Parental Closeness and Attachment in Biological and Adopted Children

A Thesis
Submitted to the Faculty
of the Psychology Department

of

Washburn University

in partial fulfillment of
the requirement for

MASTER OF ARTS

Psychology Department

By

Joel Broxterman

Topeka, Kansas

April 28th, 2016
I hereby recommend that the thesis prepared under my supervision by

Joel Broxterman

Entitled

PARENTAL CLOSENESS AND ATTACHMENT IN BIOLOGICAL AND ADOPTED CHILDREN

be accepted in partial fulfillment for the

MASTER OF ARTS DEGREE

___________________________________
David Provorse, Ph.D.
Chair of the Thesis Committee

Juli Ann Mazachek, Ph.D.
Vice President for Academic Affairs

___________________________________
Cynthia L. Turk, Ph.D.
Head of the Department

Recommendation Concurred by

___________________________________
RaLynn Schmalzried, Ph.D.
Committee for the Thesis

___________________________________
Michael McGuire, Ph.D.
Acknowledgments

This research would not have been possible without the guidance of many people. I would like to express my gratitude, first and foremost, to Dr. Dave Provorse for his support and assistance during this process as the Chair of my thesis committee. I appreciate your knowledge, and especially credit your mentorship during these three years in the Master’s Program. Thank you for believing in my abilities and for giving me the guidance and encouragement needed.

I am grateful for the comments and suggestions of the members of the thesis committee, Dr. Ralynn Schmalzried and Dr. Michael McGuire, who suggested readings and analyses helped make this document much better. An additional word of appreciation goes to Dr. Mary Pat McQuenney, for her support and suggestions for composition.

A special thanks to Dr. Carol Moddrell, Dr. Michael Thompson, and Teresa Rodgers for their support.

I would also like to recognize my wife Tracy, my adopted son Braylon, and my daughter Shayla, all of whom inspired this research. Without them, my passion for this research would not exist.
Abstract

From the moment of birth, interactions between parents and the infant form an attachment style that will define the levels of anxiety and avoidance one has in close relationships. Placing a child within a family is a lifelong journey with life altering consequences. One of those consequences is the degree to which parental closeness is experienced by the adoptive child. The current study investigated the relationship between attachment styles and parental closeness to better understand if adopted children display different levels of attachment and closeness than children raised by their biological parents. Attachment styles are developed during childhood as a result of patterns of interactions with parents, and encompass information about the self, others and relationships; defining the level of anxiety and avoidance one has in regards to close relationships. Parental closeness consists of the child’s ability to talk about worries, shared leisure time, and joint discussions with their parents. Relationships were hypothesized between participants’ level of anxiety-related attachment, avoidance-related attachment, and parental closeness. While the present study did not identify significant differences between biological and adopted children, a statistically significant result for anxiety-related attachment and parental closeness with the father figure was identified across the full sample.
PARENTAL CLOSENESS AND ATTACHMENT IN BIOLOGICAL AND ADOPTED CHILDREN

The process of adoption can be an overwhelming experience, especially for parents who are considering adoption for the first time. “Worries about bonding are almost universal among adoptive parents before they have their child” (Independent Adoption Center, n.d., para. 1).

Parents going through the adoption process for the first time may worry if they can be as close to their adoptive child as they would to a biological child. In addition, there is worry about whether the adoptive child will bond with the adoptive parents just as well as a biological child would bond with his or her parents.

In reality, the bond between baby and parent is not only biological, but mental and emotional as well. Bonding may occur as early as the prenatal stages for both adoptive and biological parents. The process does not always happen instantaneously for either biological or adoptive parents. Bonding may develop slowly over a long period, or it may occur seemingly instantaneously at the moment of birth. For many parents, their profound bond to their child—a bond like no other—develops through a variety of experiences from seeing their child for the first time, to watching their son or daughter graduate from high school or college.

The time immediately following the birth of the child can be especially crucial for development, as this is when the basis for factors such as attachment style, psychosocial development, and personality begin to form. Constant contact between the newborn baby and their new parents, whether they are related biologically or by adoption, plays a role in the bonding process (Phillips, 2013).

Attachment Theory: Definitions and History
Attachment theory was originally developed by John Bowlby (1973/1980/1982) to explain how attachment, the human need to form close affectional ties, bonds parents and infants in a way that the parent functions as caregiver and as a secure base for the child as he or she ventures out to explore and learn from the external world. While the initial and primary function of attachment reflects the parents’ need to provide protection of the infant or child from potential danger, research has identified more pervasive and enduring implications in regards to how the child comes to view him or herself, and their relationship to the larger social world. Attachment style has been shown to play an important role in developing schemas or perceptions about the world, emotional well-being of the child (Volling, McElwain, Notaro & Herrera, 2002; Waters et al., 2010), psychological health (Brumariu & Kerns, 2008), and how he or she will act as a parent in the future (Grienenberger, Kelly, & Slade, 2005; van Ijzendoorn, 1995).

Bretherton (1992) described John Bowlby and Mary Ainsworth as the first and second most prominent founders of Attachment theory, and provided a summary history of the evolution of the ideas promoted by these seminal theorists as they studied the significance of attachment and its role in the parent-infant relationship. Both theorists acknowledged being influenced by animal studies from researchers like Konrad Lorenz who described the process of imprinting in geese, and Harry Harlow’s work on the effects of emotional deprivation of orphaned rhesus monkeys. Findings from these animal studies were integrated into Bowlby’s and Ainsworth’s models of attachment on an evolutionary basis, specifically the importance of the need for contact and physical connection in both animals and humans.

Ainsworth (1967) pointed out the similarities between humans and animals in their need for contact and physical connection that went beyond the need for food. Additionally, Ainsworth (1967) conducted what is considered to be the first empirical study of attachment with humans.
when she investigated human attachment within 26 families with unweaned babies in Uganda. This study was the first of many that would eventually serve to establish attachment as a universal and cross-culturally consistent phenomenon.

Ainsworth and Wittig (1969) designed a research methodology that was later dubbed the *Strange Situation*, that could be used to evaluate the attachment pattern present between an infant and the mother. This research method involved direct observation of the interaction between mother and child in three specified scenarios: a) while the child was in presence of the mother, b) when the child was left alone, and c) when the child was returned to the mother. Specific observations were: 1) the child’s degree of and comfort with exploration when in the presence of the mother; 2) the child’s reaction to the separation from its mother; 3) the reaction of the child when in the presence of a stranger; and 4) the general overall behavior of the child. Data collected from these settings helped Ainsworth and Wittig, as well as the multitude of researchers who adopted the “strange situation” design, to identify and illustrate different patterns of attachment.

Eventually, Ainsworth (1978) adopted labels to identify the three most common types of attachment styles observed. These labels were Secure, Insecure Avoidant, and Insecure Ambivalent or Resistant Attachment. Additional research using the Strange Situation paradigm eventually identified a fourth behavioral pattern in children that was designated Disorganized/Disoriented (Main & Solomon, 1990), Secure attachment is defined as infants who were comfortable with closeness and able to explore the environment independently absent undue stress. The Insecure-Avoidant label describes children who were mostly avoidant of closeness, and thus preferred exploration over physical proximity. Insecure-Ambivalent designated infants who were extremely anxious and did not want to lose sight or closeness to the
attachment figure and preferred to constantly remain in close physical proximity to their parent, to the detriment of the exploration of the environment. The Disorganized/Disoriented label described infants who were not consistent in their manifestations of closeness, or preference for exploration, and even showed disorganized and bizarre behaviors such as banging their heads or freezing in place. Research from Benoit (2004) revealed the parenting of Disorganized/Disoriented children to be similarly disorganized, distorted or atypical, thus suggesting behavior of the parents as the source of both the child’s comfort and distress.

Even more recent developments in attachment theory and research posit the existence of the two dimensions of Avoidance and Anxiety that can be used to categorize individuals into one of four quadrants. Therefore, the fundamental elements of Attachment patterns suggest that an individual’s specific form of attachment can be understood as existing in a two-dimensional space based on the discriminant functions of anxiety and avoidance. As one’s anxiety-related and avoidant-related attachment decrease, they tend to exhibit a more Secure attachment style. A move in the opposite direction on the dimensions would thus lead to one of the other attachments styles. Factor analytic studies (Brennan, Clark, & Shaver, 1998) have confirmed the validity and reliability of this two-dimensional and four-category attachment model, which is widely accepted by contemporary attachment theorists.
Evolution of Attachment Style Theory: Measurement Issues

Attachment theory has become a popular topic of interest among researchers in the field of social and personality psychology (Blair-Gomez, 2012). The concept and classifications have evolved over the years due to interest in adult correlates of the infant patterns, development of new studies, and challenges with measuring attachment-related constructs. In the following paragraphs, the reader will find descriptions of how Attachment Style and the classification system have evolved over time.

Since the original series of Strange Situation studies, the concept of attachment style has expanded and been refined. First, Attachment theory moved beyond an exclusive focus on infants and children to include manifestations that persist throughout adolescence and adulthood. For example, the Adult Attachment Interview (AAI) was developed by Main in 1984 (Shaver et
al., 2000) to study adolescents’ and adults’ representations of their childhood caregiver attachments. The interview adopted and integrated Ainsworth’s model by utilizing a three-category division: Secure (or autonomous), Dismissing (of attachment), and Preoccupied (with attachment). As part of Main and Solomon’s (1990) expansion to four classifications, the Unresolved/Disorganized type, was added to the AAI. The addition of this category accounted for those who were unclassifiable under the three-category model of the original interview.

Toward the goal of developing an efficient approach to examining correlates of infant attachment types in adults, Hazan and Shaver (1987) developed a questionnaire which retained much of Ainsworth’s typology and focused on attachment styles as a pattern of expectations, needs, emotions, and social behavior. Their questionnaire applied these patterns to a particular history of attachment experiences, most commonly using the relationship with one’s parents (Fraley & Shaver, 2000). The design of Hazan and Shaver’s (1987) measure allowed for the identification of how adults that fell into one of the three categories of Secure, Avoidant, and Anxious. The measure asked participants to identify with one of three statements, each of which represented one of the three patterns of attachment.

I am somewhat uncomfortable being close to others (Secure);

I find it difficult to trust them completely, difficult to allow myself to depend on them (Avoidant).

I am nervous when anyone gets too close, and often, others want me to be more intimate than I feel comfortable being (Anxious). (Hazan & Shaver, 1987, p. 47)

While the questionnaire was simple and practical, some participants were unable to settle on a single statement, and often selected two statements, thus presenting researchers with a
dilemma. The questionnaire measured attachment in a categorical manner, meaning that it was assumed that traits of attachment style were totally independent of each other. While categorical measures have the benefit of being easy to administer, they come with several limitations such as lower statistical power, less chance of finding statistical significance, and frequent misclassification errors (Atkins, 1999).

The advantages of the ECR-R adopting the Likert scale is that it is a universal method of collecting data, which means it is easy to understand them. The Likert Scale is an ordinal psychometric measurement of attitudes, beliefs and opinions. In each question, a statement is presented in which a respondent must indicate a degree of agreement or disagreement in a multiple choice type format. Furthermore, because Likert Scale questions use a scale, people are not forced to express an either-or opinion, rather allowing them to be neutral should they so choose. The second advantage is a 7-point Likert scale response format allows for determination of a subscale score for each respondent. This affords the ability to produce a distribution of scores on each subscale across the participants, and the ability to apply statistical analyses.

Attachment styles have been said to affect different aspects of the person’s life due to the development of internal working models (Bowlby, 1973/1980/1982) that define views of the world and of the self. Attachment theorists have long argued that the attachment style each person develops as a product of interactions with parents during the developmentally critical stages of infancy and early childhood may have an enduring influence on not only how individuals relate to non-family members in adulthood, but also the level of intimacy, support, and “closeness” they believe they receive from their parents throughout their life. Given that events in very early childhood that have been described as “bonding”—the development of a strong emotional connection with one or both parents (Mahler, 1985) that form the basis for
acquiring a sense of “basic trust” (Horney, 1992) are theorized to form the foundation for the development of a healthy self-image which allows for the initiation and maintenance of mutually satisfying and reciprocal adult relationships, it is plausible to assume that adopted children may have a different early childhood experience compared to children raised by their own biological parents due to a disruption in the continuity of the parent-child relationship. Some research has supported this contention, and Honig (2014) reported that 39% of adopted children, ages 5 and higher, experience a higher degree of early-forming developmental disorders, future disturbed attachment relationships, and vulnerability to psychopathology.

**Parental Closeness**

Closeness has been defined as “the degree of affective, cognitive, and behavioral mutual dependence between two people, including the frequency of their impact on one another and the strength of impact per occurrence” (Dibble, Levine, & Park, 2012, p. 565). Closeness can be experienced in physical and emotional ways. Physical closeness encompasses various interactions that range from skin-to-skin contact with the infant to parents being present in the room with the child but without physical contact. Emotional closeness is how parents and children experience feelings of love, care, affection and/or connection in contrast to emotional disconnection and alienation (Flackling et al., 2012). Therefore, parental closeness has been defined as “the degree of interdependence” between the child and parent (Dibble, Levine, & Park, 2012). Parental closeness has been measured by scoring items such as how often a child interacts with their parents for things such as talking about worries, sharing leisure time, and being engaged in joint discussions (Zhang, Welte, & Wieczorek, 1999). Parental closeness has also been labeled as family bonding (Bahr, Marcos, & Maughan, 1995) or family cohesion.
Parental closeness is a combination of family, environment and genetic factors. Barlow (2002) posits that the etiology of anxiety disorders can be conceptualized as a combination of two or more factors or vulnerabilities: genetic, generalized, and specific. In addition, Linehan (1993) developed a model where genetic-biological and environmental factors influence the role of development of the child’s emotional regulation system. These models suggest that factors such as anxiety are genetically influenced, but also molded by family environment. Parenting practices have a significant and well-established impact on early childhood socialization (Belsky, 1984). Both positive and negative aspects of parenting style have been shown to predict social competence, or lack thereof, in children as young as 3 to 5 years old (Elam et al, 2013).

Parental bonding can begin during pregnancy and tends to strengthen immediately after birth (Phillips, 2013). This point is important because some children who are put up for adoption may experience a disruption in the continuity of bonding or closeness. Some children put up for adoption may be separated from one or both birthparents immediately after birth. The degree to which parents are available to interact with children in the first few hours after birth may have short and long term consequences. Authors such as Phillips (2013) have argued that close physical contact is an important factor in developing the secure attachment bond between parent and child. In his book, The Sacred Hour, he states that the “skin to skin contact with the mother protects the newborn from the well-documented negative effects of separation, supports optimal brain development and facilitates attachment, which promotes the infant’s self-regulation over time” (p. 2). Newborns who are placed in skin to skin contact with their mother have been shown to experience greater respiratory, temperature, and glucose stability and significantly less crying,
which are all indicative of decreased stress. Some hospitals have adopted this view and are increasingly providing single family rooms for neonatal births to facilitate physical contact between parents and their newborn child (Phillips, 2013). This design shortens the separation time between parents and child, allowing for a more soothing setting, increased opportunities for breastfeeding, and lower ambient sound levels. In support of this approach, research indicates that neonatal intensive care units reduce hospital stays by up to 10 days in preterm infants below gestation of 30 weeks (Flackling et al., 2012).

Both mother-child and father-child relationships have received attention in efforts to identify specific influences on early childhood development. While the mother-child relationship has been extensively studied (Cabrera et al., 2011; Casas et al., 2006; Dumas et al., 1995; Lengua et al., 2007), the father-child relationship has received attention only in recent years (Harold et al., 2012; Stover et al., 2012). Both of these studies investigated the relationship between parental warmth and child prosocial development, as well as parental hostility and maladaptive childhood development, and found that the father-child relationship tends to diminish when higher levels of anger and guilt are reported. These studies also revealed, fathers reported experiencing difficulty in recognizing emotion and expressing empathy. In general, the characteristics of each parent’s attachment style, and subsequent parenting style, have an influence on the development of the child’s attachment style.

Given the number of variables shown to contribute to parental closeness, adoption presents a unique and challenging set of circumstances (Morrison, 2012). While it is beyond the scope of the current study, the factors identified in previous research that could affect an adoptive parent’s ability to form close bonds include: the life histories of the parent and child, social supports available to the adoptive parents, intrinsic characteristics of the child, and opportunities
for positive interactions with the child. The period of transition from being separated from biological parents, through temporary placements, culminating in placement with an adoptive parent can be a particularly challenging time for the child and adoptive parent. Immediately upon meeting the child, adoptive parents may have difficulty identifying physical appearance-based, as well as emotional and temperament-based, similarities between themselves and the adoptive child. This lack of “sameness” may impair adoptive parents’ ability to take pleasure in the initial parent-to-child interactions that come so easily between many children and their biological parents. The child and parents may not only have different outward visual appearance (e.g., skin tone, eye color, facial characteristics), they may also smell, sound or “feel” different than the biological parent or early caregivers. While adoptive parents possess the intellectual knowledge that the child is now theirs, events such as these can have a marked impact nonetheless. The degree to which differences between adoptive parents and the adoptive child exist can become very challenging and add stress to the parent-child relationship.

In a post-placement follow-up of families (Morrison, 2012), 36% of adoptive parents scored in the clinical range of a measure of attachment scale, which indicated these parents experienced significant difficulty feeling a sense of attachment to their child, and/or understanding the child’s feelings and needs. Morrison (2012) reports in another study of 161 families who had finalized an adoption found that 2% of adoptive parents rated their adoption as unsuccessful, with many adoptive parents citing problems with attachment as a specific difficulty. However, it is also possible that in some cases where the adoptive child’s biological parent or other early caregiver failed to nurture a healthy attachment, the adoptive family may be able to compensate and provide the types of attention that foster a more secure attachment.
Prevalence of Adoption

As of 2013, the United States Department of Human and Health Services (AFCARS, 2014) reported 254,904 children entering the U.S. foster care system. Of those children, 101,840 were waiting to be adopted into a permanent family setting. These children reflect a disproportionate mix of racial backgrounds, with non-white children being overrepresented among those awaiting adoption. Of those, 42,344 (42%) were Caucasian; 24,312 (24%) were African-American; 23,281 (23%) were Hispanic; 1,805 (2%) were American Indian/Alaskan Native, 413 (0.4%) Asian, and 9,474 (9%) were of two or more races or of indeterminable race. In 2013, 50,608 children were adopted. Currently, adopted children represent approximately 2% of the U.S. population (Honig, 2014).

Children are being adopted into a variety of familial settings. In 2013, the Department of Human and Health Services reported that children were adopted by 33,306 (67%) married couples, 13,579 (27%) single females, 1,489 (3%) single males, and 1,278 (3%) unmarried couples. It should be noted, that due to varying state laws recognizing the legal status of same-sex marriage, some of the adopting parents listed as single may actually involve a same-sex partner that forms a dyadic parenting relationship. As of 2007, approximately two million lesbian, gay, and bisexual individuals were interested in adopting (Lavner, Waterman, & Peplau, 2007).

Children are being adopted over various age ranges. Children may be adopted shortly after birth up to age 20. Statistics from the Department of Human and Health Services (AFCARS 2014) indicates 57% of adoptions in 2013 took place by age 5 or earlier. After age 5, the number of adoptions by age steadily declines. It should also be noted that some children who are eligible
for adoption are never adopted. Some children may remain in the foster care system unadopted throughout their childhood and adolescent years, and transition into adulthood having never experienced having true parents, or being a member of a family.

The prevalence of adoption alone warrants attention from the research community related to the mental health and adjustment of adoptive children. The fact that a variety of factors have been identified that could impair the creation of secure attachments between adoptive parents and their adopted children, with a focus on circumstances that could impair the bonding process in infancy, makes such research even more paramount. However, little empirical research currently exists that directly compares the attachment styles, and levels of parental closeness, that are eventually achieved by adopted and biological children once they reach adulthood. The current study is designed to utilize psychometrically sound measures to provide a direct empirical comparison between adopted and biological children’s understandings of their own self-reported attachment style and parental closeness achieved in adulthood. Therefore, the purpose of the present study is twofold: 1) to determine whether the trepidations and concerns often experienced by prospective adoptive parents are warranted by 2) determining whether adoptive children are more likely to report more insecure attachment styles and lower levels of parental closeness in adulthood in comparison to persons raised by their biological parents.

Hypotheses

The research study proposed in this paper is designed to examine the following hypotheses:

1) Parental closeness with fathers reported by adopted children will be significantly lower than scores reported by children raised by their biological parents.
2) Parental closeness with mothers reported by adopted children will be significantly lower than scores reported by children raised by their biological parents.

3) Avoidance-related attachment reported by adopted children will be significantly higher than that reported by children raised by their biological parents.

4) Anxiety-related attachment reported by adopted children will be significantly higher than that reported by children raised by their biological parents.

**Method**

**Participants**

The data was collected from three sources. First, students enrolled in general psychology courses at a medium-sized public university in the Midwest; second via postings on social media sites; and third, by posting a direct link to the survey materials on the American Adoption Congress website. Of the 115 participants, 65 completed the study in its entirety, including demographic information and completion of all questionnaires, for an overall completion rate of 57%.

The participants in the present study self-identified their gender as 10 males (15.4%) and 55 females (84.6%). Of the 65 participants that completed the study, 20 reported that they were adopted (30.8%) and 45 biological (69.2%). Within the subsample of adopted persons, all but one participant reported having been adopted in early infancy. More specifically, 119 adopted participants reported having been adopted at “less than one year old” (95.0%), and one reported having been adopted “at age 9” (5.0%). All adopted participants reported that their adoption was Domestic (N = 20, 100%), and 19 (95%) described their adoption process as “closed”. The single
participant from the adoptive subsample that selected the forced-choice of “open” to describe the agreed upon arrangement with their biological parents selected the response option of “Seldom” to describe the level of contact they have had with their biological parents. Age of participants ranged from 18 to 72, with a mean age of 37.5. Traditional college-age (18 to 23) accounted for 32.3% of the sample (N = 21), with an additional 30.7% (N = 20) between ages 24 and 40, and 36.9% (N = 24) over 40 years of age. Self-reported racial/ethnic backgrounds were as follows: White (N = 60, 92.3%), Black (N = 1, 1.5%), Hispanic/Latino (N = 4, 6.1%), Asian-American (N = 2, 3.1%), Indigenous American (N = 2, 3.1%), Other (N = 2, 3.1%). Self-reported educational statuses were as follows: Less than High School degree (N = 1, 1.5%), Completed High School/GED (N = 8, 12.3%), Some college, but no degree (N = 29, 44.6%), 2-year/Associate’s Degree (N = 1, 1.5%), 4-year/Bachelor’s Degree (N = 15, 23.1%), and Graduate (N = 11, 16.9%).

Measures

**Demographic Inventory.** Participants were asked to provide information related to their gender, age, marital status, income, race, and level of education. Questions related to family structure included the parental figures (i.e. father, mother, step-parent, etc.) number of siblings, and whether the participant was adopted or biological. Participants reporting as adopted were asked to specify if their adoption was “open” or “closed,” “domestic” or “international,” and at what age their adoption took place. (See Appendix B to review all items on the Demographic Inventory).

**The Experiences in Close Relationships-Revised (ECR-R).** The ECR-R (Fraley, Waller, & Brennan, 2000) was derived from an Item Response Theory analysis of four other commonly used attachment measures and includes items from the original and more extensive
Experiences in Close Relationships scale (ECR). The ECR-R retained 36 items from the ECR and was developed into a self-report questionnaire that assesses two dimensions of attachment: Anxiety and Avoidance. An 18-item subscale measures each dimension, with each item using a Likert-type response scale ranging from 1 (strongly agree) to 7 (strongly disagree). Higher scores indicate a greater presence of anxiety or avoidance on the respective dimension.

The two dimensions are used to illustrate attachment-related Anxiety and attachment-related Avoidance. Attachment-related Anxiety is thought to demonstrate the individual’s predisposition toward anxiety regarding rejection and abandonment (Sibley, Fischer, & Liu, 2005). Example items from the Anxiety subscale include “I’m afraid that I will lose my partner’s love”, or “I do not often worry about being abandoned”). Attachment-related Avoidance is thought to reflect an individual’s comfort with closeness, dependency, or a reluctance to be intimate with others (Sibley, Fischer, & Liu, 2005). Example items from the Attachment subscale include “I find it relatively easy to get close to my partner”, or “I’m nervous when my partners get to close to me.” Avoidance and Anxiety items alternate in the scale. (See Appendix C to view all items on the ERC-R).

Items 9, 11, 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36 are reverse scored. After reverse-scoring, the Anxiety subscale total score is computed by first summing the scores of items 1 - 18, and then dividing by 18. Therefore, the Avoidance subscale score can range from 1 to 7. This step is repeated for items 19 – 36. Higher scores on both subscales indicated higher levels of anxiety or avoidance, respectively.

Fraley et al. (2000) noted that the scales were initially worded to be relevant to romantic relationships, but these authors have encouraged other researchers to adapt the language of the
items to more closely align with other research populations. The version of the items on the ECR-R to be used in this study matched those used by Blair-Gomez (2012) in her investigation of Therapists’ Attachment Styles and Theoretical Orientation. Psychometric properties of the subscales have been demonstrated to be quite robust despite minor modifications to the exact wording used.

The ECR-R has demonstrated strong psychometric properties. Reliability is evidenced by test-retest correlations of $r = .90$ or above reported for both subscales over periods of 6-weeks and 3-weeks (Liu et al., 2005). Information on the divergent validity between the Anxiety and Avoidance subscales of the ECR-R has been less commonly reported, but a correlation of $r = .58$ was found in a sample of student and practicing therapists (Blair-Gomez, 2012). Convergent validity has been documented through comparisons to the Relationship Questionnaire (RQ), which have indicated as much as 50% shared variance for the same constructs for the same time period (Liu et al., 2005). These psychometrics indicate that the ECR-R provides stable and valid estimates of the constructs of anxiety and avoidance that are central to attachment theory.

**The Unidimensional Relationship Closeness Scale (URCS):** The URCS (Dibble, Levine, & Park, 2012) is a 12-item self-report scale measuring the perceived closeness of the participant to their respective parent. The URCS was derived from the Relationship Closeness Survey (Berscheid et al., 1989) which consisted of three subscales designed to assess three properties proposed by Kelley et al. (1983) to indicate a close relationship: 1) the frequency with which one person impacts another, 2) the diverse kinds of activities through which one person can impact the other, and 3) the strength of the impact one has on the other. All items on the URCS are measured using a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores indicate more parental closeness being reported by the participant. Participants are
provided with versions of the URCS questionnaires based which influential parental figure they selected. (See Appendix D to view all items and versions of the URCS).

The reliability and validity of the URCS were initially documented by Dibble, Levine, and Park (2012) with college dating couples ($N = 192$), female friends and strangers ($N = 330$), friends ($N = 170$), and family members ($N = 155$). The results show that the scale is unidimensional, with strong internal consistency as measured by Cronbach’ alpha ($\alpha = .96$). Additional evidence consistent with validity included substantial within-couple agreement for the romantic couples (intraclass correlation of $r = .41$), substantial friend–stranger discrimination for the female friends ($\eta^2 = .82$), and measurement invariance across relationship types. When convergent validity of the UCRS was assessed, the correlation between the Inclusion of Other in the Self Scale (IOS) and the 12-item UCRS was $r = .58$. Mean scores by relationship types were again consistent with validity. For friend types, the URCS produced an effect size of $\eta^2 = .36$. For the family data, the effect sizes were uniformly smaller $\eta^2 = .09$.

**Procedure**

All participants completed this study in an online format utilizing the Survey Monkey software. Initially, participants provided their consent to participate by selecting the “Agree” response after reading the informed consent form. Participants had the option to acquire a printed copy of the informed consent form for their records. (See Appendix A to view the Informed Consent Form). The three questionnaires (Demographics, ECR-R, and URCS) were also offered in the online survey. Participants were asked to complete the three questionnaires by selecting the response to each item that most accurately reflected their status, personal experiences, attitude or opinion. Upon completion of the questionnaires, participants were given a formal
debriefing statement that described the purpose of the study, and provided information about how to contact the researcher in the future with any questions about their participation. Participants were provided the option to acquire a printed copy of the debriefing statement. Finally, participants were asked to confirm their “Consent to Use Data” by selecting the “Yes” response to a prompt.

**Results**

**Preliminary Analyses**

To examine the degree to which the sample used in the current study was consistent with previously established norms for the ERC-C, mean scores from the adopted and biological subsamples from the current study were compared to those of the norming sample. The mean level of reported Attachment-related Anxiety for both the adopted \((M = 4.01, SD = 1.17)\) and biological \((M = 3.26, SD = 1.26)\) subsamples from the current study fell within one standard deviation of the mean reported by the norming sample \((M = 3.56, SD = 1.12)\) used by the authors of the ECR-R (Fraley, 2012). The mean Attachment-related Avoidance \((M = 4.99, SD = 0.59)\) score reported by adopted participants in the current study was quite similar to the mean identified for the biological participants \((M = 4.90, SD = 0.50)\), with both being more than one standard deviation above the mean reported by the norming sample used by the authors of the ECR-R \((M = 2.92, SD = 1.19)\). Given that the analyses used to test the stated hypotheses included calculations of four independent samples t-tests, the Bonferroni’s correction was applied. This was done in order to account for the possibly of a Type I error. After the correction was applied, a new value of \(p < .0125\) became the required level to achieve significance.
Attachment Styles. An independent-samples t-test was conducted to compare Anxiety related attachment in biological versus adopted participants. Members of the adopted group produced scores ($M = 4.01$, $SD = 1.17$) that approached, but did not achieve, significance $t(63) = 2.27$, $p = 0.013$ compared to members of the biological group ($M = 3.26$, $SD = 1.26$).

An independent-samples t-test was conducted to compare Avoidance related attachment in biological and adopted participants. The difference in scores between the adopted ($M = 4.99$, $SD = 0.59$) and biological ($M = 4.90$, $SD = 0.50$) groups was not significant $t(63) = 0.57$, $p = 0.285$.

Parental Closeness. Statistical analyses utilizing ratings of father and mother included only cases where adoptive status and parent selected matched. In other words, participants raised by their biological parents were included in analyses if they chose to rate their biological father and mother; participants who identified as being adopted were included if they chose to rate their adoptive father and mother on the measure of parental closeness. Instances where adoptive status and parent selected did not match were excluded from the analyses. Therefore, when interpreting the parental closeness data, the matches described can be assumed.

An independent-samples t-test was conducted to compare Parental Closeness with Fathers in biological versus adopted participants. The difference in scores between adopted ($M = 4.27$, $SD = 1.92$, $N = 20$) and biological ($M = 4.45$, $SD = 1.54$) groups was not significant $t(63) = -0.39$, $p = 0.35$.

An independent-samples t-test was conducted to compare Parental Closeness with Mothers in biological versus adopted participants. Scores reported by members of the adopted
group ($M = 4.49, SD = 1.46$) were not significantly different $t(63) = -2.0, p = 0.025$) compared to the biological group ($M = 5.30, SD = 1.52$).

A correlation matrix was computed comparing all four dependent variables. Correlational analysis of the relationship between Anxiety related attachment and Parental Closeness with Fathers was the only one of six correlations computed to achieve significance, and revealed a negative relationship of ($r = -0.299, p = .015$). See Table 1 for the full correlation matrix.

Table 1

*Attachment and Parental Closeness Correlation Matrix*

<table>
<thead>
<tr>
<th>Variables</th>
<th>ECR-R</th>
<th>URCS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avoid</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Avoid</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.108</td>
<td>-</td>
</tr>
<tr>
<td>Father</td>
<td>-.124</td>
<td>-.299*</td>
</tr>
<tr>
<td>Mother</td>
<td>.091</td>
<td>-.188</td>
</tr>
</tbody>
</table>

*Note. ECR-R = Experiences in Close Relationships – Revised questionnaire. URCS = Unidimensional Relationship Closeness Scale. Avoid = Avoidant-related attachment. Anxiety = Anxiety-related attachment. Father = Father Closeness. Mother = Mother closeness. *p < .05

Discussion

Description of Results

The present study was designed to provide comparisons between the attachment styles and parental closeness reported by adopted versus biological children after reaching adulthood.

Regarding the association between attachment style and adoptive status, the results from the current study identified no significant findings. Therefore, the most compelling conclusion is that persons who were adopted in infancy are no more likely to experience levels of Attachment-
related Anxiety or Avoidance in excess of the levels experienced by persons raised by their biological parents. There was one non-significant trend in the data which provided marginal support for the hypothesis that adopted children experience greater levels of attachment-related anxiety compared to biological children. While the results did not reach the level of significance required in this study after applying the Bonferroni correction, the level of significance achieved was just slightly above that allowed ($p = .013$ with a cutoff of $p = .0125$). Previous research (Phillips 2013) has established the importance of early parental bonding and its effects on the child. Given that a majority of the adopted participants reported that their adoption occurred prior to 1 year of age, it is not surprising that they may experience more anxiety-related attachment due to an early disruption in parental bonding. Participants in both conditions reported higher, but similar levels of Attachment Avoidance as compared to the norming population.

The hypothesis that adopted children would report lower levels of closeness with their father figures compared to biological children was also not supported. Participants in both conditions reported similar average scores of parental closeness with their most influential father figure. Therefore, the hypothesis that adopted children will report statistical difference in closeness with their father figures is not supported by this study.

While the scores reported by participants in the adoptive group were almost a full point lower than those reported by the biological group when rating mothers on the measure of parental closeness used in this study, this difference also failed to reach significance.

Although not initially hypothesized, and therefore not statistically analyzed, it was interesting to note that mean scores of parental closeness were higher in the mother group than
the father group for both the adoptive and biological group. This trend is consistent with previous research (Dibble, Levine, & Park, 2011) demonstrating that people are more likely to endorse higher levels of parental closeness with their mothers compared to their fathers. Previous authors have explained this pattern by noting that the bonding process with mothers can initiate as early as conception. During the nine month period of human pregnancy, the mother and fetus form a close physiological link that is not available to even the most nurturing and attentive fathers. Also, along traditional understandings of gender norms, many mothers may engage in more nurturing behaviors, while fathers are stereotypically seen as disciplinarians, a role that may adversely affect parental closeness.

**Limitations of the Current Study**

Most of the limitations of this study are concerned with the size and diversity of the sample. While increasing sample size alone does not guarantee that the level of differences between groups will be maintained, group sizes of 20 for the adopted subsample and 45 for the biological sample produced low statistical power. Also, the degree of inequality of the sample sizes of groups this small can reduce statistical power. Given a larger sample that was more equitably shared across comparison groups would have increased the statistical power available.

Also, while increasing the diversity of the sample does not guarantee significance, the sample obtained failed to meet this researcher’s goals for this study. The sample consisted of primarily White/Caucasian female participants, leaving males and other ethnic backgrounds underrepresented. The participants reporting as adopted were mostly composed of domestic and closed adoptions. Therefore, any conclusions drawn are not applicable to persons involved in international or more open adoption processes. In addition, 95% of the participants reporting as
adopted noted their adoption took place between birth and one year of age. While in some ways this pattern was consistent with the hypotheses of this study (as the most important processes involved in forming attachments are theorized to occur during infancy), it also served to equalize the influences of interactions with parents during infancy and early childhood across the comparison groups. Therefore, the results of this study are unable to address how attachment and parental closeness may manifest differently for children adopted during later childhood or even adolescence, when such differences might be more pronounced. Additional research could focus on the additional hypothesis of the effects of age at which the adoption occurred on attachment and parental closeness.

The wide array of age ranges represented in this sample may also be a limitation in this study. Given this age range, this study encompassed several different generations of participants. Each generational cohort may have its own unique characteristics as a function of the era in which the adoption occurred. For example, participants may experience differences in parenting trends/practices (e.g.; more authoritarian versus more authoritative parenting styles being in vogue). Exposure to unique environmental and historical events might also influence a person’s sense of security, such as the threat of nuclear war in the 1970s versus the 9-11 terrorist attacks or more recent mass school shootings). Differences such as these may make it difficult to generalize findings across different generational cohorts.

**Suggestions for Future Research**

Given the lack of empirical research on the relationship between Attachment Styles and Parental Closeness in adopted participants, this study was largely descriptive and exploratory. One should read the conclusions with caution, and remain skeptical in any attempts to generalize
results to the full population of adopted children. Increasing the size of the sample could result in greater statistical power. Including more participants who experienced open adoptions would allow generalization of the results to a broader spectrum of the population of adopted children.

Having a more balanced sample of men and women might identify similarities and differences across genders. A greater sample size may provide insight on how gender interactions may be affect attachment and parental closeness between child and parent.

Having a more ethnically diverse sample might identify similarities and differences across groups and inform how much culture impacts attachment and parental closeness. As the policies of agencies involved in facilitating adoptions have changed in recent years, moving away from the assumption that achieving racial or ethnic matches between parents and adopted children is imperative, the completion of cross-cultural adoptions is a relatively recent phenomenon. The degree to which this impacts attachment and parental closeness has received little scholarly attention.

Another question of interest that remains unanswered is if attachment styles are affected by the age of adoption. As theories of attachment style emphasize the importance of interactions between child and parents, and especially between child and mother, the age at which an adoption occurs could have important implications. Having a more diverse range of ages where adoptions took place may inform how much, and in what ways, attachment and parental closeness are effected by disruptions in continuity of parental care.

Parenting styles (i.e. authoritarian, dismissive, and authoritative) might provide additional information on the relationship between children and their parents. Results from the study would suggest that attachment style may not have a significant effect on parental closeness, but what
happens after the adoption potentially does. Therefore, including parental styles as another independent variable may provide useful information.

**Clinical Implications**

Attachment styles have been studied with a focus on how each impacts perceptions of parental closeness. Prior to this current research, no known studies had investigated the relationship between these two variables in adopted populations. This study identified a significant and negative relationship between ratings of attachment-related anxiety and parental closeness with fathers within the full set of both biological and adopted participants. As parental closeness with fathers decreased, attachment-related anxiety increased. This study also yielded results that fell just short of statistically significant. Specifically, trends for anxiety-related attachment, with adopted persons reporting mean scores for attachment-related anxiety that numerically exceeded those reported by persons raised by their biological parents. This study also produced near to significant results for differences in ratings of parental closeness to mothers, with adopted participants reporting mean scores that were numerically lower than those reported by biological parents. With additional research, clinicians may have a better understanding of what role attachment styles play in facilitating parental closeness and be able to provide interventions to enhance the quality of closeness between parents and their adopted children. More specifically, findings from this study suggest that more secure attachments could be achieved by improving how close children feel towards their fathers. Consistent with attachment theory, this would likely involve encouraging greater efforts from fathers to engage in nurturing behaviors, specifically during infancy and early childhood.
In addition, many parents may be unaware of how their general parenting approaches and specific behavioral interactions affect their children, either biological or adopted. Through the research reported herein, awareness may be brought to a population of adoptive parents that could dramatically benefit from the information provided. Many prospective adoptive parents experience anxiety over the ability to bond and become close with a child that is not biologically their own. This study, while noting some results that suggest the sense of parental closeness may not be as strong in adopted children, offers hope that effective parenting strategies can produce effective relationships with proper education and support. Stated more emphatically, the failure of this study to produce statistically significant findings in support of the hypotheses as stated (that significant differences between adopted and biological children would exist) provides support for the alternative hypotheses that differences do not exist. This alternative view of the results obtained in this study suggests that adoptive parents are at least equally effective in producing relationships that embody parental closeness and attachment security comparable to parents raising their own biological children.

Finally, adopting parents may benefit from supportive counseling during the adoption process. Clinicians can recommend that prospective adopting parents seek out peer support during their application process. Adoptive parents can share their experiences and stories with the prospective parents in order to provide greater insight and alleviate anxiety. Adopting parents may learn that they will have a hard time worrying about the abstract question of whether they are the real parents, when they have to change diapers ten to twelve times a day, fill baby bottles, and constantly call the doctor with questions about their child. They will watch their baby grow, smile, and then laugh for the first time. They will feel the infant’s vulnerability and dependence
on them. Their concern about whether they are entitled to be a parent is overwhelmed by the day
to day, concrete and immediate experience of being a mother or father.
References


Beijersbergen, M., Juffer, F., Bakermans-Kranenburg, M., & Ijzendoorn, M. (2012). Remaining or becoming secure: Parental sensitive support predicts attachment continuity from


Dumas, J. E., LaFreniere, P. J., & Serketich, W. J. (1995). “Balance of power”: A transactional analysis of control in mother-child dyads involving socially competent, aggressive, and


Independent Adoption Center. (n.d.). Loving and Bonding with Your Adopted Baby


APPENDIX A

PARTICIPANT INFORMED CONSENT

The Department of Psychology supports the practice of protection for human subjects participating in research. The following information is provided so that you can decide whether you wish to participate in the present study. You should be aware that even if you agree to participate you are free to withdraw at any time, without penalty.

You will first be asked to answer questions regarding demographic information such as your age, educational status, ethnicity, family status, and gender. Then, you will be asked to complete two questionnaires concerning your feelings and behaviors within relationships. The study should take no longer than 30 minutes to complete.

The results of this study may be presented at professional meetings and/or published, and printed and electronic copies of the final report will be available sometime after June 1, 2016 through Washburn University Psychology Department and Mabee Library. No identifying information (such as your name) will be associated with the published data.

Your participation is solicited, but strictly voluntary. Do not hesitate to ask any questions about your participation in this study by contacting the researcher using the information provided below. Be assured that your name will not be associated in any way with the researcher findings or published materials. You may request a copy of this consent at any time. We appreciate your cooperation very much.

Sincerely,

Joel Broxterman
Joel.Broxterman@washburn.edu
785-249-3002
Psychology Master’s Student

Dave Provorse, Ph.D.
dave.provorse@washburn.edu
785-670-1562
Psychology Faculty Supervisor
APPENDIX B

PARTICIPANT DEMOGRAPHICS INFORMATIONAL QUESTIONNAIRE

Do you agree to participate in this study?

YES       NO

(*NOTE: If participant answers “no” they will be automatically excluded from the study)

Are you eighteen years or older?

YES       NO

(*NOTE: If participant answers “no” they will be automatically excluded from the study)

What is your current educational status? Please select the ONE which best describes your current educational status.

- Less than High School Degree
- High School Degree or Equivalent (e.g. GED)
- Some college, but no degree
- Associate’s Degree
- Bachelor’s degree
- Graduate Program (master’s or doctoral)

With what gender do you identify?

- Female
- Male
- Other (Please Specify)

How old are you (e.g., years)?

(*NOTE: Students who list their age as younger than 18 will automatically be excluded from the present study)

How many siblings do you have? Please include half-siblings and step-siblings.

(*NOTE: Students who list their age as younger than 18 will automatically be excluded from the present study)

What is your ethnicity? Please select all that apply.

- Black or African American
- Asian-American or Pacific Islander
- White/Caucasian
Hispanic or Latino  
American Indian or Alaskan Native  
Prefer not to answer  
Other  

What is your yearly income?  
- Less than $20,000  
- $20,000 to $34,999  
- $35,000 to $49,999  
- $50,000 to $74,999  
- $75,000 to $99,999  
- $100,000 to $149,000  
- $150,000 to $199,999  
- $200,000 or more  

Were you adopted?  
- YES  
- NO  

If you answered “yes” to being adopted, at what age were you adopted?  

(Participants will be provided a drop down box to select their age at adoption. Less than 1 year of age through 20 or older.)  

If you answered “yes” to being adopted, was your adoption:  
- Domestic (U.S.A.)  
- International  
- Unknown  

Was your adoption open or closed?  
- Open  
- Closed  

If your adoption was open, how much contact did you have with your biological parent(s)?  
- None  
- Seldom  
- Some  
- Often  
- Adoption was closed  

Please select your most influential FATHER figure.  
- Biological Father  
- Adoptive Father  
- Stepfather  
- Other
Please select your most influential MOTHER figure.

- Biological Mother
- Adoptive Mother
- Stepmother
- Other
APPENDIX C

The Experiences in Close Relationships-Revised (ECR-R) Questionnaire

Generic Instructions: The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience close, intimate and/or romantic relationships, not just in what is happening in a current relationship. Respond to each statement by [web: clicking a circle] to indicate how much you agree or disagree with the statement.

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on partners.
22. I am very comfortable being close to partners.
23. I don't feel comfortable opening up to partners.
24. I prefer not to be too close to partners.
25. I get uncomfortable when a partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on partners.
34. I find it easy to depend on partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.
APPENDIX D

The Unidimensional Relationship Closeness Scale (URCS)

Adoptive Father version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your ADOPTIVE FATHER when responding to the following questions. Please respond to the following statements using this scale:

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

1. My relationship with my adoptive father is close.
2. When we are apart, I miss my adoptive father a great deal.
3. My adoptive father and I disclose important personal things to each other.
4. My adoptive father and I have a strong connection.
5. My adoptive father and I want to spend time together.
6. I’m sure of my relationship with my adoptive father.
7. My adoptive father is a priority in my life.
8. My adoptive father and I do a lot of things together.
9. When I have free time I choose to spend it alone with my adoptive father.
10. I think about my adoptive father a lot.
11. My relationship with my adoptive father is important in my life.
12. I consider my adoptive father when making important decisions.
The Unidimensional Relationship Closeness Scale (URCS)
Adoptive Mother version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your ADOPTIVE MOTHER when responding to the following questions. Please respond to the following statements using this scale:

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

1. My relationship with my adoptive mother is close.
2. When we are apart, I miss my adoptive mother a great deal.
3. My adoptive mother and I disclose important personal things to each other.
4. My adoptive mother and I have a strong connection.
5. My adoptive mother and I want to spend time together.
6. I’m sure of my relationship with my adoptive mother.
7. My adoptive mother is a priority in my life.
8. My adoptive mother and I do a lot of things together.
9. When I have free time I choose to spend it alone with my adoptive mother.
10. I think about my adoptive mother a lot.
11. My relationship with my adoptive mother is important in my life.
12. I consider my adoptive mother when making important decisions.
The Unidimensional Relationship Closeness Scale (URCS)

Biological Father version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your BILOGICAL FATHER when responding to the following questions. Please respond to the following statements using this scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
1. My relationship with my biological father is close.
2. When we are apart, I miss my biological father a great deal.
3. My biological father and I disclose important personal things to each other.
4. My biological father and I have a strong connection.
5. My biological father and I want to spend time together.
6. I’m sure of my relationship with my biological father.
7. My biological father is a priority in my life.
8. My biological father and I do a lot of things together.
9. When I have free time I choose to spend it alone with my biological father.
10. I think about my biological father a lot.
11. My relationship with my biological father is important in my life.
12. I consider my biological father when making important decisions.
The Unidimensional Relationship Closeness Scale (URCS)

Biological Mother version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your BIOLOGICAL MOTHER when responding to the following questions. Please respond to the following statements using this scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. My relationship with my biological mother is close.
2. When we are apart, I miss my biological mother a great deal.
3. My biological mother and I disclose important personal things to each other.
4. My biological mother and I have a strong connection.
5. My biological mother and I want to spend time together.
6. I’m sure of my relationship with my biological mother.
7. My biological mother is a priority in my life.
8. My biological mother and I do a lot of things together.
9. When I have free time I choose to spend it alone with my biological mother.
10. I think about my biological mother a lot.
11. My relationship with my biological mother is important in my life.
12. I consider my biological mother when making important decisions.
The Unidimensional Relationship Closeness Scale (URCS)

Stepfather version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your STEPFATHER when responding to the following questions. Please respond to the following statements using this scale:

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

1. My relationship with my stepfather is close.
2. When we are apart, I miss my stepfather a great deal.
3. My stepfather and I disclose important personal things to each other.
4. My stepfather and I have a strong connection.
5. My stepfather and I want to spend time together.
6. I’m sure of my relationship with my stepfather.
7. My stepfather is a priority in my life.
8. My stepfather and I do a lot of things together.
9. When I have free time I choose to spend it alone with my stepfather.
10. I think about my stepfather a lot.
11. My relationship with my stepfather is important in my life.
12. I consider my stepfather when making important decisions.
The Unidimensional Relationship Closeness Scale (URCS)

Stepmother version

Instructions: the following questions refer to your relationship with a parent. Please think about your relationship with your STEPMOTHER when responding to the following questions. Please respond to the following statements using this scale:

Strongly Disagree  1  2  3  4  5  6  7  Strongly Agree

1. My relationship with my stepmother is close.
2. When we are apart, I miss my stepmother a great deal.
3. My stepmother and I disclose important personal things to each other.
4. My stepmother and I have a strong connection.
5. My stepmother and I want to spend time together.
6. I’m sure of my relationship with my stepmother.
7. My stepmother is a priority in my life.
8. My stepmother and I do a lot of things together.
9. When I have free time I choose to spend it alone with my stepmother.
10. I think about my stepmother a lot.
11. My relationship with my stepmother is important in my life.
12. I consider my stepmother when making important decisions.
APPENDIX E

FULL PARTICIPANT DEBRIEFING

The purpose of the survey was to gather information about attachment styles and parental closeness. The main hypothesis being investigated was that children who grow up in adoptive families may experience romantic/intimate relationships differently from children raised by their biological parents.

If you have any questions, comments, or concerns about your participation in this research project, please feel free to contact the principal investigator, Joel Broxterman (785-249-3002), or the faculty supervisor, Dave Provorse (785-670-1562).

If you are interested in reviewing the results of this study, you can access the completed master’s thesis in the Washburn Psychology Department (Henderson 211) or through Mabee Library sometime after June 1, 2016. We appreciate your participation!

If the process of completing these questionnaires prompted any distressing thoughts or feelings, please consider contacting any of the following resources:

WASHBURN UNIVERSITY RESOURCES:

Washburn Psychological Services Clinic
(Reduced fee, open to Washburn students and other community members)
111 Henderson Hall
Washburn University
1700 SW College Ave.
Topeka, KS 66621
785-670-1750

Washburn Counseling Services
(Free to Washburn students)
111 Henderson Hall
Washburn University
1700 SW College Ave.
Topeka, KS 66621
785-670-3100

COMMUNITY RESOURCES:

Stormont-Vail West Behavioral Health Services
3707 SW 6th Ave.
Topeka, KS, 66606
785-270-4600

Valeo Behavioral Health Care
330 SW Oakley Ave.
Topeka, KS 66606
785-233-1730
APPENDIX F

FULL PARTICIPANT DEBRIEFING

The purpose of the survey was to gather information about your attachment style and parental closeness. You are being excluded from participating because you selecting “No” to being 18 years of age or older. While the questions presented in this survey were not intended to cause distress, it is possible that some of the topics may bring up distressing thoughts or feelings. If you have any such feelings, please see the following resources:

WASHBURN UNIVERSITY RESOURCES:

Washburn Psychological Services Clinic
(Reduced fee, open to students and other community members)
111 Henderson Hall
Washburn University
1700 SW College Ave.
Topeka, KS 66621
785-670-1750

Counseling Services
(Free to students)
111 Henderson Hall
Washburn University
1700 SW College Ave.
Topeka, KS 66621
785-670-3100

COMMUNITY RESOURCES:

Stormont-Vail West Behavioral Health Services
3707 SW 6th Ave.
Topeka, KS, 66606
785-270-4600

Valeo Behavioral Health Care
330 SW Oakley Ave.
Topeka, KS 66606
785-233-1730

If you have any questions, comments, or concerns please feel free to contact the principal investigator, Joel Broxterman (785-249-3002), or the faculty supervisor, Dave Provorse (785-670-1562).

Thank you again for your time and participation.