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Parental Attachment and Adult Attachment: The Moderating Role of Dispositional Forgiveness and Gratitude

Christian Ammons
University of Southern Mississippi

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Parental Attachment and Adult Attachment: The Moderating Role of
Dispositional Forgiveness and Gratitude

by

Christian Ammons

A Thesis

Submitted to the Graduate School,
the College of Education & Psychology
and the Department of Psychology
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Master of Arts

Approved by:

Dr. Bonnie Nicholson, Committee Chair
Dr. Melanie Leuty
Dr. Vivian Tamkin

Dr. Bonnie Nicholson
Committee Chair

Dr. Joe Olmi
Department Chair

Dr. Karen S. Coats
Dean of the Graduate School

December 2018

ABSTRACT

Secure parental attachment, characterized by trust, care, and autonomy granting, is associated with improved psychological functioning and adjustment to college and is often associated with adult attachment relationships. Similarly, adult attachment, a characteristic of adult relationships, has been associated with improved college adjustment. Individual differences such as dispositional forgiveness and gratitude are often associated with secure adult attachment but have not been examined in relation to parent child attachment. The current study examined dispositional forgiveness and gratitude as moderators of the relationship between parental attachment and adult attachment. A sample of 185 college students participated and as expected, parental attachment inversely predicted anxious and avoidant adult attachment. Further, dispositional gratitude significantly predicted anxious adult attachment. Contrary to hypotheses, results indicated that trait gratitude did not moderate the relationship between parental attachment and adult attachment. Trait forgiveness did not have a significant independent effect on anxious nor avoidant adult attachment but significantly moderated the relationship between parental attachment and anxious adult attachment. Implications and directions for future research are discussed.

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DEDICATION

This thesis is dedicated to my ever supportive and caring parents, whose display of warmth and care were instrumental in supporting my personal and academic life.

Thank you for providing a gracious and forgiving home and creating an environment for my strengths to be fostered and applied to studying the protective factors in the human experience.

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CHAPTER I - INTRODUCTION

The transition to college is an important, yet stressful, life change experienced by many emerging adults. Emerging adulthood is a life stage describing individuals between the ages of 18-25 years old and is characterized by unique developmental experiences such as moving away from home and transitioning to college (Arnett, 2000). Emerging adult college students often experience increased rates of anxiety, depression, and relationship problems (Mistler, Reetz, Kylowicz, & Barr, 2012). Plutonic relationships in college have been shown to have positive transitional effects. Friendships, and other types of social support in adulthood are related to better coping with depression and anxiety, as well as protecting against common college stressors, and encouraging achievement (Pittman & Richmond, 2008; Fass & Tubman, 2002; Chen, Huang, Wang, & Chang, 2012). Similarly, romantic partnering also occurs in college settings and is associated with both positive outcomes, such as improved self-esteem, as well as negative outcomes, such as higher rates of alcohol problems (Salvatore, Kendler, & Dick, 2014; Pettijohn, Naples, & McDermott, 2010).

Attachment theory has often been utilized to describe the characteristics of adult relationships, specifically in emerging adults (Kamenov & Jelic, 2005; Mattanah, Lopez, & Govern, 2011). Healthy and secure attachment relationships are characterized by trust and adaptive communication styles (Simpson, 2007; Ruffieux, Nussbeck, & Bodenmann, 2014), whereas less secure attachments in adulthood are often found to be associated with emotional distress (Hankin, Kassel, & Abela, 2005). Further, there is some evidence to suggest that parent-child attachment relationships influence adult attachment relationships, although the mechanisms responsible for these connections have not been

fully explored (Kamenov & Jelic, 2005). Positive psychological traits such as forgiveness and gratitude have been shown to promote positive adult relationships, including satisfaction and intimacy, but have not frequently been examined in the context of adult attachment (Fincham, 2009; Gordon, Impett, Kogan, Oveis, & Keltner, 2012). Therefore, the purpose of the current study was to examine forgiveness and gratitude as moderators in the relationship between parent-child attachment and adult attachment in emerging adult college students.

Parental Attachment

Bowlby (1969) and Ainsworth's theories (1978) describing parent and child relationships have consistently been shown to have influential effects on psychological and social development in children (Vivona, 2000; Oldfield, Humphrey, & Hebron, 2015). Ainsworth and colleagues (1978) described that as infants explore their world, they encounter novel and often frightening stimuli in their new environment. These strange and new stimuli act to motivate infants to return to their parents for love, warmth, and security. The interaction of children seeking protection and the response of parents during this reaching-out from the child can impact the learning of interpersonal relationship security. This learning can impact expectations and perceptions that children have of others. It is theorized that these expectations form due to the development of an internal working model, or schema of lovability of self and others (Bretherton & Munholland, 1999).

Expectations of trust, care, and security are associated with secure attachment. Parent-child relationships demonstrating secure attachment are characterized by parents allowing their children the freedom to explore and providing a secure base to return in

times of stress. Additionally, secure parent-child attachment is marked by the interaction of a child returning to a responsive parent to provide physical and emotional comfort (Bowlby, 1988; Crockenberg, 1981). Secure attachment is associated with positive child outcomes such as increased empathy, self-confidence, and resilience (Malekpour, 2007). Researchers theorize that this internal working model of the self and others developed in early childhood is dynamic and continues to evolve and impact relationships throughout the lifespan (Bowlby, 1969; Bretherton & Munholland, 1999). In emerging adults, parent-child attachment characterized as more secure is often associated with stronger emotional regulation skills compared to parent child relationships characterized as less securely attached (Pascuzzo, Cyr, & Moss, 2013). Secure parental attachment in emerging adults is also associated with better college adjustment, including social competence, as well as better adjustment in relation to adult relationships (Hiester, Nordstrom, & Swenson, 2009; Liu, Wu, & Lin, 2009; Mattanah, Lopez, & Govern, 2011).

Inversely, inconsistent or rejecting parental responses to a child's behavior can lead to a less secure attachment relationship, often categorized as anxious-ambivalent or avoidant attachment. Additionally, caregivers or parents that abuse or mistreat children can lead to a disorganized attachment style (Main & Hesse, 1990; Carlson, 1998). Disorganized attachment is characterized by a child's confusion and conflict with wanting to flee from fear to a caregiver when the source of the fear is that attachment figure (Sroufe, 2005). Disorganized attachment is associated with conduct disorders, dissociation, and personality disorders in children (Hesse & Main, 2000; Sroufe, 2005). In emerging adults, insecure and disorganized parental attachment has been related to

loneliness, low distress tolerance, as well as maladjustment and dependency in adulthood (Robinson, DiTommaso, Barrett, & Hajizadeh, 2013; Malekpour, 2007; Hesse & Main, 2000; Sroufe, 2005).

As children age and transition into emerging adulthood, the manifestation of these parent and child attachments evolves as children become more independent and experience different life stages (Mercer, 2006; Arnett, 2000). As children become older, parent and child attachment relationships become characterized by emotional connectedness and affective support, rather than proximal support needed in younger children (Moretti & Peled, 2004). Researchers have operationalized attachment by assessing sensitivity to needs, emotional support, and respect for autonomy (Kenny, 1987; Berman & Sperling, 1991). Though not specifically ascribing to the distinct categories associated with infant and parent attachment, parent-emerging adult relationships are also typically conceptualized secure or insecure (Mattanah, Lopez, & Govern, 2011). Evaluating emerging adult children experiencing significant life transitions, such as the transition to college, and the influence of early parental bonding is important to understanding the impact of early experiences. Mattanah and colleagues (2011) examined the impact of parental attachment and outcomes in college student populations. The researchers postulated that the transition to college is similar to the novel situations experienced in infancy and childhood, thus eliciting similar types of parent-child attachment behaviors. These parent-child attachment behaviors are associated with both adaptive and maladaptive outcomes in both children and young adults. Attachment theory is not only utilized to describe parent and child relationships but can also describe relationships in emerging adulthood.

Adult Attachment

Similar to the theory of parent-child attachment, adult relationships can also be characterized using similar constructs of attachment. Ainsworth and colleagues' (1978) categorization of parent-child relationships as secure, anxious-resistant, or avoidant and Main and Hesse's (1991) understanding of disorganized attachment, provide the framework for understanding these adult relationships characteristics. Unique to adult attachment research supports a dimensional, rather than categorical, approach focusing on a continuum of responsive and supportive behaviors (Hazan, Campa, & Gur-Yaish, 2006). Adult relationships are understood on a continuum measuring the degree that which anxious and avoidant behaviors are exhibited (Hazan, Campa, & Gur-Yaish, 2006; Gallo, Smith & Ruiz, 2003). Bartholomew and Horowitz (1991) conceptualized these levels of anxious and avoidant adult attachment in a two-dimensional model. These two dimensions of anxious and avoidant behavioral tendencies are theorized to have resulted from early development of internal working model of self and others that formed in the parent and child attachment relationship (Kachadourian, Fincham & Davila, 2004; Gallo, Smith, & Ruiz, 2003; Fraley, Hudson, Heffernan, & Segal, 2015). Hazan and Shaver (1987) described anxious adult attachment as adults that are worried about the honesty of love expressions from others. Anxiously attached adults also desire closeness with others but feel it is not reciprocated. Avoidant adult attachment is described as adults having difficulty trusting others, difficulty developing closeness, and feeling they cannot fulfill the expectations of others (Hazan & Shaver, 1987). Adult attachment has also been found to differ amongst males and females. A meta-analysis conducted by Giudice (2011) found males displayed more avoidant adult attachment and lower anxious adult

attachment when compared to females though differences were more robust in community samples rather than college students. Additionally, the meta-analysis results indicated that gender differences were most pronounced in emerging adulthood (Giudice, 2011).

Adult attachment has been found to be an important factor in predicting important relational and adjustment characteristics such as adult friendships and romantic relationship in young adults (Pascuzzo, Cyr, & Moss, 2013; Roisman, Collins, Sroufe, & Egeland, 2005). Lower levels of anxiety and avoidance are associated with more positive emotions and greater feeling of mutual support in a relationship (Feeney, 1999). Lower levels of anxious and avoidant attachment are also associated with more compromising and active problem-solving in relationship conflicts (Shi, 2003). Inversely, higher levels of anxious adult attachment, compared to avoidant, were more positively associated with relationship conflict (Li & Chan, 2012). Secure attachment, which commonly is defined by low levels of anxiety and avoidance, has been associated with better college adjustment in college students (Xie & Yang, 2015; Lapsley & Edgerton, 2002).

Parental Attachment Predicting Adult Attachment

Researchers have suggested that parent-child attachment is predictive of adult attachment from infancy through early adulthood based on a 20-year study which indicated that 78% of attachment characteristics did not drastically change through the lifespan (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). Those reporting secure parent-child attachment are also likely to report secure adult attachment, and those with forms of insecure or disorganized parent-child attachment are likely to report less secure adult attachment relationships (Feeney & Noller, 1990; Hamilton, 2000; Hesse &

Main, 2000). Despite this evidence, some findings suggest that the type of attachment manifested in early childhood may have only a moderate predictive effect, or does not at all persist through young adulthood (Gallo, Smith, & Ruiz, 2003; Crowell, Fraley, & Shaver, 1999), such that some findings have found a minimal relationship between parent-child attachment and adult attachment (Scharfe & Bartholomew, 1994). These studies stress the importance of individual factors and situations that occur through the lifespan as being influential on adult attachment. Studies have supported the impact of individual factors such as childhood adversities and trauma on the continuity or discontinuity of early parent-child attachment onto later attachment behaviors (Mickelson, Kessler, & Shaver, 1997; Waters, Merrick, Treboux, Crowell, Albersheim, 2000). This complex relationship suggests that further investigation of the conditions under which parent and child attachment influences emerging adult attachment is warranted. Due to the emergence of dispositional forgiveness and gratitude as important factors associated with relationship maintenance, functioning, and evaluation of others, exploring the role of these constructs within the parental attachment and adult attachment relationship will assist in understanding the ways in which parent-child relationships may impact adulthood.

Dispositional Forgiveness

Forgiveness has been defined and conceptualized in different ways across the literature (Snyder, Lopez, & Pedrotti, 2011). Tangney and colleagues (1999) described forgiveness as the assessment of transgressions and a resulting decision to avoid seeking revenge. Forgiveness is also described as the resolution to absolve negative affect oriented toward the transgressor (Tangney, Fee, Reinsmith, Boone, & Lee, 1999).

Forgiveness is also operationalized as a disposition to forgive, as opposed to forgiving a specific transgression. State forgiveness is specified as the letting go of a specific transgression, whereas trait forgiveness is the general tendency to forgive across contexts and situations (McCullough, Emmons, & Tsang, 2002). Higher levels of dispositional forgiveness have been closely linked to higher levels of positive feelings, lower levels of stress, self-esteem, and improved relationship quality (McCullough & Witvliet, 2001; Van Tongeren, Green, Hook, Davis, Davis, & Ramos, 2015; Berry & Worthington, 2001; Thompson et. al., 2005). These findings suggest that understanding the relational factors that influence the development of dispositional forgiveness are important to promote adaptive functioning in many areas of life.

The developmental model of forgiveness postulates that forgiveness is established in conjunction with normative cognitive development, such as empathy, and the ability to understand the perspective of others (McCullough & Worthington, 1994). It has also been described as following the development of moral reasoning described in Kohlberg's stages of moral reasoning (Kohlberg, 1976; Romig, 1998). Personality and religious affiliation has also found to be associated with the development of forgiveness (Brose, Rye, Lutz-Zois, & Ross, 2005; Sandage & Williamson, 2010). Research has supported that forgiveness can be developed by learning and modeling in the home (Denham, Neal, & Bassett, 2004; Denham, Neal, Wilson, Pickering, & Boyatzis, 2005). Families that display more forgiveness in the home can impact future forgiveness (Maio, Thomas, Fincham, & Carnelley, 2008). With the home environment playing an important role in the development of forgiveness, investigating parent and child relationships in association with trait forgiveness is important.

Interestingly, studies have already established the link between adult attachment and dispositional forgiveness in college students. Lower levels of anxious and avoidant attachment (i.e., secure attachment) are associated with higher levels of dispositional forgiveness (Burnette, Taylor, Worthington, Forsyth, 2006; Kachadourian, Fincham, & Davila, 2004). Anxious and avoidant attachment has also been found to be associated with more rumination in relationships, an important antithesis to forgiveness (Merrill & Afifi, 2015; Reynolds, Searight, & Ratwik, 2014). Forgiveness has been found to be closely related with traits such as empathy, compassion, religiosity, and the ability to perspective-take (Enright, 2001; Macaskill, Maltby, & Day, 2002; McCullough, Fincham, & Tsang, 2003; Fox, 2008). These traits, found to be present in forgiving people, have been associated with important characteristics of closer adult relationships, including adaptive attachment styles (Mikulincer et al., 2001). Additionally, research supports that when conflicts in relationships arise where forgiving traits may be displayed, various attachment behaviors are activated (Feeney, 2008). Specifically, though some research suggests that conflict can lead to a threat in the attachment relationship, it has also been found that disagreement can act as an opportunity to encourage positive communication and further closeness in attachment relationships (Kobak & Duemmler, 1994; Simpson, Rholes, & Philips, 1996; Pietromonaco, Greenwood, & Barrett, 2004). These conflicts may serve as an opportunity for dispositional traits such as forgiveness to encourage conflict resolution and maintain the adult relationship.

Researchers have not quite begun to examine the protective role that forgiveness may have in moderating the relationship between parent-child attachment and adult

attachment. Liao and Wei (2015) found that self-forgiveness moderates the negative effects of insecure attachment such that individuals that endorsed high levels of anxious and avoidant attachment did not display significant depressive symptoms at high levels of self-forgiveness. Similarly, the current study hypothesized that forgiveness may serve to buffer against the otherwise negative implications of a less-secure parent-child attachment relationship. Specifically, it was expected that secure parent-child attachment would be associated with secure adult attachment. However, we expected the same positive relationship between less secure parent-child attachment and adult attachment in cases where students reported high levels of forgiveness. It was plausible to assume that when dispositional forgiveness was high, the maladaptive effects of poor parental attachment on adult attachment may be buffered. Because individuals with higher levels of dispositional forgiveness have been shown to be associated with less anxious and avoidant adult attachment (Burnette, Taylor, Worthington, & Forsyth, 2007), we expected this may serve to moderate the relationship between parent child attachment and adult attachment. Additionally, we examined the moderating role of a similar positive psychological trait, dispositional gratitude.

Dispositional Gratitude

Gratitude is an adaptive construct, similar to forgiveness. Gratitude is defined as an intentional expression of appreciation (Emmons & McCullough, 2004). Like forgiveness, gratitude is differentiated between state and dispositional gratitude. Dispositional gratitude can be defined as displaying general gracious tendencies towards others across contexts (McCullough, Emmons, Tsang, 2002). Dispositional gratitude is also important in adaptive adult relationships. Dispositional gratitude is associated with

overall positive relationships as well as physical health and altruistic behavior (Emmons & Mishra, 2011; Wood, Froh, & Geraghty, 2010; Hill, Alemand, & Roberts, 2013). Gratitude expression has been associated with well-being as well as social support in adult relationships (Algoe & Zhaoyang, 2016; Lin, 2016). McCullough and colleagues (2002) have also found higher levels of dispositional gratitude to be associated with positive affect, well-being, and religiosity.

The development of positive psychological traits, such as gratitude, have been shown to be genetically inherited as well as developed during childhood (Steger, Hicks, Kashdan, Krueger, & Bouchard, 2007). Child expression of gratitude has been empirically linked to parental expression of positive emotions including gratitude (Hoy, Suldo, & Mendez, 2013). This evidence supports that early relationships and the home environment play an important part in gratitude development. Prosocial behavior, a common factor strongly associated with gratitude, has also been found to be influenced by parental involvement and stronger parental relationships (Pastorelli et. al., 2016). Factors such as positive reciprocal communication and social competence are also related to trait gratitude. Feldman and colleagues (2013) found positive associations with adaptive parent and child communications and improved social competence and prosocial behavior in children. With the home environment playing an important role in the development of gratitude and related traits, investigating its association with attachment is important.

Dispositional gratitude has been closely linked with adult attachment relationships. Research has found that relationships characterized as less anxious and avoidant were associated with higher levels of dispositional gratitude (Mikulincer,

Shaver, & Slave, 2006; Wilkinson & Dinh, 2014). Research has also supported the exploration of gratitude as a protective factor in maladaptive adult romantic relationships. Griffin and colleagues (2016) found dispositional gratitude moderated the relationship between affective needs, or needing emotional reassurance, and frequency of dating violence victimization. Individuals with lower levels of trait gratitude were associated with needing more emotional support and higher frequency of dating violence victimization. This was not the case for those reporting higher levels of dispositional gratitude. This suggests that higher levels of dispositional gratitude can play a protective role against the potential for negative relationship outcomes. Additionally, positive reciprocity, as well as the tendency to forgive, have also been found to be associated with gratitude (DeShea, 2003; Li, Zhang, & Zhang, 2015).

There may be similar processes involved in the development of both gratitude and forgiveness. Similar to dispositional forgiveness, individuals with higher levels of dispositional gratitude will be associated with less anxious and avoidant adult attachment due to the positive working model of expectations of others that develops as a result of parent-child attachment. This positive internal working model could function similarly to what is needed to be an overall gracious person and may have developed in the face of less secure parent-child attachment. With the numerous positive effects of gratitude on adult relationships, understanding the protective role of the trait is important. The current study sought to further understand the predictive ability of parent-child attachment on adult attachment when individuals also display higher levels of important relational traits such as trait gratitude.

Gratitude and forgiveness are similar constructs. Both involve mechanisms such as empathy and perspective-taking, and are related to relationship quality (Watkins, Woodward, Stone, & Kolts, 2004; Fincham, Paleari, & Regalia, 2002). Though both traits are associated with positive relationship characteristics and outcomes, trait forgiveness and gratitude differ in regard to personality correlates and vulnerabilities to emotional difficulties (Brose, Rye, Lutz-Zois, & Ross, 2005). Forgiveness has been found to be associated with neuroticism and agreeableness (Neto, 2007). Additionally, when accounting for gratitude the relationship between forgiveness and well-being is strengthened as well as the relationship between forgiveness and perspective-taking (Breen, Kashdan, Lenser, & Fincham, 2010). Researchers posit that those high in gratitude also tend to have the propensity to forgive, though trait gratitude and forgiveness can manifest uniquely in mental health outcomes such as neuroticism, anger, and feelings of loneliness (Breen, Kashdan, Lenser, & Fincham, 2010). Research further evaluating the unique mechanisms of these character strengths will better explain their role in adult relationships.

The Current Study

The current study proposed to examine the moderating role of dispositional forgiveness and gratitude within the relationship between parental attachment and anxious/avoidant adult attachment. With evidence supporting the unique challenges of emerging adults in the college setting including depression, anxiety, and the importance of adult relationships (Mistler, Reetz, Kylowicz, & Barr, 2012) positive effects of secure adult attachment on relationship functioning and college adjustment, understanding the factors which are associated with adaptive adult attachment is important (Xie & Yang,

2015; Feeney, 1999). The current study hypothesized that parent-child attachment would predict anxious and avoidant adult attachment, replicating findings which have established the persistence of attachment behaviors into adulthood (Einav, 2014; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000; Fraley, 2002).

With research supporting the examination of college as a unique period of parent-child relationships (Mattanah, et. al., 2011) and the importance of plutonic and romantic relationships in supporting college adjustment and college student mental health, the current study further further explained this relationship (Pittman & Richmond, 2008; Salvatore, Kendler, & Dick, 2014; Pettijohn, Naples, & McDermott, 2010). While previous studies have mixed findings supporting the connection between parent-child attachment and anxious/avoidant adult attachment (Waters, Merrick, Treboux, Crowell, Albersheim, 2000; Sharfe & Bartholomew, 1994), it is important to examine the conditions under which this relationship occurs in the emerging adult college student life stage. Forgiveness and gratitude have been identified as two dispositional traits associated with positive adult attachment and which have some developmental connection to the parent-child attachment relationship (Burnette, Taylor, Worthington, Forsyth, 2007). We hypothesized that higher levels of secure parental attachment will be positively related to the positive psychological traits of dispositional forgiveness and gratitude. Further, we also hypothesized that dispositional forgiveness and gratitude will be positively related to secure adult attachment. These positive psychological traits have been found to be closely linked to better relationship functioning and maintenance, a common feature of less anxious and avoidant attachment (Emmons & Mishra, 2011; McCullough & Witvliet, 2001; Feeney, 1999). Additionally, an internal working model

characterized with positive evaluations of others in adult attachment may function similarly to the positive evaluation of others needed to be a generally gracious and forgiving person.

It was hypothesized that gratitude and forgiveness would protect against the negative effects less secure early attachment can have on later attachment. This protective effect may be present due to the numerous positive relational effects related to dispositional forgiveness and gratitude (Emmons & Mishra, 2011; McCullough & Witvliet, 2001; Feeney, 1999). Additionally, forgiveness and gratitude have previously been examined as protective moderators against negative relationship and emotional outcomes, though not extensively (Griffin, et. al., 2016; Liao & Wei, 2015). Examining the role of trait forgiveness and gratitude as protective factors in emerging adult college students will add to the growing literature on these positive psychological traits within the college environment and emerging adult interpersonal functioning. Therefore, it is expected that dispositional forgiveness and gratitude will moderate the relationship between parent-child attachment and adult attachment. Individuals displaying more trait forgiveness and gratitude may have developed these beneficial traits in the face of early developed negative expectations of others that less secure parental attachment fostered. Previous findings support that forgiveness and gratitude are expected to be present in conditions of secure parental attachment however the current study will explore whether forgiveness and gratitude will moderate the relationship between parental attachment and both anxious and avoidant adult attachment when parental attachment conditions are less secure. Additionally, we will examine whether the dimensions of anxious and avoidant adult attachment operate differently within these relationships. Lastly due to gender

differences in adult attachment being previously discovered (Giudice, 2011), gender will be accounted for in this relationship.

Research Questions and Hypotheses

Question 1: Does parental attachment predict adult attachment in emerging adult college students, when accounting for gender?

Hypothesis 1. Higher levels of secure parental attachment will predict lower levels of anxious and avoidant attachment in adult relationships.

Question 2: Does dispositional gratitude moderate the relationship between parental attachment and adult attachment in emerging adult college students, when accounting for gender?

Hypothesis 2: Dispositional gratitude will moderate the relationship between parental attachment and anxious and avoidant adult attachment, when accounting for gender. Low levels of secure parent child attachment will be associated with low levels of anxious and avoidant adult attachment, under conditions of higher levels of dispositional gratitude.

Question 3: Does dispositional forgiveness moderate the relationship between parental attachment and adult attachment in emerging adult college students, when accounting for gender?

Hypothesis 3: Dispositional forgiveness will moderate the relationship between parental attachment and anxious and avoidant adult attachment, when accounting for gender. Low levels of secure parent child attachment will be associated with low levels of anxious and avoidant adult attachment, under conditions of higher levels of dispositional forgiveness.

CHAPTER II - METHODS

Participants

The sample initially consisted of 239 college students between the ages of 18 and 25, who would be classified as emerging adults. Of this total, 54 either did not complete significant portions of the survey or failed validity checks and were removed from the study. Therefore, a total of 185 valid respondents were retained for analyses. The final sample consisted of 74.1% female emerging adult college students with an average age of 19.48 years ($SD = 1.68$). The sample included mostly White/non-Hispanic students (62.2%) and a majority of the sample identified their primary caregiver as their mother (78.9%). The slight majority of the sample consisted of freshmen (50.8%) and indicated an average of 2.26 semesters enrolled at their current college and 3.18 semesters in college in total. The sample reported a variety of living situations; 48.6% of participants indicated they live on-campus with a roommate, 30.3% live off-campus with a roommate, and 21.1% indicated a different living situation. Additionally, the sample reported an average of 4.5 on the financial independence scale (1 = not independent at all, 10 = completely independent). In addition, the majority of individuals identified as Christian (84.9%), reported an average of 7.54 on the religious importance scale (1 = not at all important, 10 = very important), and most reported engaging in religious activities at a minimum of one to two times per week (66.1%). The sample also reported an average of 8.23 on the overall quality of all interpersonal relationships (1 = lowest quality, 10 = highest quality relationship). Demographic data are provided in Table 1.

Table 1

Demographic Characteristics of the Sample.

Characteristic (Range)	<i>N</i>	%
Participant Gender		
Male	47	25.4
Female	137	74.1
Other	1	0.5
Participant Race		
White/non-Hispanic	115	62.5
Black/African American	61	33.2
Other Racial Groups	8	4.3
Year in School		
Freshman	94	50.8
Sophomore	39	21.1
Junior	27	14.6
Senior	25	13.5
Living Situation		
On-campus, with roommate	90	48.6
On-campus, alone	9	4.9
Off-campus, alone	15	8.1
Off-campus, with roommate(s)	56	30.3
At home, with caregiver(s)	12	6.5
Other	3	1.6
Participant's primary caregiver		
Mother	146	78.9
Father	27	14.6
Grandfather or other male family member (e.g. uncle)	1	0.5
Grandmother or other female family member (e.g. aunt)	5	2.7
Other	6	3.2
Participants' religious affiliation		
Christian	157	84.9
Atheism/Agnosticism	6	3.2
Hinduism	4	2.2
None	18	9.7
Participants' religious involvement		
None	19	10.4
Minimal	62	33.9
Involved 1-2 days per week	59	32.2
Involved 3-4 days per week	21	11.5
Involved 5-6 days per week	7	3.8

Table 1 (continued).

Involved every day, 7 days per week	15	8.2
Characteristic (Range)	<i>M</i>	<i>SD</i>
Participant age (18-25)	19.48	1.678
Importance of spirituality (1-10)	7.54	2.862
Relationship Quality (1-10)	8.23	1.948
Number of Semesters at current college	2.26	1.808
Total Number of Semesters in college	3.18	2.627
Amount of financial independence (1-10)	4.50	2.982

Materials and Procedures

Demographic Questionnaire.

Participants were asked to provide information on their age, gender, race, academic year in school, number of semester completed at current college and number of semesters completed in college in general, religious affiliation, importance of religious affiliation, amount of engagement in religious activities, overall relationship quality, amount of financial independence, and information on their identified primary caregiver. See Appendix A.

Parental Attachment Questionnaire.

Parental attachment was measured using the Parental Attachment Questionnaire (PAQ; Kenny, 1987), a 55-item measure assessing adults' perceived relationship with their parents. Items were assessed on a 5-point Likert scale (1 = *Not at All* to 5 = *Very Much*) with higher scores indicating higher levels of perceived closeness and security of parental attachment. Slight modifications were made so that participants answered according to their feelings about the person(s) they identify as their primary caregiver(s). Items included, "In general, my caregiver(s) are persons I can count on to provide

emotional support when I feel troubled,” and “During recent visits or time spent together, my caregiver(s) were persons to whom I enjoyed telling about the things I have done and learned.” Items comprise three subscales: Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as Source of Support with acceptable alphas of .96, .88, and .88, respectively (Kenny, 1990). A total score can also be calculated with scores can range from 55 to 275. Higher scores indicated more secure parental attachment. Overall past literature has reported internal consistency as adequate at .93 and .95 in male and female college students, respectively (Kenny, 1987). Test-retest reliability was also sufficient with stability coefficients reported as .82 to .91 over a two-week period (Kenny, 1990). For the purposes of this study, a total score was calculated to observe overall levels of secure attachment experienced between emerging adults and their parents. Internal consistency for the PAQ in the current study was appropriate ($\alpha = .94$).

Gratitude Questionnaire-6.

Dispositional gratitude was assessed using the Gratitude Questionnaire-6 (GQ-6; McCullough, Emmons, & Tsang, 2002) to assess a person’s general tendency to be gracious, or exhibit trait gratitude. Items are assessed using a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*) with higher scores indicating higher levels of dispositional gratitude. Participants were asked questions such as “I am grateful to a wide variety of people.” A total score was obtained to measure overall dispositional gratitude. Scores can range between 6 and 42. Past research has reported internal consistency in a sample of undergraduate college students as acceptable with a coefficient alpha of .82 (Kashdan, Mishra, Breen, & Froh, 2009). Test-retest reliability was appropriate after six

weeks with an inter-class correlation of 0.85 (Jans-Beken, Lataster, Leontjevas, & Jacobs, 2015). Internal consistency for the GQ-6 in the current study was appropriate ($\alpha = .81$).

Trait Forgiveness Scale

Dispositional forgiveness was assessed using the Trait Forgiveness Scale (TFS; Berry, et al., 2005) to gather emerging adult self-report of being forgiving across different situations and times. Items were assessed using a 5-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*) with higher scores indicating more disposition to forgive. Participants were asked questions such as “I can usually forgive and forget an insult.” A total score was obtained to measure overall Trait forgiveness. Past research has reported acceptable internal consistency in a sample of college aged students with a coefficient alpha of .80. Test-retest reliability was also adequate after 8-weeks given a correlation of .78 (Berry, et. al., 2005). Internal consistency for the TFS in the current study was appropriate ($\alpha = .78$).

Experiences in Close Relationships – Relationship Structures Questionnaire

Adult attachment was assessed using the Experiences in Close Relationships - Relationship Structures Questionnaire (ECR-RS; Fraley, Hudson, Heffernan, & Segal, 2015) to gather emerging adults self-reports of characteristics and feelings experienced in their close relationships. Items are assessed using a 7-point Likert scale (1 = *Disagree strongly* to 7 = *Agree strongly*) with higher scores indicating higher levels of anxious and avoidant behaviors. Items are loaded onto two dimensions of adult attachment characterized as anxiety and avoidant behaviors. Items included in the anxiety dimension include “I’m afraid that other people may abandon me” and “I often worry that other

people do not really care for me” Items included in the avoidant dimension include “I don’t feel comfortable opening up to others” and “I prefer not to show others how I feel deep down.” Scores for each dimension were obtained to provide a score of anxious and avoidant attachment for each participant. Past research has reported acceptable internal consistency in a sample of emerging adults with anxiety and avoidant alphas of .80 and .88, respectively (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). Test-retest reliability was adequate at 30 days ranging from .65 to .80 as well as acceptable evidence of convergent and discriminant validity with features of relationship such as satisfaction and commitment (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). Internal consistency for the ECR-RS Avoidant and Anxious scales was appropriate ($\alpha = .80$; $\alpha = .89$).

Procedures

This study was approved by the University of Southern Mississippi’s Institutional Review Board Human Subjects Protection Review Committee (Appendix B). Participants were recruited through the Department of Psychology’s research participation program. Participants completed an informed consent for (Appendix C) and the remaining questionnaires through Qualtrics, a secure online survey system. Following completion of the informed consent, participants were directed to a demographic questionnaire (Appendix A) followed by randomly ordered measures of parental attachment, trait gratitude, trait forgiveness, and adult attachment. Completion of the study took approximately 10-20 minutes. Validity checks included two false items, which asked the participant to answer in a specific way (e.g., Answer “agree” to this question). Participants who incorrectly answered either item were removed from further analyses ($n = 37$).

Data Analysis

Cases from individuals reporting their age as between 18 and 25 years, who passed validity checks, and had at least 75% of the survey completed were included in the analysis. Data was screened for missing values and influential points prior to analysis. Little's Missing Completely at Random test was conducted to assess that missing values were missing at random (Little, 1988). Missing data points were replaced using estimated means imputation which calculates means based on the likelihood of the distribution (Beale & Little, 1975). Diagnostics were conducted to identify influential points. Based on the criteria of studentized residual values, influential points that increase or decrease in value more than 0.5 from their subsequent value were removed. Data points with leverage values increasing or decreasing more than 67% and data points with standardized DFFITS values increasing more than 67% were evaluated. Analyses were run again to determine the extent of which these points were influential. Means, standard deviations, and bivariate correlations were conducted to assess basic information and relationships between variables of interest.

Assumptions of regression were first evaluated prior to interpreting results including homoscedasticity, normality of residuals, and linearity. Homoscedasticity was assessed by evaluating histograms of the predicted value and standardized residual of the dependent variable. Continuity across predicted values between -1 and 0 was assessed. Histogram plots of residuals was also evaluated to assess if normality is assumed. Skewness and kurtosis was assessed by a pseudo-z score, dividing the skewness statistic by the standard error. Kurtosis was evaluated by a pseudo-z score, dividing the kurtosis statistic by the standard error. Values were considered adequate if pseudo-z scores do not

exceed + or – 3. Scores of the PAQ and the GQ-6 were significantly negatively skewed. A two-step transformation was conducted to allow the data to be more normally distributed (Templeton, 2011). The two-step transformation process resolved skewness and kurtosis issues. The assumption of linearity was evaluated by verifying a curved relationship was not present in partial plots. All continuous predictor variables (i.e. PAQ, TFS, & GQ-6) were centered to reduce multicollinearity (Aiken & West, 1991). To interpret if multicollinearity existed, tolerance values were examined. Tolerance values was assessed to verify all values are greater than 0.2 to indicate that the assumption was met, and multicollinearity was not violated. Tolerance values were appropriate across all measures.

To assess moderating relationships, path analysis was performed using AMOS Version 5.0. The hypothesized model was assessed using χ^2 value, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). Values of .90 or above for the CFI and TLI (Tucker & Lewis, 1973) and .08 or below for the RMSEA (Browne & Cudeck, 1993) indicate that a model adequately fits the data. Simple slopes regression tests were conducted for significant interaction effects (Frazier, et. al., 2004).

CHAPTER III - RESULTS

Means, standard deviations and intercorrelations of all measures are presented for the sample in Table 2. Intercorrelations of all measures are in the expected direction for each relationship such that parental attachment security had a significant inverse relationship with anxious ($r = -.37; p < .01$) and avoidant ($r = -.44; p < .01$) adult attachment (Feeney & Noller, 1990; Hamilton, 2000). Additionally, trait gratitude and trait forgiveness had significant inverse relationships with anxious ($r = -.19, p < .05; r = -.20, p < .01$) and avoidant adult attachment ($r = -.36, p < .01; r = -.20, p < .01$) as predicted (Burnette, Taylor, Worthington, Forsyth, 2006). Parental attachment security had a significant positive relationship with both trait gratitude and trait forgiveness ($r = .52, p < .01; r = .33, p < .01$).

Table 2

Means, standard deviations, and correlations

	<i>M</i> (<i>SD</i>)	1	2	3	4	5
1. PAQ	203.65 (25.8)	-	0.52**	0.33**	-0.44**	-0.37**
2. GQ-6	35.77 (5.37)		-	0.39**	-0.36**	-0.19*
3. TFS	34.86 (6.57)			-	-0.20**	-0.20**
4. ECR-RS: Avoidant	3.25 (1.20)				-	0.26**
5. ECR-RS: Anxious	3.71 (4.46)					-

Note. PAQ = Parental Attachment Questionnaire; GQ-6 = Gratitude Questionnaire-6; TFS = Trait Forgiveness Scale; ECR-RS: Avoidant = Experiences in Close Relationship Structures: Avoidant; ECR-RS: Anxious = Experiences in Close Relationships Structures Anxious

* $p < .05$. ** $p < .01$.

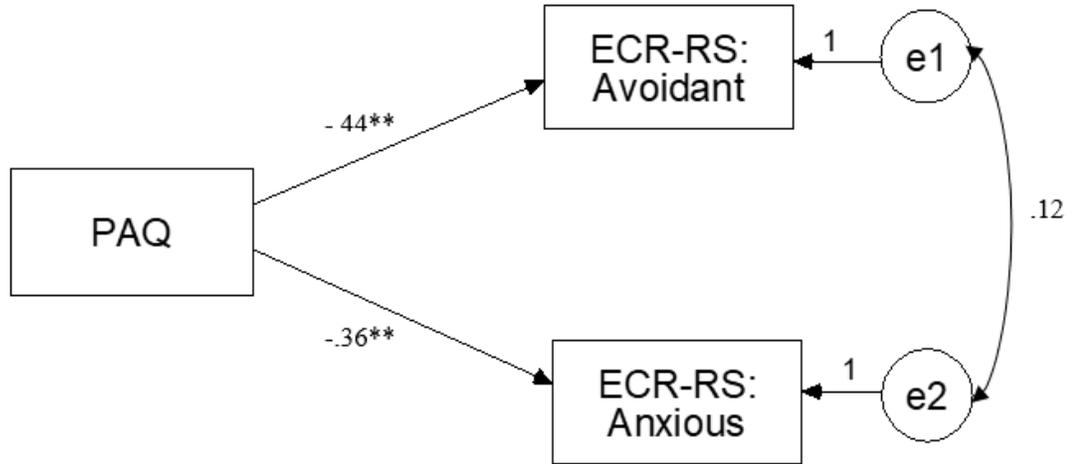
. Multiple one-way ANOVAs and correlations were conducted to assess the potential effects of covariates on the study variables. Bivariate correlations indicated that

financial independence, year at USM, number of semesters at the current college, nor number of semesters in college in total were not significantly related to anxious or avoidant adult attachment. Additionally, results indicated that anxious and avoidant adult attachment did not differ significantly based on living situation, identified primary caregiver, nor when comparing those that identify as White/non-Hispanic to other identified races. One-way ANOVAs indicated there were not significant gender differences for avoidant adult attachment, but there were significantly lower anxious attachment scores for those that identified as female versus other genders $F(1, 183) = 8.252, p < .05$. Therefore, gender was included as a covariate (Brennan, Shaver, & Tobey, 1991).

Hypothesis 1

The first hypothesis posited that parental attachment security would significantly inversely predict anxious and avoidant adult attachment. Structural equation modeling was utilized to assess the relationship. Testing of the model revealed a non-significant chi-square value ($\chi^2(1, 13) = .362, p = .548$) and some indicators of good model fit (RMSEA = .000 CFI = 1.00; TLI = 1.054). Parental attachment security significantly inversely predicted avoidant adult attachment ($\beta = -0.44, p < .001$) and significantly inversely predicted anxious adult attachment ($\beta = -0.36, p < .001$) when accounting for gender. Overall, hypothesis 1 was supported by the data as seen in Figure 1.

Figure 1. Predictive Ability of Parental Attachment Security to Avoidant and Anxious Adult Attachment when Accounting for Gender



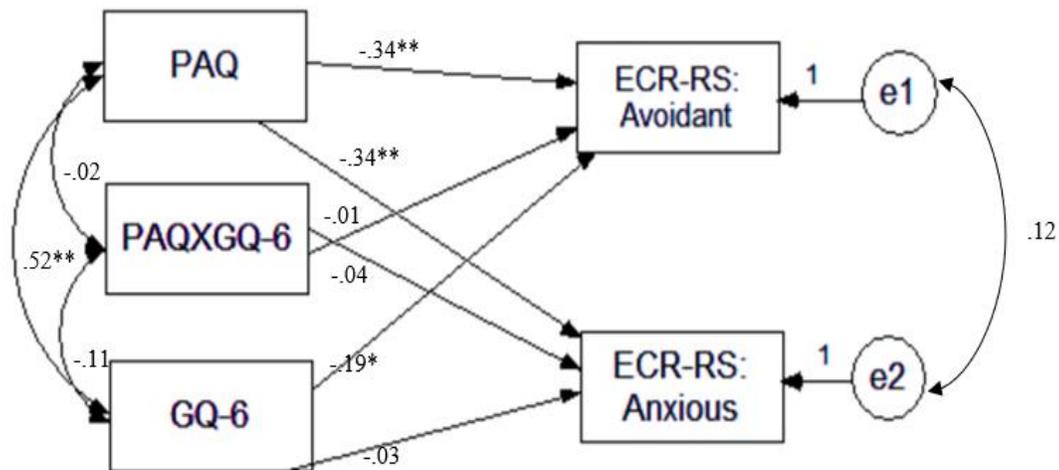
Note. PAQ = Parental Attachment security; ECR-RS: Avoidant = Avoidant adult attachment; ECR-RS: Anxious = Anxious adult attachment.
* $p < .05$. ** $p < .01$.

Hypothesis 2

The 2nd and 3rd research questions examined whether trait gratitude and trait forgiveness moderated the relationship between parental attachment security and avoidant and anxious adult attachment. Structural Equation Modeling was utilized to assess the main effects of the independent variable (i.e., parental attachment security) and the interaction term (i.e., parental attachment security X gratitude, parental attachment security X forgiveness) on the dependent variables of anxious and avoidant adult attachment. The 2nd hypothesis predicted that trait gratitude would moderate the relationship between parental attachment security and anxious and avoidant adult attachment, such that higher trait gratitude would buffer the effects of lower parental attachment security on anxious and avoidant adult attachment when accounting for the effect of gender. Testing of the model revealed a non-significant chi-square value, ($\chi^2(3, 24) = 5.36, p = .147$), and good model fit indices (RMSEA = 0.065; CFI = 0.982; TLI = 0.912). There was a significant main effect for parental attachment security which significantly inversely predicted avoidant adult attachment ($\beta = -0.34, p < .001$) and

significantly inversely predicted anxious adult attachment ($\beta = -0.34, p < .001$). The interaction of parental attachment security and trait gratitude was nonsignificant in predicting avoidant adult attachment ($\beta = -0.01, p = .959$) nor anxious adult attachment ($\beta = -0.04, p = .543$) when accounting for the effect of gender. Additionally, trait gratitude significantly inversely predicted avoidant adult attachment ($\beta = -0.19, p < .05$) thus the 2nd hypothesis was not supported as seen in Figure 2.

Figure 2. Predictive Ability of Relevant Main Effects and Interaction of Moderating Variable Trait Gratitude on Avoidant and Anxious Adult Attachment, accounting for Gender



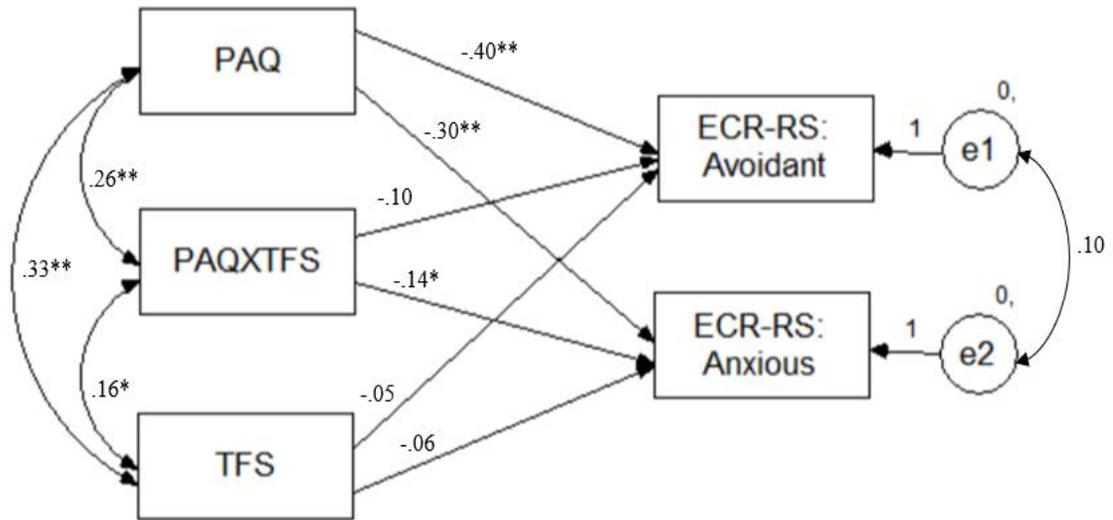
Note. PAQ = Parental Attachment security; PAQXGQ-6 = Parental attachment security X Trait Gratitude; GQ-6 = Trait Gratitude; ECR-RS: Avoidant = Avoidant adult attachment; ECR-RS: Anxious = Anxious Adult attachment
 .* $p < .05$. ** $p < .01$

Hypothesis 3

The 3rd hypothesis predicted that trait forgiveness would moderate the relationship between parental attachment security and anxious and avoidant adult attachment, such that higher trait forgiveness would buffer the effects of lower parental attachment security on anxious and avoidant adult attachment. Structural Equation Modeling was utilized to assess the main effects of the independent variable (i.e. parental attachment security) and the interaction term (i.e. parental attachment security X forgiveness) on the dependent

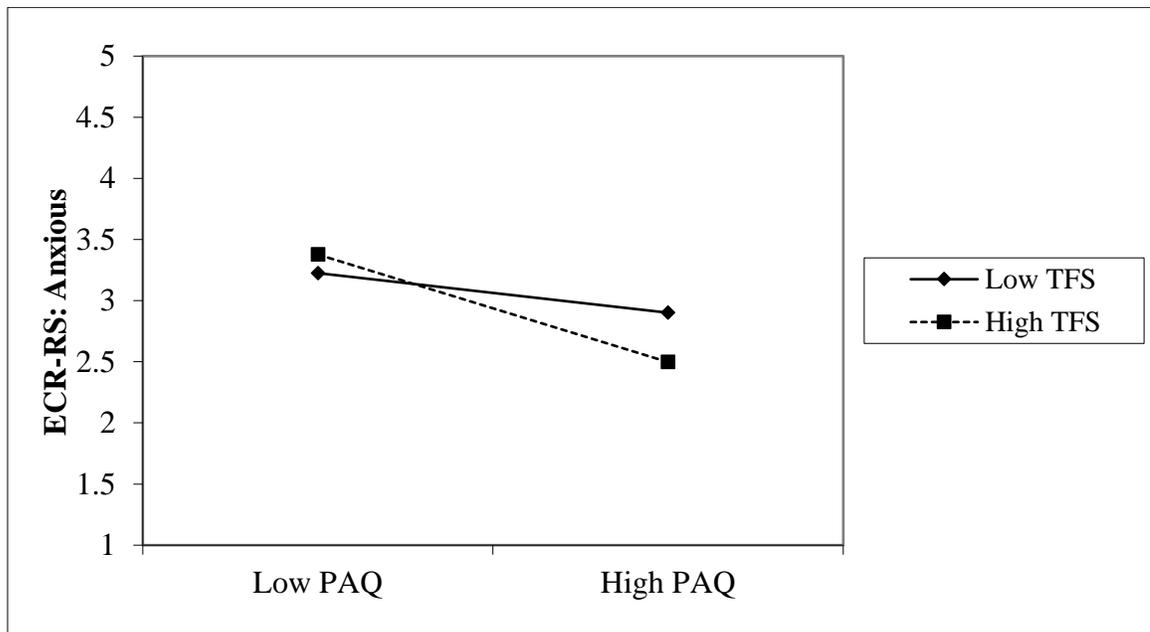
variables of anxious and avoidant adult attachment. Testing of the model revealed a non-significant chi-square value, ($\chi^2(3, 24) = 2.51, p = .473$), and good model fit indices (RMSEA = 0.000; CFI = 1.00; TLI = 1.023). Similar to hypothesis two, there was a significant main effect for parental attachment security significantly inversely predicting avoidant adult attachment ($\beta = -0.40, p < .001$) and significantly inversely predicting anxious adult attachment ($\beta = -0.30, p < .001$). The interaction of parental attachment and trait forgiveness was nonsignificant in predicting avoidant adult attachment ($\beta = -0.10, p = .162$) but was significant in predicting anxious adult attachment ($\beta = -0.14, p < .05$) as seen in Figure 3. A simple slope test was run to further understand the interaction (Frazier, et al., 2004). The simple slopes test found that for low trait forgiveness (i.e. one standard deviation below the mean), there was a non-significant relationship between parental attachment and anxious adult attachment ($\beta = -0.01, t = -1.99, p = .05$). With average trait forgiveness ($\beta = -0.02, t = -3.82, p < .01$) and trait forgiveness one standard deviation above the mean, parental attachment had a stronger inverse effect on anxious adult attachment ($\beta = -0.03, t = -5.01, p < .01$). Thus, results partially support the hypothesis as displayed in Figure 4.

Figure 3. Predictive Ability of Relevant Main Effects and Interaction of Moderating Variable Trait Forgiveness on Avoidant and Anxious Adult Attachment, when accounting for Gender



Note. PAQ = Parental Attachment security; PAQXTFS = Parental attachment security X Trait Forgiveness; TFS = Trait Forgiveness; ECR-RS: Avoidant = Avoidant adult attachment; ECR-RS: Anxious = Anxious Adult attachment.
 * p<.05. ** p<.01.

Figure 4. Parental Attachment Security and Trait Forgiveness on Anxious Adult Attachment



Note. PAQ = Parental Attachment security; TFS = Trait Forgiveness; ECR-RS: Anxious = Anxious Adult Attachment

CHAPTER IV – DISCUSSION

Discussion

The current study sought to examine the direct effects of parental attachment security predicting anxious and avoidant adult attachment, and to determine the moderating effects of trait gratitude and trait forgiveness on the relationship between parental attachment security and avoidant and anxious adult attachment, when accounting for gender. As predicted, parental attachment security significantly inversely predicted anxious and avoidant adult attachment. Additionally, as predicted, the relationship between parental attachment security and anxious adult attachment differed significantly across levels of trait forgiveness, though this was not found for avoidant adult attachment. Contrary to the predicted hypotheses, parental attachment security did not differ across levels of trait gratitude in predicting avoidant or anxious adult attachment. This suggested that the impact of parental attachment security predicting anxious and avoidant adult attachment was not significantly different for those with varying levels of trait gratitude, but some effects were present for trait forgiveness.

The first hypothesis posited the direct effects of parental attachment security on avoidant and anxious adult attachment for emerging adult college students. As projected, parental attachment security significantly inversely predicted anxious and avoidant adult attachment, suggesting that higher levels of parental attachment security predict lower levels of anxious adult attachment and avoidant adult attachment. This is consistent with the body of literature which has established the stability of attachment characteristics across development (Waters, Merrick, Treboux, Crowell, & Albersheim, 2000; Feeney &

Noller, 1990; Hamilton, 2000; Hesse & Main, 2000). These findings support the potentially foundational and persisting impact of the parent-child relationship and how these relationships can impact adult relationship characteristics. This relationship was present when accounting for potential gender differences. Importantly, with the current study having examined adult parent-child attachment characteristics and current adult attachment, these findings may suggest that an individual is attaching to significant persons similarly across contexts. With the study collecting current attachment data rather than retrospective data, the findings may suggest consistent relationship interactions across all relationships types (i.e. parents, friends, romantic partners). Overall, it appears that positive parent-child relationship security is beneficial for individuals as it may set the stage for positive relationship functioning with others in their lives. This may further support the importance of positive parenting interventions focused on promoting more adaptive attachment behaviors (Wright & Edginton, 2016).

The second and third hypotheses posited the moderating impact of trait forgiveness and gratitude on the relationship between parental attachment security and anxious and avoidant adult attachment. It was expected that lower parental attachment security would be predictive of lower anxious and avoidant adult attachment when individuals indicate higher levels of trait forgiveness and gratitude. Contrary to the hypothesis, trait gratitude did not significantly moderate the relationship between parental attachment security and neither anxious or avoidant adult attachment. These results suggest that this relationship does not vary across different levels of trait gratitude.

Though not fully consistent with the hypothesis, trait forgiveness significantly moderated the relationship between parental attachment security and anxious adult

attachment though did not moderate the path to avoidant adult attachment. These results indicated the relationship between parental attachment security and anxious adult attachment varied across different levels of trait forgiveness but did not differ significantly in the relationship with avoidant adult attachment. Specifically, lower trait forgiveness did not have an impact on the relationship between parental attachment security and anxious adult attachment, but for higher trait forgiveness, the inverse relationship between parental attachment security and anxious adult attachment was strengthened. Though not a protective effect as hypothesized, this indicated that higher trait forgiveness was a promotive factor in the path of parental attachment security to anxious adult attachment.

The moderating effect of trait forgiveness indicated that higher levels of forgiveness were associated with more adaptive adult attachment characteristics, especially for more secure parental attachment. This finding is consistent with previous research that found that trait forgiveness is a significant factor in adult relationship functioning and maintenance (Emmons & Mishra, 2011; McCullough & Witvliet, 2001; Feeney, 1999). This suggests that those with more secure attachment to their parents who are more forgiving across contexts are less likely to have experience anxious attachment in other adult relationships further indicating that higher trait forgiveness rather than low trait forgiveness makes a difference on the relationship between parent-child attachment and adult attachment. With forgiveness involving the decision to let go of negative affect oriented toward transgressors, this absolution of negative feelings may also be important in appraising others in adult relationships (i.e. the internal working model) as more positive, trusting, and full of care (Tangney, Fee, Reinsmith, Boone, & Lee, 1999). These

results suggest the important potential for forgiveness interventions to support the absolution of rumination and the positive effect this can have on adult relationships functioning (Lundahl, Taylor, Stevenson, & Roberts, 2008). Specifically, these results support the importance of forgiveness for emerging adult college students and potential for interventions within this distinct population and setting.

Though gratitude was found to be significantly related to trust and engagement in adult relationships, it did not significantly predict worry and anxiety of responsiveness and care of adult attachment individuals. The non-significant moderating effects of trait gratitude on either facet of adult attachment may indicate that though being a generally gracious person is important in adult relationships (Mikulincer, Shaver, & Slave, 2006; Wilkinson & Dinh, 2014), it does not differ across levels of parental attachment. Furthermore, graciousness may not have profound effects for individuals already displaying secure attachment characteristics across different relationships. Past research examining the importance of individual differences such as trauma or significant life events (Mickelson, Kessler, & Shaver, 1997; Waters, Merrick, Treboux, Crowell, Albersheim, 2000), may contribute to further considering the role of factors such as personal coping, resilience, or grit (Greenberger & McLaughlin, 1998; Maximo & Carranza, 2016; Levy & Steele, 2011) within this relationship. These factors may serve a profound function in buffering against the negative effects of less secure parental attachment security. Additionally, further assessing the impact of parenting college students as a specific population may further contribute to the literature on how to support college adjustment (Murphy, Laible, Augustine, & Robeson, 2015; Liu, Wu, & Lin, 2009; Mattanah, Lopez, & Govern, 2011).

Limitations

Though the current study examined the predictive nature of parental attachment security on the characteristics of adult attachment relationships, no causal conclusions can be inferred. Participants included emerging adult college students from a single university which may not display similar characteristics with emerging adults in general. Given the large number of participants identified as Christian and reported being involved in some amount of religious practices, the sample may have consisted of individuals that are more spiritual than the general public and thus limits the generalizability of the findings. The sample also consisted of predominately female participants and should be considered when applying results to men. Additionally, due to the cross-sectional nature of the data, the current study cannot provide information related to early parent-child relationship but rather the current nature of these relationships. Further assessing the stability or impact of early versus later parent-child relationships would be important to assess in future research. Lastly, it is fair to consider how a young adult college student population may display unique privilege (i.e. socioeconomic status) and improved parent-child relationships compared to the general emerging adult population. Additionally, due to the significant negative skew of the parental attachment security the sample may have not provided enough of a range to examine the effect of trait forgiveness and gratitude as a buffer against negative parental attachment.

Areas for Future Research

Future research may continue to examine how individual factors such as resilience, coping skills, and grit may impact the parental attachment and adult

attachment relationship. Due to the significant relationship between parent-child relationships and adult relationships, understanding factors that can buffer against the negative effects of poor parent-child attachment on other adult relationships may assist in understanding how to promote healthy functioning in emerging adulthood. Additionally, future research may examine the role of covariates such as socioeconomic status. With socioeconomic status and access to resources such as education and healthcare being important in the attachment and development process (Schechter, 2013), further exploring this as a covariate may be important for future research. Additionally, different theories explaining relationship quality (i.e., Relational Cultural Theory) may be important to consider when assessing individual factors such as racism, sexism, and socioeconomic status and other societal factors that may impact how an individual grows and develops relationships (Walker, 1999, 2001; Walker & Miller, 2001). Assessing the influence of these variables across various contexts may further the understanding of relationship functioning in emerging adults.

Conclusions

In conclusion, the present study found parental attachment security to significantly inversely predict avoidant and anxious adult attachment. These findings highlight the importance of parent-child attachment relationships impacting adults as they function in other relationships in their life. As predicted, trait forgiveness significantly moderated the relationship between parental attachment security and anxious adult attachment. Conversely, trait gratitude did not moderate the relationship between parental attachment security nor avoidant or anxious adult attachment. This may display the importance of exploring further individual differences that are promotive or protective

factors in the relationship between parental attachment and adult attachment. The limitations of the current study including the cross-sectional nature and unique characteristics of the sample are important to consider when interpreting results. Future studies may focus on evaluating the effects of individual differences, socioeconomic status, and the impact of societal factors on attachment characteristics across contexts.

APPENDIX A – Demographic Questionnaire

What is your age? _____

What is your gender?

- Male
- Female
- Other _____

Please indicate your college status:

- Freshman
- Sophomore
- Junior
- Senior

How many semesters have you attended USM?

How many number of semesters have you attended college in total?

Where do you currently live?

- On-campus, alone
- On-campus, with roommate(s)
- Off-campus, alone
- Off-campus, with roommate(s)
- At home, with caregiver(s)
- Other (please specify) _____

What is your race?

- African American/Black
- American Indian/Alaskan Native
- Asian/Pacific Islander
- Caucasian/White
- Multiracial
- Other
- Other (please specify) _____

For the purposes of this study, you will be asked to identify a primary caregiver. This should be the person primarily involved with the majority of your upbringing during your first 16 years growing up at home. Please indicate which option below best describes this primary caregiver.

- Mother
- Father
- Grandfather or other male family member (e.g., uncle)
- Grandmother or other female family member (e.g., aunt)
- Other (please describe) _____

APPENDIX B – IRB Approval Letter



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 17111602

PROJECT TITLE: Parental Attachment and Adult Attachment: The Moderating Roles of Dispositional Forgiveness and Gratitude

PROJECT TYPE: Master's Thesis

RESEARCHER(S): Christian Ammons

COLLEGE/DIVISION: College of Education and Psychology

DEPARTMENT: Counseling Psychology

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited Review Approval

PERIOD OF APPROVAL: 11/20/2017 to 11/19/2018

Lawrence A. Hosman, Ph.D.

Institutional Review Board

APPENDIX C – Electronic Informed Consent

PURPOSE: The present study seeks to better understand the relationship between parental attachment, dispositional forgiveness and gratitude, and adult relationship attachment among emerging adult college students.

DESCRIPTION OF STUDY: The present study will consist of completing several brief questionnaires on the internet. Completion of the study should take approximately 30-45 minutes, and participants will receive .5 points of SONA credit. Questions will be asked regarding your thoughts, feelings, and experiences. Credit will only be assigned for completing the survey and answering honestly.

BENEFITS: Participants are not expected to directly benefit from this research. However, the researchers hope this study will lead to a greater understanding of parenting, positive traits, and adult relationship functioning.

RISKS: There are no foreseeable risks, beyond those already present in routine daily life, involved in the present study. If a participant at any time feels distressed while answering any of the study's questions, they should contact the researcher immediately.

CONFIDENTIALITY: You will state your name on the informed consent form. All data collected from the study will be stored in aggregate form with no identifying information to ensure confidentiality. Data will be stored in a secure location for six (6) years, after which time it will be destroyed.

PARTICIPANT'S ASSURANCE: This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, Box 5147, Hattiesburg, MS 39406, (601) 266-6820. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to the primary researcher Chrissy Ammons (christian.ammons@usm.edu) or the research supervisor, Dr. Bonnie Nicholson (bonnie.nicholson@usm.edu).

If you experience distress as a result of your participation in this study, please notify the primary researcher Chrissy Ammons (christian.ammons@usm.edu) or the research supervisor, Dr. Bonnie Nicholson (bonnie.nicholson@usm.edu). A list of available agencies that may be able to provide services for you are provided below:

Community Counseling and Assessment Clinic (601) 266-4601

Student Counseling Services (601) 266-4829

Forrest General Psychology Service Incorporated (601) 268-3159

Consent is hereby given to participate in this study.

REFERENCES

- Aiken, L.S. & West, S.G. (1991). *Multiple regression: Testing and Interpreting Interactions*. Sage Publications: Thousand Oaks, CA.
- Ainsworth, M.S., Blehar, M.C., Waters, E., & Wall, S.N. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.
- Algoe, S. B., & Zhaoyang, R. (2016). Positive psychology in context: Effects of expressing gratitude in ongoing relationships depend on perceptions of enactor responsiveness. *The Journal of Positive Psychology, 11*(4), 399-415.
doi:10.1080/17439760.2015.1117131.
- Arnett, J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.
- Bartholomew, K. & Horowitz, L.M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*(2), 226-244.
- Beale, E.M.L. & Little, R.J.A. (1975). Missing values in multivariate analysis. *Journal of the Royal Statistical Society, 37*, 129-145.
- Berman, W.H. & Sperling, M.B. (1991). Parental attachment and emotional distress in the transition to college. *Journal of Youth and Adolescence, 20*(4), 427-440.
doi:10.1007/BF01537184
- Berry, J.W. & Worthington, E.L. (2001). Forgiveness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology, 48*(4), 447-455. doi: 10.1037//0022-0167.48.4.447

- Berry, J.W., Worthington, E.L., O'Connor, L.E., Parrott, L., Wade, N.G. (2005). Forgiveness, vengeful rumination, and affective traits. *Journal of Personality*, 73(1), 183-225. doi: 10:1111/j.1467-6494.2004.00308.x.
- Bowlby, J. (1969). *Attachment. Attachment and loss: Vol. 1. Loss*. New York: Basic Books.
- Bowlby, J. (1988). Attachment, communication, and the therapeutic process. *A secure base: Parent-child attachment and healthy human development*, 137-157.
- Breen, W.E., Kashdan, T.B., Lenser, M.L., & Fincham, F.D. (2010). Gratitude and forgiveness: Convergence and divergence on self-report and informant ratings. *Personality and Individual Differences*, 49(8), 932-937.
- Brennan, K.A., Shaver, P.R., Tobey, A.E. (1991). Attachment styles, gender, and parental problem drinking. *Journal of Social and Personal Relationships*, 8, 451-466.
- Bretherton, I., & Munholland, K.A. (1999). Internal working models revisited. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 89– 111). New York: Guilford Press.
- Brose, L.A., Rye, M.S., Lutz-Zois, C., Ross, S.R. (2005). Forgiveness and personality traits. *Personality and Individual Differences*, 39, 35-46.
- Browne, M.W., & Chudeck, R. (1993). Alternative ways of assessing model fit. In K.A. Bollen & J.S. Long (Eds.), *Testing structural equations models* (pp. 136-162). Newbury Park, CA: Sage.
- Burnette, J.L., Taylor, K.W., Worthington, E.L., Forsyth, D.R. (2007). Attachment and trait forgiveness: The mediating role of angry rumination, *Personality and Individual Differences*, 42, 1585-1596.

- Carlson, E.A. (1998). A prospective longitudinal study of attachment disorganization/disorientation. *Child Development, 69*, 1107-1128.
- Chen, X., Huang, X., Wang, L., & Chang, L. (2012). Aggression, peer relationships, and depression in Chinese children: A multiwave longitudinal study. *Journal of Child Psychology and Psychiatry, 53*(12), 1233-1241. doi: 10.1111/j.1469-7610.2012.02576.x
- Crockenberg, S.B. Infant irritability, mother responsiveness, and social support influences on the security of infant-mother attachment. *Child Development, 52*, 857-865.
- Crowell, J.A. Fraley, R.C. & Shaver, P.R. (1999). Measures of individual differences in adolescent and adult attachment. In J. Cassidy, & P.R. Shaver (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (pp.599-634).
- Denham, S. A., Neal, K., & Bassett, H. H. (2004). "You hurt my feelings pretty bad": Parents' and children's emotions as contributors to the development of forgiveness. Paper presented at the biennial Conference on Human Development, Washington, DC.
- Denham, S., Neal, K., Wilson, B., Pickering, S., & Boyatzis, C. (2005). Emotional development and forgiveness in children: Emerging evidence. In E. Worthington (Ed.), *Handbook of forgiveness* (pp. 127-142).
- DeShea, L. (2003). A scenario-based scale of willingness to forgive. *Individual Differences Research, 1*, 201-217.
- Einav, M. (2014). Perceptions about parents' relationship and parenting quality, attachment styles, and young adults' intimate expectations: A cluster analytic

- approach. *The Journal of Psychology: Interdisciplinary And Applied*, 148(4), 413-434. doi:10.1080/00223980.2013.805116
- Emmons, R.A., & McCullough, M.E. (eds). (2004). *The psychology of gratitude*. New York: Oxford University Press.
- Emmons, R.A., Mishra, A. (2011). Why gratitude enhances well-being: What we know, what we need to know. In: Sheldon K.M., Kashdan, T.B., Steger, M.F. (Eds.), *Designing positive psychology: Taking stock and moving forward* (pp. 248-262). Oxford University Press: New York.
- Enright, R.D. (2001). *Forgiveness is a choice*. Washington, DC: APA Press, American Psychological Association.
- Fass, M.E. & Tubman, J.G. (2002). The influence of parental and peer attachment on college students' academic achievement. *Psychology in the Schools*, 39(5), 561-573. doi:10.1002/pits.10050
- Feeney, J.A. (1999). Adult romantic attachment and couple relationships. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 355-377). New York: Guilford Press.
- Feeney, J.A. (2008). Adult romantic attachment: Developments in the study of couple relationships. In J. Cassidy, & P.R. Shaver (Eds.) *Handbook of Attachment: Theory, Research, and Clinical Applications* (pp. 456-481). Guilford Press: New York.
- Feeney, J.A. & Noller, P. Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 58(2), 281-291.

- Feldman, R., Bamberger, E., & Kanat-Maymon, Y. (2013). Parent-specific reciprocity from infancy to adolescence shapes children's social competence and dialogical skills. *Attachment & Human Development, 15*(4), 407-423.
doi:10.1080/14616734.2013.782650
- Fincham, F.D. (2009). Forgiveness: Integral to a science of close relationships? In Mikulincer M. Shaver P. (Eds.), *Prosocial motives, emotions, and behaviors*. (pp. 347-365) Washington D.C: APA Books.
- Fincham, F.D., Paleari, F.G., Regalia, C. (2002). Forgiveness in marriage: The role of relationship quality, attributions, and empathy. *Personal Relationships, 9*, 23-37.
- Fox, A. (2008). Impact of religious affiliation and religiosity on forgiveness. *Australian Psychologist, 43*(3), 175-185.
- Fraley, R.C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review, 6*(2), 123-151.
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment, 23*(3), 615-625. doi:10.1037/a0022898
- Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology, 109*(2), 354-368.

- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology, 5*, 115-134. doi:10.1037/0022-0167.51.1.115
- Gallo, L.C., Smith, T.W., & Ruiz, J.M. (2003). An interpersonal analysis of adult attachment style: Circumplex descriptions, recalled developmental experiences, self-representations, and interpersonal functioning in adulthood. *Journal of Personality, 71*(2), 141-181.
- Gordon, A.M., Impett, E.A., Kogan, A., Oveis, C., & Keltner, D. (2012). To have and to hold: Gratitude promotes relationship maintenance in intimate bonds. *Journal of Personality and Social Psychology, 103*(2), p. 257-274.
- Giudice, M.D. (2011). Sex differences in romantic attachment: A meta-analysis. *Personality and Social Psychology Bulletin, 37*(2), 193-214.
- Greenberger, E. & McLaughlin, C.S. (1998). Attachment, coping, and explanatory style in late adolescence. *Journal of Youth and Adolescence, 27*(2), 121-139.
- Griffin, B. J., Garthe, R. C., Worthington, E. J., Sullivan, T. N., Larsen, R., Lavelock, C. R., & Davis, D. E. (2016). How positive processes function in negative relationships: Dispositional gratitude moderates the association between affective need and frequency of dating violence victimization. *The Journal of Positive Psychology, 11*(4), 388-398. doi:10.1080/17439760.2015.1117124
- Hamilton, C.E. (2000). Continuity and discontinuity of attachment from infancy through adolescence. *Child Development, 71*, 690-694.
- Hankin, B. L., Kassel, J. D., & Abela, J. Z. (2005). Adult Attachment Dimensions and Specificity of Emotional Distress Symptoms: Prospective Investigations of

Cognitive Risk and Interpersonal Stress Generation as Mediating Mechanisms. *Personality and Social Psychology Bulletin*, 31(1), 136-151.

doi:10.1177/0146167204271324

Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.

Hazan, C., Campa, M., & Gur-Yaish, N. (2006). What is adult attachment? In M. Mikulincer & G.S. Goodman (Eds.), *Dynamics of Romantic Love: Attachment, Caregiving, and Sex (1st Ed.)*. Guilford Press: New York.

Hesse, E. & Main, M. (2000). Disorganized infant, child, and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic Association*, 48, 1097-1127.

Hiester, M., Nordstrom, A., & Swenson, L.M. (2009). Stability and change in parental attachment and adjustment outcomes during the first semester transition to college life. *Journal of College Student Development*, 50(5), 521-538. doi: 10.1353/csd.0.0089

Hill, P.L., Allemand, M., & Roberts, B.W., (2013). Examining the pathways between gratitude and self-rated physical health across adulthood. *Personality and Individual Differences*, 54, 92-96. doi: 10.1016/j.paid.2012.08.011

Hoy, B.D., Suldo, S.M., & Mendez, L.R., (2013). Links between parents' and children's levels of gratitude, life satisfaction, and hope. *Journal of Happiness Studies*, 14, 1343-1341. doi:10.1007/s10902-012-9386-7

Jans-Beken, L., Lataster, J., Leontjevas, R., & Jacobs, N. (2015). Measuring gratitude: A comparative validation of the dutch gratitude questionnaire (GQ-6) and short

- gratitude, resentment and appreciation tests (SGRAT). *Psychologica Belgica*, 55, 19-31, doi: <http://dx.doi.org/10.5334/pb.bd>
- Kachadourian, L.K., Fincham, F., & Davila, J. (2004). The tendency to forgive in dating and married couples: The role of attachment and relationship satisfaction. *Personal Relationships*, 11(3), 373-393. doi: 10.1111/j.1475-6811.2004.00088.x
- Kamenov, Z. & Jelic, M. (2005). Stability of attachment styles across students' romantic relationships, friendships and family relations. *Review of Psychology*, 12(2), 115-123.
- Kenny, M.E. (1987). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence*, 16, 17-29. doi: 10.1007/BF0214544
- Kenny, M.E. (1990). College seniors' perceptions of parental attachments: The value and stability of family ties. *Journal of College Student Development*, 38, 479-486.
- Kobak, R.R. & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Vol. 5. Attachment processes in adulthood* (pp. 121-149). London: Kingsley.
- Kohlberg, L. A. (1976). Moral stages and moralization: The cognitive developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, Research, and social issues* (pp. 31-53). New York: Holt.
- Lapsley, D.K., & Edgerton, J. (2002). Separation-individuation, adult attachment style, and college adjustment. *Journal of Counseling and Development*, 80(4), 484-492. doi:10.1002/j.1556-6678.2002.tb00215.x

- Levy, J.M. & Steele, H. (2011). Attachment and grit: Exploring possible contributions of attachment styles (from past and present life) to the adult personality construct of grit. *Journal of Social and Psychological Sciences*, 4(2), 16-49.
- Li, T., & Chan, D.K. (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42(4), 406-419. doi: 10.1002/ejsp.1842.
- Li, X., Zhang, J., & Zhang, Z. (2015). The effect of reciprocity dispositions on satisfaction with life in college students: Gratitude as a mediator. *Chinese Journal of Clinical Psychology*, 23(1), 129-132.
- Liao, K. Y., & Wei, M. (2015). Insecure attachment and depressive symptoms: Forgiveness of self and others as moderators. *Personal Relationships*, 22(2), 216-229. doi:10.1111/pere.12075
- Little, R.J.A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, 83, 1198-1202.
- Lin, C. (2016). The roles of social support and coping style in the relationship between gratitude and well-being. *Personality and Individual Differences*, 89, 13-18. doi:10.1016/j.paid.2015.09.032
- Liu, C., Wu, L., & Lin, S. (2009). Relationships among perception of parental marital relationships, attachment to parents, and attitudes toward marriage in single adults. *Bulletin of Educational Psychology*, 40(4), 641-662.
- Lundahl, B.W., Taylor, M.J., Stevenson, R., Roberts, D.K. (2008). Process-based forgiveness interventions: A meta-analytic review. *Research on Social Work Practice*, 18(5), 465-478.

- Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness of self and others and emotional empathy. *Journal of Social Psychology, 142*, 663-665.
- Maio, G.R., Thomas, F., Fincham, F.D., & Carnelley, K.B. (2008). Unraveling the role of forgiveness in family relationships. *Journal of Personality and Social Psychology, 94*(2), 307-319.
- Malekpour, M. (2007). Effects of attachment on early and later development. *The British Journal of Developmental Disabilities, 53*(105), 81-95.
- Main, M. & Hesse, E. (1990) Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In: Greenberg, M., Cicchetti, D., Cummings, E.M. (Eds.) *Attachment in the preschool years: Theory, research, and intervention*. (pp. 161-184). University of Chicago Press: Chicago, IL.
- Mattanah, J.F., Lopez, F.G., & Govern, J.M. (2011). The contributions of parental attachment bonds to college student development and adjustment: A meta-analytic review. *Journal of Counseling Psychology, 58*(4), 565-596. doi: 10.1037/a0024635
- Maximo, S.I. & Carranza, J.S. (2016). Parental attachment and love language as determinants of resilience among graduating university students. *Sage Open, 6*(1), 1-11.
- McCullough, M.E., Emmons, R.A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82*, 112-127. doi:10.1037//0022-3514.82.1.112

- McCullough, M.E., Fincham, F.D., & Tsang, J. (2003). Forgiveness, forbearance, and time: The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology* 84, 540-557.
- McCullough, M. E., & Witvliet, C. V. (2001). The psychology of forgiveness. In C. R. Snyder and S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 446-458). New York: Oxford.
- McCullough, M.E., & Worthington, E. (1994b). Models of interpersonal forgiveness and their applications to counseling: Review and critique. *Counseling and Values*, 39, 2-14.
- Mercer, J. (2006). Attachment, age, and change: Ties from birth to parenthood. In *Understanding Attachment*. (pp. 55-77). Praegar: Connecticut.
- Merrill, A. F., & Afifi, T. D. (2015). Attachment-related differences in secrecy and rumination in romantic relationships. *Personal Relationships*, 22(2), 259-274.
doi:10.1111/pere.12078
- Mickelson, K.D., Kessler, R.C., & Shaver, P.R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology*, 73(5), 1092-1106.
- Mikulincer, M., Gillath, O., Halevy, V., Avihou, N., Avidan, S., & Eshkoli, N. (2001) Attachment theory and reactions to others' needs: Evidence that activation of the sense of attachment security promotes empathic responses. *Journal of Personality and Social Psychology*, 81(6), 1205-1224.
- Mikulincer, M., Shaver, P.R., & Slave, K. (2006). Attachment, mental representations of others, and gratitude in romantic relationships. In M. Mikulincer & G.S.

- Goodman (Eds.), *Dynamics of Romantic Love: Attachment, Caregiving, and Sex* (p. 190-215). New York: Guilford Press.
- Mistler, B.J., Reetz, D.R., Kylowicz, B., & Barr, V. (2012). The association for university and college counseling center directors annual survey. Retrieved from http://files.cmcglobal.com/Monograph_2012_AUCCCD_Public.pdf
- Moretti, M.M. & Peled, M. (2004). Adolescent-parent attachment: Bonds that support healthy development. *Paediatric Child Health*, 9(8), 551-555.
- Murphy, T. P., Laible, D. J., Augustine, M., & Robeson, L. (2015). Attachment's links with adolescents' social emotions: The roles of negative emotionality and emotion regulation. *The Journal of Genetic Psychology: Research and Theory On Human Development*, 176(5), 315-329. doi:10.1080/00221325.2015.1072082
- Neto, F. (2007). Forgiveness, personality, and gratitude. *Personality and Individual Differences*, 43(8), 2313-2323.
- Oldfield, J., Humphrey, N., & Hebron, J. (2015). The role of parental and peer attachment relationships and school connectedness in predicting adolescent mental health outcomes. *Child and Adolescent Mental Health*. doi:10.1111/camh.12108
- Pascuzzo, K., Cyr, C., & Moss, E. (2013). Longitudinal association between adolescent attachment, adult romantic attachment, and emotion regulation strategies. *Attachment & Human Development*, 15(1), 83-103. doi:10.1080/14616734.2013.745713
- Pastorelli, C., Lansford, J. E., Luengo Kanacri, B. P., Malone, P. S., Di Giunta, L., Bacchini, D., & ... Sorbring, E. (2016). Positive parenting and children's prosocial

- behavior in eight countries. *Journal of Child Psychology and Psychiatry*, 57(7), 824-834. doi:10.1111/jcpp.12477
- Pettijohn, T.F., Naples, G.M., McDermott, L.A. (2010). Gender, college year, and romantic relationship status differences in embarrassment and self-attitudes of college students. *Individual Differences Research*, 8(3), 164-170.
- Pietromonaco, P.R., Greenwood, D., & Barrett, L.F. (2004). Conflict in adult close relationships: An attachment perspective. In W.S. Rholes & J.A. Simpson (Eds.) *Adult Attachment: Theory Research, and Clinical Implications* (pp. 267-299). Guildford Press: New York.
- Pittman, L.D. & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education*, 76(4), 343-361.
- Reynolds, S., Searight, H. R., & Ratwik, S. (2014). Adult attachment style and rumination in the context of intimate relationships. *North American Journal of Psychology*, 16(3), 495-506.
- Robinson, B.A., DiTommaso, E., Barrett, Y., & Hajizadeh, E. (2013). The relation of parental caregiving attachment to well-being and loneliness in emerging adults. *Psychology and Education: An Interdisciplinary Journal*, 50(3-4), 19-31.
- Roisman, G.I., Collins, W.A., Sroufe, L.A., & Egeland, B. (2005). Predictors of young adults' security in their current romantic relationships: A prospective test of the prototype hypothesis. *Attachment & Human Development*, 7, 105–121.
- Romig, C.A. (1998). Forgiveness and psychosocial development: Implications for clinical practice. *Counseling and Values*, 42(3), 185-199.

doi: 10.1002/j.2161-007X.1998.tb00425.x

Ruffieux, M., Nussbeck, F.W., & Bodenmann, G. (2014). Long-term prediction of relationship satisfaction and stability by stress, coping, communication, and well-being. *Journal of Divorce & Remarriage*, 55, 485-501. doi:

10.1080/10502556.2014.931767

Salvatore, J.E., Kendler, K.S., & Dick D.M. (2014). Romantic relationship status and alcohol use and problems across the first year of college. *Journal of Studies on Alcohol Drugs*, 75, 580-589. doi: 10.15288/jsad.2014.75.580

Sandage, S.J. & Williamson, I. (2010). Relational spirituality and dispositional forgiveness: A structural equations model. *Journal of Psychology and Theology*, 38(4), 255-266.

Scharfe, E. & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, 1(1), 23-43.

Schechter, I. (2013). A secure place: Attachment patterns and socioeconomic status.

Master's Thesis Pacific University. Retrieved from

<http://commons.pacificu.edu/spp/1110>.

Shi, L. (2003). The association between adult attachment styles and conflict resolution in romantic relationships. *The American Journal of Family Therapy*, 31, 143-157.

doi: 10.1080/01926180390167142

Simpson, J.A. (2007). Psychological foundations of trust. *Current Directions in*

Psychological Science, 16(5), 264-268. doi: 10.1111/j.1467-8721.2007.00517.x

- Simpson, J.A., Rholes, W.S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, 71, 899-914.
- Snyder, C.R., Lopez, S.J., & Pedrotti, J.T. (2011). Empathy and egotism: Portals to altruism, gratitude, and forgiveness. In C.R. Snyder, S.J. Lopez, & J.T. Pedrotti (Eds.), *Positive Psychology: The Scientific and Practical Exploration of Human Strengths (2nd Ed.)*. Sage: California.
- Sroufe, L.A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & Human Development*, 7(4), 349-367.
- Steger, M. F., Hicks, B. M., Kashdan, T. B., Krueger, R. F., & Bouchard, T. (2007). Genetic and environmental influences on the positive traits of the values in action classification, and biometric covariance with normal personality. *Journal of Research in Personality*, 41, 524–539.
- Tangney, J.P., Fee, R., Reinsmith, C., Boone, A.L., & Lee, N. (1999, August). *Assessing individual differences in the propensity to forgive*. Paper presented at the annual meeting of the American Psychological Association, Boston.
- Templeton, G.F. (2011). A two-step approach for transforming continuous variables to normal: Implications and recommendations for IS research. *Communications of the Association for Information Systems*, 28(4), 149-164.
- Thompson, L.Y., Snyder, C.R., Hoffman, L., Michael, S.T., Rasmussen, H.N., Billings, L.S., Heinze, L., Neufeld, J.E., Shorey, H.S., Roberts, J.C., Roberts, D.E., (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality*, 73(2), 313-360. doi: 10.1111/j.1467-6494.2005.00311.x

- Tucker, L.R. & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38, 1-10.
- Van Tongeren, D. R., Green, J. D., Hook, J. N., Davis, D. E., Davis, J. L., & Ramos, M. (2015). Forgiveness increases meaning in life. *Social Psychological and Personality Science*, 6(1), 47-55. doi:10.1177/1948550614541298
- Vivona, J. M. (2000). Parental attachment styles of late adolescents: Qualities of attachment relationships and consequences for adjustment. *Journal of Counseling Psychology*, 47(3), 316-329.
- Walker, M. (1999). Race, self, and society: Relational challenges in a culture of disconnection. *Work in Progress*, 85, Wellesley, MA: Stone Center Working Paper Series.
- Walker, M. (2001). When racism gets personal. *Work in Progress*, 93, Wellesley, MA: Stone Center Working Paper Series.
- Walker, M. & Miller, J.B. (2001). Racial images and relational possibilities. *Talking Paper*, 2, Wellesley, MS: Stone Center Working Paper Series.
- Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, 71(3), 684-689.
- Watkins, P.C., Woodward, K., Stone, T., Kolts, R.L. (2003). Gratitude and happiness: Development of a measure of gratitude, and relationship with subjective well-being. *Social Behavior and Personality*, 31, 431-452.

- Wilkinson, R.B. & Dinh, T. (2014). A social cognitive theory of gratitude: An attachment perspective, International association for relationship research biennial conference, 2014. Melbourne, Australia. Doi: 10.13140/2.1.2461.1201
- Wood, A.M., Froh, J.J., Geraghty, A.W. (2010). Gratitude and well-being: A review and theoretical integration. *Clinical and Psychology Review*, 30, 890-905. doi: 10.1016/j.cpr.2010.03.005
- Xie, A., & Yang, Y. (2015). Relationship between adult attachment and school adjustment of college freshmen. *Chinese Journal of Clinical Psychology*, 23(2), 339-342.