similar relationship as increased experiences of overparenting practices predicted decreased parent-emerging adult communication, which related to decreased perceived family satisfaction.

**Summary of the Literature**

While the literature clearly points to the importance of parents in emotion regulation and management of affect during childhood (Shaver & Mikulincer, 2007), little is known regarding how this interpersonal emotion regulation process operates during emerging adulthood (Cabral et al., 2012; Diamond & Aspinwall, 2003). Additionally, far less is known regarding how helicopter parenting behaviors, categorized by increased support, intervention, guidance, and contact (Collins & O'Brien, 2011), further conflate and complicate the interpersonal emotion regulation between emerging adults and helicopter parents. While the literature predominantly examines helicopter

parenting behaviors within a young population (Bronstein et al., 2005; Calkins & Johnson, 1998; Calkins et al., 1998), two studies that examined non-helicopter parenting relationships suggest that the parent-child relationship may continue to be important in emerging adults' emotion regulation processes (Cabral et al., 2012; Scharf et al., 2004). Therefore, this study contributes to our knowledge base as it considered how the increasingly prevalent behavioral practices of helicopter parents contribute to emerging adults' abilities to regulate their emotions.

**The Present Study**

Helicopter parenting is a relatively new area of study (Segrin et al., 2013), and no known study to date has examined the influence of helicopter parenting behaviors on emerging adults' emotion regulation capabilities. This is an important area of study as societal trends in emerging adulthood and the continued role that parents play during this time of transition may challenge previously established knowledge about how emerging adults regulate experiences of negative and positive affect. Additionally, helicopter parenting, characterized by the tendency to intervene and manage emerging adult concerns, and the helicopter parent-emerging adult dynamic have not been examined within the emerging adult emotion regulation context. The purpose of the present study was to use dyadic data to examine how communication quality within the helicopter parent-emerging adult relationship associates with emerging adults' ability to regulate experiences of negative and positive affect. Using a cross-sectional study design and actor-partner interdependence mediation models (APIMeM), this study examined the

following research questions (RQ) and tested the following hypotheses (H; See Figure 1 for graphical representations):

R1: How are experiences of negative affect associated with perceived stress for emerging adults and helicopter parents?

H1a: There will be a direct association between negative affect and perceptions of stress such that negative affect will be positively associated with stress for both emerging adults and helicopter parents independently (actor effect; pathways $c_1$ and $c_2$, respectively). The literature reveals a consistent association between experiences of negative affect and perceived stress as higher levels of perceived negative affect are associated with higher levels of perceived stress (e.g., McHugh, Kaufman, Frost, Fitzmaurice, & Weiss, 2013; Mroczek & Almeida, 2004).

RQ2: What role does perceived communication quality between helicopter parents and emerging adults play in mitigating experiences of negative affect?

H2a: There will be a negative indirect association between negative affect and perceptions of stress via emerging adults' and helicopter parents' own perceptions of communication quality with their helicopter parent or emerging adult (actor effect; pathways $a_1 \rightarrow b_1$ and $a_2 \rightarrow b_2$ for emerging adults and helicopter parents, respectively).

H2b: There will be a positive direct effect between negative affect and communication quality (pathways $a_1$ and $a_2$) as parent-emerging adult dyads are more likely to utilize communication for emotional support in times of stress (Mikulincer et al., 2003). Communication quality will, in turn, be directly and negatively associated with perceptions of stress (pathways $b_1$ and $b_2$) as individuals who perceive greater benefits

from their communications within the helicopter parent-emerging adult dyad will endorsed decreased perceptions of stress. These hypotheses are based on considerations of the increased frequency of communication between emerging adults and parents in today's society and how this serves as a form of emotional support (e.g., Fingerman et al., 2012a).

RQ3: How do helicopter parents' perceptions of their parent-emerging adult communication quality associate with emerging adults' reported stress?

H3: There will be indirect partner effects for helicopter parents such that:

H3a: Helicopter parents' own perceptions of negative affect will be positively associated with their emerging adults' experience of communication quality, which, in turn, will be negatively associated with emerging adults' perceived stress (pathway: $a_3 \rightarrow b_1$).

H3b: Parents' perceptions of negative affect will be positively associated with their own perceptions of communication quality, which, in turn, will be negatively associated with emerging adults' perceived stress (pathway: $a_2 \rightarrow b_3$). Based on the literature that parents continue to play a significant role in emerging adults' lives (Fingerman et al., 2012a) and that they continue to serve as secure bases during emotionally taxing times (Mikulincer et al., 2003), the partner effects are hypothesized to be uni-directional. Helicopter parent characteristics more significantly predict emerging adult outcomes than vice versa (Segrin et al., 2013).

RQ4: How are experiences of positive affect associated with perceived stress for emerging adults and helicopter parents?

H4: There will be a direct effect between positive affect and perceived stress such that positive affect will be negatively associated with stress for emerging adults and helicopter parents (actor effect; pathways $c_1$ and $c_2$, respectively). The literature demonstrates that experiences of positive affect diminish perceptions of stress (e.g., McHugh et al., 2013). Therefore, emerging adults and helicopter parents who endorsed greater experiences of positive affect will also endorsed lower levels of perceived stress.

RQ5: What role does helicopter parent-emerging adult communication quality play in emerging adults and helicopter parents regulating their own experiences of positive affect?

H5a: There will be a negative indirect effect between emerging adults' and helicopter parents' experience of positive affect and their perceived stress via their own perceptions of communication quality with their helicopter parent or emerging adult (actor effect; pathways $a_1 \rightarrow b_1$ and $a_2 \rightarrow b_2$ for emerging adults and helicopter parents, respectively).

H5b: Again, due to the increased trend in communication between emerging adults and parents to obtain emotional support and to share their daily experiences (e.g., Fingerman et al., 2012a), the current study hypothesized a positive direct effect between positive affect and communication quality (pathways $a_1$ and $a_2$) as helicopter parent-emerging adult dyads are more likely to communicate, particularly to share daily events whether positive or negative. Communication quality will, in turn, be directly and negatively associated with perceptions of stress (pathways $b_1$ and $b_2$) as emerging adults and helicopter parents who perceive greater benefits from their communication within the helicopter parent-emerging adult dyad would endorse decreased perceptions of stress.

RQ6: How do helicopter parents' perceptions of their parent-emerging adult communication quality and their positive affect associate with emerging adults' perceptions of stress?

H6: There will be indirect partner effects for helicopter parents such that:

H6a: Helicopter parents' perceptions of positive affect will be positively associated with emerging adults' experience of communication quality, which, in turn, will be negatively associated with emerging adults' perceived stress (pathway: $a_3 \rightarrow b_1$).

H6b: Helicopter parents' perceptions of positive affect will be positively associated with their own perceptions of communication quality, which, in turn, will be negatively associated with emerging adults' perceived stress (pathway: $a_2 \rightarrow b_3$). As experiences of positive affect within the parent-child relationship may serve as the secure base from which individuals explore their environment (Schwarz & Bohner, 1996), considering how helicopter parents' positive affect and dyadic communication quality associate with emerging adults' perceptions of stress is important to understand how this attachment relationship continues to play a role in emotion regulation during emerging adulthood.

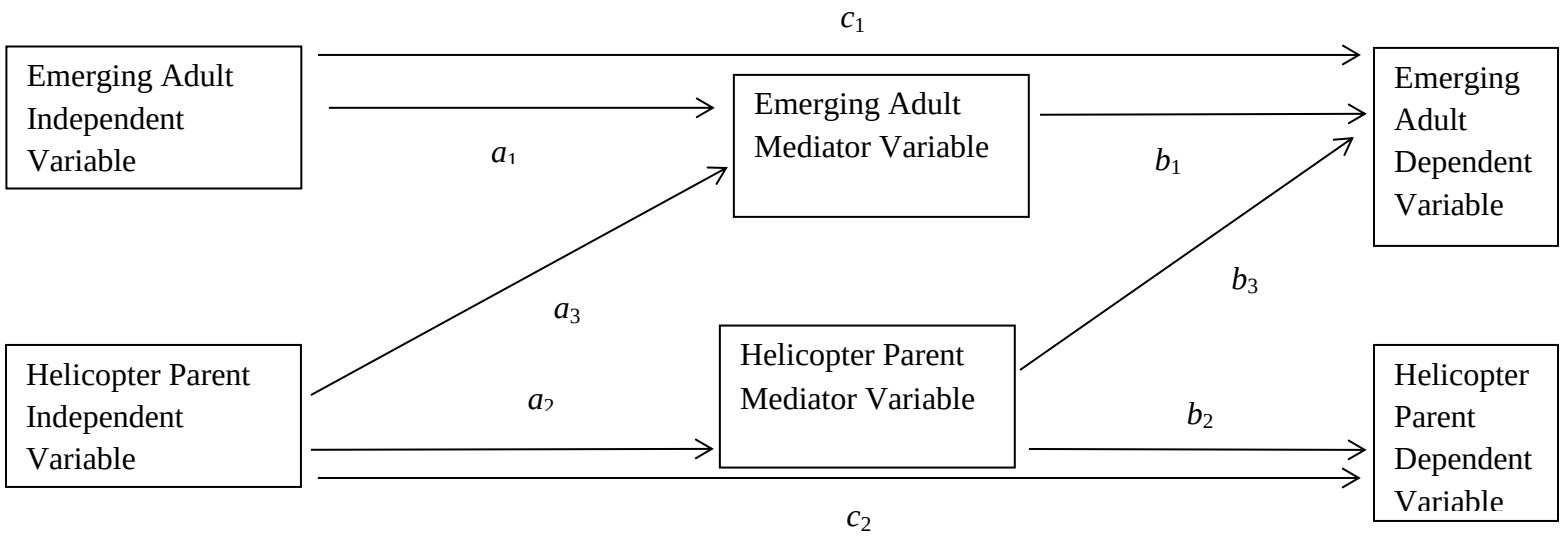





*Figure 1.* Graphical representation of hypotheses

*Note.* For negative affect analyses: independent variable = negative affect (PANAS-X); dependent variable = stress (DASS-21); mediator = communication quality; controls = conflict (QRI) and difficulties in emotion regulation (DERS).

For positive affect analyses: independent variable = negative affect (PANAS-X); dependent variable = stress (DASS-21); mediator = communication quality; controls = conflict (QRI) and difficulties in emotion regulation (DERS).

# Chapter 2

# Method

## Procedure and Recruitment

After obtaining approval from the university Institutional Review Board (see Appendix A), emerging adult and parent participants were recruited via community contacts, university listservs, psychology department participant pools, and Craigslist. Interested participants contacted the Principle Investigator (PI) at an email address created specifically for the purpose of this study. Criteria to participate in the study were: (1) both parent, either mother or father, and emerging adult were willing to participate, (2) emerging adult was between the ages of 18- and 25-years-old (Arnett, 2000), and (3) parent met criteria of helicopter parent (described below). Each emerging adult and parent participant was assigned a unique identification number that linked with their dyad identification (e.g., for Dyad 1, Emerging Adult = 001, Parent = 501).

Data for this study were collected in two parts: (1) a screening questionnaire, and (2) an online survey. Participants were sent separate screening surveys to determine the emerging adult's age and to assess parent's helicopter parenting behaviors using the Helicopter Parenting Scale (Padilla-Walker & Nelson, 2012; see Appendix B). This is a 5-item measure that assesses the construct of helicopter parenting (e.g., "My parent intervenes in solving problems with my employers or professors"). Items are rated on a 5-point scale, ranging from 1 = *not at all like me/him/her* to 5 = *a lot like me/him/her*, where higher scores represent higher levels of helicopter parenting behaviors. Good internal consistency was found for the study sample (Cronbach's $\alpha$ = .75). For this study,

emerging adults' perceptions of their parent's helicopter parenting behaviors served as the distinguishing criteria for participation. Therefore, dyads where emerging adults endorsed an average score of 3 or above on the 5-item measure were invited to participate in the study.

For those eligible, the PI sent each member of the dyad a link to the online questionnaire (Part 2), which contained measures related to experiences of emotion, difficulties in emotion regulation, experiences of stress, and perceptions of the parent-emerging adult relationship and communication. The online questionnaire took approximately 30 minutes to complete. Parent-emerging adult dyads where both members completed the questionnaire were entered into a drawing to receive 2 of 80 $25 gifts cards from Amazon.com. Participants were also eligible to receive class credit where offered.

**Participants**

Five hundred and three parent-emerging adult dyads were screened for this study. Of these 503 dyads, 72 dyads met the criteria to participate in the study survey. From this sample, 66 dyads completed the baseline questionnaire and were included in the final analyses. Several cross-sectional dyadic data studies (e.g., Driscoll, Schatschneider, McGinnity, & Modi, 2012; Lim, 2014; Metsapelto, Pulkkinen, & Poikkeus, 2001; Pakenham & Samios, 2013; Sina, Meulen, & de Paula, 2010) point to the sufficiency of the current sample size as the number of dyads included in these studies ranged from 29 to 77. Additionally, when examining mediational relations in dyads, Garciá-López,

Sarriá, Pozo, and Recio (2016) utilized 76 dyads. These numbers are comparable with the current study's sample size.

For the emerging adult sample (36 male, 29 female, and 1 unidentified), the age range specified by the criteria was fully represented, with participants ranging from 18- to 25-years-old ($M$ = 19.62, $SD$ = 1.47). The majority of the helicopter parent sample identified as female (58 mothers, 10 fathers) and ranged from 37- to 64-years-old ($M$ = 49.94, $SD$ = 6.02). Overall, the sample predominantly identified as White, highly educated, and financially stable. Helicopter parents largely reported a household income of over $150,000 ($n$ = 15; 22.7%), followed by between $100,000 and $150,000 ($n$ = 14; 21.2%), between $75,000 and $100,000 ($n$ = 11; 16.7%), between $50,000 and $75,000 ($n$ = 11; 16.7%), between $25,000 and $50,000 ($n$ = 8; 12.1%) and under $25,000 ($n$ = 6; 9.1%). One parent did not provide their household income. Emerging adult participants endorsed predominantly living with roommates ($n$ = 30; 45.5%) and with parents ($n$ = 21; 31.8%), followed by living alone ($n$ = 5; 7.5%), living with a partner ($n$ = 3; 4.5%), and other ($n$ = 2; 3.0 %). Five emerging adult participants did not indicate their living situation (see Table 1 for additional demographic information).

**Measures**

The online survey included standard demographic questions (see Appendix C) and a series of questionnaires. Wording for measures of relationship quality and communication quality were adjusted to reflect the role of the participant in the helicopter parent-emerging adult dyad (e.g., "When thinking of your relationship with your

(parent/emerging adult), please use the following scale to indicate the degree of your response").

Table 1

*Descriptive Statistics: Emerging Adults and Helicopter Parents*

| Variables | | Emerging Adult | | Parent | |
|---|---|---|---|---|---|
| | | N | % | N | % |
| Racial Background | White/European-American | 32 | 48.5 | 33 | 50.0 |
| | Asian/Asian American | 17 | 25.8 | 17 | 25.8 |
| | Hispanic/Latino(a) | 9 | 13.6 | 10 | 15.2 |
| | Black/African American | 3 | 4.5 | 2 | 3.0 |
| | Other | 5 | 7.6 | 4 | 6.1 |
| Education | Less than High School | - | - | 3 | 4.5 |
| | High School | 26 | 39.4 | 10 | 15.2 |
| | Professional Program | - | - | 2 | 3.0 |
| | Some College | 36 | 54.5 | 15 | 22.7 |
| | Undergraduate Degree | 4 | 6.1 | 16 | 24.2 |
| | Graduate Degree | - | - | 20 | 30.3 |
| Relationship Status | Single/Not in a Relationship | 42 | 63.6 | 9 | 13.6 |
| | In a committed heterosexual relationship – not living together | 17 | 25.8 | 1 | 1.5 |
| | In a committed same-sex relationship – not living together | 1 | 1.5 | - | - |
| | In a committed heterosexual relationship – living together | 4 | 6.1 | 5 | 7.6 |
| | Engaged – living together | 1 | 1.5 | 1 | 1.5 |
| | Married | 1 | 1.5 | 50 | 75.8 |

**Stress.** To measure perceptions of stress, the Stress subscale of the Depression, Anxiety, and Stress Scales (DASS-21; Henry & Crawford, 2005) was used (see Appendix D). This scale has 7 items, including "I find it hard to wind down," that were rated on a 4-point scale ranging from 0 = *does not apply to me at all* to 3 = *applies to me very much, or most of the time*. Responses were summed within the stress subscale and could range from 0 to 21 with higher scores indicating higher levels of perceived stress. Emerging adult and helicopter parent participants endorsed lower levels of perceived stress as reflected in their mean scores ($M$ = 6.68, $SD$ = 3.68 and $M$ = 4.30, $SD$ = 3.60, respectively). DASS-21 has been shown to have strong internal consistency for general populations (e.g., $\alpha$ = .88 for general adult United Kingdom population; Henry & Crawford, 2005). Antony, Bieling, Cox, Enns, and Swinson (1998) found evidence of concurrent validity, while Henry and Crawford (2005) found evidence of convergent and discriminant validity when comparing DASS-21 results to independent measures of psychological distress. For this study, the stress subscale demonstrated good internal consistencies across the total sample (Cronbach's $\alpha$ = .81) and for emerging adult (Cronbach's $\alpha$ = .74) and helicopter parent participants (Cronbach's $\alpha$ = .84) separately.

**Positive and negative affect**. The Positive and Negative Affect Schedule – Extended Form (PANAS-X; Watson & Clark, 1994) was used to measure experiences of positive and negative affect within the past week (10 items each). Items, which consist of single word descriptors of feelings and emotions (e.g., nervous, enthusiastic), were rated on a five-point scale ranging from 1 = *very slightly/not at all* to 5 = *extremely*. Ratings were summed within each subscale (i.e., Positive Affect and Negative Affect) with scores

ranging from 10 to 50. Higher scores reflect greater endorsement of the affect type. For emerging adults, the mean scores for positive and negative affect were 35.85 (*SD* = 6.32) and 22.83 (*SD* = 7.23), respectively, demonstrating that the emerging adult sample endorsed high levels of positive affect and moderate levels of negative affect overall. The helicopter parent mean scores for positive and negative affect were 35.26 (*SD* = 5.63) and 16.5 (*SD* = 5.89), respectively, illustrating high levels of positive affect and low levels of negative affect for the helicopter parent sample.

In their manual for the PANAS-X, Watson and Clark (1994) present internal consistencies for the positive and negative affect scales across multiple studies, with Cronbach's alphas ranging from .83 to .90 and .85 to .90 for the positive and negative affect scales, respectively. The authors found that PANAS-X demonstrated factorial validity, convergence validity with peer ratings, and convergent and divergent validity when compared to the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971). For the current study, the positive and negative affect scales showed good internal consistency across this study's sample (Cronbach's $\alpha$ = .84 and .89 for Positive Affect and Negative Affect, respectively) and for emerging adults (Positive Affect: Cronbach's $\alpha$ = .85; Negative Affect: Cronbach's $\alpha$ = .86) and for helicopter parents (Positive Affect: Cronbach's $\alpha$ = .83; Negative Affect: Cronbach's $\alpha$ = .88).

**Communication**. For the purpose of this study, several questions were created to assess helicopter parent-emerging adult communication (see Appendix E). Three questions were used to assess communication quality, including how often the dyads communicated, how satisfied the individual felt with this communication (i.e., "How

satisfied are you with this communication?"), and how supported the individual felt (i.e., "How supported do you feel during this communication?"). These questions were rated on 5-point scales ranging from 1 = *none/very unsatisfied/very unsupported* to 5 = *every day/very satisfied/very supported*. Responses were summed and averaged to represent communication quality with higher scores reflecting greater quality of helicopter parent-emerging adult communication. Emerging adults ($M$ = 4.23, $SD$ = .73) and helicopter parents ($M$ = 4.11, $SD$ = .81) endorsed high levels of communication quality. The responses showed good internal consistencies overall (Cronbach's $\alpha$ = .78), and for emerging adults (Cronbach's $\alpha$ = .77) and for helicopter parents (Cronbach's $\alpha$ = .78). Additional questions assessed the mode of communication most frequently used (e.g., phone call, text message, email) as well as the content of the communication. The content of communication was examined by addressing the focus of the conversation (i.e., related to school, work, home, friends, or partner/significant other) and how this focus may differ based on affect (i.e., positive emotion, negative emotion). The prompts were "I contact my parent/child most often when something positive or enjoyable happens," and "I contact my parent/child most often when something negative or stressful happens" (Table 2 presents communication information).

**Control variables.** Control variables account for associations that could influence the main study variables. By controlling for these constructs, the associations between affect, communication quality, and stress within the helicopter parent-emerging adult relationship are examined more clearly as alternative explanations for their associations are accounted for. The literature demonstrates strong associations between

Table 2

*Descriptive Statistics: Emerging Adult Communication with Helicopter Parent*

| Variables | | N | % |
|---|---|---|---|
| Daily Mode of Communication | Phone Call/FaceTime | 25 | 37.9 |
| | Text Message | 15 | 22.7 |
| | Email | 1 | 1.5 |
| | Social Media | 1 | 1.5 |
| | Face-to-Face Communication | 24 | 36.4 |
| Positive Event Contact | At School | 43 | 65.2 |
| | At Work | 5 | 7.6 |
| | At Home | 6 | 9.1 |
| | With Friends | 3 | 4.5 |
| | With my Partner/Significant Other | 4 | 6.1 |
| | Other | 5 | 7.6 |
| Negative Event Contact | At School | 31 | 47.0 |
| | At Work | 6 | 9.1 |
| | At Home | 10 | 15.2 |
| | With Friends | 9 | 13.6 |
| | With my Partner/Significant Other | 5 | 7.6 |
| | Other | 5 | 7.6 |

relationship factors and communication (Miller-Ott et al., 2014; Schon, 2014). This association obscures whether emerging adults benefit from relational characteristics or from the behavior of communication with their parent. Therefore, the current study controlled for relationship quality, in particular perceptions of social support and conflict within the helicopter parent-emerging adult relationship, to examine the role of communication in regulating experiences of negative affect. The Quality of

Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991; see Appendix F) was used to examine positive and negative dimensions of the helicopter parent-emerging adult relationship. The QRI is a 25-item measure that was used to assess relationship quality across three domains: social support (e.g., "To what extent could you count on this person for help with a problem?"); conflict (e.g., "How upset does this person sometimes make you feel?"); and depth (e.g., "How close will your relationship be with this person in 10 years?"). For the purposes of this study, only the social support and conflict scales were considered as measures of positive and negative relationship quality. Items were rated on a four-point scale ranging from 1 = *not at all* to 4 = *very much*. Responses were summed and averaged within each subscale with higher scores demonstrating greater endorsement of that scale construct. For the social support and conflict subscales, the mean scores for emerging adults were 3.50 (*SD* = .55) and 2.27 (*SD* = .59), respectively, while the mean scores for helicopter parents were 3.31 (*SD* = .51) and 2.14 (*SD* = .58), respectively. Both emerging adult and helicopter parent participants endorsed high levels of social support in their parent-emerging adult relationship and moderate levels of conflict. Pierce and colleagues (1991) reported strong internal consistencies for undergraduates' perceptions of relationship quality with their mother ($\alpha$ = .83-.88) and with their father ($\alpha$ = .84-.91). The total, emerging adult, and helicopter parent samples for this study demonstrated good internal consistencies for social support (Cronbach's $\alpha$ = .87, .89, and .83, respectively) and for conflict (Cronbach's $\alpha$ = .87, .87, and .88, respectively).

To elucidate more fully the processes of communication between emerging adults and helicopter parents, emerging adult and helicopter parents' abilities to independently regulate their emotions were considered. This was assessed by examining individual difficulties in emotion regulation. As difficulties in emotion regulation may strengthen individuals' tendency to seek communication when experiencing negative affect, this construct was controlled for in the analyses. The Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004) is a 36-item self-report measure that assesses difficulties in emotion regulation (see Appendix G). This measure focuses on the intrinsic strategies of emotion regulation as items predominantly emphasize how individuals personally regulate their emotions. Items, such as "I experience my emotions as overwhelming and out of control," were rated on a 5-point Likert-type scale ranging from 1= *almost never* to 5= *most of the time*. For this study, responses were summed to create an overall score ranging from 36 to 180. Higher scores reflected greater difficulties in regulating emotion. Emerging adult participants' mean score was 82.61 (*SD* = 22.39), while helicopter parent participants' mean score was 65.77 (*SD* = 19.25). Emerging adult participants endorsed moderate difficulties in emotion regulation and helicopter parent participants endorsed minimal difficulties. DERS has been found to have strong internal consistency within an undergraduate population (α = .93; Gratz & Roemer, 2004). For the current study, good internal consistency was found for the total sample (Cronbach's $\alpha$ = .95) and for emerging adults and helicopter parents (Cronbach's $\alpha$ = .94 and .95, respectively).

Emerging adults' relationship status was included in the analyses as emerging adults' in romantic relationships may rely on their romantic partners for support and interpersonal emotion regulation, rather than utilizing their parents (Erikson, 1968). Emerging adult relationship status was dummy-coded for individuals in a relationship (-1) and those who identified as single (1).

**Data Analysis**

Dyadic data have sources of interdependence, signifying that helicopter parent-emerging adult responses are highly correlated due to the nature of their relationship (Kenny, Kashy, & Cook, 2006). Dyads within this sample are considered distinguishable, such that there is a variable that differentiates the members of the dyad (i.e., helicopter parent compared with emerging adult). To account for this interdependence, structural equation modeling (SEM) procedures for distinguishable dyads were used to examine the actor-partner interdependence mediation models (APIMeM) of the proposed hypotheses. The data of this study have two levels. Level 1 represents the individual and includes difficulties in emotion regulation and reports of stress. Level 2 represents the dyad (i.e., measures that represent the dyad) and includes perceptions of helicopter parent-emerging adult relationship quality and communication. Negative and positive affect (X), and communication quality (M) served as the independent variables, and stress (Y) served as the dependent variable. Two equations are presented to represent the analyses. Subscripts of 1 for X, M, Y, and *e* (error) signify emerging adult variables, while subscripts of 2 for X, M, Y, and *e* (error) signify helicopter parent variables. The beta values are represented by *b*. Since partner effects

were only considered for their influence on emerging adult stress ($Y_1$), the two equations are different (see above for description of equation variables).

Emerging Adult: $Y_1 = b_0 + b_1X_1 + b_2X_2 + b_3M_1 + b_4M_2 + e_1$

Helicopter Parent: $Y_2 = b_5 + b_6X_2 + b_7M_2 + e_1$

Due to the distinguishable nature of the dyads, the hypotheses were examined using two-intercept models, which highlight actor and partner effects individually for emerging adult and helicopter parent participants (Ledermann, Macho, & Kenny, 2011). Using Mplus7 software (Muthèn & Muthèn, 1998-2015), two SEMs were run to assess whether individuals' self-reported affect was associated with experiences of stress and whether communication quality mediated this association for both negative and positive affect separately. These models also assessed for partner effects of helicopter parents' perceptions of negative affect and communication quality on emerging adults' perceptions of stress. Independent variables in this study (negative affect, positive affect, communication quality, difficulties in emotion regulation, and conflict) were mean-centered to standardize their values, making zero a meaningful value for each independent variable (Kenny et al., 2006). This allows the dependent variable (stress) to have nonzero intercepts and to differ between emerging adult and helicopter parent participants, facilitating a free model.

Table 3

*Means, Standard Deviations, and Correlations of Study Variables*

| | Possible | Emerging Adult | | Helicopter Parent | | Correlations | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Range | *M* | *SD* | *M* | *SD* | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 1. Negative Affect | 10-50 | 22.83** | 7.23 | 16.5** | 5.89 | __ | -.25* | .56** | -.35* | -.37* | .42** | .66** | __ |
| 2.Positive Affect | 10-50 | 35.86 | 6.31 | 35.26 | 5.63 | -.36* | __ | -.06 | .19 | .35* | -.26 * | -.40* | __ |
| 3. Stress | 0-21 | 6.68** | 3.68 | 4.30** | 3.60 | .56** | -.24 | __ | -.18 | -.12 | .53** | .59** | __ |
| 4. CQ | 1-5 | 4.23** | .73 | 4.11** | .81 | -.24* | .21 | -.21 | __ | .53** | -.45** | -.26* | __ |
| 5. Social Support | 1-4 | 3.5** | .55 | 3.31** | .51 | -.27* | .31* | -.11 | .53** | __ | -.50** | -.25* | __ |
| 6. Conflict | 1-4 | 2.27 | .59 | 2.14 | .58 | .43** | .11 | .37* | -.29* | -.17 | __ | .52** | __ |
| 7. DERS | 36-180 | 82.61* | 22.39 | 65.77* | 19.25 | .52** | -.50** | .51** | -.38* | -.38* | .32* | __ | __ |
| 8. EA Rel | __ | __ | __ | __ | __ | .04 | .09 | .13 | -.14 | .03 | .23 | .01 | __ |

Paired-sample t-tests of helicopter parent and emerging adult means are presented within the report of means and standard deviations.
Zero-order correlations for emerging adults are presented below the diagonal, and zero-order correlations for helicopter parents are presented above the diagonal.
CQ: communication quality; DERS: difficulties in emotion regulation; EA Rel: emerging adult relationship status.
*$p < .05$, **$p < .001$.

# Chapter 3

## Results

Descriptive statistics were generated to examine the characteristics of the emerging adult and helicopter parent sample (see Table 1). Variable means, standard deviations, paired-sample t-tests, and zero-order correlations of main variables by dyad role were also calculated (i.e., emerging adult, helicopter parent; see Table 3).

### Study Variable Correlations

Correlations among negative and positive affect, stress, communication quality, and the control variables (i.e., helicopter parent-emerging adult social support and conflict, difficulties in emotion regulation, and emerging adult relationship status) were analyzed for emerging adults ($-.50 < r > .56$) and for helicopter parents ($-.50 < r > .66$; see Table 3).

**Emerging adult correlations.** Emerging adults' negative affect was significantly associated with positive affect ($r = -.36$, $p = .003$), stress ($r = .56$, $p < .001$), communication quality ($r = -.24$, $p = .05$), social support ($r = -.27$, $p = .03$), conflict ($r = .43$, $p < .001$), and difficulties in emotion regulation ($r = .52$, $p < .001$). Emerging adults' positive affect was significantly associated with social support ($r = .31$, $p = .01$) and difficulties in emotion regulation ($r = -.50$, $p < .001$). Communication quality was significantly associated with social support ($r = .53$, $p < .001$), conflict ($r = -.27$, $p = .02$), and difficulties in emotion regulation ($r = -.38$, $p = .002$). Difficulties in emotion regulation was related to both social support ($r = -.38$, $p = .002$) and conflict ($r = .32$, $p = .01$). No variables were significantly associated with emerging adults' relationship status.

**Helicopter parent correlations.** Helicopter parents' negative affect was significantly associated with positive affect ($r$ = -.25, $p$ = .04), stress ($r$ = .56, $p$ < .001), communication quality ($r$ = -.35, $p$ = .004), social support ($r$ = -.37, $p$ = .002), conflict ($r$ = .42, $p$ < .001), and difficulties in emotion regulation ($r$ = .66, $p$ < .001). Helicopter parents' positive affect was significantly associated with the control variables, social support ($r$ = .35, $p$ = .004), conflict ($r$ = -.26, $p$ = .04), and difficulties in emotion regulation ($r$ = -.40, $p$ = .001). Communication quality was also related to all control variables: social support ($r$ = .53, $p$ < .001), conflict ($r$ = -.45, $p$ < .001), and difficulties in emotion regulation ($r$ = -.26, $p$ = .04). Helicopter parents' perceptions of social support in their parent-child relationship was significantly associated with conflict ($r$ = -.50, $p$ < .001) and difficulties in emotion regulation ($r$ = -.25, $p$ = .04). Finally, their perceptions of conflict were significantly associated with difficulties in emotion regulation ($r$ = .52, $p$ < .001).

**Control variables.** Control variables were examined to assess their associations with the dependent variable, stress. The control variables account for additional associations that might influence the dependent variable, allowing for associations among the study's main variables to be examined more clearly. Perceptions of conflict within the helicopter parent-emerging adult relationship was significantly, positively associated with perceived stress for both emerging adults ($r$ = .37, $p$ < .001) and helicopter parents ($r$ = .53, $p$ < .001). Social support within the helicopter parent-emerging adult relationship was not significantly associated with stress for either emerging adults ($r$ = -.22, $p$ < .05) or helicopter parents ($r$ = -.18, $p$ > .05). Difficulties in emotion regulation were

significantly, positively associated with perceptions of stress for both emerging adults ($r$ = .41, $p$ < .001) and helicopter parents ($r$ = .59, $p$ < .001). Emerging adult relationship status was also not significantly associated with emerging adults' perceptions of stress ($r$ = .13, $p$ > .05). Due to their significant associations, difficulties in emotion regulation and perceptions of conflict were retained in the analyses as control variables. Social support and emerging adult relationship status were not included as control variables in the analyses to facilitate parsimony within the mediation models.

**Summary.** Correlations were in the expected directions as conceptually deleterious variables, including stress, negative affect, and difficulties in emotion regulation, were positively associated with each other and negatively associated with conceptually beneficial variables, including positive affect, communication quality, and social support. There were several significant differences in variable endorsement based on role in the dyad. Emerging adults more highly endorsed variables of stress, negative affect, perceived communication quality, difficulties in emotion regulation, and perceived social support within the helicopter parent-emerging adult relationship when compared to their helicopter parent counterparts.

**Primary Analyses**

Structural equation modeling (SEM) of actor-partner interdependence mediation models (APIMeM) was utilized to assess the two hypothesized mediation model using Mplus7 software (Muthèn & Muthèn, 1998-2015). The initial models displayed convergence issues due to the large variances of several variables. Based on the recommendation of L. K. Muthén (personal communication, March 8, 2017), who

proposed variances should be between 1 and 10 to ensure adequate convergence within the model, the variables of stress, negative affect, positive affect, communication quality, conflict, and difficulties in emotion regulation were divided by constants for both emerging adults and helicopter parents to correct the variance concerns without changing the significance of the variables used. Additionally, due to the limited sample size, bootstrap procedures (5,000) were used to correct for bias (Ledermann et al., 2011). Bootstrapping is a resampling procedure that computes statistics based on probable datasets, which are created using the available dataset (Singh & Xie, 2010). In other words, for the current study, this procedure generated statistics based on 5,000 hypothetical samples from the current sample.

**H1: Associations between Negative Affect and Stress**

H1 proposed that negative affect would be positively associated with stress for emerging adults and helicopter parents independently (actor effect). The SEM analysis demonstrated a significant actor effect for emerging adults ($b$ =.24, $SE$ = .10, $p$ = .01), such that emerging adults who endorsed higher experiences of negative affect also endorsed higher levels of perceived stress. The direct effect between negative affect and stress was non-significant for helicopter parents ($b$ = .18, $SE$ =.12, $p$ = .13). Therefore, H1 was partially supported by data.

**H2a and H2b: Communication Quality as Mediator for Associations between Negative Affect and Stress**

To address the mediation hypotheses for negative affect, an APIMeM was tested. Overall, the model did not demonstrate a good fit with the hypotheses proposed ($\chi^2$ =

6308.46, *df* = 148, *p* < .001, CFI = .02, RMSEA = .79, SRMR = .35). The large test statistic and small *p*-value of the chi-square goodness-of-fit test signifies that the hypothesized model does not correspond with the observed data (Maydeu-Olivares & García-Forero, 2010). This result suggests that the mediation model as a whole was non-significant; however, examining the associations between the variables provides information regarding what associations were non-significant within the proposed model. Due to the exploratory nature of this study, these associations may have implications for future research (see Chapter 4).

H2a proposed an indirect effect between negative affect and stress via communication quality such that perceptions of communication quality would mediate the association between negative affect and perceptions of stress for emerging adult and helicopter parent participants independently (actor effects). When the mediator was added to the model, the direct effect between negative affect and stress remained significant for emerging adults' (*b* = .24, *SE* = .10, *p* = .01) and held as non-significant for helicopter parents (*b* = .21, *SE* = .12, *p* = .08), demonstrating that the mediated associations were not significant. Therefore, the total indirect effect was non-significant for both emerging adults (*b* = .001, *SE* = .02, *p* = .98) and helicopter parents (*b* = -.03, *SE* = .03, *p* = .39). This suggests that communication quality did not significantly mediate the association between experiences of negative affect and perceptions of stress for either emerging adult or helicopter parent participants. Hypothesis 2b proposed a positive direct association between negative affect and communication quality and a negative direct association between communication quality and stress for both emerging adults

and helicopter parents. None of the direct effects via communication quality were significant (see Table 4), which suggests that communication quality was not significantly associated with either negative affect or with perceived stress for emerging adults and helicopter parents. H2a and H2b were not supported by the data.

**H3a and H3b: Helicopter Parent Partner Effects on Emerging Adults' Perceived Stress**

The third hypothesis proposed two indirect partner associations. The first proposed an indirect partner-actor effect such that helicopter parents' perceptions of negative affect would be associated with emerging adults' experiences of communication quality, which would, in turn, be associated with emerging adults' reported stress. The total indirect effect was non-significant ($b$ = -.01, $SE$ = .03, $p$ = .77), which suggests that emerging adults' perceptions of communication quality did not mediate the association between helicopter parents' experience of negative affect and emerging adults' perceptions of stress. The direct effect between helicopter parents' perceived negative affect and emerging adults' communication quality was also non-significant ($b$ = -.13, $SE$ = .18, $p$ = .46), which suggests that helicopter parents' experience of negative affect was not significantly associated with emerging adults' perceptions of their communication quality within the dyad. H3a was not supported by the data.

Next, an indirect actor-partner effect was examined such that helicopter parents' perceptions of negative affect would be associated with their own perceptions of communication quality, which would, in turn, be associated with emerging adults' reported stress. The total indirect effect was non-significant ($b$ = .03, $SE$ = .04, $p$ = .55),

Table 4

*Estimates of Direct Effects and Indirect Effects (Bootstrapped) for the Negative Affect Actor-Partner Interdependence Mediation Model (APIMeM; N = 66 Dyads)*

| | Est. | *SE* | *p* | CI [95%] | |
|---|---|---|---|---|---|
| *Direct Effects* | | | | | |
| $NA_{EA} \rightarrow S_{EA}$ | **.24** | **.10** | **.01** | **[.05,** | **.42]** |
| $NA_{HP} \rightarrow S_{HP}$ | .21 | .12 | .08 | [-.02, | .43] |
| $CQ_{EA} \rightarrow S_{EA}$ | .08 | .14 | .57 | [-.19, | .35] |
| $CQ_{HP} \rightarrow S_{HP}$ | .09 | .08 | .26 | [-.06, | .23] |
| $CQ_{HP} \rightarrow S_{EA}$ | -.08 | .11 | .44 | [-.29, | .13] |
| $NA_{EA} \rightarrow CQ_{EA}$ | .01 | .13 | .95 | [-.25, | .27] |
| $NA_{HP} \rightarrow CQ_{HP}$ | -.38 | .19 | .10 | [-.69, | .06] |
| $NA_{HP} \rightarrow CQ_{EA}$ | -.13 | .18 | .46 | [-.47, | .21] |
| *Specific Indirect Effects* | | | | | |
| $NA_{EA} \rightarrow CQ_{EA} \rightarrow S_{EA}$ | .001 | .02 | .98 | [-.04, | .04] |
| $NA_{HP} \rightarrow CQ_{HP} \rightarrow S_{HP}$ | -.03 | .03 | .39 | [-.09, | .04] |
| $NA_{HP} \rightarrow CQ_{EA} \rightarrow S_{EA}$ | -.01 | .03 | .77 | [-.08, | .06] |
| $NA_{HP} \rightarrow CQ_{HP} \rightarrow S_{EA}$ | .03 | .04 | .55 | [-.06, | .11] |

*Note*. Significant pathways are bold; control variables were difficulties in emotion regulation and perceptions of conflict; Est. = unstandardized estimates, NA = negative affect, S = stress, CQ = communication quality, EA = emerging adult, HP = helicopter parent.

which suggests that helicopter parents' perceptions of their dyadic communication quality did not mediate the association between helicopter parents' experience of negative affect and emerging adults' perceptions of stress. Examination of the direct effect between helicopter parents' communication quality and emerging adults' perceptions of stress revealed non-significant associations ($b$ = -.08, $SE$ = .11, $p$ = .44), which suggests that helicopter parents' communication quality was not significantly associated with emerging adults' perceptions of stress. Therefore, H3b was not supported by the data.

**H4: Associations between Positive Affect and Stress**

H4 proposed a negative direct effect such that positive affect would be negatively associated with perceived stress for emerging adults and helicopter parents (actor effects). While the direct association between positive affect and stress was non-significant for emerging adults ($b$ = -.05, $SE$ = .07, $p$ = .52), the direct effect was significant for helicopter parents ($b$ = .15, $SE$ = .06, $p$ = .01); however, the association was not in the hypothesized direction. The data show that helicopter parents who endorsed increased experiences of positive affect also reported increased perceptions of stress. Despite this significant association, H4 was not supported by the data due to the directionality of the helicopter parent direct effect between positive affect and perceived stress.

**H5a and H5b: Communication Quality as Mediator for Associations between Positive Affect and Stress**

To address the mediation hypotheses for positive affect, an actor-partner interdependence mediation model was tested. Overall, the model did not demonstrate a good fit with the hypotheses proposed ($\chi^2$ = 3795.66, $df$ = 80, $p$ < .001, CFI = .02,

RMSEA = .84, SRMR = .29). These results signify that the mediation model as a whole was non-significant due to the large test statistic and small *p*-value of the chi-square goodness-of-fit test (Maydeu-Olivares & García-Forero, 2010). Although the hypothesized model did not correspond with the observed data, examining the associations between the variables provides information regarding what associations were non-significant within the proposed model. Associations among the variables may provide potential contributions to future studies.

H5a proposed an indirect effect between positive affect and stress via communication quality such that communication quality would mediate the association between positive affect and perceptions of stress for emerging adult and helicopter parent participants separately (actor effect). When the mediator was added to the model, the direct effects between positive affect and stress remained significant for helicopter parents ($b$ = .14, $SE$ = .06, $p$ = .01) and non-significant for emerging adults ($b$ = -.06, $SE$ = .08, $p$ = .46). These results signify that the mediated associations of communication quality between positive affect and perceptions of stress were non-significant. The total indirect actor effects were, therefore, non-significant for both emerging adults ($b$ = .007, $SE$ = .02, $p$ = .74) and for helicopter parents ($b$ = .002, $SE$ = .01, $p$ = .82). H5b proposed a positive direct effect between positive affect and communication quality and a negative direct effect between communication quality and stress for both emerging adults and helicopter parents. None of the direct effects via communication quality were significant (see Table 5), which suggests that communication quality was not significantly associated

with either positive affect or perceptions of stress for emerging adults and helicopter parents. H5a and H5b were not supported by the data.

**H6a and H6b: Helicopter Parent Partner Effects on Emerging Adults' Perceived Stress**

H6 examined two indirect partner effects. H6a proposed an indirect partner-actor effect such that helicopter parents' perceptions of positive affect would be associated with emerging adults' experiences of communication quality, which would, in turn, be associated with emerging adults' reported stress. The mediated partner-actor effect was non-significant ($b$ = .007, $SE$ = .02, $p$ = .74), which demonstrates that emerging adults' communication quality did not mediate the association between helicopter parents' positive affect and emerging adults' perceptions of stress. The direct effect between helicopter parents' perceived positive affect and emerging adults' communication quality was also non-significant ($b$ = .06, $SE$ = .12, $p$ = .60), suggesting that helicopter parents' positive affect was not associated with emerging adults' communication quality. H6a was not supported by the data.

H6b proposed an actor-partner effect such that helicopter parents' perceptions of positive affect would be associated with their own perceptions of communication quality, which would, in turn, be associated with emerging adults' reported stress. The total indirect effect was non-significant ($b$ = -.01, $SE$ = .02, $p$ = .63), which suggests that helicopter parents' communication quality did not mediate the association between helicopter parents' positive affect and emerging adults' perceptions of stress. Additionally, the direct effect between helicopter parents' communication quality and

emerging adults' perceptions of stress was non-significant ($b$ = -.16, $SE$ = .11, $p$ = .15). H6b was not supported by the data.

**Summary of Results**

Two significant direct associations emerged between affect and stress. For emerging adults only, there was a significant positive association between negative affect and stress such that higher experiences of negative affect were associated with higher perceptions of stress. This association was non-significant for helicopter parents, however, signifying that H1 was partially supported by the data. For helicopter parents only, there was a significant positive association between positive affect and stress such that higher experiences with positive affect were associated with higher perceptions of stress. This was counter to the negative association proposed by the H4. Additionally, the association was non-significant for emerging adults; therefore, H4 was not supported by the data. Overall, the direct and indirect effects of the two APIMeMs were non-significant, demonstrating that communication quality did not serve as a mediator for the associations between experiences of affect (negative and positive) and perceptions of stress; therefore, the data did not support the following hypotheses: H2a; H2b; H3a; H3b; H4a; H4b; H5a; and H5b.

Table 5

*Estimates of Direct Effects and Indirect Effects (Bootstrapped) for the Positive Affect Actor-Partner Interdependence Mediation Model (APIMeM; N = 66 Dyads)*

| | Est. | *SE* | *p* | CI [95%] | |
|---|---|---|---|---|---|
| *Direct Effects* | | | | | |
| $PA_{EA} \rightarrow S_{EA}$ | -.06 | .08 | .46 | [-.20, | .09] |
| $PA_{HP} \rightarrow S_{HP}$ | **.14** | **.06** | **.01** | **[.03,** | **.26]** |
| $CQ_{EA} \rightarrow S_{EA}$ | .12 | .13 | .35 | [-.13, | .38] |
| $CQ_{HP} \rightarrow S_{HP}$ | .04 | .07 | .62 | [-.11, | .18] |
| $CQ_{HP} \rightarrow S_{EA}$ | -.16 | .11 | .15 | [-.38, | .06] |
| $PA_{EA} \rightarrow CQ_{EA}$ | .05 | .10 | .60 | [-.15, | .25] |
| $PA_{HP} \rightarrow CQ_{HP}$ | .07 | .11 | .54 | [-.15, | .29] |
| $PA_{HP} \rightarrow CQ_{EA}$ | .06 | .12 | .60 | [-.17, | .29] |
| *Specific Indirect Effects* | | | | | |
| $PA_{EA} \rightarrow CQ_{EA} \rightarrow S_{EA}$ | .007 | .02 | .74 | [-.03, | .05] |
| $PA_{HP} \rightarrow CQ_{HP} \rightarrow S_{HP}$ | .002 | .01 | .82 | [-.03, | .02] |
| $PA_{HP} \rightarrow CQ_{EA} \rightarrow S_{EA}$ | .007 | .02 | .74 | [-.04, | .05] |
| $PA_{HP} \rightarrow CQ_{HP} \rightarrow S_{EA}$ | -.01 | .02 | .63 | [-.06, | .03] |

*Note*. Significant pathways are bold; control variables were difficulties in emotion regulation and perceptions of conflict; Est. = unstandardized estimates, PA = positive affect, S = stress, CQ = communication quality, EA = emerging adult, HP = helicopter parent.

# Chapter 4

## Discussion

Emerging adulthood serves as the period where individuation from parents and autonomously navigating the world begins (Arnett, 2000). While parents generally begin to "take a backseat" in their children's lives during adulthood, a sensationalized form of parenting termed *helicopter parenting* may be complicating and changing the landscape of this process (LeMoyne & Buchanan, 2011; Schiffrin, 2014). The tendency of helicopter parents to step in and assist their emerging adult children with tasks, decisions, and obstacles (Collins & O'Brien, 2011), which previous developmental theorists posited should be managed independently during young adulthood (e.g., Erikson, 1968), may inhibit emerging adults from developing the skills and internal resources needed to navigate daily struggles autonomously (e.g., Cabral et al., 2012).

The attachment literature (Bowlby, 1973, 1980, 1982) highlights the importance of the parent-child relationship in how children navigate the world and regulate their emotional experiences. Bowlby (1973, 1980, 1982) proposed that "working models," or internalized blueprints of how the world operates, are formed from early interactions with parents. These working models not only facilitate how individuals regulate their emotional experiences but also play a strong role in individuals' ability to trust others for support (Bowlby, 1982). Parents become secure bases (Bowlby, 1982; Shaver & Mikulincer, 2007), providing a sense of security for individuals in times of threat (negative affect; Bowlby, 1982) and in times of exploration and navigating new experiences (positive affect; Schwarz & Bohner, 1996). While working models and

secure bases are internalized with age, parents have been shown to continue to shape emotion regulation throughout development (Calkins & Dollar, 2014), particularly through social sharing of emotionally taxing experiences (Rimé, 2007). From the social sharing framework, Butler and Gross (2009) proposed that conversations and shared experiences provide the foundation through which individuals regulate their emotions interpersonally. As emotions unfold differently depending on when intervention occurs (Gross, 1998), communication serves as one means of modifying experiences of emotion. Therefore, to examine how the helicopter parent-emerging adult relationship may play a role in emotion regulation strategies, the current study examined how communication quality within the helicopter parent-emerging adult dyad may mediate associations between experiences of both negative and positive affect and perceived stress.

**Associations between Affect and Stress**

Before considering the role of helicopter parent-emerging adult communication, the associations between experienced affect and perceived stress must be elucidated. The current results demonstrate significant associations between experiences of negative affect and perceived stress for emerging adults but not for helicopter parents. This partially supports similar, consistent links found in the literature (e.g., Corral-Frìas et al., 2016; Folkman & Moskowitz, June 2000; Hamama et al., 2013; Montpetit et al., 2010), which demonstrate that individuals' experiences of negative affect are positively connected to their perceptions of stress. Individuals within these studies presented an age range from 18- to 92-years-old, establishing the consistent association between negative affect and stress throughout the lifespan. The positive association between experiences

of negative affect and stress is important in the emotion regulation literature as individuals utilize regulation strategies to down-regulate negative affect, protecting their perceptions of well-being (Gross et al., 2006; Snyder et al., 2006). It is equally important in the attachment literature as individuals seek others they trust during emotionally taxing experiences to decrease their perceptions of stress (e.g., Mikulincer et al., 2003). The consistent positive association between negative affect and perceived stress is mirrored in the emerging adult results as higher levels of negative affect were associated with higher levels of perceived stress. However, while this association was found for emerging adults, it was not established for helicopter parents. This non-significant result may be due to the floor effects of helicopter parents' endorsed negative affect and perceived stress as helicopter parents' endorsed low levels of negative affect and perceived stress. The literature supports these low scores as older adults have been shown to report decreased experiences of negative affect and stress (Brummer, Stopa, & Bucks, 2014; Schilling & Diehl, 2014), which has been attributed to lower levels of reactivity to stressors with age (John & Gross, 2004) and utilizing emotion regulation strategies preemptively (Hay & Diehl, 2011)

Conversely, empirical evidence points to the negative association between positive affect and experiences of stress (e.g., Corral-Frìas et al., 2016; Civitci, 2015; Dunkley et al., 2016; O'Hara et al., 2014). In other words, positive affect buffers experiences of stress as greater feelings of positive affect (e.g., enthusiastic, inspired, strong) are associated with decreased perceptions of stress. While the association between experiences of positive affect and perceptions of stress was non-significant for

emerging adults, this association was significant for helicopter parents; however, the current study found that, for helicopter parents, higher perceptions of positive affect were related to higher perceptions of stress. When considering the positive direction of this association, it seems important to reflect on helicopter parents' level of endorsement concerning positive affect and stress. Overall, helicopter parent participants reported experiencing low mean levels of stress and high mean levels of positive affect. Even though the data were not significantly skewed, the extreme mean scores associated with these constructs appear critical to the interpretation of these results. As an association between greater experiences of positive affect and higher perceptions of stress is counterintuitive to what is reported in the literature (Corral-Frìas et al., 2016; Civitci, 2015; Dunkley et al., 2016; O'Hara et al., 2014), interpretation of this association may be that greater experiences of positive affect are related to lower perceptions of stress due to the ceiling effect of helicopter parents' positive affect and the floor effect of their perceived stress. Examining the association between positive affect and stress longitudinally in future studies may provide clarification regarding this discrepant finding. This longitudinal study design would facilitate the examination of whether this association is due to the nature of the helicopter parents' mean scores in the current study or whether these results point to a unique disposition of being a helicopter parent. Helicopter parents' nature of embodying high control, high expectations of the environment, and high energy to support their child's needs (e.g., Collins & O'Brien, 2011; Stokes, Oct. 2014) may provide an alternate explanation for the positive affect association, such that helicopter parents may feel responsibility and stress to maintain

positive emotion states, whether for their children or for themselves. These expectations and possible feelings of responsibility may promote the positive association between positive affect and perceived stress.

Nevertheless, these results demonstrate discrepant associations between experiences of affect and stress for emerging adult and helicopter parent participants. When considering the associations between both negative and positive affect and perceptions of stress, it seems that two distinguishing characteristics should be considered: age of the participant and the position of the participant within the dyad (i.e., emerging adult versus helicopter parent). Empirical evidence documents differences in experiences of affect and stress due to age (e.g., Aldwin, 1991; Diehl & Hay, 2010; Mroczek & Almeida, 2004; Mroczek & Kolarz, 1998; Stawski, Sliwinski, Almeida, & Smyth, 2008). The literature predominantly points to the negative association between perceived stress and age (e.g., Aldwin, 1991; Brummer et al., 2014), such that individuals who are older experience lower levels of perceived stress. Additionally, empirical evidence identified negative associations between perceived negative affect and age (e.g., Diehl & Hay, 2010; Schilling & Diehl, 2014). Although the current study does not involve a longitudinal design, studies examining age differences in associations between negative affect and stress are predominantly longitudinal in nature (e.g., daily diary). This allows researchers to examine the variations of negative affect and stress more clearly to identify the role age plays in the association between these two variables. For instance, Stawski and colleagues (2008) compared groups of young individuals ($M_{age}$ = 20 years old) and older individuals ($M_{age}$ = 80 years old) in a daily diary study. The

authors found that exposure to daily stressors diminished with age and that individuals' overall perceived stress was positively associated with negative affect, but only for the young adult group. The number and severity of stressors experienced within the day also played an important role in young adults' experience of negative affect, as increased severity of stress was associated with increased experiences of negative affect. Although comparison between these results and the current study is tentative due to the differing design approaches, the literature demonstrates that age plays a significant role in associations between negative affect and stress, suggesting decreased reactivity to stressors with age (John & Gross, 2004) and proactivity in utilizing emotion regulation strategies with age (Hay & Diehl, 2011).

Empirical evidence also demonstrated positive associations between perceived positive affect and age, particularly in women (Mroczek & Kolarz, 1998). This positive association is highlighted in the current study, which predominantly included mothers who endorsed high levels of positive affect and low levels of perceived stress. When compared to the literature on negative affect, far fewer studies examine associations between positive affect, perceived stress, and age, which are variables most frequently examined in respect to physical health and chronic illness. This dearth of research may explain why the role of emotion regulation for positive emotions is still unclear (e.g., Gross et al., 2006; Snyder et al., 2006). Schilling and Diehl (2014) suggested that associations between positive affect and stress are more complicated than those between negative affect and stress, particularly when assessing for age differences. However, it may still be important to consider the contribution of age to the positive direction of

helicopter parents' association between positive affect and stress as this association is incongruent with the general literature (e.g., Corral-Frìas et al., 2016; Civitci, 2015; Dunkley et al., 2016; O'Hara et al., 2014). Overall, the salience of negative affect and positive affect for different age groups was reflected in the significant association of negative affect and stress for emerging adults' and the significant association of positive affect and stress for helicopter parents.

Individuals' position within the helicopter parent-emerging adult dyad (i.e., being the parent or being the child) may be another factor to consider. While most studies focus on how parental stress relates to children's outcomes (e.g., Schiffrin et al., 2014) or how parenting styles impact children's perceptions of stress (e.g., Segrin et al., 2013), there appears to be a need for studies that examine the same constructs in both parents and their children. For instance, Segrin and his colleagues (2013) examined direct effects between parents' anxiety and overparenting behaviors and between emerging adults' stress and their parents' overparenting behaviors. However, other than the shared construct of overparenting behaviors, emerging adults and parents were not compared regarding their personal perceptions of well-being and functioning. Therefore, no known study to date has examined bidirectional associations between helicopter parents' and emerging adult children's personal perceptions of stress, which was examined in the current study by administering identical batteries to both members of the dyad. Considering the unique temperament of helicopter parents and their emerging adult children (i.e., one that intervenes, controls, and utilizes high expectations, and one that receives emotional and financial support and guidance), it may be important to consider

how each members' individual experiences contribute to the dynamics of this dyadic relationship (e.g., Iida, Seidman, Shrout, Fujita, & Bolger, 2008; Laurenceau & Bolger, 2005).

**Helicopter Parent-Emerging Adult Communication: Indirect and Direct Effects**

One goal of this study was to assess the importance of helicopter parent-emerging adult communication quality in mediating associations between affect and stress. Literature examining parent-child emotional dialogues (Denham, 1993) and social sharing of emotionally taxing experiences (Rimé, 2007) points to the importance of parent-child communication in regulating emotional experiences. Parent-child communication about emotion in early childhood allows for children to understand and begin regulating emotional experiences (i.e., emotional dialogues). Social sharing represents individuals' drive to continue satisfying these attachment needs throughout development via sharing emotionally demanding experiences with others (Bulter & Gross, 2009; Rimé, 2007). When examining communication quality as a mediator for the associations between negative affect and perceived stress, the mediation model was non-significant for both actor effects (associations within the individual) and partner effects (associations that occur between members of the dyad). This seems counter to the attachment literature as parent-child communication about emotional experiences represents a foundational manner of regulating emotion (Denham, 1993) and is a behavior that can be carried into adulthood (Mikulincer et al., 2003). The use of frequent communication with parents into emerging adulthood seems particularly true with millennials who exhibit increased contact with their parents when compared to previous

generations (Arnett & Schwab, Sept. 2013; Pizzolato & Hicklen, 2011). However, when considering the recursive nature of emotion regulation (Gross & Thompson, 2007), such that individuals may attend to, appraise, and respond to a single situation repeatedly and in various ways, these non-significant results may correspond with the processes outlined in the "modal model" of emotion regulation (Gross, 1998). As emerging adult and helicopter parent participants in the current study reported decreased global experiences of negative affect and stress within the past week, the decreased valence of their affective and stress experiences may capture the outcome of the emotion regulation process. Due to the cross-sectional nature of this study, the results may represent the sum of the emotion regulation process, instead of the daily perceptions of these as they unfold and the various interventions (e.g., communication) as they occur.

Examination of the mediation model for positive affect yielded similar results such that communication quality did not significantly mediate the association between positive affect and stress for either emerging adult or helicopter parent participants. The attachment literature suggests that positive affect serves as a signal for individuals to explore unknown surroundings and to take risks (Schwarz & Bohner, 1996). This conceptualization of positive affect coincides with Gilbert and colleagues (2008) finding that positive affect that corresponded with feeling safe and content had the strongest negative correlation with perceived stress in a sample of undergraduate students. Emerging adults continue to utilize their parents as safe havens (Fingerman et al., 2012a) and continue to engage in frequent communication with their parent to share their daily experiences and to obtain advice (Fingerman et al., 2012b). Therefore, the non-

significant mediation of positive affect and perceived stress via communication quality seems counterintuitive to the attachment literature and to characteristics of the emerging adult population. Nevertheless, the modal model of emotion regulation may again be operating as participants endorsed high levels of positive affect and low levels of perceived stress, possibly indicating that these emotional experiences have been regulated, which appears to be reflected in the reported valence of participants' positive affect and perceived stress.

While the negative affect and positive affect results demonstrate non-significant mediation models, the high mean scores of communication quality for both emerging adults and helicopter parents suggest that communication is important for emerging adults and helicopter parents as both samples, on average, highly rated the frequency, satisfaction, and support of their parent-child communication. Based on these endorsements, the nature of communication between emerging adults and helicopter parents seems positively evaluated by both emerging adults and helicopter parents alike; however, this endorsement was more prominent for emerging adults based on the significant difference between emerging adult and helicopter parent reports identified during the paired-samples t-test. Although the current study assessed communication quality as global perceptions in a cross-sectional framework, which has its limitations in terms of generalizability of findings, the overall satisfaction and support that emerging adults endorsed from their helicopter parent-emerging adult communication are important to note. Examining this construct longitudinally and on a daily basis would provide more concrete information regarding how helicopter parent-emerging adult communication

quality may modify the emotion regulation process over time. Additionally, there may be other methods that emerging adults of helicopter parents use to regulate their emotion within the context of their parent-child relationship that would be important to examine, such as dyadic coping strategies (e.g., Bodenmann, 2008).

**Considerations of the control variables.** Of importance to consider in the associations between communication quality and regulating affect within the helicopter parent-emerging adult dyad are perceptions of relationship quality and difficulties in emotion regulation. The current study controlled for both constructs to examine the influence of communication quality itself on the association between experiences of affect and perceptions of stress; however, controlling for these variables may have left out important information. For instance, the attachment literature predominantly examines relationship quality within parent-child relationships as indicated by Baumrind's (1971) attachment styles and the conceptualization of attachment by Hazan and Shaver (1987), who examine attachment along dimensions of attachment anxiety and attachment avoidance instead of the traditional, discrete categories. Additionally, the emotion regulation literature asserts that individuals' difficulties in regulating emotion are related to the severity of their experiences of stress (e.g., Wang & Saudino, 2011). While communication quality itself is important when thinking of how emerging adults regulate their emotions, it may also be crucial to consider the relationship quality within the helicopter parent-emerging adult relationship and the extent to which individuals are capable of regulating their emotions.

In the current study, the control variables of relationship quality (i.e., social support, conflict) were significantly associated with perceptions of stress and communication quality for both emerging adults and helicopter parents. These associations may have critical implications for how to view emotion regulation processes between emerging adults and helicopter parents as the behavior of communication itself may not be the important aspect of emotion regulation, which may be implied by the non-significant mediation models of the present study. Rather, it may be the quality of the relationship between emerging adults and helicopter parents that is more important. Although relationship quality was not assessed for in the current mediation models, empirical evidence points to the dual significance of the helicopter parent-emerging adult relationship in both helping (e.g., Fingerman et al., 2012a; Robinson et al., 2013) and harming (e.g., Bland et al., 2012; Kouros et al., 2017; Reed et al., 2016) emerging adult well-being and self-concepts. However, a study by Nelson, Padilla-Walker, and Nielson (2015) underscored the importance of relational characteristics over behavioral ones. The authors found that maternal warmth moderated the associations between helicopter parenting behaviors and emerging adults' self-worth and participation in risky behaviors. Maternal warmth appeared to be a protective factor in this association as emerging adults who endorsed increased experiences of maternal warmth, reported increased self-worth and decreased engagement in risk behaviors, despite their mother's overparenting behaviors. With these associations in mind, we may infer that how emerging adults view their relationship with their parent may be the protective factor in the emotion regulation process, rather than the interpersonal, external processing of the affective experiences via

communication, which corresponds with the non-significant mediation findings. Therefore, when controlling for relationship quality in the current study, the underlying gains emerging adults receive from communicating with their helicopter parent, of feeling cared for and supported, were not incorporated in the mediation models. Future studies should consider including these relational characteristics within the emotion regulation models given the significant associations these constructs had with experiences of affect and perceptions of stress.

The control variable of difficulties in emotion regulation had significant associations with negative and positive affect, perceptions of stress, and communication quality for both emerging adults and helicopter parents. While the literature on early childhood to late adolescence points to the importance of parents in scaffolding emotion regulation tendencies for their children (e.g., Arnett, 2000; Calkins & Hill, 2007; Fox & Calkins, 2003), the significant associations of difficulties in emotion regulation with study variables suggest that this construct may be important to consider as parent-child emotion regulation dynamics continue into emerging adulthood (Mikulincer et al., 2003). For instance, emotion regulation skills and strategies that emerging adults may or may not possess may be associated with their tendency to utilize their parent when emotions arise. Conversely, helicopter parents who do not possess the repertoire necessary to assist their emerging adult in regulating affect may actually increase perceptions of stress for their emerging adult and themselves through this dyadic process. Therefore, although the construct of difficulties in emotion regulation was controlled for in the current study to facilitate clear examination of communication quality between emerging adults and

helicopter parents, future studies examining emotion regulation processes may want to consider this construct within the mediational analyses.

**Study Limitations**

There are several limitations of note for this study. Although the sample of those screened for helicopter parenting was large, the sample size that met the study criteria and who completed all parts of the study was relatively small. Although several studies utilized comparable sample sizes (e.g., Driscoll et al., 2012; Garciá-Lopez et al., 2016; Lim, 2014; Metsapelto et al., 2001; Pakenham & Samios, 2013; Sina et al., 2010), many dyadic studies, particularly those in the helicopter parent literature, utilize samples of approximately 500 or more parent-emerging adult dyads (e.g., Segrin et al., 2012, 2013, 2015). An increase in sample size may provide the power necessary for significant effects of the mediation analyses to transpire (Kenny et al., 2006). This increased sample has implications for recruitment procedures and criteria for inclusion in future helicopter parent-emerging adult research (see Future Research).

Additionally, the data collection predominantly took place at one large, public university in the southwestern United States. Although the sample was rather diverse in terms of overall race/ethnicity make-up and self-reported gender of the emerging adult participants, helicopter parent mothers, who were married, highly educated, and endorsed high socioeconomic status, predominantly participated in the study. Helicopter parenting is most often documented in high socioeconomic status families (Lynthcott-Haims, 2015) and with mothers (Fingerman et al., 2009; Fingerman et al., 2012b; Suitor & Pillemer, 2006), characteristics that were reflected in the current sample. Therefore,

generalizability of the findings should be made tentatively to different regions of the United States, to fathers who engage in helicopter parenting behaviors, and to helicopter parents with lower socioeconomic status as background variables, such as socioeconomic status, may play a particularly salient role in the presence of helicopter parenting behaviors and how the helicopter parent-emerging adult dynamics unfold. . Additionally, other than demographic information collected regarding race/ethnicity of participants who participated in the baseline survey, cultural considerations and norms of parenting were not assessed in the current study, and race and ethnicity were not examined for participants who did not qualify as helicopter parents. Therefore, no inferences can be made about cultural considerations in understanding the prevalence of helicopter parenting and how helicopter parenting may be received differently based on cultural background. Finally, comparisons cannot be made between parents who engage in helicopter parenting behaviors and those who do not as this study examined the helicopter parent-emerging adult relationship alone.

The current study was cross-sectional in nature. Despite the temporal components of emotion regulation (Gross, 1998), the day-to-day nuances of emotion regulation and communication between emerging adults and helicopter parents were not examined. Examining daily emotion regulation may be important as dyadic research has demonstrated both concurrent (same-day) effects of interactions within the dyad and lagged (subsequent day) effects (e.g., Totenhagen, Randall, Cooper, Tao, & Walsh, 2016). Additionally, the current study examined how affect, communication quality, and perceived stress globally associated within the helicopter parent-emerging adult

relationship; however, these variables are not static (e.g., Schilling & Diehl, 2014). Therefore, within the cross-sectional framework, the daily differences of dyadic emotion regulation were not examined and important dynamics, such as concurrent and lagged effects, not assessed. Additionally, causal relations between affect, communication quality, and perceived stress cannot be inferred without the use of longitudinal data as the time component facilitates interpretation of directionality of predictor variables.

With regards to measures included in the study, several constructs may have been beneficial to include in the mediation analyses. While emotion regulation was measured in terms of difficulties one might face in managing affect, examining specific coping techniques, such as problem-focused and emotion-focused dyadic coping, may have provided additional information regarding the emotion regulation abilities of emerging adults and their helicopter parents. Specific strategies for regulating affect differ based on personality characteristics, such as autonomous mindset versus dismissive mindset (Scharf et al., 2004), and age (John & Gross, 2004; Schilling & Diehl, 2014). Therefore, in addition to considerations of communication, examining different emotion regulation strategies would provide a richer understanding of helicopter parent-emerging adult emotion regulation. Additionally, when considering the unique parent-child relationship of helicopter parents, inclusion of an attachment measurement may provide important information regarding attachment anxiety and attachment avoidance (Hazan & Shaver, 1987) operating within the helicopter parent-emerging adult relationship. This would also provide an important context regarding how emerging adults might use of the helicopter parent-emerging adult relationship in regulating emotions. For instance, in a

young adult sample, Pascuzzo, Cyr, and Moss (2013) found that individuals who endorsed more anxious attachment used more emotion-oriented emotion regulation strategies, rather than task-oriented strategies, while individuals with more avoidance attachment were less support-seeking. Examining whether emerging adults of helicopter parents embody more secure, anxious, or avoidant attachment would provide the framework for understanding emerging adults' ability to, respectively, regulate emotion independently, feel emotionally overwhelmed and utilize the parent support more, or avoid social support altogether.

**Future Research**

Future research can be informed by the results and limitations of the current study. In the present study, helicopter parenting behaviors were assessed regarding how often parents intervened in different domains (i.e., decision-making, disputes with friends/roommates, problems with professors/employers, crises, and job/internship search). When considering the under-reporting of helicopter parenting behaviors in the parents sampled, future studies may address concerns about sample size by either incorporating more items to assess for helicopter parenting behaviors or by utilizing comparison groups (i.e., those who identify as helicopter parent-emerging adult dyads and those who do not). By utilizing a more extensive helicopter parenting behaviors measure, which assesses aspects of control, autonomy-undermining behaviors, and collaborative decision-making in addition to types of interventions, parents who embody different aspects of the helicopter parent definition would not only be included in the sample, broadening the scope of parenting behaviors assessed, but would also increase

the potential of capturing parents who engage in helicopter parenting behaviors, thus increasing the helicopter parent sample size. Additionally, inclusion of comparison groups would facilitate increased power of analyses and would provide important information regarding how these two groups compare to each other, including differences in how helicopter parents and non-helicopter parents support their emerging adults' emotion regulation and what role helicopter parenting behaviors play in helping or hurting the emotion regulation process in emerging adults. This inclusion of comparison groups and more nuanced criteria of helicopter parenting behaviors seems particularly important for cultural considerations given the predominantly White samples of the current study and previous studies (e.g., Padilla-Walker & Nelson, 2012; Segrin et al., 2012). Diversification of recruitment procedures, such as recruiting from different geographic regions, would facilitate examination of the role of culture in the occurrence of helicopter parenting and would provide a deeper understanding of the national prevalence of this parenting style.

As emerging adults predominantly live outside of the household and daily interactions between parents and emerging adults may be limited, future studies should examine the associations between experiences of affect, perceived stress, and processes of emotion regulation within a longitudinal or daily diary framework. A study utilizing the daily diary approach could include a baseline survey and shorter daily surveys for emerging adults and helicopter parents to complete at the same time each day for several days (e.g., 7-day daily diary study). The baseline would include measures that are more global and trait-like, such as difficulties in emotion regulation, attachment style, dyadic

coping strategies, and relationship quality. The daily diary surveys would include more dynamic constructs, such as negative and positive affect, experiences of stress, and communication. This study design would facilitate examining the concurrent and lagged effects of emotion regulation processes within the dyad such that associations within the same day and associations on subsequent days are examined (e.g., Totenhagen, Serido, Curran, & Butler, 2012). This methodology would also allow emerging adults and helicopter parents to reflect on the day itself, which provides less biased responses in terms of rating daily experiences in constructs assessed versus global experiences. Additionally, a daily diary design provides a time component that would facilitate drawing causal inferences from the analyses such that an action the day before (e.g., negative affect) predicts an action the subsequent day (e.g., communication with helicopter parent) (e.g., Iida et al., 2008; Laurenceau & Bolger, 2005; Totenhagen et al., 2016).

**Clinical Recommendations**

The current study found that communication quality within the helicopter parent-emerging adult relationship was neither helpful nor hurtful for emerging adults regulating experiences of affect. When considering the pervasive role helicopter parents play in emerging adults' lives, particularly in college (e.g., Bradley-Geist & Olson-Buchanan, 2014; LeMoyne & Buchanan, 2011; Schiffrin et al., 2014), it seems important to situate these findings in terms of how they impact conceptualization of emerging adult students academically. Universities across the United States are attending to the societal trend of helicopter parents so much so that college administrators and instructors are creating

ways to interact specifically with helicopter parents (e.g., Frey & Tatum, 2016). The literature highlights the occurrence of increased contact between emerging adults and their parents, particularly in college settings (Arnett & Schwab, Sept. 2013), and shows that the helicopter parent-emerging adult relationship can be deleterious to emerging adult students' academic performance and student self-efficacy (e.g., Bradley-Geist & Olson-Buchanan, 2014; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014). Therefore, as the current results demonstrate that helicopter parent-emerging adult communication quality is neither beneficial nor deleterious to emerging adults' emotion regulation, providing programming for helicopter parents related to challenging the motivations behind their increased communication with their emerging adult, identifying the potential injurious effects of this communication, and teaching methods of communication that are empirically helpful (e.g., autonomy-supporting communication) may facilitate helicopter parents allowing their emerging adults to develop the autonomy and competence necessary to excel both in college and in their career.

The current study may also shed light on the impact of helicopter parent-emerging adult communication in emerging adult mental health. The literature demonstrates that overparenting behaviors have been negatively associated with well-being and life satisfaction such that higher levels of overparenting behaviors are associated with lower global well-being (i.e., autonomy, relationship with others, environment mastery, personal growth, purpose in life, and self-acceptance; LeMoyne & Buchanan, 2011), lower life satisfaction (Schiffrin et al., 2014), and increased experiences of depression (Schiffrin et al., 2014). This may have implications in terms of emerging adults engaging

in counseling and the role helicopter parents play in emerging adults' presenting concerns. Therefore, when assessing for family relationships, it may be beneficial for mental health professionals to evaluate the occurrence of overparenting behaviors within the parent-emerging adult relationship and how helicopter parent-emerging adult communication may serve as a contributor or a safeguard for the presenting issue. Again, since the mediation models were non-significant, implications regarding whether this communication is helpful or hurtful cannot be determined; nevertheless, within the therapy setting, it is important to assess how the style and function of communication occur between emerging adults and their helicopter parents and how emerging adults view this communication through thorough questioning and use of examples and subjective statements of the emerging adult. Additionally, the results of this study may suggest that helicopter parents' motivation to help their emerging adults through communication does not meet its intended end, to help their emerging adults navigate daily difficulties, and may be causing issues in other domains, such as decreased self-efficacy (Givertz & Segrin, 2014) and decreased family satisfaction (Segrin et al., 2012). Therefore, mental health professionals are in the unique position to assist emerging adults in challenging their communication behavior with their helicopter parent should it be harmful, learning effective communication (i.e., "I" statements) and boundary-setting techniques (e.g., assertiveness training), and adjusting their interactions with their parents to align with emerging adults' values and their developmental transition to adulthood. Mental health clinicians should also be mindful that helicopter parents may attempt to play a primary role in their emerging adults' care, viewing their mental health much like

their physical health. Given that emerging adults have rights as medical adults, mental health professionals may consider more thoroughly educating their emerging adult clients about these rights so that they know they have the right to confidential treatment independent of their parent and do not need to share information they do not want to. Finally, mental health professionals may consider assisting emerging adults in challenging the dynamics of their relationship with their helicopter parents to increase perceptions of well-being, autonomy, and competence.

**Conclusions**

While emerging adults' negative affect and helicopter parents' positive affect were significantly associated with perceptions of stress, the interchange and dynamic process between helicopter parents and emerging adults touted by popular culture (e.g., Lynthcott-Haims, 2015; Settersten & Ray, 2010; Stokes, Oct. 2014) was not founded in the current study's proposed mediation models. While the non-significant mediation models seem counter to the attachment literature (Bowlby, 1973, 1980, 1982) that identifies parent-child interactions as foundational for emotion regulation capabilities, the current study facilitates considerations for future studies examining emotion regulation within the helicopter parent-emerging adult relationship, which are still unknown and may have critical implications for how emerging adults' of helicopter parents transition into adulthood. Further exploration of the nature and nuances of helicopter parents' interventions in the day-to-day functioning of their emerging adults is critical to understand more fully the impact of this recently identified parenting dynamic characterized by increased support, intervention, guidance, and contact (Collins &

O'Brien, 2011). Despite the non-significant mediation models for both negative affect and positive affect, the current study contributes to the literature by examining these processes within a dyadic framework to provide a more comprehensive picture of how emotion regulation occurs within the helicopter parent-emerging adult dyad. Additionally, this study may point to the importance of relational characteristics within the helicopter parent-emerging adult relationship (e.g., social support and conflict), which may influence emerging adults' emotion regulation above perceptions of communication quality.

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# APPENDIX A

## UNIVERSITY INSTITUTIONAL REVIEW BOARD APPROVAL

ASU Knowledge Enterprise Development

APPROVAL: EXPEDITED REVIEW

Ashley Randall
CLS - Counseling and Counseling Psychology
480/727-5312
Ashley.K.Randall@asu.edu

Dear Ashley Randall:

On 3/27/2015 the ASU IRB reviewed the following protocol:

| | |
|---|---|
| Type of Review: | Initial Study |
| Title: | Effects of Helicopter Parenting on Emerging Adults' Emotion Regulation |
| Investigator: | Ashley Randall |
| IRB ID: | STUDY00002460 |
| Category of review: | (7)(b) Social science methods, (7)(a) Behavioral research |
| Funding: | None |
| Grant Title: | None |
| Grant ID: | None |
| Documents Reviewed: | • Leaving the Nest_IRB Application_v2.docx, Category: IRB Protocol;<br>• Leaving the Nest_Reminder Messages.pdf, Category: Recruitment Materials;<br>• Leaving the Nest_Flyer_Parent.pdf, Category: Recruitment Materials;<br>• Leaving the Nest_Flyer_Emerging Adult.pdf, Category: Recruitment Materials;<br>• Leaving the Nest_Participant Emails.pdf, Category: Recruitment Materials;<br>• Leaving the Nest_Measures_v2.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);<br>• Leaving the Nest_Consent_v2.pdf, Category: Consent Form; |

The IRB approved the protocol from 3/27/2015 to 3/26/2016 inclusive. Three weeks before 3/26/2016 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 3/26/2016 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the "Documents" tab in ERA-IRB.

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

Sincerely,

IRB Administrator

cc:
Kelsey Walsh
Sharon Kurpius

# APPENDIX B

# HELICOPTER PARENTING SCALE

1= not at all like me/him/her to 5 = a lot like me/him her

**For Emerging Adult Participants:**

My parent…

1. Makes important decisions for me (e.g., where I live, where I work, what classes I take)
2. Intervenes in settling disputes with my roommates or friends
3. Intervenes in solving problems with my employers or professors
4. Solves any crisis or problem I might have
5. Looks for jobs for me or tries to find other opportunities for me (e.g., internships, study abroad)

**For Parent Participants:**

I…

1. Make important decisions for my child (e.g., where I live, where I work, what classes I take)
2. Intervene in settling disputes with my child's roommates or friends
3. Intervene in solving problems with my child's employers or professors
4. Solve any crisis or problem my child might have
5. Look for jobs for my child or tries to find other opportunities for my child (e.g., internships, study abroad)

# APPENDIX C

## DEMOGRAPHIC QUESTIONNAIRE

## Demographics

1. How old are you?
    a. _____ years
    b. _____ months

2. What is your sex
    a. Male
    b. Female

3. Which best describes your racial background:
    a. Asian/Asian American
    b. Black/African American
    c. Hispanic/Latino(a)
    d. Native American/Pacific Islander
    e. White/European-American
    f. Other

4. What is your typical yearly household income before taxes?
    a. $0 - $25,000
    b. $25,000 - $ 50,000
    c. $50,000 - $75,000
    d. $75,000 - $ 100,000
    e. $100,000 - $150,000
    f. Greater than $150,000

5. What is the highest level of education you have completed?
    a. Less than high-school
    b. High-school
    c. Professional program
    d. Some college
    e. Undergraduate degree
    f. Graduate degree

6. What is your relationship status?
    a. Single/not in a relationship
    b. In a committed heterosexual relationship – not living together
    c. In a committed same-sex relationship – not living together
    d. In a committed heterosexual relationship – living together
    e. In a committed same-sex relationship – living together
    f. Engaged – not living together
    g. Engaged – living together
    h. Married

7. How long have you and your partner been in a romantic relationship together?
    a. _____years

8. If you are married to your partner, how long have you and your partner been married?
    a. _____years

9. How satisfied are you in your current romantic relationship?
    a. Very Dissatisfied
    b. Dissatisfied
    c. Unsure
    d. Satisfied
    e. Very Satisfied

10. What is the status of your relationship with your child's biological parent/what is your parents' relationship status?
    a. In a committed relationship
    b. Married
    c. Separated
    d. Divorced
    e. Other

11. How many children do you have/How many siblings do you have?
    a. _____

12. What is your current living situation? (FOR EAs ONLY)
    a. Living with parent(s)
    b. Living with roommate(s)
    c. Living with partner
    d. Living alone
    e. Other

# APPENDIX D

## STRESS SUBSCALE OF DEPRESSION, ANXIETY, AND STRESS SCALES (DASS-21)

The next items ask about different experiences people sometime have. Please read each statement and indicate how much the statement applied to you ***over the past week*.**

**0** Did not apply to me at all; **1** Applied to me to some degree, or some of the time; **2** Applied to me to a considerable degree, or a good part of time; **3** Applied to me very much, or most of the time

1. I found it hard to wind down
2. I tended to over-react to situations
3. I felt that I was using a lot of nervous energy
4. I found myself getting agitated
5. I found it difficult to relax
6. I was intolerant of anything that kept me from getting on with what I was doing
7. I felt that I was rather touchy

# APPENDIX E

# COMMUNICATION MEASURE

1. How often do you communicate with your child/parent?
    a. Never
    b. Very Little
    c. Occasionally/Sometimes
    d. Almost every day
    e. Every day

2. What mode of communication did you use most often to communicate with your parent/child today?
    a. Phone call/FaceTime
    b. Text Message
    c. Email
    d. Social Media (e.g., Facebook)
    e. Face-to-face communication

3. How satisfied are you with this communication?
    a. Very satisfied
    b. Somewhat satisfied
    c. Neutral
    d. Somewhat unsatisfied
    e. Very unsatisfied

4. How supported do you feel during this communication?
    a. Very supported
    b. Somewhat supported
    c. Neutral
    d. Somewhat unsupported
    e. Very unsupported

5. I contact my parent/child most often when something positive or enjoyable happens:
    a. At school
    b. At work
    c. At home
    d. With friends
    e. With my partner/significant other

6. I contact my parent/child most often when something negative or stressful happens at:
    a. At school
    b. At work
    c. At home
    d. With friends
    e. With my partner/significant other

# APPENDIX F

## QUALITY OF RELATIONSHIPS INVENTORY (QRI)

When thinking of your relationship with your parent/emerging adult, please use the following scale to indicate the degree of your response.

| 1<br>**Not at All** | 2<br>**Very Little** | 3<br>**Somewhat** | 4<br>**Very Much** |
|---|---|---|---|

1. To what extent could you turn to this person for advice about problems?

2. How often do you have to work hard to avoid conflict with this person?

3. To what extent could you count on this person for help with a problem?

4. How upset does this person sometimes make you feel?

5. To what extent can you count on this person to give you honest feedback, even if you might not want to hear it?

6. How much does this person make you feel guilty?

7. How much do you have to "give in" in this relationship?

8. To what extent can you count on this person to help you if a family member very close to you died?

9. How much does this person want you to change?

10. How positive a role does this person play in your life?

11. How significant is this relationship in your life?

12. How close will your relationship be with this person in 10 years?

13. How much would you miss this person if the two of you could not see or talk with each other for a month?

14. How critical of you is this person?

15. If you wanted to go out and do something this evening, how confident are you that this person would be willing to do something with you?

16. How responsible do you feel for this person's well-being?

17. How much do you depend on this person?

18. To what extent can you count on this person to listen to you when you are very angry at someone else?

19. How much would you like this person to change?

20. How angry does this person make you feel?

21. How much do you argue with this person?

22. To what extent can you really count on this person to distract you from your worries when you feel under stress?

23. How often does this person make you feel angry?

24. How often does this person try to control or influence your life?

25. How much more do you give than you get from this relationship?

# APPENDIX G

## DIFFICULTIES IN EMOTION REGULATION SCALE (DERS)

Please indicate how often the following statements apply to you by using the following scale for each item:

| 1<br>Almost never (0-10%) | 2<br>Sometimes (11-35%) | 3<br>About half the time (36-65%) | 4<br>Most of the time (66-90%) | 5<br>Almost always (91-100%) |
|---|---|---|---|---|

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'll 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 with 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 with 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 behaviors.

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