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Adult Attachment and Commitment to Romantic Relationships

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Abstract

Two factors that may influence the quality of romantic relationships are attachment style to one's parents and current adult attachment to romantic partners. This study utilized the attachment literature to establish a framework for examining how adult attachment to parents may be related to relationship commitment. It was predicted that gender and family structure would be associated with the quality of relationships children have with their parents and that attachment to romantic partners would mediate the relationship between attachment to parents and commitment. It was further predicted that a combination of low anxiety and low avoidance with parents (i.e., secure attachment) would predict higher interest in committing to exclusive romantic relationships, and higher levels of commitment within those relationships, than those with insecure attachment. Data was collected from college students through a computer-based survey. Results showed that attachment to mothers and fathers was predictive of interest in commitment, but not actual patterns of commitment or level of commitment to romantic partners. Mediation analyses provided evidence that attachment avoidance with mothers is transferred to romantic partners, which, in turn, is negatively related to interest in commitment. The findings from this study demonstrate the importance of the quality of relationships with parents in individuals' commitment to romantic relationships.

Adult Attachment and Commitment to Romantic Relationships

Most Americans view marriage as an important, and typical, part of life. Although 90% of all adults in America eventually get married, approximately 50% of all marriages end in divorce (Conger, Cui, Bryant, & Elder, 2000). Uncovering the predictors of the quality of romantic relationships may help to explain the reasons for this high divorce rate. Two factors that may influence the quality of romantic relationships are attachment style to one's parents, as developed in the context of childhood family relationships, and current adult attachment to romantic partners. Attachment to parents in childhood provides a working model for one's relationships with significant others (Collins, Guichard, Ford, & Feeney, 2004). In adulthood, people transfer these attachment representations from their parents to close others and romantic partners (Hazan, Gur-Yaish, & Campa, 2004). In addition to attachment styles, the quality of romantic relationships can be attributed to an individual's commitment to the relationship. However, there is limited information on how attachment contributes to emerging adults' interest in, and exclusive commitment to, romantic partners. The present study is designed to address this gap.

This paper will explore how attachment to parents in childhood relates to adult attachment to others and romantic partners, as well as commitment to relationships in emerging adulthood. First, the theoretical framework of attachment theory in infancy will be provided. Second, the links between attachment to parents and emerging adult attachment will be described, with particular attention focused on childhood family structure and individual characteristics. Third, adult attachment will be explored in terms of attachment to others and to romantic partners. Fourth, the specific issue of commitment in adult romantic relationships will

be examined, with a distinction made between committing to a relationship and the level of commitment. Finally, the framework for the current study will be provided.

Attachment Theory

Attachment theory has been applied to most types of interpersonal relationships. Inspired by the relationships infants exhibited with their caregivers, John Bowlby (1988) formulated a theory to explain the developing connection between infants and mothers. He noticed that infants behave in ways to achieve and maintain closeness to their caregivers and used these observations as the foundation for attachment theory. Mary Ainsworth built upon Bowlby's framework, noting that there are individual differences in attachment orientations and behaviors (Ainsworth & Bell, 1970). She tested the theory experimentally, thereby establishing a large empirical basis for the study of attachment behaviors. By examining infant behaviors through Bowlby's (1988) evolutionary perspective, and considering Ainsworth's notions regarding individual differences, a framework for understanding adult romantic relationships can be established.

Attachment is an adaptive quality defined as any behavior that results in a person achieving or maintaining closeness to another individual (Bowlby, 1988). Bowlby's evolutionary perspective posits that attachment offers infants a survival advantage that protects them from danger by keeping them close to their primary caregiver. Further, infants seek closeness to their caregiver to fulfill their needs and desires (Bowlby, 1958). Beginning in their first year, infants engage in a variety of behaviors to achieve proximity to their mother, including sucking, clinging, crying, smiling, and following (Bowlby, 1958; Cassidy, 1999). There are many beneficial outcomes to the infant when proximity to the caregiver is achieved and maintained. The benefits of the infant being near the caregiver include feeding, learning about the environment, and social interaction (Cassidy, 1999). An additional evolutionary function of

proximity is protection from predators, which increases the likelihood that an infant will seek the caregiver in a time of distress (Bowlby, 1958; Cassidy, 1999). Thus, attachment provides a survival advantage for the infant in serving to keep the infant close to the caregiver.

The overall goal of an infant's attachment system is the feeling of security (Bowlby, 1988; Feeney & Noller, 1996). Feelings of security with an attachment figure are determined by mental representations of that relationship, which are known as "working models." If an attachment figure acknowledges an infant's needs for protection and comfort by responding to those needs, the child will likely develop a working model of the self as being valued and the caregiver as reliable (Feeney & Noller, 1996). Therefore, attachment security with the primary caregiver allows the infant to feel comfortable exploring the environment without fear of abandonment. Alternatively, if the attachment figure frequently rejects the infant's needs, the child is likely to develop a working model of the self as incompetent or unworthy, and the caregiver as unreliable (Feeney & Noller, 1996). In these cases, the child is less likely to freely explore the environment because of the inability to rely on the caregiver protecting them from danger. Infants use their working models to predict the likelihood of the attachment figure's actions and (unconsciously) plan their responses to their attachment figure's behaviors, which make these models very important for a child's attachment to their parents (Bretherton, 1992). Therefore, it is the quality of the attachment relationship that is fundamental to the infant's social and emotional development (Cassidy, 1999).

Infant Attachment

Individual differences in infant-caregiver attachment relationships are studied with a laboratory assessment called the *Strange Situation* (Ainsworth & Bell, 1970). The infant's behaviors exhibited during the protocol are classified into different styles of attachment to

parents. The Strange Situation protocol requires that infants, typically aged 12-18 months, experience a series of separations from and reunions with their mother or other caregivers. The goal is to activate the infant's attachment system and observe the behavioral responses to the stress of being separated (Ainsworth & Bell, 1970; Weinfield, Sroufe, Egeland, & Carlson, 1999). The protocol begins with an infant and the infant's mother playing together in an unfamiliar room. A stranger then enters the room and the mother leaves. The infant's reaction to the separation from the mother and interactions with the stranger are observed. Finally, the stranger leaves and the mother reenters to reunite with the infant at which time the researchers examine the interactions for evidence of consolation by the mother and movement of the infant toward or away from the mother. This protocol is intended to be mild to moderately distressing for the infant, thereby eliciting whether infants attempt to remain within the attachment figure's protective range (Ainsworth & Bell, 1970; Feeney & Noller, 1996; Weinfield et al., 1999). Insights into the quality of infant-parent relationships are provided through the examination of the infant's behaviors upon separation from and reunion with the caregiver.

Ainsworth and Bell (1970) developed a coding system to assess individual differences in ways that infants respond to their caregivers in the Strange Situation that are classified into attachment styles. There are two general attachment classifications: secure and insecure. Secure attachment occurs when infants have mental representations that the attachment figure is available and responsive when needed (Cassidy, 1999). In the presence of the caregiver, securely attached infants tend to be sociable and engage in exploration and mastery of the environment. Securely attached infants may also occasionally check back with the caregiver while they are playing with toys. When the caregiver leaves the room, these infants may be openly distressed but also friendly toward the stranger. At the reunion of caregiver and infant, the secure infant

will seek contact with the caregiver for comfort until he or she has calmed down, and eventually return to playing with the toys (Ainsworth & Bell, 1970). These behaviors tend to be viewed positively because they indicate that the caregiver has been responsive to the infant in the past; this behavior suggests that the infant has developed a working model of high self-worth and that the caregiver is available and supportive.

Alternatively, insecurely attached individuals are less confident in their caregivers' responsiveness and may be anxious about the availability of their attachment figures. There are two types of insecure attachment: avoidant and resistant. Avoidant infants will engage with the toys in the presence of the caregiver, but are unlikely to show any signals of direct interaction with the caregiver before the initial separation. They are not likely to be openly distressed upon separation from the caregiver. When avoidant infants meet a stranger, the infant does not behave differently than if that person were the caregiver, and the infant is sometimes more responsive to the stranger than the caregiver. When the caregiver reunites with an avoidant infant, reactions of avoidant infants typically include ignoring, turning away from, or looking and moving past the caregiver. Avoidant infants are also likely to make no effort to achieve proximity or maintain contact with the caregiver. Conversely, insecure-resistant infants are likely to be unable to explore the setting freely. These infants often seek contact with the caregiver and then resist that contact once it is achieved. Resistant infants are often distressed and not easily calmed by the caregiver or a stranger. Additionally, a third insecure category of disorganized or disoriented attachment has been proposed. In this case, infants are unable to maintain one coherent attachment strategy when distressed and tend to behave in contradictory ways such as remaining still for long periods or displaying discomfort with the caregiver. However, the majority of research has focused on the three main infant attachment classifications: secure, avoidant, and

resistant, as categorized by the infant's proximity seeking, avoiding, or resisting behaviors (Ainsworth & Bell, 1970).

There is an abundant research base that supports Bowlby and Ainsworth's work on the importance of the attachment relationship with caregivers during infancy (e.g. McElwain, Booth-LaForce, & Wu, 2011; Ricks, 1985; Suess, Grossman, & Sroufe, 1992; Stams, Juffer, & van IJzendoorn, 2002; Vondra, Shaw, & Kevenides, 1995). Infant attachment relationships provide insights into the quality of caregiving in the first 18 months of life, and also establish a foundation for relationships in childhood and adolescence.

Attachment in Childhood and Adolescence

Working models provide a means for "cross-age continuity" of attachment styles (Collins & Read, 1990), and are impacted by the characteristics of family relationships in childhood and adolescence. During this time, individuals begin to transfer attachment orientations with parents to relationships with peers (Allen & Land, 1999; Laible, Carlo, & Roesch, 2004). Securely attached children typically maintain a positive working model of peers and an expectation that they will be responsive to their needs just as their parents were (Lieberman, Doyle, & Markiewicz, 1999). That is, the quality of the family relationship environment is reflected in the attachment relationships formed with friends. For example, those with more emotionally close, adaptable, and satisfying family relationships tend to have secure attachments to both parents and peers (Fraley, 2002; Pfaller, Kiselica, & Gernstein, 1998). Alternatively, those who report more conflict, less cohesion, and less parental support in their family interactions are more likely to have insecure attachments with parents and peers (Feeney & Noller, 1990; Riggio, 2004; Sprague & Kinney, 1997). These findings suggest that the foundations of attachment to parents

formed in infancy may influence feelings of self-worth and comfort in later interactions with others.

The relationships that children build with others are guided by their concepts of their own self-worth and the resulting confidence they feel in their interactions with peers. These feelings stem from the working models they have of their parents. For instance, experiences with the responsiveness and availability of parents lead children to create expectations of peer availability. Research has demonstrated that when parents were more available, children rated their relationships with peers more positively (Lieberman et al., 1999). In addition, children with more secure relationships with both parents have a higher sense of self-worth than those with insecure relationships (Booth La-Force et al., 2006). Conversely, insecure relationships with parents were related to less social autonomy in children and adolescents (Boling, Barry, Kotchik, & Lowry, 2011) such that those with less support and availability from parents were less likely to feel comfortable in interactions with peers than those with high parental support. Moreover, children who are insecurely attached to others exhibit lower self-esteem than those who enjoy secure attachments to others (Arbona & Power, 2003). The implication of these findings is that when parents are available for their children, they garner a greater sense of security that allows them to develop positive working models of themselves as competent and worthy. This sense of security with parents often leads to individuals' confidence in their own interactions with others while growing up (Feeney & Noller, 1996), including the confidence they exhibit as they form romantic relationships. Thus, these types of attachment bonds become even more prominent in emerging adulthood, when prior attachment experiences shape the approach that individuals take toward romantic relationships (Allen & Land, 1999).

Adult Attachment

Individuals' early family relationship experiences and experiences with peers influence how they function in relationships with friends and romantic partners in adulthood (Crockett & Randall, 2006; Stocker & Richmond, 2007). Adult attachment theory is defined by how comfortable individuals are using other adults for security and support (Schindler, Fagundes, & Murdock, 2010). The main premise of adult attachment theory is that the working models of attachment figures that were established through interactions with parents in infancy and childhood become the framework for interactions with friends and romantic partners in adulthood (Fraley, 2002). Positive qualities of parent-child relationships, such as high warmth and low hostility (Conger et al., 2000), have been linked to secure attachment to both parents and romantic partners, and positive qualities in later romantic relationships (Auslander, Short, Succop, & Rosenthal, 2009). For instance, a longitudinal study found that positive parent-child relationships in adolescence predicted the degree of secure attachment of individuals to others and romantic partners at age 25 (Dinero, Conger, Shaver, Widaman, & Larsen-Rife, 2008). In another study, participants' attachment to parents was assessed with the Strange Situation in infancy and related to the quality of their romantic relationships at age 19 (Roisman, Collins, Sroufe, & Egeland, 2007). It was found that infant attachment security was predictive of adult romantic relationship quality and perceptions of romantic partners, in that those who were more securely attached to parents in infancy reported higher quality romantic relationships. Thus, qualities of attachment relationships are developed through early life experiences and transferred into adulthood, with similar patterns commonly present in adult friendships and romantic relationships.

Drawing from Hazan and Shaver's (1987) three-category adult attachment typology analogous to that of Ainsworth's model, Bartholomew and Horowitz (1991) developed a four-

factor model that reflects a more refined representation of attachment styles with which to categorize adult attachments with friends and romantic partners. The four-category model is comprised of two interpersonal dimensions: anxiety and avoidance (Bartholomew & Horowitz, 1991). Anxiety is the degree to which individuals tend to worry about rejection, abandonment, and being unloved by others. Avoidance is the degree to which an individual avoids closeness with others, maintains independence, and lacks trust in others. Traditionally, through the use of self-report methods, individuals were scored on each dimension and then classified into one of the four attachment orientations: secure, preoccupied, dismissing-avoidant, and fearful-avoidant (see Figure 1). Individuals are considered *secure* when they are low on both anxiety and avoidance, *preoccupied* when they are high on anxiety and low on avoidance, *dismissing-avoidant* when they are low on anxiety and high on avoidance, and *fearful-avoidant* when they are high on both anxiety and avoidance (Feeney & Collins, 2001). Because of conceptual and statistical issues with categorizing individuals in research (Fitzsimons, 2008; van Walraven & Hart, 2008), more contemporary attachment research has strayed from using the typological approach and begun conceptualizing individual differences in adult attachment as variations on the continuous dimensions of anxiety and avoidance (Fraley & Waller, 1998; Locke, 2008). Characteristics of adult relationships with friends and romantic partners vary along the independent dimensions of attachment. People who are high in either anxiety or avoidance are considered insecurely attached. Individuals who are highly anxious tend to worry about their attachment figure being unresponsive and tend to focus on whether their friends and partners will be available to them (Fraley & Bonanno, 2004; Locke, 2008), whereas people who are low on this dimension tend to feel relatively secure about the attachment relationship. Highly avoidant adults often withdraw from close relationships and feel uneasy with closeness (Fraley &

Bonanno, 2004; Locke, 2008). However, those who are low on the avoidance dimension tend to feel comfortable opening up to others and depending on them (Fraley & Bonanno, 2004). With this more nuanced method of measuring adult attachment, the traditional typologies can still be identified through interactions between two continuous measures. For instance, secure individuals are low on both anxiety and avoidance, therefore they generally view themselves as worthy of affection (low anxiety) and are comfortable with mutual dependence and closeness (low avoidance) (Locke, 2008). Many studies have explored the relationship between the attachment dimensions and qualities of friendships and romantic relationships in adulthood.

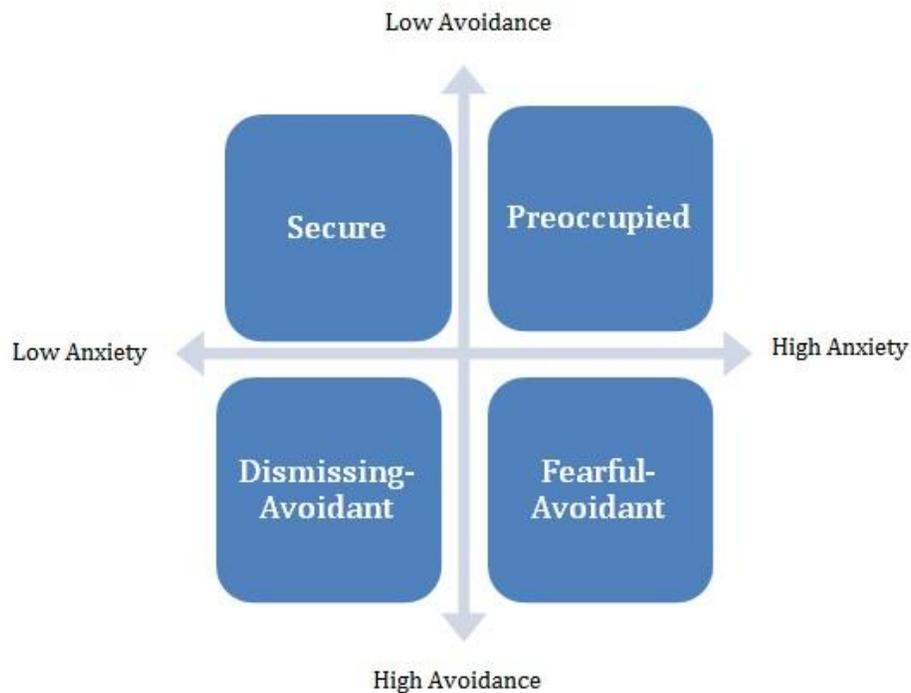


Figure 1. Two-dimensional four-category model of attachment.

Adult attachment in friendships. Relationship quality in friendships varies among the dimensions of attachment anxiety and avoidance. Individuals who are low on both anxiety and avoidance (secure) in their relationships with close others tend to perceive their friends as being

responsive, caring, and reliable (Collins et al., 2004). Also, secure individuals report their friendships as being more satisfying, and their friends report that secure individuals are better at handling conflict in their relationships (Bippus & Rollin, 2003). Therefore, because individuals low in anxiety and avoidance tend to be comfortable with themselves and with others, they have more positive qualities in their friendships. Although characteristics of secure adult attachment are fairly straightforward, characteristics of the insecure dimensions are more complex.

Insecure attachments to friends in adulthood are classified as high in either avoidance or anxiety, or a combination of both. Individuals who are high in anxiety tend to lack confidence in their friends' availability and likelihood of responsiveness to their needs, but may have a high desire for closeness (Vungkhanching, Sher, Jackson, & Parra, 2004). Alternatively, those who are highly avoidant often distance themselves from close relationships in order to maintain a positive self image or minimize their attachment needs (Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2006). Also, highly avoidant individuals often have strong distrust of others who exhibit minimal emotional expressions, avoid intimacy, and have a fear of closeness (Collins et al., 2004; Feeney & Noller, 1990; Hazan & Shaver, 1987). Collectively, insecure attachment with close others is characteristic of low quality relationships with friends. These individual differences of adult attachment to friends have also been applied to the specific case of adult attachment to romantic partners.

Adult attachment in romantic relationships. Early attachment relationships with parents and friends lay the foundation for adult attachment in romantic relationships; specifically, working models developed with parents and subsequent evaluations of self-worth, are carried over into romantic relationships. The adult attachment bond is designed to reflect a mutual relationship of seeking protection and comfort between romantic partners (Hazan et al.,

2004). Research has demonstrated that those who are securely attached to their partners enjoy higher quality romantic relationships. For example, people who are low in both anxiety and avoidance with partners tend to be in relationships characterized by increased levels of interdependence, trust, commitment, and satisfaction (Simpson, 1990), as well as higher in levels of cohesion and expressiveness (Kapanee & Rao, 2007). They characterize their relationship experiences as being happier, more caring, and exhibiting greater trust than those who are high in anxiety and/or avoidance (Hazan & Shaver, 1987). These positive qualities in romantic relationships could be a result of secure partners' comfort with closeness and being able to depend on others (Collins et al., 2004).

Conversely, those who are insecurely attached to their partners may experience more negative outcomes in their romantic relationships. Generally, they tend to show decreased levels of interdependence, trust, commitment, and satisfaction with their partners (Simpson, 1990). Moreover, the levels of anxiety and avoidance in the relationship are likely to lead to different relationship qualities. For instance, the romantic relationships of more anxious individuals tend to be lower on cohesion, adaptability, and satisfaction than low anxiety individuals (Pfaller et al., 1998). They have also characterized their romantic relationship experiences as marked by jealousy and emotional fluctuations (Hazan & Shaver, 1987). Alternatively, highly avoidant individuals may be self-sufficient, self-reliant, independent, and tend to not depend on others for support (Sprague & Kinney, 1997; Weiss, 1979). These outcomes in the qualities of romantic relationships could be a result of the lack of comfort and trust insecure individuals feel with close others. Additionally, the quality of romantic relationships could be indicative of the romantic relationships observed during childhood. The dynamics of childhood family relationships and family structure could relate to adult attachment to partners in romantic relationships.

Family Structure

Family structure histories are believed to set the foundation for adult romantic attachment orientations (Cavanagh, Crissey, & Raley, 2008). Two types of family structures thought to have an effect on attachment to parents and later to romantic partners are intact (two-biological parent) and divorced parent (single or remarried) families (Cavanagh, et al., 2008). Children of intact families have been found to be more securely attached to parents and others than children of divorced parents (Brennan, Clark, & Shaver, 1998). They have also reported less conflict and more family cohesion when growing up (Sprague & Kinney, 1997). Two-parent families typically include available parents, an intimate parental relationship, and well-functioning family relationships that the children can observe and experience. The dynamics of intact families tend to show increased trust in the family relationships. Therefore, the positive aspects of an intact family structure may influence greater attachment security toward partners in adulthood.

Conversely, parental divorce often leads to negative qualities of romantic relationships in adulthood. Children of divorced parents are more likely to report having a fearful-avoidant (high anxiety, high avoidance) attachment to their romantic partners, perhaps as a result of feeling less support from their families during childhood (Cavanaugh et al., 2008). This lack of support could cause adolescents and young adults who grew up in these families to expect that others will be unavailable to meet their needs, leading them to avoid closeness (despite their desire to be close). Also, because children are more dependent on their parents in younger childhood, they tend to be more affected by divorce when it occurs at younger ages, such as during pre-school rather than during older childhood (Sirvanli-Ozen, 2008). In later ages, children are more able to seek comfort from friends and remove themselves from conflict. It has been found that although younger children experience the immediate effects of divorce more keenly, the negative

outcomes tend to affect older children later in life, such as in adulthood (Dilek, 2008). Adult children of divorced parents have reported feeling less trust for others (Sprague & Kinney, 1997), which could be explained by the highly avoidant attachment that children of divorce report (Brennan et al., 1998). One study found that students from divorced families were inclined to have more sexual partners than those from intact families (Sprague & Kinney, 1997). These individuals have also been shown to transition into marriage or cohabitation sooner than others (Cavanaugh et al., 2008). Although children of divorce often get married sooner than those from two-parent families, they are also likely to get divorced; possibly because of the lack of relationship skills these individuals have acquired (Amato & DeBoer, 2001).

The impact of divorce may be exacerbated by the custodial parent's dating behaviors. Children of divorce often reside with one parent, some of whom actively date, and some who remain single. Individuals who grew up in single-parent families tend to have an attachment orientation toward significant others that is dependent upon the dating activities of their parent. Because parent relationships are one of the most socializing influences in a child's life, when parents are divorced, the socialization for a strong relationship is weakened (Sirvanli-Ozen, 2008). However, children from single parents who are romantically involved in a stable relationship are likely to be more secure and comfortable in other relationship situations (Cavanagh et al., 2008). Parent involvement in a stable relationship offers children the opportunity to observe and learn relationship skills, socializing them to seek more stable relationships. Alternatively, children who grew up with single parents who did not maintain stable relationships may have had fewer opportunities to learn interpersonal dating skills and may be more insecure with partners and uncomfortable in relationships (Cavanagh et al., 2008). The characteristics of these family structures have shown to be related to the behaviors of the

offspring in romantic relationships in adulthood, such as the intergenerational transmission of marriage and divorce (Crowell, Treboux, & Brockmeyer, 2009; Crowell, Treboux, & Waters, 2002; Sirvanli-Ozen, 2008). Therefore, family dynamics are an important aspect of an adult's history that could influence the quality of romantic relationships. In addition to these family experiences shaping attachment toward others and romantic partners in adulthood, personal characteristics have also been shown to have an influence.

Personal Characteristics

Gender. Whereas research on gender differences in infant parental attachment tends to be consistent, the research is less clear on the gender differences in adult attachment to romantic partners. In adulthood, the studies of attachment differences are based on perceptions of the attachment relationships, such as with parents or romantic partners. Given the abundance of research that clearly illustrates there are gender differences in attachment to parents, it is likely that these differences transmit to romantic relationships as well. However, current research has shown inconsistent findings for gender differences in attachment to romantic partners.

Research demonstrates that adult perceptions of childhood relationships with parents differ by gender. Specifically, positive ratings of cross-gender parent-child relationships have been a common pattern of findings. In one study, respondents rated their opposite-sex parent more positively than the same-sex parent (Hazan & Shaver, 1987). For instance, females saw fathers as warmer and mothers as more critical, where males perceived the opposite pattern for their parents' caregiving. Parents have also been perceived to react more negatively to their same gender child as compared to an opposite gender child (Noller, 1980). For instance, mothers have been found to use more negative statements toward daughters than toward sons (Lanvers, 2004). These patterns may have influenced adults to report a more secure relationship with the opposite-

sex parent than with the same-sex parent. Although much research examines mother-child dyads only, it is apparent that father-child dyads are important in attachment formation as well (Lanvers, 2004). Given that relationships with mothers and fathers can differ with their children, research should consider analyzing gender differences in attachment to each parent separately.

Some studies indicate that there are gender differences in adult attachment to romantic partners, whereas many show none. For example, because of the stereotype that females are more relationship-oriented and sometimes “clingy” toward romantic partners (Hazan & Shaver, 1994), it has been hypothesized that females are more anxiously attached to close others than males. Additionally, the male stereotype of evading intimacy has been used to explain the finding that males are more avoidant than females (DelGuidice, 2011; Hazan & Shaver, 1994; Laible et al., 2004; Mickelson, Kessler, & Shaver, 1997). However, in a meta-analysis on gender differences in attachment at different ages, Chopik, Edelstein, and Fraley (2012) found that men and women were very similar to each other with respect to attachment styles. Findings showed females reported slightly more anxious attachment to romantic partners than males in early adulthood, as well as slightly more avoidant attachment to romantic partners in older adulthood; however, these differences were very small, and many gender differences were not found with their college-aged sample. Similarly, other researchers found no gender differences in attachment to romantic partners: males and females did not rate disproportionately high on either dimension (Hazan & Shaver, 1994; Mohr, Selterman, & Fassinger, 2013). The finding for similarities between males and females support Bowlby’s notion that all human beings have an innate need for felt security (Hazan & Shaver, 1994).

Sexuality. Along with gender differences, research has examined individual differences in attachment with regards to sexual orientation. There is an abundance of evidence that

attachment to parents and romantic partners do not differ based on sexual preference. Much of the attachment literature excludes non-heterosexual participants mainly because they comprised a small percentage of the sample (Brumbaugh & Fraley, 2010; Crockett & Randall, 2006), they were specifically looking at romantic relationships between heterosexual couples (Dewall et al., 2011; Pistole & Clark, 1995), or do not mention assessing sexual preferences (Conger et al., 2000; Schindler et al., 2010). Of those studies on adult romantic attachment that have included non-heterosexual participants, no significant differences in attachment or commitment to romantic partners by sexual orientation emerged (Hazan & Shaver, 1987; Schrachner, Shaver, & Gillath, 2008). This failure of most studies to find significant differences is also extended to studies on relationship quality. A study on the differences in heterosexual and homosexual relationship quality found no differences in the couples' love for one another, relationship satisfaction, or attachment to one another based on sexual preferences (Kurdeck, 2002; Kurdeck & Schmitt, 1986; Peplau & Fungerhut, 2007). However, Mohr et al. (2013) recently compared findings from a study on heterosexual attachment and relationship functioning to a homosexual sample, noting that anxiety was especially salient for homosexual couples, which could be a result of the exposure to negative societal beliefs regarding their sexual preferences. Thus, a majority of the literature has found similarities between homosexual and heterosexual individuals with regards to attachment to romantic partners and romantic relationship functioning, supporting Ainsworth's (1989) notion that heterosexual pair bonds and same-sex pair bonds are similar; research should therefore consider both groups together.

Summary

Attachment theory has been extensively explored in many aspects of relationships. Beginning in infancy, the relationships between childhood attachments to parents and

attachments to peers have been examined as well as the many outcomes associated with attachment style during those developmental stages. Those attachment outcomes and relationships begin being transferred to romantic partners in late adolescence and early adulthood. Much of the literature on adult attachment is focused on behaviors within attachment relationships, such as the quality of the relationship. Most often, the quality of romantic relationships is described in terms of commitment. Although there is a large body of research on commitment within romantic relationships, there is a lack in understanding for how attachment style is related to forming committed relationships with romantic partners. Thus, it is of interest to examine how attachment orientations are related to commitment to adult romantic relationships.

Attachment and Commitment

Commitment is an important aspect of romantic relationships, both in terms of the decision to commit to a relationship and the level of commitment one exhibits. One way of measuring commitment is through the decision to begin a romantic relationship. In this context, committing is defined as the act of entering into a romantic relationship in which both partners agree to date exclusively (Fagundes & Schindler, 2012). Another way to measure commitment is to examine the level of commitment individuals have to their current partner. In this context, commitment to a relationship is generally defined as intentions to remain in the relationship, commonly defined by duration of and investment in the relationship (Kelly, 1983). The adult attachment literature provides a suitable framework for exploring the connection between attachment to parents, attachment to romantic partners, and the level of commitment experienced in the relationship.

Although many romantic relationships during college tend to be short-term rather than long-term and committed, 98% of college students say they would like to find an exclusive partner at some point in their lives (Bhathal, 2011). The choice to commit oneself to a romantic relationship has rarely been studied, especially with regards to attachment theory (Bartholomew & Harowitz, 1991; Schindler et al., 2010). Although few studies have explored who commits to relationships, trends toward attachment influences in commitment can be seen through research on the behaviors of individuals within a romantic relationship context. For instance, secure individuals tend to be more involved than insecure individuals in their close relationships (Bartholomew & Harowitz, 1991). The only known study on committing to relationships established that anxious individuals desired close relationships but did not actually commit to relationships more often than any other attachment style; in addition, highly avoidant individuals were less likely to commit to a relationship than those who reported low avoidance (Schindler et al., 2010). It is possible that anxious individuals may want to commit in order to fulfill their dependency needs but potential partners may not agree with their desires, whereas avoidant individuals may tend to evade closeness to minimize eventual disappointment (Bartholomew & Harowitz, 1991; Schindler et al., 2010). Although little work has been done to explore the decision to exclusively commit to romantic relationships, a number of studies have examined the level of commitment in existing romantic relationships.

Some studies have explored level of commitment to relationships in relation to attachment styles. It has been found that securely attached adults are more committed to their romantic partners than insecurely attached individuals (Keelan, Dion, & Dion, 1998; Pistole & Clark, 1995; Simpson, 1990). This finding could reflect secure individuals' comfort with closeness and intimacy compared to insecure individuals (Joel, MacDonald, & Shimotomai,

2011), and/or a result of secure individuals having had a greater number of close and trusting relationships. Higher commitment could also stem from secure adults' positive mental representations of their partners (Keelan et al., 1994). Additionally, differences in levels of commitment between avoidant and anxious individuals have been found (Joel et al., 2011). On the one hand, individuals with avoidant attachments to partners are less committed to their relationships than anxious people (DeWall et al., 2011), possibly due to their desire to maintain distance from that partner. In contrast, adult attachment anxiety is not significantly related to level of commitment (Joel et al., 2011). This lack of association could reflect internal conflicts regarding the desire for closeness but uncertainty about partners' affections. Collectively, the findings suggest that those with secure attachments to partners have higher levels of commitment in their relationships than those who are high in attachment anxiety and/or avoidance.

The Current Study

The present study draws upon the attachment literature as a foundation for examining how attachment to parents is related to attachment to romantic partners in adulthood. In particular, this study focused on the relation between attachment and commitment. The proposed model (see Figure 2) suggests that gender and family structure are associated with the quality of relationships with parents, which is related to adult attachment to romantic partners. In turn, it is the quality of the attachment relationship (i.e., levels of adult attachment anxiety and avoidance with parents) that influences individuals' interest in committing to an exclusive romantic relationship, and the level of commitment within those relationships. This study helps to fill the gaps in the literature on attachment and commitment.

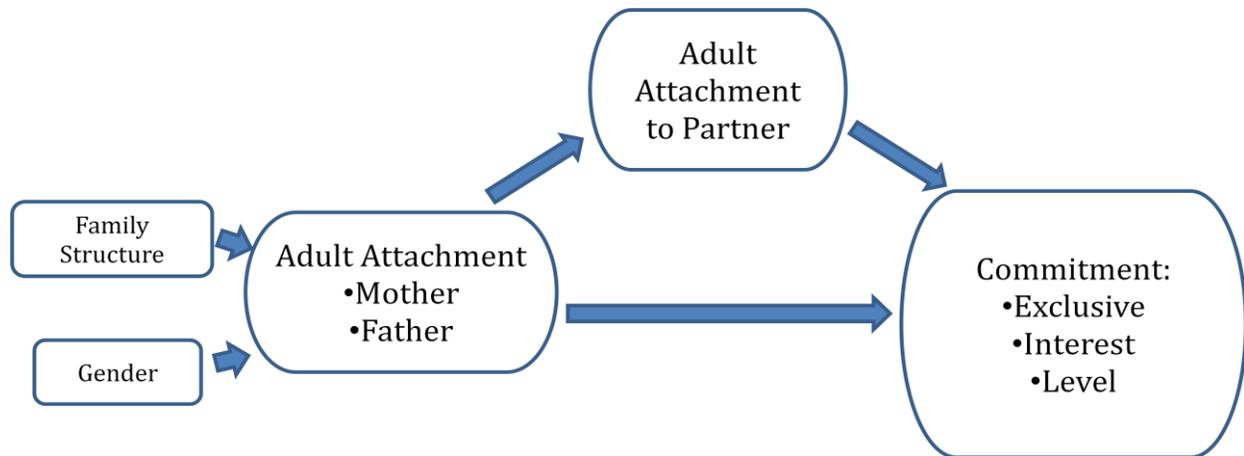


Figure 2. Hypothesized conceptual model.

Hypotheses

Adult Attachment to Parents.

1. Adult attachment to parents would differ by family structure.

Adults from intact (two-biological parent) families would report less anxiety (H1a) and less avoidance (H1b) with parents than those from divorced parent families.

2. There would be a cross-gender effect for attachment to parents: males would report less anxiety (H2a) and less avoidance (H2b) in their relationships with mothers relative to fathers; females would report less anxiety (H2c) and less avoidance (H2d) in their relationships with their fathers relative to their mothers.

Adult Attachment and Commitment.

3. Attachment to parents would predict commitment to exclusive romantic relationships.

More attachment avoidance would predict fewer committed romantic relationships (H3a). More attachment anxiety would predict more short-term committed romantic relationships (H3b). Secure individuals, defined as the

combination of low anxiety *and* low avoidance, would report fewer long-term relationships (H3c).

4. The relationship between dimensions of attachment to parents and interest in commitment would be explained by dimensions of attachment with romantic partners.

Greater parent attachment anxiety would predict higher interest in commitment (H4a). Greater parent attachment avoidance would predict lower interest in commitment (H4b). Secure individuals, defined as the combination of low anxiety *and* low avoidance, would report the highest interest in commitment (H4c).

Attachment to romantic partners would mediate these relationships (H4d).

5. The relationship between dimensions of attachment to parents and level of commitment would be explained by dimensions of attachment to romantic partners.

Higher parent attachment anxiety would predict higher levels of commitment (H5a). More parent attachment avoidance would predict low levels of commitment to current romantic relationships (H5b). Secure individuals, defined by the combination of low anxiety *and* low avoidance, would report the highest levels of commitment to a current romantic relationship (H5c). Attachment to romantic partners would mediate these relationships (H5d).

Method

Participants

One hundred seventy three students participated in the current study. Because the study was restricted to only those who were between the ages of 18-25, eighteen participants were removed from the dataset because they either did not fit the age criteria ($n=8$), entered invalid

ages ($n=4$), or did not provide an age at all ($n=6$). One additional participant was removed because he did not complete most of the predictor measures.

The final sample included 80 male and 74 female college students ($N=154$). Participants were 18-25 years old ($M=19.94$, $SD=1.58$), the age group considered to be *emerging adulthood* (Arnett, 2000). Only those who were not married were included in the study. The sample was predominantly White (43.5%) and Hispanic (34.4%). Preliminary analyses showed that, with few exceptions, attachment did not differ according to sexuality or gender so all groups were analyzed together. See Table 1 for a summary of the sample demographics.

Procedure

Students were recruited through the Human Participant Pool (HPP) at a moderate sized state university for participation in the *College Student Interests and Experiences Study*. They were told that the survey focused on the interests and interpersonal relationships of college students from the past, present, and future. Participants who signed up for a designated time for data collection came to an on-campus research laboratory where they read and signed informed consent and were given instructions. After being given an opportunity to ask questions, they began the online survey. It took participants an average of 17 minutes ($SD=5.00$ minutes) to complete the survey. Upon completion, participants were debriefed and given information about where to obtain results of the study. Compensation was provided in the form of HPP credits toward their qualifying course.

Table 1
Demographics

Variable	<i>n</i> (%)	<i>M</i> (<i>SD</i>)	<i>Range</i>
Age		19.95 (1.58)	18-25
Gender			
Male	80 (51.9%)		
Female	74 (48.1%)		
Ethnicity			
African American	4 (2.6%)		
Asian/Pacific Islander	22 (14.3%)		
Hispanic/Latino	53 (34.4%)		
White/Caucasian	67 (43.5%)		
Other	8 (5.2%)		
Ever committed to Relationship			
Yes	111 (72.5%)		
No	42 (27.5%)		
Relationship Status			
Single (not committed)	87 (56.5%)		
In exclusive committed relationship	67 (43.5%)		
Class Standing			
Freshman (0-30 units)	44 (28.6%)		
Sophomore (31-60 units)	51 (33.1%)		
Junior (61-90 units)	47 (30.5%)		
Senior (91-120 units)	12 (30.5%)		
Sexuality			
Heterosexual	133 (88.7%)		
Non-heterosexual	17 (11.0%)		
Parent Relationship Status			
Together	113 (73.4%)		
Separated	41 (26.6%)		

Measures

Parent information. Participants were asked to provide their parents' relationship status. Most participants (82.5%, $n=128$) lived with both their mother and father growing up. If participants responded that their parents were separated or divorced (26.5%, $n=41$), they were then asked how old they were when their parents separated ($M=9.23$, $SD=6.44$, $Range=0-23$ years old) and with which parent they lived for the majority of their childhood. Of those with separated parents, 92.7% ($n=38$) reported having had contact with their biological mother and 80.5% ($n=33$) reported having had contact with their biological father throughout childhood. If the parents had separated, participants were also asked about the dating histories of the parent with whom they lived. The majority of participants with single parents reported that their parent did not date at all (36.6%, $n=15$) or was in one long-term relationship (31.7%, $n=13$) when they were growing up.

Predictor variables.

Attachment to parents. Attachment to mothers and fathers was measured with the Experiences in Close Relationships-Relationship Structures (ECR-RS) questionnaire (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). The self-report measure is used to assess adult attachment-related anxiety and avoidance in multiple relationship contexts. The measure is comprised of nine items each for mother and father taken from the original Experiences in Close Relationships (ECR) questionnaire, which is widely used for assessing attachment to close friends and romantic partners in adulthood (Brennan et al., 1998). Participants indicated which mother or father figure they were responding for and responded for each separately. Most participants responded for their biological mother ($n=150$, 97.4%) and their biological father ($n=146$, 95.4%). Other mother figures included two stepmothers, one adoptive mother, and one

older sister. Additional father figures included three stepfathers, one adoptive father, and one uncle. Two participants indicated that their fathers were deceased and did not designate another father figure or complete the ECR-RS measure for their fathers.

In the ECR-RS, three items assessed attachment anxiety and six items assessed avoidance with each parent, separately. A sample item for the anxiety subscale is “I worry that this person won't care about me as much as I care about him or her.” A sample item from the avoidance subscale is “I don't feel comfortable opening up to this person.” The items were rated on a 7-point scale (1=strongly disagree; 7=strongly agree). Mean item scores for each subscale were calculated. High scores on the anxiety or avoidance subscale indicated more anxious attachment and more avoidant attachment, respectively (see Table 2). Lower scores on *both* the anxiety and avoidance subscales indicated higher attachment security. Reliability coefficients for the anxiety subscale for mothers and fathers were $\alpha=.89$ and $\alpha=.94$, respectively. Reliability coefficients for the avoidance subscale for mothers and fathers were $\alpha=.92$ and $\alpha=.89$, respectively. The ECR-RS has shown to be a valid measure of attachment given its positive relationship with the ECR. The measure has also shown to have similar psychometric properties as the ECR (Fraley et al., 2011).

Adult attachment to romantic partner. Attachment to romantic partners was also measured with the ECR-RS questionnaire (Fraley et al., 2011). This measure was only given to those individuals who indicated that they have ever been in a committed romantic relationship (72.1%, $n=111$). Participants who were currently in a romantic relationship responded for their relationship with their current partner (58.6%, $n=65$), and if participants were not currently in a romantic relationship they responded for their most recent partner (41.4%, $n=46$). The items and scoring remained the same as for parents; however instructions were changed to reflect romantic

partners. Reliability coefficients for the avoidance and anxiety subscales were $\alpha=.86$ and $\alpha=.92$, respectively (see Table 2).

Table 2

Descriptives for ECR-RS attachment dimensions for mothers, fathers, and partners

Scale	<i>M (SD)</i>	<i>n</i>	Reliability (α)
Mother			
Avoidance (6 items)	2.74 (1.74)	154	.92
Anxiety (3 items)	1.32 (.89)	154	.89
Father			
Avoidance (6 items)	3.47 (1.51)	152	.89
Anxiety (3 items)	1.54 (1.23)	152	.92
Partner			
Avoidance (6 items)	2.16 (1.46)	111	.86
Anxiety (3 items)	2.41 (1.71)	111	.92

Outcome variables.

Interest in commitment. In order to increase construct validity, a pluralistic approach (i.e., using multiple methods to measure the same construct) was taken toward measuring interest in commitment to romantic relationships. First, interest in commitment was assessed through content analysis. Participants were given the following prompt: “During college, you make many decisions and have many experiences that shape your future. Think about where you will be 10 years from now; please describe what you anticipate your career, recreational activities, and personal relationships to be like.” Their open-ended responses were coded by two raters for commitment themes and words. The responses were rated holistically on a 5-point scale for intensity of interest in relationship commitment (1=no mention or opposing view of commitment theme; 5=extremely interested in commitment). Examples of a response containing no commitment theme (a score of 1) are: “In ten years I will be working on my masters degree in psychology and running for a Nike team” or “I do not plan on being in a relationship”. A statement that exhibits extreme interest in commitment (a score of 5) contained specific details or plans for a relationship, for example: “I am ready to meet the man who I want to marry and start

a family with. I would like to raise my children in California, and start a family at the same time as my friends.” or “I anticipate my relationship to be strong, close, and as honest as it is now.”

Two coders were trained on sample statements and compared with the master coder, and to each other, weekly until the reliabilities were above $r=.80$ for each coder. Then the coders each rated all of the statements ($n=154$) and weekly meetings were held to discuss discrepancies and to prevent rater drift. The final reliability between the two coders was $r=.76$ ($n=154$). The ratings were averaged across the two coders and the mean rating was used as the measure of interest in commitment from the content analysis ($M=2.93$, $SD=1.20$, $Range=1-5$).

Interest in commitment to romantic relationships was also measured with a ranking task of potential campus-wide student interest web sites. The purpose of this task was to assess interest in commitment beyond basic self-report methods. Participants reviewed a screen shot of the homepage of potential websites. The websites all had the same formatting and coloring, as well as a picture depicting the topic. The four topics included career, cooking, committed relationships, and activities/hobbies. Participants were asked to rate and rank four websites based on how interested they would be in seeing the websites shared with students. They rated their interest in each screenshot individually on a 7-point scale (1=Not at all interested; 7=Extremely interested), and ranked the website screenshots in relation to each other from 1 to 4 (1=Most interested in this website; 4= least interested in this website). A higher individual website rating indicated higher interest in that topic and a high ranking (1 out of 4) indicated more interest in that topic than the other three; therefore those who ranked the committed relationships website higher than the others were coded as interested in commitment ($n=41$, 26%).

Third, a measure of dating goals was used to assess interest in commitment. The Social Dating Goals Scale (SDGS; Sanderson & Cantor, 1995) examines the goals that one possesses

for maintaining identity and for intimacy when in a dating relationship. Sample items include “In my dating relationships, I try to date people with whom I might fall in love” and “In my dating relationships, I try to consistently date someone.” The 13-items were rated on a 5-point scale (1=Disagree Strongly; 5=Agree Strongly). Mean-item scores for the measure were calculated ($M=3.48$, $SD=.31$, $n=154$). Higher scores on the scale typically indicate greater focus on intimacy and lower scores indicate a greater focus on identity (Sanderson & Cantor, 1997; Sanderson & Karetsky, 2002). However, the measure was not reliable with a Chronbach’s alpha of .45. Therefore, because the measure was being used to examine interest in commitment, only the nine intimacy items were used ($M=4.26$, $SD=.49$, $n=154$). Higher scores on the intimacy subscale indicated higher focus on intimacy goals whereas a low score indicated lower focus on intimacy. This subscale showed acceptable internal consistency ($\alpha=.73$).

To ensure that the interest in commitment measures were measuring the same construct, convergent validity was assessed for the three measures. A Pearson’s correlation was used to test the relationship between the continuous rating for the “committed relationship” website ($M=5.06$, $SD=1.81$, $n=154$) and the SDGS intimacy subscale ($M=4.26$, $SD=.49$, $n=154$). This analysis showed that the two measures were correlated ($r=.39$, $p<.001$). Also, the website rankings were dichotomized between those who ranked the “committed relationships” highest and those who did not. An independent means t-test was run to assess whether those who ranked the “committed relationships” website highest ($M=4.41$, $SD=.36$, $n=40$) would have the higher scores on the intimacy subscale than those who did not ($M=4.21$, $SD=.52$, $n=114$). A significant difference was found in the expected direction, $t(98.08)= 2.66$, $p=.01$, $d=.54$. Additionally, the relationship between the content analysis and the SDGS was assessed. A Pearson’s correlation was conducted to assess the relationship between the content analysis and the SDGS intimacy

scale. Results showed that these two measures were correlated ($r=.26, p=.001$). Taken together, these relationships between the SDGS interest in commitment measure, the website ratings, and the content analysis, provide evidence for convergent validity. Because the strengths of the relationships were low to moderate, future research should re-assess the convergent validity between the three measures. As the established scale, the SDGS was used as the outcome variable in the analyses to test the hypotheses for interest in commitment.

Exclusive committed romantic relationship. Participants were provided with the definition of an exclusive committed romantic relationship: *An exclusive relationship in which both partners would say that they are “going steady” and are not dating other people.* Participants were then asked whether they have ever been in an exclusive committed romantic relationship. For those who responded positively, retrospective self-reports of exclusive relationships were provided. Participants were asked to provide the start and end dates of each relationship along with the initials of each former partner. This information yielded data indicating whether the participants have ever actually committed to relationships, how many relationships they have had in the past, and the duration of each relationship. For those with a current partner, the start date of that relationship was provided.

Forty two participants indicated that they had never been in a committed relationship; of those, 23 (53.5%) indicated that they have never had the opportunity. For those who have had a romantic relationship ($n=111$), the highest number of relationships reported (including current) was six ($M=2.67, SD=1.31, n=108$). Relationship lengths were calculated for all past relationships. The number of participants with valid relationship lengths is much lower than the total sample because some participants did not follow instructions when reporting their past relationships ($n=17$), some reported their current relationship which they were instructed not to

($n=13$), and some reported invalid dates ($n=3$). The number of short term relationships for each participant was calculated by adding together the number of relationships each person reported that were less than 12 months in duration ($M=.87$, $SD=1.11$, $Range=0-5$, $n=78$). The number of long term relationships for each participant was calculated by adding together the number of relationships each person reported that were greater than or equal to 12 months in length ($M=.85$, $SD=.70$, $Range=0-4$, $n=78$).

Level of commitment. Those who indicated that they have been in a romantic relationship ($n=111$) were asked to complete this measure for their current or most recent partner. Participants completed the Murray, Holmes, Griffin, Bellard, and Rose (2001) Commitment Scale. This is a two-item measure assessing the level of commitment one has to their romantic partner: “I am very committed to maintaining my relationship” and “I have made a firm promise to myself to do everything in my power to make my relationship work.” The two items were rated on a 6-point scale from “not at all true” to “completely true” of their relationship. Mean-item scores were calculated for current partner ($M=5.58$, $SD=.73$, $n=65$), recent partner ($M=4.84$, $SD=1.28$, $n=46$), and for current and recent partner measures combined ($M=5.27$, $SD=1.06$, $n=111$), with higher scores indicating higher levels of commitment to romantic partners. The reliability coefficient for the current partner measure was $\alpha=.78$, for recent partner was $\alpha=.88$, and for current and recent partner combined was $\alpha=.86$. The combined current and recent partner attachment measure was used in the main analyses for this study.

Results

Preliminary Analyses

First, descriptive statistics were assessed for each variable. The distributions were examined for outliers by searching for data beyond three standard deviations above or below the

mean. Visual inspections of histograms showed that all of the attachment measures, avoidance and anxiety to mothers, fathers, and partners, were positively skewed. This was expected because previous research has shown that most people report more secure relationships with their parents and partners. Additionally, there were outliers in some of these measures and those outliers were winsorized to reduce their influence (Tabachnik & Fidell, 2001). Specifically, any data point that fell above three standard deviations from the mean was reduced to the highest point at three standard deviations. When there was more than one outlier, the scores were recoded so that the order of the outliers remained the same. For instance, if three standard deviations from the mean was 4.01, and there were two outliers 6.0 and 7.0, 6.0 became 4.01 and 7.0 became 4.02. Results did not differ between the raw attachment scores and the winsorized scores. All results reported here are for the winsorized data.

Interest in commitment as measured by the SDGS was slightly negatively skewed. The negative skew was expected because most students are eventually interested in committing to exclusive relationships (Bhathal, 2011). Number of committed relationships, number of short term relationships, and number of long term relationships were positively skewed with most participants reporting fewer relationships in each category. Additionally, level of commitment was negatively skewed with most participants indicating high levels of commitment to their partners. Analyses were run with this in mind, however the t test and F test are considered robust to violations of normality (Howell, 2013).

Analyses of Hypotheses

Tests of assumptions. The assumptions of the statistical tests were assessed for the variables in the context of each of the hypotheses prior to conducting the analyses. Assumptions for independent samples t -tests are that the data are normally distributed, variances are equal, and

the observations are independent. For a dependent samples *t*-test it is assumed that data are normally distributed, the differences between pairs are normally distributed, and the data are dependent or paired. In general, the assumptions for the *t*-tests were met with the exception of normality. However, *t*-tests are robust to violations of normality with a large sample size ($n > 30$). The assumptions for multiple regressions are that the errors have a mean of zero, are normally distributed, uncorrelated with any predictors (*tolerance* $> .20$), and homoscedastic as shown by the scatter plot. Additionally, the relationships should be linear, the measures valid and reliable, and the scores independent. In general, all assumptions of multiple regressions were met with the exception of some residuals not being normally distributed for the multiple regression models. Analyses were conducted despite this violation because multiple regressions are considered robust to violations of multivariate normality (Howell, 2013, p.525) and this is likely caused by the variables themselves being skewed (Tabachnik & Fidell, 2001, p.77). Because the variables of interest in the current study were expected to be skewed, the data were not transformed. Thus, although unlikely because of a large sample size, results reported here may be at greater risk for Type II error and should be interpreted with caution.

Hypothesis one. It was predicted that adults from divorced parent families would be more anxious and more avoidant with their parents than those from intact (two-parent) families. Two independent samples *t*-tests assessed whether family structure was associated with attachment avoidance and anxiety with parents. Individuals from divorced parent families were more anxiously attached to their mothers than those from intact parent families but mother avoidance did not differ by family structure (see Table 3). For fathers, there was a significant difference in both attachment anxiety and avoidance between those from divorced parent families and those from intact families. People from divorced parent families were more anxious

and more avoidant with their fathers than those from families whose parents had not separated (see Table 3).

Table 3
Results of independent samples t-test, hypothesis 1

	<i>M (SD)</i>	<i>n</i>	<i>t (df)</i>	<i>p</i>	<i>d</i>
<i>Mothers</i>					
<i>Anxiety</i>					
Intact	1.20 (.54)	113	-2.35* (48.41)	.02	.68
Divorced	1.59 (1.01)	41			
<i>Avoidance</i>					
Intact	2.72 (1.30)	113	-.30 (54.56)	.77	
Divorced	2.81 (1.88)	41			
<i>Fathers</i>					
<i>Anxiety</i>					
Intact	1.24 (.66)	113	-3.81*** (42.49)	<.001	1.17
Divorced	2.26 (1.62)	39			
<i>Avoidance</i>					
Intact	3.23 (1.33)	113	-2.97** (53.78)	.004	.81
Divorced	4.15 (1.76)	39			

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, two-tailed.

Hypothesis two. To analyze the hypothesis that there would be a cross-gender pattern of attachment, four dependent samples t-tests were run separately for males' and females' attachment anxiety and avoidance to parents. Specifically, males' attachment anxiety to mothers was compared to males' attachment anxiety to fathers, and a similar analysis was done for attachment avoidance. In support of the hypothesis, males were more avoidant with their fathers than their mothers (see Table 4). Females were more avoidant and more anxious with their fathers than their mothers (see Table 4), which is contrary to the hypothesis. Thus, the cross-gender hypothesis was not fully supported.

Hypothesis three. The analyses for the hypothesis that attachment to partners would be related to patterns of commitment to exclusive romantic relationships were conducted using multiple regressions with three predictors: the continuous measures of anxiety, avoidance, and

the interaction of the two variables. The predictor variables were centered to solve any issues with multicollinearity and improve the interpretation of parameter estimates. Three separate multiple regression models were run. The outcome variables for the analyses were total number of relationships, number of short-term relationships, and number of long-term relationships. Analyses were run separately for mothers (see Table 5) and fathers (see Table 6). Results indicated that attachment to parents did not significantly predict the pattern of exclusive commitment outcomes. Therefore, this hypothesis was not supported.

Table 4
Results of dependent samples t-test, hypothesis 2

	<i>M(SD)</i>	<i>n</i>	<i>t (df)</i>	<i>p</i>	<i>d</i>
<i>Males</i>					
<i>Avoidance</i>					
Mother	2.90 (1.41)	79	-3.15** (78)	.002	.71
Father	3.41 (1.37)	79			
<i>Anxiety</i>					
Mother	1.31 (.72)	79	-.55 (78)	.58	
Father	1.37 (.83)	79			
<i>Females</i>					
<i>Avoidance</i>					
Mother	2.58 (1.52)	73	-4.07*** (72)	<.001	.96
Father	3.53 (1.64)	73			
<i>Anxiety</i>					
Mother	1.29 (.71)	73	-2.33** (72)	.02	.54
Father	1.65 (1.30)	73			

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, two-tailed.

Hypothesis four. The hypothesis that attachment to parents would be related to interest in commitment was tested using multiple regressions with three predictors: the continuous measures of anxiety, avoidance, and the interaction of the two variables. All predictor variables were centered to address multicollinearity. The outcome variable was interest in commitment as measured by the SDGS intimacy subscale. Analyses were conducted for mothers and fathers separately.

Table 5

Results of multiple regressions for mothers, hypothesis 3

Total relationships ($R^2=.02$, $R^2_{adj}=-.01$, $F(3,107)=.68$, $p=.57$)			
	β	t	p
Anxiety	.06	.47	.64
Avoidance	-.11	-1.04	.30
Anxiety X Avoidance	.09	.67	.51
Short-term relationships ($R^2=.03$, $R^2_{adj}=-.01$, $F(3,77)=.83$, $p=.48$)			
	β	t	p
Anxiety	-.03	-.19	.85
Avoidance	.10	.76	.45
Anxiety X Avoidance	.14	.86	.39
Long-term relationships ($R^2=.00$, $R^2_{adj}=-.04$, $F(3,77)=.08$, $p=.97$)			
	β	t	p
Anxiety	.00	.01	.99
Avoidance	-.02	-.14	.89
Anxiety X Avoidance	-.05	-.30	.77

Note. * $p<.05$, ** $p<.01$, *** $p<.001$, two-tailed.

Table 6

Results of multiple regressions for fathers, hypothesis 3

Total relationships ($R^2=.02$, $R^2_{adj}=-.01$, $F(3,106)=.83$, $p=.48$)			
	β	t	p
Anxiety	.01	.08	.94
Avoidance	-.16	-1.39	.17
Anxiety X Avoidance	.07	.44	.66
Short-term relationships ($R^2=.02$, $R^2_{adj}=-.03$, $F(3,76)=.38$, $p=.77$)			
	β	t	p
Anxiety	-.19	-1.02	.31
Avoidance	.03	.22	.83
Anxiety X Avoidance	.12	.70	.49
Long-term relationships ($R^2=.01$, $R^2_{adj}=-.03$, $F(3,76)=.32$, $p=.81$)			
	β	t	p
Anxiety	.15	.82	.41
Avoidance	-.06	-.48	.64
Anxiety X Avoidance	-.16	-.94	.35

Note. * $p<.05$, ** $p<.01$, *** $p<.001$, two-tailed.

Mothers. Results of the multiple regression showed that the final regression equation with three predictors was significant. Higher avoidance with mothers was related to lower interest in commitment. Also, higher anxiety with mothers was related to lower interest in commitment (see Table 7).

Table 7

Results of multiple regressions for mothers, hypothesis 4

Interest in Commitment ($R^2=.10$, $R^2_{adj}=.08$, $F(3,153)=5.64$, $p=.001$)***			
	β	t	p
Anxiety	-.19	-1.99*	.048
Avoidance	-.25	-2.91**	.004
Anxiety X Avoidance	.28	2.96**	.004

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, two-tailed.

The interaction between mother avoidance and mother anxiety emerged as a significant predictor of interest in commitment (see Table 7). Simple slopes ($Y = -.08x + .08zx + .13z + 4.23$) revealed that this interaction supports the hypothesis that higher attachment security with mothers (i.e., low avoidance and low anxiety) was related to the highest interest in commitment. Those who exhibited preoccupied attachments (i.e., high in anxiety and low in avoidance) also had high interest in commitment. Those who exhibited dismissing-avoidant characteristics (i.e., high in avoidance and low in anxiety) were the least interested in commitment (see Figure 3).

The final part of hypothesis four was that attachment to partners would mediate the relationship between attachment to mothers and interest in commitment. This was tested using mediation analyses; separate analyses were conducted for avoidance and anxiety.

Avoidance. There are four steps to the mediation analysis. First, a bivariate regression was used to determine if mother avoidance predicted interest in commitment. Results showed that more avoidant people were less interested in commitment ($b = -.07$, $p = .01$; $R^2 = .05$, $R^2_{adj} = .04$,

$F(3, 153)=7.50, p=.01$) than less avoidant people. The second step of the analysis was to determine whether mother avoidance predicted avoidance with partners.

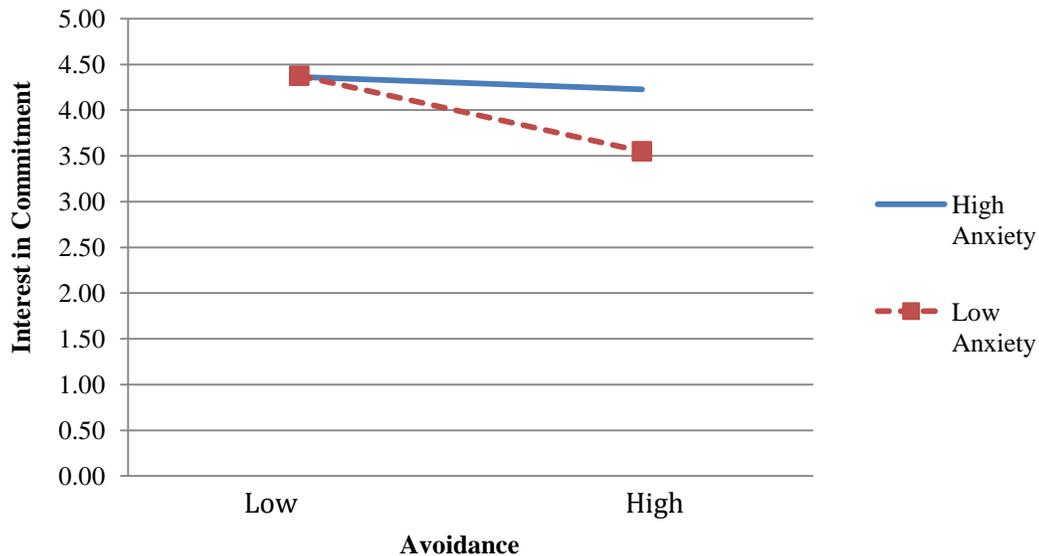


Figure 3. Simple slopes of avoidance and anxiety with mother predicting interest in commitment.

Higher avoidance with mothers was related to greater avoidance with romantic partners ($b=.19, p=.01; R^2=.06, R^2_{adj}=.05, F(1,110)=6.60, p=.01$). The third step of the analysis was to determine whether avoidance with partners predicted interest in commitment while controlling for the effect of avoidance with mothers using a multiple regression. This regression revealed that greater partner avoidance was related to less interest in commitment ($b=-.23, p<.001; R^2=.31, R^2_{adj}=.30, F(2,110)=24.50, p<.001$). The final step of the mediation analysis determined whether avoidance with partners actually mediated the effect of mother avoidance on interest in commitment. To do this, the effect of mother avoidance on interest in commitment was assessed,

controlling for partner avoidance. Results of this analysis showed that there was no longer a significant relationship between mother avoidance and interest in commitment ($b = -.01, p = .64$). Because this path was not significant, it is evidence for full mediation. Results of a Sobel test ($z = -3.52, p < .05$) indicated that avoidance with partners fully mediated the relationship between avoidance with mothers and interest in commitment: those who were high in avoidance with mothers were likely to be more avoidant with partners which was in turn, related to lower interest in commitment (see Figure 4).

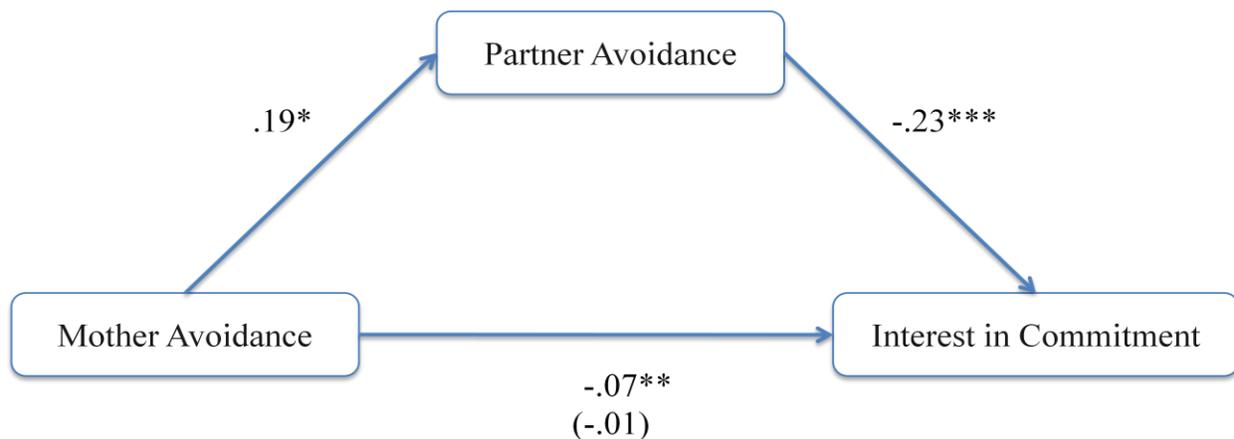


Figure 4. Unstandardized regression coefficients for the relationship between mother avoidance and interest in commitment as mediated by avoidance with partners. The unstandardized regression coefficient between mother avoidance and interest in commitment controlling for partner avoidance is in parentheses.

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Anxiety. The first step of the mediation analysis was to determine whether anxiety with mothers predicted interest in commitment using a bivariate regression. Mother anxiety did not predict interest in commitment ($R^2 = .01, R^2_{adj} = .01, F(1,153) = 2.10, p = .15$); consequently, the mediation analysis was halted.

Fathers. Results of the multiple regression showed that the final regression equation with three predictors was not significant, however the interaction between father avoidance and father anxiety emerged as a significant predictor of interest in commitment (see Table 8). Simple slopes ($Y = -.02x + .07xz - .02z + 4.20$) revealed that this interaction supports the hypothesis that higher attachment security, low avoidance and low anxiety, with fathers is related to higher interest in commitment than the other combinations of the attachment dimensions. Also, those who are low in avoidance and high in anxiety were the least interested in commitment. Those who were high in avoidance with fathers did not differ in their interest in commitment with regards to anxiety (see Figure 5).

Table 8

Results of multiple regressions for fathers, hypothesis 4

<i>Interest in Commitment</i> ($R^2 = .05$, $R^2_{adj} = .03$, $F(3,151) = 2.65$, $p = .051$)			
	β	t	p
Anxiety	-.29	-1.96	.052
Avoidance	-.06	-.67	.51
Anxiety X Avoidance	.34	2.53**	.01

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, two-tailed.

The final part of hypothesis four was that attachment to partners would mediate the relationship between attachment to fathers and interest in commitment. To test this, separate mediation analyses were conducted for avoidance and anxiety. In the first step of the mediation analyses, there was no significant relationship between father avoidance and interest in commitment ($b = -.03$, $t = -1.23$, $p = .22$; $R^2 = .10$, $R^2_{adj} = .01$, $F(1,151) = 1.52$, $p = .22$) or between father anxiety and interest in commitment ($b = -.02$, $p = .52$; $R^2 = .00$, $R^2_{adj} = .00$, $F(1,151) = .41$, $p = .52$). Therefore, the additional steps of the mediation analyses were unnecessary.

Hypothesis five. The hypothesis that attachment to parents would be related to level of commitment to romantic partners was tested using a multiple regression with three predictors:

the continuous measures of anxiety, avoidance, and the interaction of the two variables. The predictor variables were centered to address multicollinearity. The outcome variable was level of commitment as measured with the Level of Commitment scale. Analyses were conducted for mothers and fathers separately (see Table 9). Results indicated that attachment to parents did not significantly predict level of commitment. Thus, this hypothesis was not supported.

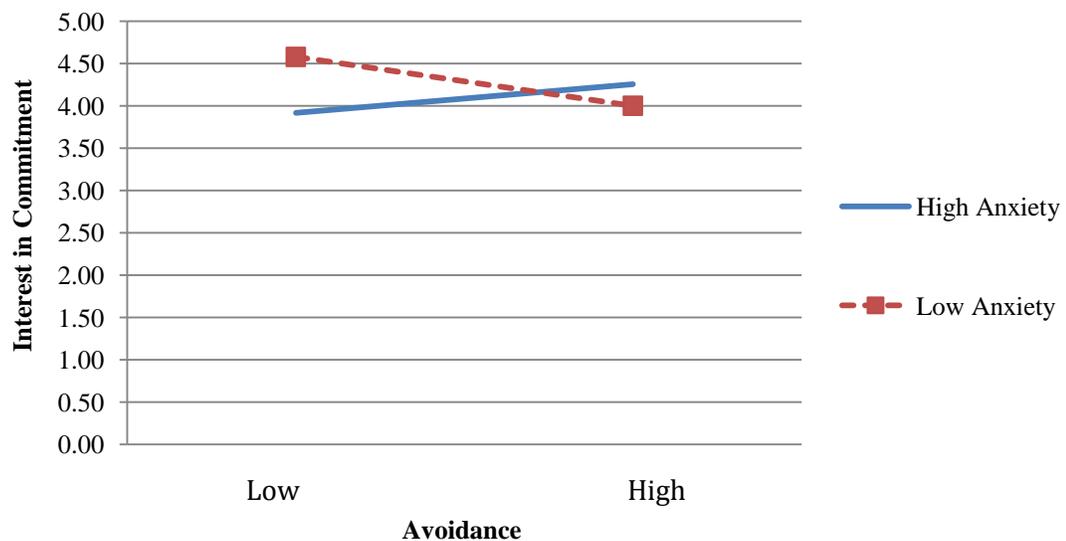


Figure 5. Simple slopes of avoidance and anxiety with fathers predicting interest in commitment.

Table 9

Results of multiple regressions for level of commitment, hypothesis 5

<i>Mothers</i> ($R^2=.02$, $R^2_{adj}=-.01$, $F(3,110)=.82$, $p=.49$)			
	β	t	p
Anxiety	.11	.79	.43
Avoidance	-.11	-1.03	.31
Anxiety X Avoidance	.07	.50	.62
<i>Fathers</i> ($R^2=.01$, $R^2_{adj}=-.02$, $F(3,109)=.39$, $p=.76$)			
	β	t	p
Anxiety	-.03	-.19	.85
Avoidance	-.09	-.83	.41
Anxiety X Avoidance	.07	.46	.65

Note. * $p<.05$, ** $p<.01$, *** $p<.001$, two-tailed.

Post Hoc Analyses

Results indicated that attachment to parents did not predict actual patterns of exclusive commitment to romantic partners or level of commitment to partners. It was of interest why attachment to parents was important for interest in commitment but not the additional outcomes. It is possible that attachment to partners, rather than attachment to parents, was the more important predictor. Therefore, further analyses were run to explore whether attachment to partners predicted these commitment outcomes. Results of these analyses showed that the overall model was not significant but avoidance with partners uniquely predicted number of long-term relationships (see Table 10). Those who were more avoidant with their partners were likely to have had fewer long-term committed relationships than those who were less avoidant with partners. Even though avoidance with partners did not significantly predict total number of relationships or short term relationship lengths in the regression framework, bivariate correlations showed that avoidance with partners was significantly related to number of short term relationships ($r=.23, p=.04, n=78$), indicating that high avoidance to partners was related to a greater number of short term relationships.

Post hoc analyses were also conducted to explore whether attachment to partners predicted level of commitment. Results showed that avoidance with partners significantly predicted level of commitment (see Table 11). Those who were more avoidant with their partners were likely to have lower levels of commitment to their relationships than those who were less avoidant with partners. Partner anxiety did not predict level of commitment.

The interaction between partner avoidance and partner anxiety was a significant predictor of level of commitment (see Table 11). Simple slopes ($Y=-.59x+.13z+.06z+5.17$) revealed that a combination of low avoidance and low anxiety with partners (indicative of a secure attachment)

was related to a high level of commitment to partners. Also, those who were low in avoidance and high in anxiety (i.e., preoccupied) were more committed to their partners. Generally, when avoidance is high, level of commitment was low, however those who were fearful-avoidant (high anxiety and high avoidance) reported higher levels of commitment than those who were dismissing-avoidant (high in avoidance and low in anxiety) (see Figure 6).

Table 10

Results of multiple regressions for partners and patterns of commitment

Total relationships ($R^2=.03$, $R^2_{adj}=.003$, $F(3,107)=1.10$, $p=.35$)			
	β	t	p
Anxiety	-.07	-.63	.53
Avoidance	-.11	-1.06	.29
Anxiety X Avoidance	.14	1.32	.19
Short-term relationships ($R^2=.07$, $R^2_{adj}=.03$, $F(3,77)=1.91$, $p=.14$)			
	β	t	p
Anxiety	.15	1.15	.26
Avoidance	.17	1.35	.18
Anxiety X Avoidance	.01	.10	.92
Long-term relationships ($R^2=.07$, $R^2_{adj}=.03$, $F(3,77)=1.84$, $p=.15$)			
	β	t	p
Anxiety	.02	.13	.90
Avoidance	-.27	-2.23**	.03
Anxiety X Avoidance	.07	.59	.56

Note. * $p<.05$, ** $p<.01$, *** $p<.001$, two-tailed.

Table 11

Results of multiple regressions for partners and level of commitment

Level of Commitment ($R^2=.38$, $R^2_{adj}=.37$, $F(3,110)=22.18$, $p<.001$)***			
	β	t	p
Anxiety	.10	1.10	.28
Avoidance	-.63	-7.56***	<.001
Anxiety X Avoidance	.25	3.09**	.003

Note. * $p<.05$, ** $p<.01$, *** $p<.001$, two-tailed.

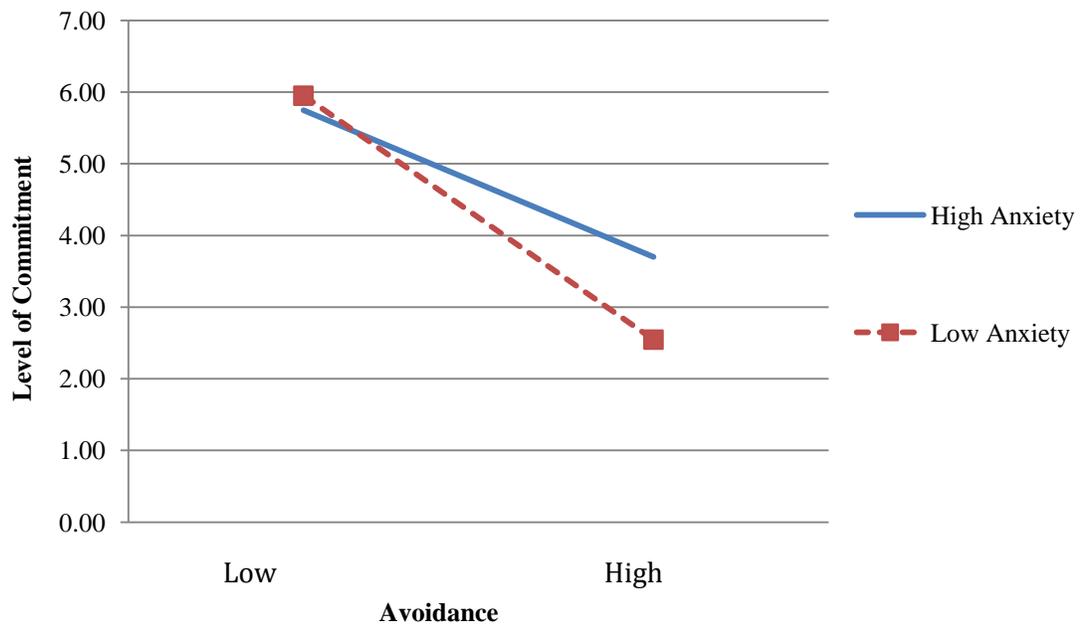


Figure 6. Simple slopes for avoidance and anxiety with partners predicting level of commitment.

Discussion

The aim of the current project was to assess how attachment to parents is transferred throughout development and related to commitment to romantic partners in adulthood. Specifically, the attachment dimensions, avoidance and anxiety, were examined as predictors of multiple commitment outcomes. Findings from this study support previous research for individual differences in attachment to mothers and fathers being influenced by family structure and gender. Additionally, attachment security with both parents emerged as a predictor of adult interest in committing to romantic relationships. However, attachment to parents was not predictive of actual patterns of commitment or level of commitment to such relationships but attachment to romantic partners was. Overall, it is apparent that parents contribute to the foundation for attachment and children's interest in committing to romantic relationships, but

once that attachment is transferred to romantic partners, it is attachments to those partners that ultimately predict additional commitment and relationship outcomes.

Factors related to attachment to parents

Attachment relationships were found to differ for family structure and gender. Specifically, individuals from divorced parents reported higher avoidance with their fathers and higher anxiety with both parents than those from intact (two-parent) families. This finding is consistent with research that children of two-parent families are more securely attached to their parents than children of divorced parents (Brennan et al., 1998). Parental availability may fluctuate during times of divorce and children may begin to be unsure of the responsiveness of their parents, leading children of divorce to develop a lack of trust in others (Dilek, 2008). Whereas children from intact families often experienced their parents together and available to them in the same home, children of divorce may have often experienced a parent leaving the family and may feel insecure about the parent's availability. Therefore, differences in attachment to parents according to family structure may be influenced by the child's feelings of parental accessibility.

When comparing those from intact and divorced parent families, results indicated similar patterns for anxiety, but different patterns among mothers and fathers for avoidance. For both mothers and fathers, individuals from divorced parent families exhibited greater anxiety than their counterparts from intact families. High anxiety with parents for those from divorced parent families may stem from fear of abandonment from mothers and fathers, a common characteristic of anxiously attached individuals. However, differences emerged when avoidance was considered. Children of divorce displayed higher levels of avoidance with fathers than those from intact families. It is possible that high attachment avoidance with fathers but not mothers may stem from children of divorced parents likely having had closer relationships with their

mothers than their fathers, perhaps due in part to the greater tendency to live with mothers (Maccoby, Depner, & Mnookin, 2014). For instance, in the current sample, 19.5% of participants from divorced parent families indicated that they did not have contact with their fathers when growing up and 59.1% grew up in a household with their mothers. However, it is important to keep in mind that avoidance with mothers was consistently low among participants from both family structures of interest (<3.0 on a 7-point scale). Thus, despite parental divorce or separation, individuals appear to not feel the need to maintain independence from their mothers. In fact, children of divorce may actually be more likely to cling to their mothers to feel more secure, which is supported by findings that adults with parents whose parents divorced before they were 18 years old are likely to develop a preoccupied (high anxiety, low avoidance) attachment style (Dilek, 2008). Thus, attachment style differs by family structure and results tend to show that individuals from divorced parent families are more insecurely attached to their parents than those from intact families.

Consideration was also given to the role that gender plays in attachment relationships with parents. It was expected that evidence of a cross-gender hypothesis would emerge. As anticipated, males were more securely attached to their mothers than their fathers. Unexpectedly, females were also more securely attached to their mothers; specifically females were more anxiously attached to their fathers than their mothers. These findings contradict the cross-gender hypothesis that males and females would have more secure attachment to the opposite-gender parent, but shows that emerging adults tend to have more secure relationships with their mothers. Although it was expected that females would perceive more secure attachment to fathers than mothers, these findings may imply that relationships with mothers are more salient for both their daughters and sons throughout development. Traditionally, mothers are the primary attachment

figure for their infants because they often spend more time with them at a young age. Thus, adult children may continue to feel more secure attachments to their mothers than their fathers because they play a larger role in their daily lives. Taken together, these results provide evidence for more secure attachments to mothers than fathers, as well as more attachment security with both parents for those from intact families.

Attachment to parents and commitment to romantic relationships

This study focused extensively on the roles of avoidance and anxiety with parents in college students' commitment to romantic relationships. The analyses suggest that for both mothers and fathers, the quality of the attachment relationship was predictive of interest in commitment to romantic partners, but was not related to the length or quality of those relationships. Specifically, individuals who were securely attached to their parents (i.e., low in anxiety and low in avoidance) reported high interest in commitment; the lowest interest in commitment was exhibited by fearful-avoidant (high avoidance, low anxiety) individuals. Because parents are often the first relationship children experience, parents are likely to play a significant role in their children's expectations for the quality of future relationships. Thus, if a child forms secure attachments toward parents in which they can trust and rely on them, they may be more likely to seek and/or expect that sort of positive relationship in adulthood. Securely attached adults also tend to be comfortable with close relationships and therefore may be more interested in committing to a romantic partner (Locke, 2008). Alternatively, if children have an insecure relationship with parents, they may expect future relationships to have negative outcomes and therefore be less interested in commitment. For instance, those who are highly avoidant with romantic partners are less likely to commit to relationships than those who are low in avoidance

(Schindler & Fagundes, 2010), and a characteristic of fearful-avoidant adults is distancing from others and avoidance of intimacy.

There were differences in the patterns of relationships between attachment to mothers and fathers and interest in commitment for preoccupied individuals (high anxiety, low avoidance). Those individuals who had preoccupied attachments with their mothers had comparably high interest in commitment to those who were secure. This finding may stem from preoccupied individuals' high desire for closeness despite their fear of abandonment (Joel et al., 2011). Conversely, those individuals who exhibited preoccupied attachments with fathers reported lower interest in commitment than the other attachment styles. It is possible that individuals who are anxiously attached to their fathers have more ambivalence toward committing because their fathers were less available to them than their mothers while growing up. Therefore, with mothers, characteristics of anxiety may be clinginess and high desire for closeness, whereas with fathers, it may be lack of trust and uncertainty about availability. Collectively, these findings support the hypotheses and provide evidence that high attachment security with parents may influence greater interest in committing to romantic relationships. It is worth noting, however, that the overall regression models for mothers and fathers explained less than 10% of the variance in interest in commitment (see Table 7 and Table 8). Thus, there are many additional factors that could contribute to an emerging adult's interest in committing to romantic relationships. These findings may be a result of the interest in commitment measure having only adequate reliability ($\alpha=.73$). Overall, the combination of anxiety and avoidance with parents revealed significant patterns of college student interest in commitment and findings were consistent with characteristics of attachment styles and comfort with close relationships.

However, the interest and desire to commit may not be reflected in actual behaviors, especially among emerging adults.

Whereas attachment relationships with parents were related to interest in commitment, parental attachment did not play a role in length or quality of romantic relationships. It was hypothesized that avoidance and anxiety with parents would predict the number of short term and long-term relationships that participants had in the past, and the quality of the most recent relationship. However, the findings failed to support these hypotheses and are contrary to results from other studies. Previous research has shown that avoidant individuals are less likely to commit to relationships (Schindler et al., 2010) and securely attached individuals are more committed to their romantic partners than their insecurely attached counterparts (Keelan et al., 1994; Simpson, 1990). Additionally, securely attached individuals have shown to be more committed to their romantic relationships than insecurely attached individuals (Keelan et al., 1994; Pistole & Clark, 1995; Simpson, 1990). These contradictions may be due to the use of different methodologies. For example, Schindler et al. (2010) looked at whether participants committed to a relationship one year following their intake assessment, whereas the current study examined specific patterns of relationships from participants' pasts. It may be that the retrospective memory bias of the participants in this study accounted for the lack of a significant finding. Although a longitudinal design is ideal, it was assumed that the use of retrospective reports would give detailed information about relationship histories. However, the average age of the current sample was 19 years old, so many of the retrospective reports were of relationships that may have occurred during the teenage years. Therefore, patterns of commitment and level of commitment may have been different for the participants in this sample as compared to previous studies in which college students reported commitment prospectively. Additionally, previous

studies did not assess attachment to parents, but to romantic partners or others in general (Bartholomew & Harowitz, 1991; Fagundes & Schindler, 2012; Murray et al., 2001; Schindler et al., 2010; Simpson, 1990). It is possible that attachment to parents was not predictive of number or duration of relationships because there may be many other factors within a romantic relationship context that influence the decision to begin or remain in a relationship with a partner, such as the context of the relationship with the romantic partner. It was this reasoning that led to the post hoc analyses utilizing attachment to romantic partners.

Post hoc analyses were conducted to explore the relationships between attachment to romantic partners and various aspects of commitment. Results showed that those who were high in avoidance were more likely to have had fewer long-term relationships and a greater number of short-term relationships than those who were less avoidant. Thus, highly avoidant individuals who decided to commit to romantic relationships did not stay in their relationships for long periods of time. Moreover, those avoidant individuals who were in romantic relationships exhibited lower levels of commitment to partners. It is possible that avoidant individuals do not feel comfortable in their relationships with their partners, which results in less investment in their relationships and quicker termination. Conversely, partners of avoidant individuals may not like how distanced their partners behave in the relationship, so it is the partner who terminates the relationships quickly. In either case, individuals who exhibit more avoidance in their relationships are not likely to enjoy high quality, enduring relationships (Simpson, 1990).

Post hoc analyses also revealed that the quality of committed relationships is related to attachment to partners. Those individuals who reported secure attachments to their significant others (low anxiety and low avoidance), enjoyed higher levels of commitment to their romantic partners. Secure individuals feel comfort with the closeness they experience with their partners;

this may lead to their willingness to put a great deal of themselves into the relationship, leading to higher quality interactions with their loved one. Interestingly, preoccupied individuals (those who were low in avoidance but high in anxiety) reported high levels of commitment that were comparable to those who were secure. It is possible that these individuals feel high levels of commitment to their partners because anxiously attached adults have been described as “clingy” in romantic relationships (Hazan & Shaver, 1994), and often try to remain extremely close to their partners. Taken together, the results of analyses with parent and partner attachment suggest that parents are important in the initial interest in commitment to romantic relationships, but it is the quality of the attachment relationship to the partner that is predictive of the length and quality of emerging adult’s romantic relationships. Because the first attachment bond that individuals form is typically with parents, and partner attachment is related to commitment outcomes, it is important to consider whether attachment relationships to parents are associated with attachment relationships to partners.

Attachment to parents transferred to romantic partners

A robust finding in the attachment literature is that attachment to parents is predictive of attachment relationships to peers and romantic partners (Feeney & Noller, 1990; Fraley & Shaver, 2000; Hazan & Shaver, 1987). The results of this study provide additional evidence for a transfer of attachment orientations from parents to romantic partners. Attachment to parents was related to interest in commitment to romantic relationships. This suggests that the working models that are developed for parents in childhood may be carried with children as they form new relationships. They may expect that the quality of those new relationships will be similar to those they share with their parents. To test this transfer directly, this study assessed whether partner attachment would mediate the relationships between parental attachment and

commitment to romantic partners. It was assumed that the quality of the parental attachment relationship would be transferred to the quality of the partner attachment, which would, in turn, predict commitment. Results from a mediation analysis supported this model for one dimension of attachment: the relationship between avoidance with mothers and interest in commitment was fully mediated by avoidance with romantic partners. Those individuals who were avoidant with mothers were also avoidant with partners; the ultimate outcome was lower levels of commitment. No other significant mediations were found because the other attachment dimensions with parents did not independently predict any of the commitment outcomes. It is possible that avoidance is the most dynamic of the two dimensions in terms of commitment. The characteristics of avoidance are discomfort with closeness and fear of intimacy. Therefore when it comes to the decision to commit oneself to a partner, avoidance may play the biggest role. Anxiety, on the other hand, is characterized by a high desire for closeness and fear of abandonment. Those who are anxious may enter into, and endure, committed relationships despite their insecurities or unhappiness with their partner. Overall, the results of the mediation analyses show that for at least one dimension of attachment, avoidance with mothers, there is a direct transfer to romantic partners. More work should be done to assess the differences in the dimensions as they are transferred from mothers and fathers to romantic partners in association with relationship outcomes.

Summary

The current study provided evidence that attachment to parents and romantic partners is related to adults' interest in committing to exclusive romantic relationships, and the length and quality of those relationships. A key theme is the importance of parents' own relationship history as a predictor of attachment relationships with emerging adult children. Parental divorce may

put the quality of attachment relationships at risk, especially with regard to anxiety in the relationship. A second theme revealed the importance of the quality of those attachment relationships with parents to emerging adults' intention to commit to relationships in the future. The working model established with parents may provide the foundation upon which all future relationships will rest. A third theme highlighted the different roles that attachment to parents and attachment to partners may play in commitment to romantic relationships. Whereas parents may be important for the global intention to commit to a relationship, it is the quality of the attachment relationship with that partner that is related to the duration and quality of relationships emerging adults' enjoy. Collectively, these findings support the idea that prior relationship history with parents is an important factor to consider in romantic relationships of emerging adults.

Strengths and Limitations

There are many strengths of the current study. First, the current study examined attachment to three prominent figures in participants' lives: mothers, fathers, and partners. Second, it examined the outcome variable in three different ways: interest in commitment, patterns of commitment, and level of commitment. By triangulating the definition of commitment and measuring attachment to many specific targets, the results better describe the factors and individuals that influence commitment. Future research should continue to expand upon the types of commitment that are being assessed in order to capture how young adults are approaching romantic relationship at this point in their lives. Third, the study employed continuous measures of avoidance and anxiety to assess attachment, thereby allowing for greater exploration of the dimensions of attachment. Although attachment categories were used for conceptual purposes in this paper, the analyses of the data relied on the continuous attachment

dimensions of anxiety and avoidance. There are many statistical issues with creating categories from continuous data such as arbitrary boundaries, ambiguity of the midpoint, and deciding where to place those who fall directly in between two categories. The use of continuous data allows the research to avoid these pitfalls. Finally, this study is the first of its kind to use mediation to examine how partner attachment explains the relationship between parent attachment and commitment outcomes. Past research has shown that attachment styles are often transferred from parents to partners, but has not shown how these attachments contribute to relationship commitment. The current study was able to explore this model. Future research should continue to examine how attachment to parents transfers to partners, and how both are related to commitment or other relationship outcomes.

There are some limitations of the present study that are important to address as well. One limitation is that the use of self-report measures only reflect the perception of the individual and may inaccurately describe the attachment orientations or actual commitment patterns of the participants. Adults often report high attachment security to parents and romantic partners (Bartholomew & Harowitz, 1991; Hazan & Shaver, 1987) when this level of attachment may not truly be the case. However, self-report methods are the common method of obtaining attachment metrics in adulthood. Additionally, the retrospective reports of romantic relationships may have been inaccurate. Participants may have reported fewer relationships than they truly had experienced, may have forgotten the actual lengths of those relationships, and/or may have misinterpreted the definition of a committed exclusive romantic relationship. Results were interpreted as though the reports of past relationships were accurate; however future research should examine patterns of committed relationships longitudinally for many years after an initial assessment of attachment in childhood. An additional limitation of this study is that partner

assessments were not obtained, making the results subject to the bias of a single partner.

Romantic relationships involve two people and the attachment orientations of partners were likely an additional factor that contributed to the duration of participants' relationships.

Conclusion

Parents are arguably the most influential figures in a child's life. This study showed that attachments with parents are a key factor in whether people are eventually interested in committing to a romantic relationship of their own. Therefore, the quality of parent-child relationships is predictive of the relationships that the child will form in adulthood. Ultimately, it is possible that a lack of commitment to romantic partners is what is driving the high divorce rate in America. Thus, the current study provides support for the need for cultivating positive parent-child relationships in order to help adults develop a willingness to commit to exclusive relationships for a long-term, which has shown to be related to fewer mental health problems in emerging adulthood (Braithwaite, Develi, & Fincham, 2010). Research in this field could inform parents, clinicians, and couples with an awareness of how parent-child attachment patterns predict later attachment and commitment to romantic relationships in emerging adulthood, including the duration and quality of those relationships.

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