A Comparative Study of Adopted and Nonadopted Women's Attachment Within Romantic Relationships

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Abstract
In today’s society adoption has offered an effective way for dealing with children who are for whatever reason separated from their biological parents. During the past decade a burgeoning interest in the psychological community about the experiences of adult adoptees has initiated a growing amount of research regarding adopted individual’s adult relational adjustment. Still, little is known about adoptee’s relational adjustment in adulthood. From a sample of two-hundred-thirty-one women (N=231), one-hundred-twenty-seven adopted women and one-hundred-four women who were not adopted were compared in terms of their attachment style within romantic relationships. Comparisons were also made between adopted women and nonadopted women regarding their parental bonding experiences. Participants completed The Experiences in Close Relationships Measure to assess romantic relationship attachment, The Parental Bonding Instrument to assess experiences of parental behaviors and attitudes during their first sixteen years of life, and a Background Information Questionnaire. Statistical analysis indicated that adopted women experienced a more insecure attachment within their romantic relationships. Statistical analysis also indicated that adopted women reported more negative parental attitudes and behaviors regarding their mutual interactions with their parents during the first sixteen years of their life. Clinical implications are discussed with a particular focus on how clinicians may better serve their adopted clients through having an in-depth understanding of adoption and attachment. Further research is needed to determine the impact of adoption on adult attachment related experiences for adopted persons.

Degree Type
Dissertation

Degree Name
Doctor of Social Work (DSW)

First Advisor
Dr. Ram Cnaan

Second Advisor
Dr. Kevin Corcoran

Third Advisor
Dr. Vasiliki Galani

Keywords
Adoption, Attachment, Adopted Women, Adult Adoptee, Romantic Relationships, Parental Bonding

Subject Categories
Psychology | Social and Behavioral Sciences | Social Work

This dissertation is available at ScholarlyCommons: http://repository.upenn.edu/edissertations_sp2/7
A COMPARATIVE STUDY OF ADOPTED AND NONADOPTED WOMEN’S ATTACHMENT WITHIN ROMANTIC RELATIONSHIPS

Mary Ann A. Groncki

A DISSERTATION

in

Social Work

Presented to the Faculties of the University of Pennsylvania

in

Partial Fulfillment of the Requirements for the

Degree of Doctor of Social Work

2010

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A COMPARATIVE STUDY OF ADOPTED AND NONADOPTED WOMEN’S ATTACHMENT WITHIN ROMANTIC RELATIONSHIPS

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ABSTRACT

A COMPARATIVE STUDY OF ADOPTED AND NONADOPTED WOMEN’S ATTACHMENT WITHIN ROMANTIC RELATIONSHIPS

Mary Ann A. Groncki
Ram Cnaan, PhD

In today’s society adoption has offered an effective way for dealing with children who are for whatever reason separated from their biological parents. During the past decade a burgeoning interest in the psychological community about the experiences of adult adoptees has initiated a growing amount of research regarding adopted individual’s adult relational adjustment. Still, little is known about adoptee’s relational adjustment in adulthood. From a sample of two-hundred-thirty-one women (N=231), one-hundred-twenty-seven adopted women and one-hundred-four women who were not adopted were compared in terms of their attachment style within romantic relationships. Comparisons were also made between adopted women and nonadopted women regarding their parental bonding experiences. Participants completed The Experiences in Close Relationships Measure to assess romantic relationship attachment, The Parental Bonding Instrument to assess experiences of parental behaviors and attitudes during their first sixteen years of life, and a Background Information Questionnaire. Statistical analysis indicated that adopted women experienced a more insecure attachment within their romantic relationships. Statistical analysis also indicated that adopted women reported more negative parental attitudes and behaviors regarding their mutual interactions with their parents during the first sixteen years of their life. Clinical implications are discussed with a particular focus on how clinicians may better serve their adopted clients through having
an in-depth understanding of adoption and attachment. Further research is needed to
determine the impact of adoption on adult attachment related experiences for adopted
persons.
DEDICATION

I dedicate this dissertation to my parents, Dolores and Thomas Groncki. You provided a secure base from which I could grow and flourish. Thank you for your unconditional love and support. I appreciate everything I have learned from you about life, love, and partnership. It is because of you that I was able to pursue my academic dreams. Thank you for it!

This dissertation is also dedicated to my husband, Nicholas Naro. Your patience, compassion, understanding, and support contributed to a successful completion of my doctoral education and dissertation. Thank you for listening and providing helpful feedback. I look forward to the next twenty years and beyond with you by my side my love!
ACKNOWLEDGEMENTS

Throughout this doctoral dissertation journey a number of people have offered and provided encouragement and support. First, I would like to thank Dr. Ram Cnaan, Dr. Kevin Corcoran, and Dr. Vasiliki Galani for their guidance and insightful feedback throughout the dissertation process. Dr. Cnaan, because of your mentorship I am confident that the next phase of my clinical social work career will be a professionally and personally fulfilling one.

My appreciation goes out to each and every one of the adopted women who participated in my doctoral dissertation study. I could not have done it without your help. I am grateful for your kindness and thankful for your willingness to participate in the study.

Thank you to my friends and colleagues, especially Dr. Genevieve Chaney, Ms. Pam Kasinetz, Dr. Maria Padro, and Dr. Lina Perez. You inspired me to continue my education and pursue a doctoral degree. Thank you for your unconditional friendship throughout the past three years.

Finally, I would like to thank my biological mother for her ability to see beyond the moment and have the strength to make a difficult decision. I am grateful to you for it.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. iii
DEDICATION .............................................................................................................. v
ACKNOWLEDGEMENTS .......................................................................................... vi

INTRODUCTION
Statement of the Problem ......................................................................................... 1
Purpose of the Study .................................................................................................. 2
Significance of the Study .......................................................................................... 3

CHAPTER I
LITERATURE REVIEW
Adoption ..................................................................................................................... 4
Adoptee Adjustment .................................................................................................. 5
Adoptive Family Dynamics ...................................................................................... 7

CHAPTER II
LITERATURE REVIEW
Attachment Theory ................................................................................................ 10
Attachment Behavior .............................................................................................. 11
Internal Working Models ......................................................................................... 11
Attachment Classification System ......................................................................... 12
Attachment and Adoption ....................................................................................... 13
Attachment and Adulthood ....................................................................................... 14
Attachment and Adult Romantic Relationships ..................................................... 15
Attachment within Adopted Women’s Romantic Relationships ......................... 18

CHAPTER III
METHODS
Research Questions ................................................................................................. 19
Hypotheses ............................................................................................................... 19
Research Design .................................................................................................... 19
Recruitment Procedures ......................................................................................... 20
Participant Characteristics ..................................................................................... 22
Sample ................................................................................................................... 24
Measures ............................................................................................................... 29
Data Analysis ......................................................................................................... 32

CHAPTER IV
FINDINGS
Adopted and Nonadopted Women’s Attachment within Romantic Relationships .. 34
Parental Bonding Experiences of Adopted and Nonadopted Women ................. 38
The Impact of Parental Bonding on Romantic Attachment .................................. 43
CHAPTER V
DISCUSSION
Summary.........................................................................................48
Romantic Attachment ......................................................................48
Parental Bonding ...........................................................................50
Romantic Attachment and Parental Bonding ................................53
Clinical and Policy Implications .....................................................55
Limitations ...................................................................................59
Recommendations for Future Research .........................................61
References ...................................................................................64

APPENDICES
Appendix A: Study Advertisement ................................................71
Appendix B-1: Cover Letter Adopted Woman ..................................72
Appendix B-2: Cover Letter Nonadopted Woman .............................73
Appendix C: Experiences in Close Relationships Measure ................74
Appendix D: Parental Bonding Instrument .....................................75
Appendix E-1: Background Questionnaire Adopted Woman ............76
Appendix E-2: Background Questionnaire Nonadopted Woman ........80

LIST OF TABLES
Table 1: Participant Background Characteristics .............................26
Table 2: Romantic Relationship Characteristics ..............................28
Table 3: Adoptee Characteristics ...................................................29
Table 4: Dependent Variable: Avoidance ......................................36
Table 5: Dependent Variable: Anxiety ..........................................37
Table 6: Comparing Adopted and Nonadopted Women and Parental Care ....39
Table 7: Regression Model to Explain Variation in Reported Mother Overprotection ...41
Table 8: Regression Model to Explain Variation in Reported Father Overprotection ...41
Table 9: Regression Model to Explain Variation in Reported Mother Care ..........42
Table 10: Regression Model to Explain Variation in Reported Father Care .........42
Table 11: Regression Model to Explain Variation in Reported Anxiety in Romantic Relationships ..................................................44
Table 12: Regression Model to Explain Variation in Reported Anxiety in Romantic Relationships (full model) ........................................45
Table 13: Regression Model to Explain Variation in Reported Avoidance in Romantic Relationships ..................................................45
Table 14: Regression Model to Explain Variation in Reported Avoidance in Romantic Relationships (full model) ........................................46
Introduction

Statement of the Problem

In the United States, there are approximately 5 million individuals of all ages who were adopted (Demick & Andreoletti, 2003). Researchers (Collishaw, Maughan, & Pickles, 1998; Cubito & Brandon, 2000; Levy-Shiff, 2001; Wierzbicki, 1993) have only recently started to investigate the unique psychosocial experiences of adopted adults. This is most likely due to adoption practices that existed into the 1970’s where traditional closed adoption, no communication of information between biological and adoptive parents, was the norm (Demick & Andreoletti, 2003). Over the past four decades literature has accumulated about the psychological and social adjustment of adopted individuals. Recently the literature expanded to include an exploration of adult adoptees relational adjustment and functioning. The vast majority of the research on the adjustment of adoptees has focused on children and adolescents. To date, little is known about adoptee’s adjustment in adulthood.

Despite the mixed findings for general adjustment, there are continuing convincing arguments linking adoption to increased risk of interpersonal problems (Collishaw, Maughan, & Pickles, 1998; Cubito & Brandon, 2000; Feeney, Passmore, & Peterson, 2007; Levy-Shiff, 2001; Wierzbicki, 1993). Early interpersonal experiences are likely to have potential consequences for the future relational functioning of the adopted individual. In his work on attachment, separation and loss, Bowlby defines the process of a universal attachment behavioral system and explains the process of the infant’s emotional attachment to their primary caregivers (Bowlby, 1969, 1973, 1980). Bowlby’s
work describes and explains how infants become emotionally attached to their primary caregiver and emotionally distressed when separated from them (Bowlby, 1969, 1973, 1980). Adopted children, even those children who were placed for adoption early in their lives thereby reducing the effects of separation and loss, are likely vulnerable to potential difficulties in future relational functioning because of their separation from and loss of their first attachment, their biological mother. Smith and Brodzinsky (1994) emphasized in their findings that infant-placed adoptees occasionally experienced adoption as stressful. This separation and loss, is likely to have psychological and social implications for the adopted individual.

Although there is growing consensus within the scientific community that adoptees are at risk for psychological maladjustment, the adoption related factors that contribute to their maladjustment remain inconclusive. Little is known at the present time of the long-term effects of adoption on the adopted individual’s attachment and relational adjustment. Moreover, the experience and long-term effects of adoption have received little attention in scholarly research.

**Purpose of the Study**

The purpose of this study is to examine adopted women’s attachment in the context of their romantic relationships. There are few studies that exist that examine adopted individuals adult attachment experiences, especially in their romantic relationships. During the past decade a burgeoning interest in the psychological community about the experiences of adult adoptees has initiated a growing amount of research regarding adopted individual’s adult relational adjustment. In this study, adopted women and samples of women in the general population (nonadopted women) will be compared in
terms of their attachment style within romantic relationships. Next, comparisons will be made between adopted women and nonadopted women regarding parental bonding experiences. It is this researcher’s hope that this study will add to the understanding of adopted women’s attachment within their romantic relationships.

**Significance of the Study**

This study is significant in a number of ways. First, the majority of systematic research on the adjustment of adoptees has focused on children and adolescents. To date, little is known about the experiences and adjustment of adult adoptees. Second, little is known about the effect of adopted individual’s attachment experiences and how those experiences manifest themselves within future relationships, especially romantic relationships. Since internal working models are considered the blueprint for future patterns of interaction and are thought to remain relatively stable throughout adulthood, examination of the experiences of adoptees early formation of these working models through parental bonding experiences may explain and impact the quality of future attachments. Finally, if the study finds that adopted women have a more insecure attachment style within their romantic relationships, as compared to nonadopted women, it will have potentially important implications for early intervention and long-term support for both the adoptee and adoptive family. The findings of this study may also inform clinical practice, which includes psychotherapeutic interventions, specific to adopted women.
Chapter I

Adoption

In today’s society adoption has offered an effective way for dealing with children who are for whatever reason separated from their biological parents. The number of adoptions within the United States continues to increase each year. Social attitudes about adoption continue to be filled with mixed messages which range from admiration for adoptive parents to the view that adoption is an inferior route to family formation.

Bowlby was among the first to bring attention to the psychological community about the potential psychological implications for the adopted child. Bowlby cautioned against the danger of separation of the child from the primary caregiver. The impact of Bowlby’s message was not fully realized until the publication of two papers by Marshall Schechter (Schechter, 1960; Schechter, Carlson, Simmons & Work, 1964). Schechter’s work incited dialogue and research in the psychological community about the prevalence of symptomology in adoptees (Schechter, 1960; Schechter, et al., 1964).

The twentieth century brought with it a new structure and codified practice to the field of adoption (Sorosky, Baran, & Pannor, 1984). Adoption has been around for a very long time. References to adoption exist in the Bible. In the mid-nineteenth century, adoptions were done either informally or by indenturing the child to the new parents (Cole & Donley, 1990). The first of the adoption statutes was passed by Massachusetts in 1851 and provided the court inquiry into and control over adoption (Cole & Donley, 1990). Until the 1920’s, the adoption of infants was not a widely acceptable practice within the United States (Cole & Donley, 1990). After World War II there was a renewed interest in adoption that was limited largely to infants (Cole & Donley, 1990). During this
time it was common practice to keep infants in “study homes” for six to twelve months following their birth to observe them and have psychological testing done regarding their development (Cole & Donley, 1990). John Bowlby’s monograph in the early 1950’s called attention to the potential impact of the adoption experience on adoptees. The monograph demonstrated the deleterious effects on the child of early maternal deprivation and was instrumental in bringing adoption policy the current mental health theories, with an emphasis on early placement (Sorosky, Baran, & Pannor, 1984).

In today’s society adoption remains a common solution for couples who are not able to have a biological child of their own and for unwanted children. Adoption has undergone a number of changes over the years. In contemporary society the most notable of these changes is the option of open adoption where adoptee’s birth identity and any information connected to the adoptee’s biological heritage is readily available to the adopted individual.

**Adoptee Adjustment**

A number of studies have examined the psychological adjustment of adult adoptees (Collishaw, Maughan, & Pickles, 1998; Cubito & Brandon, 2000; Levy-Shiff, 2001; Wierzbicki, 1993). These studies support the notion that adoptees are at greater risk for psychological issues. Feeney, Passmore, & Peterson’s (2007) recent study findings support the view that adoption may be a risk factor for negative relational attitudes and relationship difficulties in adult life, particularly in terms of attachment security.

Adopted individuals have their own unique experiences and challenges to contend with within their relationships with adoptive family members. Partridge (1991) identified
a number of challenges for the adopted individual including: unacknowledged losses, tension and secrecy related to their adoption and biological heritage, divided identity, a sense of being loved, wanted or good enough, and sense of differentness.

The benchmark of a successful adoption requires that the child attach to the new family. For this reason the idea of loss is important to both adoptees and their adoptive parents. Many adoptees experience a sense of loss slowly in conjunction with their growing awareness of the meaning and implications of having been adopted. This loss not only includes the loss of biological parent and information connected to their biological origin, but it may also include loss of stability in the relationship with the adoptive parent, loss of a sense of self, and loss of status associated with being different (Brodzinsky, 1987; Kirk, 1964; Partridge, 1991).

Some adoptees experience a sense of tension and secrecy within their adoptive family related to their adoption and biological heritage. An important aspect of the experienced secrecy is the assumption that if one is not allowed to know something, especially about oneself, it must be bad (Lifton, 1979; Partridge, 1991; Verrier, 1993).

Adoptees have two sets of parents, adoptive parents and biological parents. This phenomena, known as the adoption triangle, may lead the adopted individual to feel they have two identities, their adopted identity and their biological identity (Partridge, 1991). This sense of divided identity may arise as an issue, especially if the adopted individual becomes interested in discovering information about their birthparents. Identity development issues resurface repeatedly in adoptees lives. Many adoptees venture on a
quest to fulfill a psychological void in the search for an identity (Deeg, 1991; Helwig & Ruthven, 1990; Hodges, 1984).

In their pursuit of gaining a sense of being loved or wanted or good enough, some adoptees may repeatedly try to test whether their adoptive family really wants them (Partridge, 1991; Verrier, 1993). Reasons behind this testing may include the adopted individual’s questions about the reasons behind their birthparents decision to give their child up for adoption and if their adoptive parents would have preferred a biological child.

Adopted persons miss out on the “sameness” experience and the connectedness implied in resembling those in the adopted family (Partridge, 1991). This sense of differentness can create feelings of loneliness and non-belonging. Further, disclosure of adoptive status (depending on its time and manner of disclosure) may lead adoptees to feel that they don’t belong in the adoptive family (Levy-Shiff, 2001).

Adoptive Family Dynamics

The way in which adopted individuals view their adoption experience and cope with it may be impacted by the feedback they receive about their adoptive status from the society in which they live, the peers with whom they have contact, and most important, the specific family in which they are reared (Brodzinsky, 1993). Adoption research, to date, has provided no overall continuing consistent findings regarding familial experiences, especially parental bonding experiences, or how those familial experiences may impact the adoptee’s adult attachment experiences.
Adoptive families are different in many ways and Kirk (1964) relayed that the primary issue for adoptive families is the way that they handle the differences that are a part of the adoptive family dynamic. A number of unique dimensions are involved and need consideration in the adoptive family dynamic to fully understand the experiences of the adopted individual within it.

The presence of a biological child in the adoptive family system may have an impact on the adopted child’s adjustment. A few studies have indicated that the presence of a biological child in the family creates an atmosphere where adopted children are more vulnerable psychologically, especially when the biological child’s birth follows the adoption (Hoopes, 1982; Kraus, 1978). Other studies (Brodzinsky & Brodzinsky, 1992; Kaye, 1990) indicate that the presence of a biological child in the adoptive family has little to no impact on the adopted child’s adjustment.

Parenting of an adopted child may be complex if issues connected to infertility lead to the adoption process (Kirk, 1964; Verrier, 1993). Adoptive parents may have unresolved feelings about their own infertility and in turn, those feelings maybe projected onto their adopted child (Kirk, 1964).

Family communication patterns about adoption is another salient issue for both the adopted child and the adoptive family. Acknowledgement-of-difference about adoption among family members within the family system ultimately facilitates healthier adjustment in adoptees (Kirk, 1964). However, Brodzinsky (1987) explained that extremes at either end of the communication continuum, denial-of-difference or insistence-on-difference, are less likely to promote positive adjustment in adoption.
The literature has shown that parental emotional adjustment is another important issue to consider within the adoptive family dynamic. Problems in adopted children are more likely when there are emotional problems in one or both adoptive parents and/or when there is a history of death or divorce in the adoptive family (Cadoret, 1990; Rosenthal, Schmidt & Connor, 1988)

Parental attributions and expectations in relation to the adopted child’s adjustment are another set of important issues to consider within in the adoptive family dynamic. As cited in Marquis and Detweiler (1985), research indicates that adoptive parents are usually seven to eight years older than biological parents and their preparation for parenthood is not necessarily the rich anticipatory period as that for the natural child, but is rather an anxious time. Kirk (1964) explained that adoptive parent’s confidence may be jeopardized because of the probing personal scrutiny of the social worker who has the power to either sanction or deprive them of the adoption of a child. Kadushin (1980) reported that acceptance of and satisfaction with adoptive parenthood, coupled with a warm and accepting attitude toward the child is predictive of more positive adoption adjustment as compared with parental rejection and parental dissatisfaction with adoptive parenthood.
Chapter II

Attachment Theory

Both Bowlby’s and Ainsworth’s work on attachment have significantly influenced current research connected to adult relational functioning, specifically in understanding adult close relationships. Bowlby’s attachment theory grew out of observations of infants and young children who were separated from their primary caregiver (Bowlby, 1988). According to attachment theory, infants and children create and maintain bonds to caretakers instinctively for the purpose of achieving security and survival (Bowlby, 1969, 1973, 1980). A necessary function of the attachment figure is to provide a secure base from which the infant can explore their environment (Bowlby, 1988). Erber & Gilmore (1994) explained that the theory of attachment is an attempt to explain both attachment behavior and the enduring attachments that children make to particular others. Sable (2008) further noted that the quality, security, and stability of these early bonds are related to the emotional health and well-being of the individual throughout the individual’s life.

Ainsworth’s laboratory observation, the Strange Situation, provided an observable tool and operationalization for Bowlby’s attachment concepts (Ainsworth, Blehar, Waters, & Wall, 1978). The Strange Situation experiment organized attachment concepts into a classification system of secure, ambivalent, and avoidant attachment patterns (Ainsworth, et al., 1978). Bowlby formulated attachment theory and Ainsworth’s methodology made it possible to test attachment theory ideas.
**Attachment Behavior**

Bowlby (1973) defined attachment behavior in childhood as any form of behavior that results in a person attaining or retaining proximity to some other differentiated and preferred individual, usually conceived as stronger and/or wiser. He further described attachment behavior as adaptive, having evolved through a process of natural selection, which protects the infant from danger by keeping them close to the primary caregiver (Bowlby, 1973). This organized behavioral system regulates the behaviors designed to establish or maintain contact with an attachment figure and attain “felt security” (Feeney & Noller, 1996). The attachment figure serves as this secure base from which the infant feels safe to explore and master the environment. Ainsworth believed that the function of the secure base was important in understanding the attachment style of the infant. If the infant was able to develop a secure bond with her attachment figure then she would be able to utilize that individual if she became frightened. However, if the child was not able to develop a secure bond with her attachment figure then she would not be able to utilize that individual if she became frightened.

**Internal Working Models**

Bowlby’s attachment theory outlined the function of internal working models and individual differences in attachment styles. Internal working models are repeated attachment related experiences. Goldberg, Muir, and Kerr (1995) relayed that Bowlby’s internal working models are thought to be flexible, impressionable, and responsive to changes in environment. Goldberg, Muir, and Kerr (1995) further explained that internal working models are derived from interactions connected to attachment related events,
specifically from the child’s experiences with the primary caretaker. Through these experiences, the child constructs mental representations of expectations and appraisals of world, significant people within it and of him or herself. Internal working models enable the individual to perceive and interpret interpersonal events and shape current and future interpersonal interactions (Goldberg, et al., 1995). Working models orchestrate behavior, cognition, and affect in close relationships and provide guidance about how to behave, what should be expected or anticipated, and how to interpret the meaning of ambiguous interpersonal events (Rholes & Simpson, 2004). Individuals who are securely attached have formed mental models that reflect a trust of self and other as opposed to individuals who are insecurely attached who have formed mental models that reflect that others cannot be trusted, that the individual will not be cared for and also reflects a negative self-image (Bartholomew & Horowitz, 1991). It is theorized that adult patterns of interaction with significant others are based on these internal working models.

**Attachment Classification System**

The Strange Situation provided an observable way to operationalize Bowlby’s attachment concepts (Ainsworth, et al., 1978). Ainsworth’s Strange Situation is a 20-minute laboratory experiment consisting of eight episodes where the mother and infant are introduced to a laboratory playroom and are later joined by an unfamiliar woman (Ainsworth, et al., 1978). At each stage of the experiment the baby’s behavior is monitored and recorded. Ainsworth found that there was not a uniform way all the babies responded. Through the Strange Situation experiment, Ainsworth organized attachment concepts into a clear classification system of secure, ambivalent, and avoidant attachment.
patterns (Ainsworth, et al., 1978). Ainsworth’s attachment classification system explains that in a secure attachment the infant will successfully use the caregiver as a secure base when distressed, in an ambivalent attachment the infant will display overt expressions of protest and anger toward the caregiver when distressed, and that in an avoidant attachment the infant will avoid the caregiver and will exhibit signs of detachment when distressed (Ainsworth, et al., 1978).

**Attachment and Adoption**

Adoption creates a complex set of circumstances regarding attachment experiences for the child. When a child is adopted, he or she experiences a separation from and the loss of not only their biological parent(s) but also the possible separation from other caregivers who they have formed an attachment bond. In addition, adoptive parents do not just want to care for and rear and adoptive child, they want to create a family relationship and emotional ties between themselves and the child (Mercer, 2006). Attachment theory asserts that children begin to attach very early in life. With this in mind it is reasonable to assume that if a child has attached to one caretaker and then is removed from her caretaker that this could have a negative impact on the child’s development and the future attachment of the child to other significant others.

The adopted individual is separated from her biological mother. It is thought that this loss may trigger a reaction of fear and terror within the infant. Lifton (1994) and Verrier (1993) noted that this traumatic separation has lasting effects for the adoptee which are experienced and reacted to later in life. This experience can cause a sense of loss within the adoptee which never fully subsides. The research and theory of Mahler, Pine, and
Bergman (1975) and Newman (1973) supports the perspective that the adoptee’s loss of her biological mother is a traumatic experience for the adoptee. For the adopted individual the psychological ramifications of this loss may manifest itself early in life or remain dormant and manifest itself later in life when the adopted individual begins to understand the concept of adoption and its role in her life.

Research such as that of Thomas and Chess (1980) examined the experiences of infants post-birth and support the idea that post-birth experiences are significant for the infant. Thomas and Chess (1980) concluded that newborns are able to discriminate their parent’s voices. However, Mercer (2006) stated that infants who are less than six months old generally show little real distress about separation as long as they are cared for by a responsive caregiver. Mercer (2006) further relayed that the important factor is not the fact of adoption but rather whether the adoptee has received consistent, sensitive, and responsive care during their infant years. Bowlby believed that heredity could play a role in emotional disturbance. However, he doubted that hereditary difficulties would lead to emotional disturbances unless the environment had somehow exacerbated them (Karen, 1998). Early disruptions, such as the loss of the biological mother, are likely to have an impact on the infant adoptee’s ability to attach to subsequent caretakers and future significant others.

**Attachment and Adulthood**

Although there is growing amount of literature examining adult attachment, there is still much to learn about it. The unconscious and conscious processes that influence how
individuals bond with others play a pivotal role in how the individual will bond with significant others throughout his or her life.

Adult attachments differ from infant-caregiver bonds in two important respects, they are reciprocal and sexual and in nature (Hazan, Campa & Gur-Yaish, 2006). This same motivational system that gives rise to the close emotional bond between parent and child is thought to be responsible for the bond that develops between adults in emotionally intimate relationships. Similar to the attachment behavior of the infant and child, adult’s attachment behavior involves the tendency of an adult individual to maintain proximity to another individual who provides a safe base in times of distress and a secure base from which one can venture out. Adult attachment formation is a process that occurs over time and happens at multiple levels (Hazan, et al., 2006). Hazan, Campa, and Gur-Yaish, (2006) further explained that it takes a minimum of six months for infants to become fully attached to their caregiver and therefore they believe that it would take this long for adults to become attached. However, because there have not been documented studies that confirm this thought, the length of time adults need to become attached remains arbitrary.

Attachment and Adult Romantic Relationships

Researchers have started to explore an attachment theory approach to adult relational functioning, specifically within adult romantic relationships (e.g., Collins & Reed, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987; Simpson, 1987). Theorists (e.g. Hazan & Shaver, 1994) have suggested that the social interactions individuals have throughout their life are shaped by the emotional attachment they form with their primary caregiver
during infancy (Martin & Shrink, 2008). Since attachment style is thought to be relatively stable throughout an individual’s life, it is thought that the same three attachment styles described in infant attachment literature are manifested within adult relationships, specifically within adult’s romantic relationships. Attachment style consists of mental models that are believed to organize the development of behavior and guide subsequent social behavior (Simpson, 1990). Attachment style includes secure and insecure attachment patterns.

Hazan and Shaver were the first to conceptualize adult romantic love as an attachment process. Consistent with Bowlby’s attachment theory, Hazan and Shaver conceptualized romantic love as enduring affectional bonds characterized by complex emotional dynamics (Hazan & Shaver, 1987). Additionally, Shaver and Hazan (1988) utilized Sternberg’s theory of love which included three parts: intimacy, passion and decision-commitment.

Romantic love can be conceptualized as an attachment process which is influenced in part by earlier experiences with caregivers. Hazan and Shaver (1987) created a three category attachment system which indicated that secure, ambivalent, and avoidant styles are manifested in adult romantic relationships and early variations in social experience produce relatively enduring differences in relationship styles and therefore may take on different forms, depending on the individual’s attachment history. Within adult romantic attachment, securely attached individuals tend to see themselves and their partners in a positive way. They feel respected by their partner and generally experience their partner as available, sensitive, and supportive (Mikulincer & Shaver, 2007). Anxiously attached
individuals tend to see themselves and their partners in a less positive way. They may tend to worry about their connection with their partner, fear interpersonal rejection or abandonment, have an excessive need for approval from others, and become distressed when their partner is unavailable or unresponsive (Mikulincer & Shaver, 2007). Those individuals with an avoidant attachment tend to desire a high level of self-reliance (Mikulincer & Shaver, 2007). These individuals tend to have mixed feelings about close relationships, tend to seek less intimacy from partners, and fear dependence (Mikulincer & Shaver, 2007).

Recent research has begun to explore the effects of an individual’s attachment style within romantic relationships (Collins & Reed, 1990; Davila, Burge, & Hammen, 1997; Main, Kaplan, & Cassidy, 1985; Simpson, 1990). Davila, Burge, and Hammen’s (1997) study found that some people are prone to fluctuations in attachment style and that attachment style fluctuation is linked to attachment insecurity. Thus people who change attachment styles may be uncertain about certain things such as the extent to which they can trust and depend on others and the extent to which they feel being comfortable being close and intimate with others (Davila, Burge, & Hammen, 1997). Another study (Simpson, 1990) found that people who exhibit a secure attachment style tend to be involved in relationships characterized by higher levels of interdependence, trust, commitment and satisfaction while those who exhibit insecure styles (ambivalent or avoidant) tend to have relationships defined by less interdependence, trust, commitment and satisfaction.
At the present time research addressing the attachment issues of adopted women within their romantic relationships does not exist. A recent study by Feeney, Passmore, and Peterson (2007), which examined adoption, attachment, and relationship concerns in a sample of adult adoptees, did support the view that adoption may be a risk factor for negative relational attitudes and relationship difficulties in adult life, particularly in terms of attachment security.

Adoptees contend with their own unique set of attachment issues. Adoptees are separated from their biological parents, expected to integrate into a non-biological family, and make sense of what it means to them that they are adopted. In addition, adoptees encounter their own unique set of developmental and social issues which potentially have an enduring impact on attachment, including attachment within romantic relationships.
Chapter III

Methods

Research Questions

This study examined the following exploratory research questions:

1. Do differences exist between adopted women and women in the general population in terms of their attachment style in romantic relationships?

2. Are there differences that exist between adopted women and women in the general population in terms of their parental bonding experiences?

Hypotheses

H-1: Adopted women will, on average, experience a more insecure attachment within their romantic relationship as opposed to nonadopted women. Attachment is operationally defined by the Experiences in Close Relationships Measure (1998).

H-2: Adopted women will, on average, report a more negative relationship with their parents during their first sixteen years of life as opposed to nonadopted women. Further, adopted women will, on average, report more negative parental attitudes and behaviors regarding their mutual interactions with their parents during their first sixteen years of life as opposed to nonadopted women. Parental bonding is operationally defined by the Parental Bonding Instrument (1979).

Research Design

Quantitative research methods were used to collect and analyze the data for this study. The study examined the relationship between adopted women, their attachment within romantic relationships, and their parental bonding experiences. The process included
advertising for participants, mailing the measures and background questionnaire to the
participants, and then the participant’s completion and return of the measures and
questionnaire. The measures utilized in the study were: The Experiences in Close
Relationships Measure and The Parental Bonding Instrument (nonadopted women
completed it once for experiences with their biological mother and once for experiences
with their biological father while adopted women completed it once for their experiences
with their adoptive mother and once for experiences with their adoptive father). The
Background Information Questionnaire included a set of background items. A description
of psychometric properties of each of the measures and questionnaire is covered in this
chapter in the section titled measures.

Recruitment Procedures

Participant recruitment for the study was conducted January, 2009 through April,
2009. Participants were recruited for the study through announcements to local clinically-
oriented professional groups, social networks available to the researcher, word-of-mouth,
and advertisements on adoption related internet sites. An additional sampling technique,
snowball sampling, was also utilized for the recruitment of participants for this study. It
was anticipated that adopted women may be somewhat difficult to locate and recruit for
this study. However, participants often readily volunteered to refer other adopted and
nonadopted women to the study.

Both adopted and nonadopted women were instructed to contact the researcher
directly regarding their interest to participate in the study. A study packet which included
the introductory cover letter, measures, and questionnaire was then sent to the participant
within two days following the participant’s request to have the measures and questionnaire sent to them. The study packet was mailed to the address where the prospective participant requested to receive it. It was estimated that it would take the participants approximately 30 minutes to complete the measures and background questionnaire. The cover letter explained the nature of the research, its purpose and importance, the confidential nature of the study, how involvement in the study is important to the success of the study and is important to adopted women. Participants were asked to complete the measures and questionnaire and to return them to the researcher in the included self-addressed and stamped envelope within two weeks of receiving them.

The cover letter instructed participants to contact the researcher directly if they had any questions and/or concerns about completing the measures and questionnaire and/or about being in this study. The cover letter also relayed that the study was approved by the University of Pennsylvania Institutional Review Board.

Participants were informed that they were giving their consent to participate in this study through returning the completed measures and questionnaire. No identifying markers, of any kind, appeared on any of the measures or on the questionnaire. Participants were informed that the study was completely voluntary and anonymous and that they may withdraw from the study by not returning the measures and questionnaire without adverse consequences. They were made aware that due to the anonymous nature of the research measures and the questionnaire could not be withdrawn once they had been submitted. Participants were also made aware that they could contact the researcher
Participants did not receive financial compensation for their participation in the study. However, they were told that for every completed and returned/received study packet a $1.00 donation would be made to an adoption agency. During the recruitment process four individuals who identified themselves as study participants requested that no donation be made for their completed and returned measures and questionnaire set. It was explained that the donation would be earmarked for adoptee services which included adoptee assistance with search services, counseling services, adoption and family diversity training, and educational classes. Regardless, in each of the four cases the individuals requested that the donation not be made to an adoption agency. As per their request, in the four cases, the $1.00 donation was not given to an adoption agency.

Participants Characteristics

A purposive sample of adopted women and a comparison group sample nonadopted women were recruited for this study. Study packets were mailed to 141 prospective, adopted women, study participants. The prospective, adopted women, study participants came from 35 different states with the largest group of those who requested the study packet coming from Pennsylvania (n = 21, 14.9%), New Jersey (n = 23, 16.3%) and New York (n = 18, 12.8%). Of the 141 study packets that were sent out to the prospective, adopted women, study participants a total of 127 study packets were completed and
returned. Study packets were mailed to 148 prospective, nonadopted women, study participants. The prospective, nonadopted women, study participants came from 14 different states with the largest group of those who requested the study packet coming from Pennsylvania (n = 88, 59.5%) and New Jersey (n = 21, 14.2%). Of the 148 study packets that were sent out to the prospective, nonadopted women, study participants a total of 104 study packets were completed and returned.

The adopted women that participated in this study were between 25 and 60 years of age; identified as caucasian; currently resided in the United States of America; were born and adopted within the United States of America; were adopted as an infant (adopted by 24 months/2 years of age); lived in adoptive family until, at least, 16 years of age; had involvement in at least one romantic relationship of at least three months; had not been adopted by a biological family member, had not been born in and/or adopted from another country. The nonadopted women that participated in this study were between 25 and 60 years of age; identified as caucasian; currently resided in the United States of America; lived in their biological family until, at least, 16 years of age; and had involvement in at least one romantic relationship of at least three months.

Demographic and other background information were collected and included: age, relationship status (single, cohabiting, married, separated, divorced, remarried, widowed), sexual orientation (heterosexual, lesbian, bisexual), parental status (number of children), education level (highest completed grade level), and employment status (full-time, part-time, not currently employed, student). In addition, adopted women were asked to
complete both open-ended and structured questions about their adoption (e.g. age at adoption, age at learning adoptive status, biological search status).

**Sample**

The study sample was composed of 231 women of which 127 (55%) were adopted and 104 (45%) were not adopted and served as the control group. The mean age of the entire sample was 43 years old and each subgroup (adopted women and nonadopted women) reported the exact same age ($t = .85$, $p > .05$). The completed results of the two sub-samples socio-characteristics are listed in Table 1.

Regarding employment, in the two groups the largest percentage of women were fully employed (54.4% and 54.5% respectively). While more adopted women were not currently employed (19.2% vs. 12.9% respectively) employment status difference was not statistically significant ($X^2 = 2.60$, $df = 3$, $p > .05$).

Regarding sexual orientation, in the two groups the largest percentage of women were heterosexual (89.4% and 95.1% respectively). The differences between the two groups were statistically insignificant ($X^2 = 3.0$, $df = 2$, $p > .05$).

Regarding annual household income, in the two groups the largest percentage of women had an annual household income of $76-125.000$ (24.8% and 29.7% respectively). The differences between the two groups were statistically insignificant ($X^2 = 11.8$, $df = 7$, $p > .05$). However, when the nine income categories were combined into two income categories (below $50,000$ and above $50,000$) there was a statistically significant difference ($X^2 = 6.92$, $df = 1$, $p < .01$). There were more were more adopted women with below $50,000$ income (32.2%) than nonadopted women (16.8%).
Regarding highest level of education, in the two groups the largest percentage of women had a graduate degree (36.8% and 51% respectively). The difference in level of education between the groups was found to be significant ($X^2 = 13.04$, df = 4, $p < .05$). Most notably, were among those with graduate degrees (masters, doctorate). Half of the nonadopted women (51%) but only a little over a third of the adopted women (36.8%) reported such level of education. Among those who had some college education, more were among the adopted women (21.6% vs. 9.8% respectively).

Regarding the number of siblings in their family, in the two groups the largest percentage of women had one sibling (43.7% and 23.3% respectively). Adopted women, on average, had less siblings within their family system than nonadopted women (1.49% and 2.58% respectively; $t = 13.6$, $p < .001$).

Regarding parental status, in the two groups the largest percentage of women had two children (28.2% and 39.2% respectively). Adopted women, on average, have more children than nonadopted women (1.76% and 1.46% respectively; $t = 1.37$, $p > .05$).

Regarding receiving psychotherapy services any time in their lives, two-thirds of the women (67.2%) reported positively. There was a statistically significant difference between the groups where 73% of adopted women and 60% of nonadopted women reported to have received psychotherapy services ($X^2 = 4.23$, df = 1, $p < .05$).

Regarding experiences of physical abuse any time in their lives, more adopted women reported such abuse (31.2%) as compared with nonadopted women (17.5%). This difference was statistically significant ($X^2 = 5.7$, df = 1, $p < .05$).
Regarding experiences of sexual abuse any time in their lives, more adopted women reported such abuse (37.9%) as compared with nonadopted women (15.5%). This difference was statistically significant ($X^2 = 14.04, df = 1, p < .001$).

### Table 1  Participant Background Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adopted Women (n = 127)</th>
<th>Nonadopted Women (n = 104)</th>
<th>Total Sample (n=231)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>43</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td><strong>Employment Status (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>54.4%</td>
<td>54.5%</td>
<td>54.4%</td>
</tr>
<tr>
<td>Part-time</td>
<td>23.2%</td>
<td>26.7%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Not currently employed</td>
<td>19.2%</td>
<td>12.9%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Student</td>
<td>3.2%</td>
<td>5.9%</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Sexual Orientation (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>89.4%</td>
<td>95.1%</td>
<td>92%</td>
</tr>
<tr>
<td>Lesbian</td>
<td>4.1%</td>
<td>2.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Bisexual</td>
<td>6.5%</td>
<td>2%</td>
<td>4.4%</td>
</tr>
<tr>
<td><strong>Annual Household Income (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under $10,000</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>$11-20,000</td>
<td>.8%</td>
<td>3%</td>
<td>1.8%</td>
</tr>
<tr>
<td>$21-30,000</td>
<td>9.1%</td>
<td>3%</td>
<td>6.3%</td>
</tr>
<tr>
<td>$31-40,000</td>
<td>9.9%</td>
<td>3%</td>
<td>6.8%</td>
</tr>
<tr>
<td>$41-50,000</td>
<td>12.4%</td>
<td>7.9%</td>
<td>10.4%</td>
</tr>
<tr>
<td>$51-75,000</td>
<td>14.9%</td>
<td>20.8%</td>
<td>17.6%</td>
</tr>
<tr>
<td>$76-125,000</td>
<td>24.8%</td>
<td>29.7%</td>
<td>27%</td>
</tr>
<tr>
<td>$126-175,000</td>
<td>14.9%</td>
<td>15.8%</td>
<td>15.3%</td>
</tr>
<tr>
<td>$176 and above</td>
<td>13.2%</td>
<td>16.8%</td>
<td>14.9%</td>
</tr>
<tr>
<td><strong>Highest Level of Education (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>High school or GED diploma</td>
<td>1.6%</td>
<td>2.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Some college</td>
<td>21.6%</td>
<td>9.8%</td>
<td>16.3%</td>
</tr>
<tr>
<td>College graduate</td>
<td>23.2%</td>
<td>30.4%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Some graduate training</td>
<td>16.8%</td>
<td>6.9%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Graduate degree (masters, doctorate)</td>
<td>36.8%</td>
<td>51%</td>
<td>43.2%</td>
</tr>
<tr>
<td><strong>N of Siblings in Family (%)</strong>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>18.3%</td>
<td>8.7%</td>
<td>14%</td>
</tr>
<tr>
<td>1</td>
<td>43.7%</td>
<td>23.3%</td>
<td>34.5%</td>
</tr>
<tr>
<td>2</td>
<td>21.4%</td>
<td>16.5%</td>
<td>19.2%</td>
</tr>
<tr>
<td>3</td>
<td>9.5%</td>
<td>22.3%</td>
<td>15.3%</td>
</tr>
<tr>
<td>4</td>
<td>3.2%</td>
<td>14.6%</td>
<td>8.3%</td>
</tr>
<tr>
<td>5</td>
<td>2.4%</td>
<td>10.7%</td>
<td>6.1%</td>
</tr>
<tr>
<td>More than 5</td>
<td>1.6%</td>
<td>3.9%</td>
<td>2.6%</td>
</tr>
<tr>
<td><strong>Parental Status (n of children %)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>33.1%</td>
<td>31.4%</td>
<td>32.3%</td>
</tr>
<tr>
<td>1</td>
<td>13.7%</td>
<td>12.7%</td>
<td>13.3%</td>
</tr>
<tr>
<td>2</td>
<td>28.2%</td>
<td>39.2%</td>
<td>33.2%</td>
</tr>
<tr>
<td>3</td>
<td>13.7%</td>
<td>13.7%</td>
<td>13.7%</td>
</tr>
<tr>
<td>4</td>
<td>4.8%</td>
<td>1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>5</td>
<td>3.2%</td>
<td>2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Not done</td>
<td>3.2%</td>
<td>0%</td>
<td>1.8%</td>
</tr>
<tr>
<td><strong>Received Psychotherapy Treatment (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>73%</td>
<td>60.2%</td>
<td>67.2%</td>
</tr>
<tr>
<td><strong>History of Physical Abuse (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>31.2%</td>
<td>17.5%</td>
<td>25%</td>
</tr>
<tr>
<td>1</td>
<td>15.5%</td>
<td>15.5%</td>
<td>27.8%</td>
</tr>
<tr>
<td><strong>History of Sexual Abuse (%)</strong>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>56.1%</td>
<td>31.1%</td>
<td>44.7%</td>
</tr>
</tbody>
</table>

* denotes a significant difference at the .05 level
** denotes a significant difference at the .01 level
*** denotes a significant difference at the .001 level
Regarding experiences of emotional abuse any time in their lives, more adopted women reported such abuse (56.1%) as compared with nonadopted women (31.1%). This difference was statistically significant ($X^2 = 14.02$, df = 1, $p < .001$).

The completed results of the two sub-samples with regard to romantic relationship characteristics are listed in Table 2. Regarding current relationship status, in the two groups the largest percentage of women were married (63.4% and 68.9% respectively). The difference was statistically insignificant ($X^2 = 7.5$, df = 6, $p > .05$).

Regarding whether the women were currently in a committed romantic relationship, in the two groups the largest percentage of women were currently in a committed relationship (77.8% and 82.2% respectively). The difference was statistically insignificant ($X^2 = .672$, df = 1, $p > .05$).

Regarding the length of time in the current committed relationship, in the two groups the largest percentage of women were in the current committed relationship over twenty years (24.2% and 31.3% respectively). The difference was statistically insignificant ($X^2 = 8.5$, df = 7, $p > .05$).

Regarding the longest period of time in a committed relationship, in the two groups the largest percentage of women reported that the longest period of time that they were in a committed relationship was over twenty years (18.3% and 29.3% respectively). The difference was statistically insignificant ($X^2 = 10.9$, df = 7, $p > .05$).
Table 2  Romantic Relationship Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adopted Women (n = 127)</th>
<th>Nonadopted Women (n = 104)</th>
<th>Total Sample (n=231)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Relationship Status (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>17.9%</td>
<td>12.6%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>5.7%</td>
<td>5.8%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Married</td>
<td>63.4%</td>
<td>68.9%</td>
<td>65.9%</td>
</tr>
<tr>
<td>Divorced</td>
<td>7.3%</td>
<td>3.9%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Remarried</td>
<td>4.1%</td>
<td>1.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Separated</td>
<td>1.6%</td>
<td>4.9%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Widowed</td>
<td>0%</td>
<td>1.9%</td>
<td>.9%</td>
</tr>
<tr>
<td>Currently in Committed Relationship (%)</td>
<td></td>
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<td></td>
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<tr>
<td>Yes</td>
<td>77.8%</td>
<td>82.2%</td>
<td>79.7%</td>
</tr>
<tr>
<td>No</td>
<td>22.2%</td>
<td>17.8%</td>
<td>20.3%</td>
</tr>
<tr>
<td>Length of Current Committed Relationship (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not done</td>
<td>1.0%</td>
<td>.0%</td>
<td>.5%</td>
</tr>
<tr>
<td>3 to 5 months</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>6 to 11 months</td>
<td>4.0%</td>
<td>3.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>1 to 2 years</td>
<td>4.0%</td>
<td>9.6%</td>
<td>6.6%</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>11.1%</td>
<td>10.8%</td>
<td>11%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>22.2%</td>
<td>21.7%</td>
<td>22%</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>18.2%</td>
<td>18.1%</td>
<td>18.1%</td>
</tr>
<tr>
<td>16-20 years</td>
<td>15.2%</td>
<td>4.8%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>24.2%</td>
<td>31.3%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Longest Period of Time In Committed Relationship (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 to 5 months</td>
<td>0%</td>
<td>1%</td>
<td>.4%</td>
</tr>
<tr>
<td>6 to 11 months</td>
<td>2.4%</td>
<td>1%</td>
<td>1.8%</td>
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<tr>
<td>1 to 2 years</td>
<td>4.8%</td>
<td>4%</td>
<td>4.4%</td>
</tr>
<tr>
<td>3 to 5 years</td>
<td>16.7%</td>
<td>12.1%</td>
<td>14.7%</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>23.8%</td>
<td>30.3%</td>
<td>26.7%</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>20.6%</td>
<td>17.2%</td>
<td>19.1%</td>
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<tr>
<td>16-20 years</td>
<td>13.5%</td>
<td>5.1%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>18.3%</td>
<td>29.3%</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

Finally, the completed results of the unique characteristics of the sub-sample of adopted women are listed in Table 3. The adopted women in this study were adopted between the time of birth and age 21 months with a mean of about 3 months. This implies that regarding age of adoption they are a homogenous group. Most (93%) of the adopted women were told of their being adopted at a very young age (0 to 7 years) while the rest were told at an older age (27 to 44 years). The majority of the adopted women were adopted through closed adoption and almost all of them (89.7%) have actively attempted to search for members of their biological family.
Regarding siblings in family, the majority (70%) of the adopted women reported that they did not have a sibling that was a biological child of their adopted parents and (30%) of adopted women reported that they did have a sibling that was a biological child of their adopted parents.

Regarding siblings in family, the majority (63.5%) of adopted women reported that they did have at least one sibling that was an adopted child of their adopted parents and (36.5%) of adopted women reported that they did not have a sibling that was an adopted child of their adopted parents.

Table 3  

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adopted Women (n = 127)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age Adopted</td>
<td>2.36 months</td>
</tr>
<tr>
<td>Mean Age Told Adopted</td>
<td>5.82 years</td>
</tr>
<tr>
<td>Adoption Type (%)</td>
<td></td>
</tr>
<tr>
<td>Closed</td>
<td>95.2%</td>
</tr>
<tr>
<td>Open</td>
<td>2.4%</td>
</tr>
<tr>
<td>Semi-open</td>
<td>2.4%</td>
</tr>
<tr>
<td>Mean Age of Adoptive Parent at Time of the Adoption</td>
<td></td>
</tr>
<tr>
<td>Adoptive mother</td>
<td>32.8 years</td>
</tr>
<tr>
<td>Adoptive father</td>
<td>35 years</td>
</tr>
<tr>
<td>Siblings in Family - Biological Children of Adoptive Parents (%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>30.2%</td>
</tr>
<tr>
<td>No</td>
<td>69.8%</td>
</tr>
<tr>
<td>Siblings in Family - Adopted Children of Adoptive Parents (%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>63.5%</td>
</tr>
<tr>
<td>No</td>
<td>36.5%</td>
</tr>
<tr>
<td>Searched for Members of Biological Family (%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>89.7%</td>
</tr>
<tr>
<td>No</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

Measures

Adult Romantic Attachment Patterns/Styles within Romantic Relationships

Experiences in Close Relationships Measure (Brennan, Clark, & Shaver, 1998)

The Experiences in Close Relationships Measure is a 36-item, instrument designed to measure adult attachment experience within romantic relationships. It is scored on a Likert-type scale which ranges from 1 “disagree strongly” to 7 “agree strongly”. Sample
questions are, “I prefer not to show a partner how I feel deep down” and “I worry that romantic partners won’t care about me as much as I care about them”. It was estimated to take 5 to 10 minutes to complete the measure. The measure assessed how an individual feels in romantic relationships and generally experiences romantic relationships. It is a two-category, anxiety (fear of rejection and abandonment) and avoidance (discomfort with closeness and discomfort depending on others), self-classification measure. The items were derived from a factor analysis of most of the existing self-report measures of adult romantic attachment (Brennan, Clark, & Shaver, 1998). In this empirical study the correlation between the two parts (avoidance and anxiety) was significant ($r = .341$, $p < .001$). This suggests that the two parts are both related to insecurity in relationships but are not identical.

The Experiences in Close Relationships Measure is said to have high internal consistency, and being based on a large, comprehensive item pool, may be more precise than previous scales measuring the same phenomenon (Brennan, et al., 1998). In this empirical study, the reliability of the avoidance subscale was slightly above the one reported by Brennan, Clark, and Shaver (1998). Among the responded for this study the Cronbach’s Alpha for avoidance was .954 whereas the one reported by Brennan, Clark, and Shaver was .94. In this empirical study, the reliability of the anxiety subscale was slightly above the one reported by Brennan, Clark, & Shaver, 1998. Among the responded for this study the Cronbach’s Alpha for anxiety was .941 whereas the one reported by Brennan, Clark, and Shaver was .91.
Parental Bonding


The Parental Bonding Instrument is a 25-item instrument designed to measure parental behaviors and attitudes as perceived by the child (who may be an adult). The Parental Bonding Instrument is scored on a Likert-type scale ranging from 0 “very like” to 3 “very unlike”. The participants completed the measure once for as they remember their experiences with their mother for the first sixteen years of their life and completed the measure for a second time for as they remember their experiences with their father for the first sixteen years of their life. Adopted women answered these questions with respect to their adoptive parents and the comparison group, nonadopted women, answered these questions with respect to their biological parents. Sample questions are, “Made me feel I wasn’t wanted” and “Tried to control everything I did”. It was estimated to take a total of 10 minutes to complete the measure for experiences with mother and then again for experiences with father. The Parental Bonding Instrument was constructed on the basis of two variables deemed important in developing a bond between parent and child, caring (with the opposite extreme being indifference or rejection) and overprotection (with the opposite extreme being encouragement of autonomy and independence) (Fisher & Corcoran, 2007). The Parental Bonding Instrument has good to excellent internal consistency, with split-half reliability coefficients of .88 for care and .77 for overprotection (Fisher & Corcoran, 2007). The Parental Bonding Instrument has good concurrent validity, correlating significantly with independent rater judgments of parental caring and overprotection (Fisher & Corcoran, 2007). Wilhelm and Parker (1990) also
showed that the Parental Bonding Instrument is reliable over time when measured on the same population for over eleven years.

In this empirical study, the reliability of the care subscale was slightly above the one reported by Parker, Tupling, and Brown, 1979. Among the responded for this study the Cronbach’s Alpha was .941 for mother care and .934 for father care whereas the one reported by Parker, Tupling, and Brown was .88. In this empirical study, the reliability of the overprotection subscale was slightly above the one reported by Parker, Tupling, & Brown, 1979. Among the responded for this study the Cronbach’s Alpha for mother overprotection was .893 and father overprotection was .878 whereas the one reported by Parker, Tupling, and Brown was .77.

However, it should be noted that inter-correlations between the four subscales of parental bonding instrument were significant and strong. For example, the mother overprotection and mother care were strongly and negatively correlated ($r = -.45$, $p < .001$) and mother overprotection and father overprotection were strongly positively correlated ($r = .45$, $p < .001$). Similarly, mother care and father care were also strongly and positively correlated ($r = .39$, $p < .001$). As such the findings regarding each subscale should be taken with a caution as they may measure similar properties.

**Data Analysis**

Statistics included general descriptive statistics, t-tests for independent means and an analysis of the variance to ascertain the interactive effects of the independent variables on scores from the four dependent variables. Correlational analysis was performed using Pearson’s $r$ to determine the correlations between and among the dependent variable and
moderating variables, such as age and income. Finally, linear multiple regression analyses were performed to assess the combined impact of all relevant independent variables on the two key dependent variables (avoidance and anxiety).
Chapter IV

Findings

Adoption and Nonadopted Women’s Attachment Within Romantic Relationships

The first hypothesis suggested that adopted women will, on average, experience a more insecure attachment within their romantic relationship as opposed to nonadopted women. More specifically, it was hypothesized that adopted women will score higher on the Experiences in Close Relationships Measure. The Experiences in Close Relationships Measure is composed of two related but different parts: avoidance and anxiety. Each component of romantic attachment was treated independently.

As expected, adopted women reported higher levels of avoidance (3.21) as compared to nonadopted women (2.29). This difference on a scale of 1 (low avoidance) to 7 (high avoidance) is statistically significant (t = 5.0, p < .001).

Similarly, adopted women reported higher levels of anxiety (4.11) as compared to nonadopted women (3.07). This difference on a scale of 1 (low anxiety) to 7 (high anxiety) is statistically significant (t = 5.90, p < .001).

In order to find out if the differences in avoidance and anxiety were associated with adoption status or other variables, bivariate tests were conducted which examined the relationships of all the background variables and either avoidance or anxiety. With respect to age, employment status, sexual orientation, level of education, number of children, current relationship status, and length of current committed relationship there were no statistical significant differences.
When household income was examined and the subjects were divided into above and below $50,000, significant differences were found only regarding anxiety (t = 2.11, p < .05). Those who reported higher income also reported a higher level of anxiety. However, when household income was examined and the subjects were divided into above and below $50,000, no significant difference was found regarding avoidance. Regarding number of siblings, there was no statistically significant correlation with avoidance. However, there was a statistically significant negative correlation with anxiety (r = -.25, p < .001). Those with more siblings reported less anxiety. Regarding having received psychotherapy treatment at some point during their lifetime, there was no statistically significant association with avoidance but there was a statistical significance association with anxiety (t = 4.27, p < .001). Those who have been in psychotherapy reported a level of anxiety at 3.91 as compared to those who had not been in psychotherapy treatment and reported a level of anxiety at 3.07. Physical abuse was significantly associated both with avoidance (t = 2.27, p < .05) and anxiety (t = 2.71, p < .01). Similarly sexual abuse was significantly associated both with avoidance (t = 2.76, p < .01) and anxiety (t = 2.72, p < .01). Emotional abuse was also significantly associated both with avoidance (t = 3.19, p < .01) and anxiety (t = 5.00, p < .001). Committed relationship was significantly associated both with avoidance (t = -2.99, p < .01) and anxiety (t = -2.88, p < .01). As may be expected, in both cases those not in committed relationships reported a higher level of avoidance and anxiety. Longest period of time in a committed relationship was significantly associated both with avoidance (r = -.15, p < .05) and anxiety (r = -.91, p < .001).
Those who reported being in a relationship for a shorter period of time scored higher on avoidance and anxiety.

A linear multiple regression was conducted to find out what of the variables listed above may explain the variation in avoidance. As can be seen from Table 4, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with avoidance ($\beta = -.371$), the largest in the model. In addition, the number of siblings was significantly correlated with avoidance whereas the more siblings one has the more the avoidance. Finally, being in a committed relationship was negatively correlated with avoidance. Those in committed relationships reported less avoidance. The overall, R Square for this model was .22 which implies that 22% of the variance in avoidance was explained by the model.

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>$\beta$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.780</td>
<td>-.371</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>.188</td>
<td>-.371</td>
<td>.000</td>
</tr>
<tr>
<td>Income combined</td>
<td>.228</td>
<td>.104</td>
<td>.164</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>.059</td>
<td>.213</td>
<td>.002</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>.187</td>
<td>-.003</td>
<td>.961</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.255</td>
<td>-.028</td>
<td>.737</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.213</td>
<td>-.085</td>
<td>.243</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>.213</td>
<td>-.086</td>
<td>.281</td>
</tr>
<tr>
<td>Committed relationship</td>
<td>.261</td>
<td>.155</td>
<td>.046</td>
</tr>
<tr>
<td>Relationship longest</td>
<td>.060</td>
<td>-.131</td>
<td>.077</td>
</tr>
</tbody>
</table>

A linear multiple regression was run to find out which of the above variables listed may explain variation in anxiety. As can be seen from Table 5, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with anxiety ($\beta = -.242$), the largest in the model. Psychotherapy, emotional abuse, and committed relationships were significantly correlated with anxiety.
Those in psychotherapy reported a higher level of anxiety. Those who reported a higher level of abuse also reported a higher level of anxiety. It should be noted that emotional abuse was almost as strong in explaining variation in anxiety ($\beta = - .236$). Being in a committed relationship was negatively correlated with anxiety. Those who reported being in a committed relationship reported less anxiety. The overall R Square for this model was .28 which implies that 28% of the variance in anxiety was explained by the model.

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.801</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td><strong>Group</strong></td>
<td>.193</td>
<td>-.242</td>
<td>.000</td>
</tr>
<tr>
<td>Income combined</td>
<td>.234</td>
<td>.079</td>
<td>.273</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>.061</td>
<td>-.126</td>
<td>.056</td>
</tr>
<tr>
<td><strong>Psychotherapy</strong></td>
<td>.192</td>
<td>-.157</td>
<td>.014</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.262</td>
<td>-.002</td>
<td>.984</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.219</td>
<td>.021</td>
<td>.761</td>
</tr>
<tr>
<td><strong>Emotional abuse</strong></td>
<td>.219</td>
<td>-.236</td>
<td>.002</td>
</tr>
<tr>
<td><strong>Committed relationship</strong></td>
<td>.268</td>
<td>.160</td>
<td>.031</td>
</tr>
<tr>
<td>Relationship longest</td>
<td>.061</td>
<td>.084</td>
<td>.236</td>
</tr>
</tbody>
</table>

The emerging picture from the analysis supported the research hypothesis. Being adopted versus nonadopted remained statistically significant in explaining the variation in both avoidance and anxiety regarding romantic attachment. Being adopted or nonadopted scored the highest Beta’s in both models even when all relevant control variables were entered and analyzed. In addition a few other variables were also significant in explaining variation. Regarding avoidance, it was number of siblings and being in a committed relationship. Those with more siblings reported high avoidance and those not in a committed relationship also reported high avoidance. Regarding anxiety, it was history of receiving psychotherapy at some point in one’s lifetime, reporting emotional abuse at
some point in one’s lifetime, and not being in a committed relationship that increased the likelihood of experiencing anxiety in adult romantic attachment.

**Parental Bonding Experiences of Adopted and Nonadopted Women**

The second hypothesis suggested that adopted women will, on average, report more negative parental attitudes and behaviors regarding their mutual interactions with parents during their first sixteen years of life as opposed to nonadoptive women. More specifically, it was hypothesized that adopted women will score lower on care and higher on overprotection both for father and mother as compared to nonadopted women on the Parental Bonding Instrument. The Parental Bonding Instrument is composed of two related but different parts: care and overprotection.

A series of four separate t-tests, as can be seen in Table 6, were run to compare adopted and nonadopted women on these four subscales. Three out of the four expectations were supported. Regarding overprotection, in both cases adopted women reported higher scores. Adopted women reported experiencing less encouragement of autonomy and less independence from both their adoptive mother and father during the first sixteen years of their life. Regarding mother overprotection, adopted women scored 17.15 whereas nonadopted women 13.11 (t = 3.60, p < .001). Regarding father overprotection, adopted women scored 14.24 whereas nonadopted women scored 10.6 (t = 3.54, p < .001). Regarding mother care, adopted women scored lower 20.65 as compared with nonadopted women 24.82 (t = -3.26, p < .001). Adopted women reported experiencing their adoptive mother as more indifferent and rejecting during the first sixteen years of their life. Regarding father care, adopted women and nonadopted women
scored almost identically (23.77 and 23.67) for no statistical significant difference (t = .31, p > .05). Neither adopted nor nonadopted women reported their father/adoptive father as indifferent or rejecting of them in their experiences with them during the first sixteen years of their life.

Table 6 Comparing Adopted and Nonadopted Women and Parental Care

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother overprotection ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopted</td>
<td>125</td>
<td>17.15</td>
<td>8.69</td>
<td>.77751</td>
</tr>
<tr>
<td>Nonadopted</td>
<td>102</td>
<td>13.11</td>
<td>8.24</td>
<td>.81601</td>
</tr>
<tr>
<td>Father overprotection ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopted</td>
<td>123</td>
<td>14.24</td>
<td>8.00</td>
<td>.72171</td>
</tr>
<tr>
<td>Nonadopted</td>
<td>98</td>
<td>10.60</td>
<td>7.01</td>
<td>.70803</td>
</tr>
<tr>
<td>Mother care ***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopted</td>
<td>125</td>
<td>20.65</td>
<td>10.11</td>
<td>.90420</td>
</tr>
<tr>
<td>Nonadopted</td>
<td>102</td>
<td>24.82</td>
<td>8.92</td>
<td>.88347</td>
</tr>
<tr>
<td>Father care N.S.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adopted</td>
<td>123</td>
<td>23.77</td>
<td>9.29</td>
<td>.83791</td>
</tr>
<tr>
<td>Nonadopted</td>
<td>98</td>
<td>23.37</td>
<td>9.77</td>
<td>.98691</td>
</tr>
</tbody>
</table>

*** denotes statistical difference at the .001 level
N.S. denotes no statistical difference

In order to find out if the differences in overprotection and care were associated with adoption status or other variables, bivariate tests were conducted which examined the relationships of all the background variables for parental bonding experiences. With respect to employment, level of education, number of children, relationship status, relationship length, household income, number of siblings, committed relationship, and longest period of time in a committed relationship there were no significant statistical differences.

Regarding age there was no significant correlation with father overprotection, mother overprotection or mother care. However, age was significantly correlated with father care (r = .15, p < .05). Older women reported their father as more caring. Regarding sexual
orientation, there was no significant difference regarding overprotection for both mother and father. However heterosexual women significantly rated father (23.82 vs. 18.56) and mother (23.06 vs. 15.72) as more caring. Regarding psychotherapy, those who have received psychotherapy at some point in their lives significantly reported both mother (17.02 vs. 11.92) and father (13.53 vs. 10.78) as overprotective and mother (20.55 vs. 26.52) and father (22.27 vs. 26.27) as less caring. Regarding physical abuse, those who reported physical abuse occurring at some point in their lives reported both mother (18.95 vs. 14.17) and father (14.91 vs. 11.90) as overprotective and mother (16.42 vs. 24.57) and father (19.09 vs. 25.03) as less caring. Regarding sexual abuse, those who reported sexual abuse occurring at some point in their lives reported no difference regarding overprotection for either mother or father. However, those who reported sexual abuse occurring at some point in their lives reported a significant difference in mother care and father care. In both cases those who reported sexual abuse occurring at some point in their lives reported mother (17.36 vs. 24.63) and father (19.88 vs. 25.04) as less caring. Regarding emotional abuse, those who reported emotional abuse occurring at some point in their lives reported both mother (19.11 vs. 12.40) and father (14.60 vs. 11.10) as overprotective and mother (18.15 vs. 26.17) and father (20.75 vs. 25.86) as less caring.

A linear multiple regression was run to find out what of the variables listed above may explain variation mother overprotection. As can be seen from Table 7, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with mother overprotection ($\beta = -.17$). There were two other variables
that are also significant in explaining mother overprotection. Both had a higher Beta than the group designation. Psychotherapy ($\beta = -.27$) and emotional abuse ($\beta = -.30$) were the other variables which significantly enter the equation. Those variables combined yielded a R Square of .23.

Table 7  Regression Model to Explain Variation in Reported Mother Overprotection

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>115.693</td>
<td>-.039</td>
<td>.373</td>
</tr>
<tr>
<td>Birth year (age)</td>
<td>.059</td>
<td>.036</td>
<td>.568</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>.990</td>
<td>-.039</td>
<td>.592</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>1.160</td>
<td>-.216</td>
<td>.001</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.565</td>
<td>-.055</td>
<td>.492</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.333</td>
<td>.079</td>
<td>.261</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.339</td>
<td>-.296</td>
<td>.000</td>
</tr>
<tr>
<td>Group</td>
<td>1.103</td>
<td>-.166</td>
<td>.010</td>
</tr>
</tbody>
</table>

A linear multiple regression was run to find out what of the variables listed above may explain variation in father overprotection. As can be seen from Table 8, only the group designation was statically significant. All other variables did not significantly contribute to the variation of father overprotection. The R Square of .12 is mostly attributed to whether the woman was adopted or nonadopted.

Table 8  Regression Model to Explain Variation in Reported Father Overprotection

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>112.592</td>
<td>-.098</td>
<td>.093</td>
</tr>
<tr>
<td>Birth year (age)</td>
<td>.057</td>
<td>-.010</td>
<td>.141</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>1.009</td>
<td>-.110</td>
<td>.877</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>1.150</td>
<td>-.039</td>
<td>.114</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.538</td>
<td>.048</td>
<td>.650</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.305</td>
<td>-.136</td>
<td>.527</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.317</td>
<td>-.205</td>
<td>.106</td>
</tr>
<tr>
<td>Group</td>
<td>1.086</td>
<td>.003</td>
<td>.003</td>
</tr>
</tbody>
</table>

A linear multiple regression was run to find out what of the variables listed above may explain variation in mother care. As can be seen from Table 9, the group designation of
whether the woman was adopted or nonadopted did not significantly enter into the equation. The variables that are significant are first and foremost emotional abuse, sexual abuse and psychotherapy. It is important to note that the group designation (adopted or nonadopted) did not significantly contribute to the variation in mother care.

### Table 9  Regression Model to Explain Variation in Reported Mother Care

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>129.062</td>
<td>.777</td>
<td></td>
</tr>
<tr>
<td>Birth year (age)</td>
<td>.066</td>
<td>.015</td>
<td>.807</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>1.104</td>
<td>.079</td>
<td>.204</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>1.294</td>
<td>.157</td>
<td>.012</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.746</td>
<td>.131</td>
<td>.093</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.487</td>
<td>.147</td>
<td>.032</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.493</td>
<td>.201</td>
<td>.009</td>
</tr>
<tr>
<td>Group</td>
<td>1.230</td>
<td>.085</td>
<td>.176</td>
</tr>
</tbody>
</table>

A linear multiple regression as run to find out what of the variables listed above may explain variation father care. As can be seen from Table 10, the group designation of whether the woman was adopted or nonadopted did not significantly enter into the equation. The only variable that slightly entered into the equation was sexual abuse and even this barely made it at the .05 level.

### Table 10  Regression Model to Explain Variation in Reported Father Care

<table>
<thead>
<tr>
<th>Model</th>
<th>Standard Error</th>
<th>B</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>134.377</td>
<td>.088</td>
<td></td>
</tr>
<tr>
<td>Birth year (age)</td>
<td>.068</td>
<td>.115</td>
<td>.080</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>1.204</td>
<td>.083</td>
<td>.215</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>1.373</td>
<td>.108</td>
<td>.112</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1.835</td>
<td>.113</td>
<td>.180</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>1.557</td>
<td>.145</td>
<td>.050</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>1.572</td>
<td>.125</td>
<td>.128</td>
</tr>
<tr>
<td>Group</td>
<td>1.296</td>
<td>-.130</td>
<td>.057</td>
</tr>
</tbody>
</table>
In summary, adopted women reported similar level of care for either father or mother as did nonadopted women. Women who reported emotional or sexual abuse or being in psychotherapy regardless of adoption status reported a lower level of parental (mother and father) care. Regarding parental overprotection, adopted women reported higher levels of overprotection for both mother and father even when other variables were entered into the equation. Also regarding overprotection, those who reported emotional or sexual abuse also reported higher levels of parental overprotection.

The Impact of Parental Bonding on Romantic Attachment

Linear multiple regression analyses were performed to assess the combined impact of all relevant independent variables on the two key dependent variables, avoidance and anxiety, in adult romantic relationships. In order to find out if the differences were associated with adoption status, parental bonding experiences or other relevant variables, linear multiple regression analyses were performed which examined the relationship of parental bonding variables, other relevant independent and possible intervening variables, and either avoidance or anxiety.

A linear multiple regression analysis was first run to find out whether parental bonding variables may explain variation in anxiety. As can be seen from Table 11, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with anxiety (β = -.288), the largest in the model. Mother overprotection and father overprotection were also significantly correlated with anxiety. Those women who reported higher levels of anxiety in their romantic attachment within their romantic relationships also reported experiencing higher mother and father
overprotection (less encouragement of autonomy and independence) during the first sixteen years of their life. The overall R Square for this model was .216 which implies that 21.6% of the variance in anxiety was explained by the model.

<table>
<thead>
<tr>
<th>Table 11</th>
<th>Regression Model to Explain Variation in Reported Anxiety in Romantic Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Standard Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.506</td>
</tr>
<tr>
<td>Group</td>
<td>.186</td>
</tr>
<tr>
<td>Mother overprotection</td>
<td>.012</td>
</tr>
<tr>
<td>Father overprotection</td>
<td>.013</td>
</tr>
<tr>
<td>Mother care</td>
<td>.011</td>
</tr>
<tr>
<td>Father care</td>
<td>.010</td>
</tr>
</tbody>
</table>

The previous model only included the group designation and the four sub-scales of parental bonding. To test of other variables may account for the variability in anxiety, a second linear multiple regression analysis was run that included parental bonding variables, along with other relevant and possible intervening variables. As can be seen from Table 12, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with anxiety ($\beta = -.240$), the largest in the model. Father overprotection, age, and emotional abuse were also significantly associated with anxiety. Those women who reported higher levels of anxiety in their romantic attachment within their romantic relationships also reported experiencing higher father overprotection (less encouragement of autonomy and independence) during the first sixteen years of their life. The overall R Square for this model was .300 which implies that 30.0% of the variance in anxiety was explained by the model.
A linear multiple regression analysis was run to find out whether parental bonding variables along with the group designation may explain variation in avoidance. As can be seen from Table 13, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with avoidance ($\beta = -0.277$), the largest in the model. Mother care was also significantly associated with avoidance. Those women who reported higher levels of avoidance in their romantic attachment within their romantic relationships also reported experiencing their mother as less caring (more indifferent and rejecting) during the first sixteen years of their life. The overall R Square for this model was .216 which implies that 21.0% of the variance in avoidance was explained by the model.
Finally, the previous model only included the group designation and the four sub-scales of parental bonding. To test if other variables may account for the variability in avoidance a second linear multiple regression analysis was run that included parental bonding variables along with other relevant independent and possible intervening variables. As can be seen from Table 14, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with avoidance ($\beta = -0.252$), the largest in the model. Mother care was also significantly associated with avoidance. Those women who reported higher levels of avoidance in their romantic attachment within their romantic relationships also reported experiencing their mother as less caring (more indifferent and rejecting) during the first sixteen years of their life. The overall R Square for this model was .217 which implies that 21.7% of the variance in avoidance was explained by the model.

<table>
<thead>
<tr>
<th>Table 14</th>
<th>Regression Model to Explain Variation in Reported Avoidance (full model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Standard Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>19.800</td>
</tr>
<tr>
<td><strong>Group</strong></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>.187</td>
</tr>
<tr>
<td>Mother overprotection</td>
<td>.012</td>
</tr>
<tr>
<td>Father overprotection</td>
<td>.013</td>
</tr>
<tr>
<td><strong>Mother care</strong></td>
<td></td>
</tr>
<tr>
<td>Mother care</td>
<td>.011</td>
</tr>
<tr>
<td>Father care</td>
<td>.010</td>
</tr>
<tr>
<td>Birth year (age)</td>
<td>.010</td>
</tr>
<tr>
<td>Income</td>
<td>.051</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.260</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.220</td>
</tr>
<tr>
<td>Emotional abuse</td>
<td>.224</td>
</tr>
</tbody>
</table>

Again, the results of the analysis supported the research hypothesis. Being adopted versus nonadopted remained statistically significant in explaining the variation in both avoidance and anxiety regarding romantic attachment even when parental bonding and
other relevant intervening variables were entered into the equation. However, a few other variables were also significant in explaining variation. Regarding anxiety, when parental bonding variables were entered into the equation, it was mother overprotection and father overprotection that were significant in explaining the variation. However, when parental bonding variables along with other rival and relevant variables were entered into the equation, it was father overprotection, age, and emotional abuse that significantly explained variation in anxiety. Regarding avoidance, when parental bonding variables were entered into the equation, it was mother care that was significant in explaining the variation. Regarding avoidance, when parental bonding variables along with other rival and relevant variables were entered into the equation, again it was mother care that was significant in explaining the variation.
Chapter V

Discussion

Summary

Romantic Attachment

The purpose of this study was to examine, in an exploratory fashion, adopted women’s attachment within their romantic relationship as compared to nonadopted women. This study utilized an attachment perspective as a framework to examine the romantic relationship experiences of a sample of women who were adopted as infants and a comparison group of nonadopted women who grew up in their biological family.

As expected, adopted women reported higher levels of avoidance as compared to nonadopted women. Similarly, adopted women reported higher levels of anxiety as compared to nonadopted women. Findings from this study indicated that adopted women experienced a more insecure attachment within their romantic relationships as opposed to nonadopted women. The adopted women in this study scored higher on both avoidance and anxiety, the two key dimensions of adult attachment (Brennan, Clark, & Shaver, 1998). The findings support the first hypothesis that adopted women will experience a more insecure attachment within their romantic relationship as opposed to nonadopted women.

The adopted women in this sample were adopted between birth and twenty-one months with a mean age at adoption of about three months. Attachment theory asserts that children begin to attach very early in life. It also asserts that attachment bonds form through a history of repeated, mutual interactions (Noller, Feeney & Peterson, 2001).
However, Verrier (1993) has postulated that adoptees experience a lasting sense of loss rooted in their experience of separation from their biological parent. Verrier (1993) suggested that when the biological parent and infant are separated that there is disruption in the infant’s emerging sense of self. Mercer (2006) relayed that the important factor is not the fact of the adoption but rather whether the adoptee has received consistent, sensitive, and responsive care during their infant years. Regardless, literature exists that supports that adoptees do experience a sense of abandonment or rejection by their biological parents (e.g. Brodzinsky, 1990; Lifton, 1994; Verrier, 2003). In this study adopted women had higher levels of avoidance and anxiety within their romantic relationships as compared to nonadopted women even when other control variables were entered into the equation. The study findings suggest that even very early separation and loss, the separation and loss of the biological parent(s) for the infant, may have a significant impact on future attachment related experiences including attachment experiences within romantic relationships.

Linear multiple regressions were conducted to find out what variables may explain the variation in both avoidance and anxiety. The emerging picture from the analysis supported the research hypothesis. Being adopted versus nonadopted remained statistically significant in explaining the variation in both avoidance and anxiety regarding romantic attachment. Being adopted or nonadopted scored the highest Beta’s in both models even when all relevant control variables were entered and analyzed. In addition a few other variables were also significant in explaining variation. Regarding avoidance, it was number of siblings and being in a committed relationship. Those with
more siblings reported high avoidance and those not in a committed relationship also reported high avoidance. Regarding anxiety, it was history of receiving psychotherapy at some point in one’s lifetime, reporting emotional abuse at some point in one’s lifetime, and being not being in a committed relationship that increased the likelihood of experiencing anxiety in adult romantic attachment.

*Parental Bonding*

This study also examined adopted women’s relationships with their parents during their first sixteen years of their lives as compared to nonadopted women. The second hypothesis suggested that adopted women will, on average, report more negative parental attitudes and behaviors regarding their mutual interactions with parents during their first sixteen years of life as compared to nonadopted women. More specifically, it was hypothesized that adopted women will report less care and more overprotection both for father and mother as compared to nonadopted women. The results from this study indicated that adopted women experienced more negative parental attitudes and behaviors regarding their mutual interactions with their parents during the first sixteen years of their life as opposed to nonadopted women on three of the four sub-scales: mother overprotection, father overprotection and mother care. Adopted and nonadopted women scored almost identically on father care. Both adopted and nonadopted women reported their father as neither indifferent nor rejecting of them in their experiences with them during the first sixteen years of their life.

In addition, women who reported emotional or sexual abuse or being in psychotherapy regardless of adoption status reported a lower level of parental care for both mother and
father. Adopted women reported higher levels of parental overprotection for both mother and father even when other variables were entered into the equation. Adopted women reported experiencing their adoptive mother and father as less encouraging of autonomy and less encouraging of independence during the first sixteen years of their life. Also those women who reported emotional or sexual abuse also reported higher levels of parental overprotection.

Adopted and nonadopted women scored almost identically on father care. Age was significantly correlated with father care. In this instance, the older women in the sample reported their father as more caring. The majority of the older adopted women were adopted and brought up in an adoptive family during a time when the traditional family system, where the mother provides the majority of the child rearing responsibilities, was the norm. It is possible that these adopted women had spent more time with their adoptive mothers on a daily basis as opposed to their adoptive fathers. Fathers may not have had to contend with the majority of conflicts that arise in childhood and adolescence. Mothers may not have handled the conflicts that inevitably arise during childhood and adolescence with sensitivity for the child’s temperament. Adoptive mothers may not have recognized, nor have had the information to handle, the myriad of questions specific to the adoptee’s central conflict of identity within the family system and ultimately within the world.

Adopted women reported their adoptive mothers as less caring. Parenting of an adopted child may be complex if issues connected to infertility lead to the adoption process (Kirk, 1964; Verrier, 1993). Adoptive parents may have unresolved feelings about their own infertility and in turn, those feelings maybe projected onto their adopted
child (Kirk, 1964). It is possible that adoptive mothers who have experienced infertility may have thoughts and feelings triggered about their inability to conceive a child when their adoptive daughter reaches puberty. This may activate feelings of guilt, shame, disappointment and/or anger about one’s own inability to conceive a child. In turn these unrealized and unexpressed feelings may become displaced onto the adoptee. Adopted women also reported experiencing their adoptive mother and father as less encouraging of autonomy and less encouraging of independence during the first sixteen years of their life. There are a number of reasons why this may be the case for the adoptee. For the sample of women in this study, the majority were the product of closed adoption. Further, the mean age of the women in this study was forty-three-years-old. It is possible that both adoptive mothers and fathers may have not encouraged conversation about the adoptee’s adoptive status nor adoptive background. It is also possible that both adoptive mothers and father may have sent overt and covert messages regarding their lack of willingness to engage in conversation about their child’s adoption and adoptive status which in turn may have impacted the adoptee’s perception of what she can and cannot talk about within the relationship with her parents. Adolescence may be even more complicated for the adoptee and her adoptive parents because is a time of identity exploration. For the adopted person this exploration may involve wanting to know information about one’s own biological history. If the adoptive parents did experience the adoptee’s interest in acquiring information about her own biological history as a threat to their relationship with the adoptee or the family system they may attempt to shield the adoptee from exploring their adoption and adoption related
issues. It is possible that adoptive parents that encourage less autonomy and less independence have issue with an acknowledgement-of-differences, hence acknowledgement of their child’s adoptive status.

*Romantic Attachment and Parental Bonding*

Finally, linear multiple regression analyses were performed to assess the combined impact of all relevant independent and possible intervening variables on the two key dependent variables, avoidance and anxiety, in adult romantic relationships. A second linear multiple regression analysis was run to test whether other variables may account for the variability in anxiety and avoidance that included the four parental bonding variables, along with other possible intervening variables. In all cases, the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with both anxiety and avoidance.

Again, the results of the analysis supported the research hypothesis. Being adopted versus nonadopted remained statistically significant in explaining the variation in both avoidance and anxiety regarding romantic attachment even when parental bonding and other relevant intervening variables were entered into the equation. However, a few other variables were also significant in explaining variation. Regarding anxiety, when parental bonding variables were entered into the equation, it was mother overprotection and father overprotection that explained the variation. Those women who reported higher levels of anxiety in their attachment within their romantic relationships also reported experiencing higher mother and father overprotection (less encouragement of autonomy and independence) during the first sixteen years of their life. However, when parental
bonding variables along with other rival and relevant variables were entered into the equation, it was father overprotection, age, and emotional abuse that significantly explained variation in romantic anxiety. Those women who reported higher levels of anxiety in attachment within their romantic relationships also reported experiencing more father overprotection (less encouragement of autonomy and independence) during the first sixteen years of their life, were older in age and experienced less emotional abuse. Regarding avoidance, when parental bonding variables were entered into the equation, it was mother care that explained the variation. Those women who reported higher levels of avoidance in attachment within their romantic relationships also reposted experiencing their mother as less caring (more indifferent and rejecting) during the first sixteen years of their life. Regarding avoidance, when parental bonding variables along with other rival and relevant variables were entered into the equation, again it was mother care that explained the variation.

Regardless, in each of the cases the group which is the designation of whether the woman was adopted or nonadopted was significant and strongly correlated with both anxiety and avoidance. The designation of whether the woman was adopted or nonadopted was consistently the largest in the model. The study findings support the arguments linking adoption to increased risk of interpersonal problems (Collishaw, Maughan, & Pickles, 1998; Cubito & Brandon, 2000; Feeney, Passmore, & Peterson, 2007; Levy-Shiff, 2001; Wierzbicki, 1993). The study findings also support Feeney, Passmore, and Peterson’s (2007) recent study which examined adoption, attachment, and relationship concerns in a sample of adult adoptees which supported the view that
adoption may be a risk factor for negative relational attitudes and relationship difficulties in adult life, particularly in terms of attachment security.

*Clinical and Policy Implications*

The findings of this study indicate that adopted women experience a more insecure (avoidant or anxious) attachment within their romantic relationships. With the findings of the study in mind, there are a number of implications that have the potential to benefit not only the adoptee, specifically adopted women, but also have the potential to benefit the adoptive parents, adoptive family system, and the romantic partner of the adopted woman.

Clinicians working with adoptees, especially adopted women, must have a comprehensive understanding of adoption. In addition, clinicians who work with adoptees must have a firm understanding of attachment and the ways in which adoption impacts the adoptee’s present and future attachment to significant others. This knowledge is not only imperative for having an understanding of how the adoptee has related and continues to relate to significant others but also how the adoptee will relate to the clinician within their ongoing work together. The study results indicate that being adopted and other issues such as adoptive family bonding issues contribute to adopted women’s risk for an avoidant or anxious attachment within their romantic relationships. Knowing this, the clinician has the foresight to listen for attachment related issues (past and present) that come up in the therapeutic work and gently encourage ongoing exploration of those attachment related issues. Also, if the clinician is working with an adopted woman with an avoidant or anxious attachment, the clinician could be aware of
his or her way of relating to the adoptee within their work together to provide the space for the adoptee to feel safe to explore attachment related issues/experiences and adoption related issues/experiences with the clinician.

Adopted persons, adoptive parents, the adoptive family system and ultimately the romantic partner of the adopted woman would benefit from support through the form of receiving psychoeducation which addresses adoption related issues. Clinician facilitated psychoeducational groups for the adoptee, the adoptive parents, the adoptive family system and the romantic partners of the adopted woman would provide the vehicle for not only education about adoption related issues but also allow the space and time for the processing of one’s thoughts, feelings and experiences regarding those adoption related issues and how they impact relationships. Psychoeducational groups should be tailored to educate about the adoptee experience and focus on the potential issues that the adopted individual faces throughout their childhood, adolescence and adult life. This may include such issues as attachment, identity and bonding with significant others. The psychoeducational groups will also provide the vehicle for validation of adoptee’s unique life experience as an adopted individual. Kirk (1964) identified that acknowledgement-of-difference about adoption among family members within the family system ultimately facilitates healthier adjustment in adoptees. Brodzinsky (1987) explained that extremes at either end of the communication continuum, denial-of-difference or insistence-on-difference, are less likely to promote positive adjustment in adoption. With the assistance of the clinician the adoptee, the adoptive parents, adoptive family system and ultimately
the romantic partner of the adopted woman will have a safe place to become educated about and explore this type of adoption related issue.

Adopted women could greatly benefit from education about adoption and attachment, especially how those attachment related issues may impact their connection with their romantic partner. The clinician who is aware that adopted women are more likely to experience an avoidant or anxious attachment within their romantic relationships has the ability to educate his or her client about the characteristics of an avoidant or anxious attachment. The clinician’s ability to relay this information to the adopted woman may in turn provide the space for dialogue about attachment related difficulties within the adoptee’s romantic relationship(s) and allow for the possibility of metalizing and ultimately putting into action different ways of interrelating with her significant other. Mentalization is the capacity to interpret the behavior of oneself and others and also enables the individual to perceive and interpret human behavior in terms of intentional mental states (e.g. needs, desires and feelings) which is often a problem for those with attachment related difficulties (Fonagy, 2001).

Romantic partners of adopted women could benefit from education about the attachment related issues of their adopted partner and how those attachment related issues may impact the connection with their adopted partner. The clinician who is aware that adopted women are more likely to experience an avoidant or anxious attachment within their romantic relationship has the ability to educate the romantic partner of the adopted woman about the characteristics of an avoidant or anxious attachment. The clinician’s ability to relay this information to the adopted woman’s romantic partner may in turn
provide the space for dialogue between the adopted woman and her partner about attachment related difficulties within the romantic relationship and allow for the possibility of putting into action different ways of relating to each other.

The findings of this study indicated that even adoption at a very young age, between birth and 24 months, has the potential to impact an adoptee’s future attachment style within their romantic relationships. Based on this finding it is reasonable to assume that the infant’s separation from the biological parent(s) does have a lasting impact on the adopted person’s attachment. Therefore, it is essential to consider the option of keeping birth parents together with their biological children if possible, in order to deter the possibility of a disrupted attachment. Based on the findings in this study this separation from the biological parent(s) is a significant factor which has lasting implications in the child’s future attachments with significant others in their romantic relationships.

Adoption policy must take into consideration of the rights of adoptees and not just the rights of biological parents and adoptive parents. For many years, when closed adoption was the prevalent way through which adoptees were adopted into a family, consideration of and conversation about how the adoption and life within the adoptive family system would impact the adoptee was nonexistent. Adopted persons of closed adoptions are often left without options regarding acquiring their biological history because of laws that protect the biological parents and adoptive parents. The literature supports the idea that some adoptees experience a sense of tension and secrecy within their adoptive family related to their adoption and biological heritage. An important aspect of the experienced
secrecy is the assumption that if one is not allowed to know something, especially about oneself, it must be bad (Lifton, 1979; Partridge, 1991; Verrier, 1993).

Finally, clinicians have a responsibility to acknowledge adoptee rights, which includes the right to information about one’s own biological history, and foster a better understanding of the adoptee’s life experience as an adopted individual. Clinicians who work with adopted individuals have first-hand knowledge about the adoptee’s unique life experiences. Because of this, clinicians who work with adopted persons are the most suited to contribute to fostering a better understanding of the adopted person’s experiences through engaging in and contributing to adoption related research.

**Limitations**

Although this study has made a contribution to the understanding of adopted women’s attachment within their romantic relationships, there are a number of study limitations that must be taken into consideration. The generalizability of the study results are impacted by the following study limitations:

First, the study sample was entirely female and caucasian. Because only the female gender and caucasian race were represented in the study, the findings may not be generalizable to the experiences of the male gender or transgender population or other races.

Second the study sample was a purposive one. Subjects for the study were solicited to participate on a volunteer basis. This sampling strategy has the potential to introduce bias in the sample. For instance, those women who are interested in research and/or adoption may have been more likely to participate in the study. Because a purposive
sample was utilized for this study, the study sample may not be representative of the adopted women population and may not be representative of adopted women in the United States of America.

Third, one of the ways prospective participants were recruited was through advertisements on adopted related internet sites. Those who choose to affiliate with adoption groups of any kind may be biased because they might be more interested in adoption, adoption related issues, and how adoption has impacted their life. Those adopted women who have joined and participate in adoption related groups may be currently working on adoption related issue such as biological family search and reunion. Some adoption related internet sites have a political agenda associated with it. Regardless, those adoptees that choose to join adoptee related groups most likely do so because of their interest in adoption and the adoption related issue represented by the group.

Fourth, the majority of those adopted women who participated in this study identified their adoption as a closed adoption. Adopted women, who were adopted through a closed adoption process, have had a very different experiences than those adopted via semi-open or open adoption. An example of this difference would be not having access to any biological family medical history. Also, some adoptees of closed adoption may not have knowledge of their adoption status until later in life. Because the experiences of adopted women of closed adoption is qualitatively different than those who have been adopted via semi-open or open adoption, the ability to generalize the study results to adoptees of semi-open or open adoption may be compromised.
Finally, attachment theory does not take into account the infant’s biological makeup. Attachment theory also does not take into account the child’s environment and environmental factors. Finally, the person-other perspective of attachment theory does not take into account the myriad of other social influences on the individual and its impact on his or her identity formation.

**Recommendations for Future Research**

The following are recommendations for future study:

It is recommended that future investigators compare samples of adoptees from both open and closed adoption with same variables. Since the majority of the participants in this study were from closed adoptions, it would be advantageous to compare the results and see if there are different findings.

It is recommended that future research examine and compare both male and female adult adoptees attachment within romantic relationships. It would be useful to know whether there are gender differences that exist regarding romantic attachment.

In order to ascertain a more in-depth analysis of adult adoptees attachment experiences within romantic relationships, future research should involve qualitative studies of adult adoptees attachment experiences within romantic relationships. This will help to capture the unique experiences of adoptees within romantic relationships and allow the space for exploration of how those adoptees believe their adoption and adoptee experience has impacted their attachment to their partner(s) within romantic relationship(s).
Research is needed that considers the impact of different types of family systems that exist on the adoptee’s attachment. The traditional mother/father dyad is no longer the predominant family system in which an adoptee is raised. Studying adoptee’s experiences within a variety of family systems (e.g. two mothers, two fathers, mixed race) allows for a more actual representation of the differences that may exist and are experienced within those family systems.

There is a need for longitudinal studies that follow adoptees attachment experiences within their adoptive family and tracks their attachment style throughout their childhood, adolescence, young adulthood and adulthood. Longitudinal studies would provide insight into the ongoing process of attachment during each developmental phase of the adoptee’s life and his or her attachment related experiences.

Replication of the present study would be helpful in determining if the results obtained in this study are representative of adopted women in general. It would be interesting to find out if the romantic attachment results obtained in this study would hold true for another sample of adopted women.

Future research is needed which involves the study of the experiences of adoptive parents raising an adopted individual. To more fully understand adoptees’ attachment experiences one must first understand the attachment style of the adopted individual’s caretakers and its potential impact on the adoptees’ attachment bond. Also, adoptive parent’s experiences of the adoption process and raising an adoptee impacts the adoptive parent/adopted child bonding experience and ultimately the quality of the adoptive parent’s ongoing interaction with the adoptee. In addition, it may be beneficial to explore
adoptive parent’s attachment within their own romantic relationship(s). It would be interesting to see if the adoptee’s romantic attachment was similar to his or her caretakers (i.e. adoptive mother has a more insecure romantic relationship attachment style and her adoptive daughter also has a more insecure romantic relationship attachment style).
References


Appendix A

Adopted Women

Participants Needed for a Doctoral Research Project

Are you an adopted woman, 25 to 60 years old, who currently resides in The United States of America and identifies as caucasian? Were you born and adopted within the United States of America? Were you not adopted by a biological family member? Did you live within your adoptive family until at least 16 years of age? Have you had involvement in at least one romantic relationship of at least three months? If you answered yes to these questions, please consider participating in this doctoral dissertation research project that will explore adopted women’s attachment experiences within romantic relationships.

Participating in this study involves completing questionnaires and will take approximately 30 minutes of your time. Participation is voluntary and anonymous. The questionnaires will be mailed directly to you and you will be provided with a self-addressed and stamped envelope for their return. Your participation and the data from it could help in gaining a more in-depth understanding of adopted women.

If you are interested in participating in this study please contact MaryAnn A. Groncki, MSW, LCSW at 3 Paoli Plaza, Suite D, Paoli, PA 19301. Telephone: 215-292-3276. Or contact MaryAnn by email at mgroncki@sp2.upenn.edu. This study has been approved by The University of Pennsylvania Institutional Review Board.

Thank you!

Mary Ann A. Groncki, MSW, LCSW
University of Pennsylvania School of Social Policy & Practice Doctoral Candidate
Appendix B-1

Mary Ann A. Groncki, MSW, LCSW
3 Paoli Plaza
Suite D
Paoli, PA 19301
215-292-3276
mgroncki@sp2.upenn.edu

Dear Prospective Research Participant,

My name is Mary Ann A. Groncki and I am a Doctoral Student at The University of Pennsylvania in the School of Social Policy and Practice. I am requesting your participation in a doctoral dissertation research project that will explore adopted women’s attachment experiences within their romantic relationships.

You are being asked to participate in this study because you are an adopted woman between 25 and 60 years of age, currently reside in the United States of America, identify as caucasian, were not born and/or adopted from outside of The United States of America, were adopted as an infant (adopted by 24 months/2 years of age), have lived within your adoptive family until at least 16 years of age, have had involvement in at least one romantic relationship of at least three months, and were not adopted by a biological family member.

To participate in this study please complete the four questionnaires, The Experiences in Close Relationships Measure, The Parental Bonding Instrument (completed twice - once for experiences with mother and once for experiences with father), and the Background Information Questionnaire, and send them back to me within two weeks of receiving them in the provided self-addressed and stamped envelope. It should take approximately 30 minutes to complete the questionnaires. I will make a $1.00 donation to Adoptions from the Heart for each fully completed and returned set of questionnaires.

By returning your completed questionnaires you are giving your consent to participate in this study. Your participation is completely voluntary and you may chose not to participate in this study without adverse consequences. Please keep this letter for your records.

Data will remain confidential. There will be no way for me or anyone else to know which questions you answered. Completed questionnaires and the data associated with them will be kept in a locked file cabinet in my office for five years after my dissertation is published. After that time all questionnaires will be shredded. Due to the anonymous nature of the research I will not be able to withdraw questionnaires once they have been submitted.

There are no known risks associated with being in this research study beyond the possible inconvenience of your time. However, if you experience any distress while completing the questionnaires please feel free to contact me directly for a referral to a licensed psychotherapist who will provide you with one consultation session paid for by this researcher.

Although there may not be any direct benefit to you, your participation and the data from it could help in gaining a more in-depth understanding of adopted women. If you decide to participate in this study know that you are contributing to an area of study which lacks research and can benefit from greater understanding and study. Upon completion of this doctoral research project I hope to submit the study findings to a scholarly journal for publication.

If you have any questions or concerns about completing the questionnaires or about being in this study, you may contact me directly at 3 Paoli Plaza, Suite D, Paoli, PA 19301. Telephone: 215-292-3276. Email address: mgroncki@sp2.upenn.edu.

If you have questions or concerns about the treatment of participants in this study you may call or write: Dr. Ram Cnaan, University of Pennsylvania, School of Social Policy & Practice, 3701 Locust Walk, Philadelphia, PA 19104. Telephone: (215) 898-5523.

This study has been approved by The University of Pennsylvania Institutional Review Board. Thank you for your consideration of participation in this study!

Sincerely,

Mary Ann A. Groncki, MSW, LCSW
University of Pennsylvania School of Social Policy & Practice Doctoral Candidate
Appendix B-2

Mary Ann A. Groncki, MSW, LCSW
3 Paoli Plaza
Suite D
Paoli, PA 19301
215-292-3276
mgroncki@sp2.upenn.edu

Dear Prospective Research Participant,

My name is Mary Ann A. Groncki and I am a Doctoral Student at The University of Pennsylvania in the School of Social Policy and Practice. I am requesting your participation in a doctoral dissertation research project that will explore adopted women’s attachment experiences within their romantic relationships.

You are being asked to participate in this study because you are a woman between 25 and 60 years of age, identify as caucasian, currently reside in the United States of America, have lived within your biological family for the first 16 years of your life, and have had involvement in at least one romantic relationship of at least three months.

To participate in this study please complete the four questionnaires, The Experience in Close Relationships Measure, The Parental Bonding Instrument (completed twice - once for experiences with mother and once for experiences with father), and the Background Information Questionnaire, and send them back to me within two weeks of receiving them in the provided self-addressed and stamped envelope. It should take approximately 30 minutes to complete the questionnaires. I will make a $1.00 donation to Adoptions from the Heart for each fully completed and returned set of questionnaires.

By returning your completed questionnaires you are giving your consent to participate in this study. Your participation is completely voluntary and you may chose not to participate in this study without adverse consequences. Please keep this letter for your records.

Data will remain confidential. There will be no way for me or anyone else to know which questions you answered. Completed questionnaires and the data associated with them will be kept in a locked file cabinet in my office for five years after my dissertation is published. After that time all questionnaires will be shredded. Due to the anonymous nature of the research I will not be able to withdraw questionnaires once they have been submitted.

There are no known risks associated with being in this research project beyond the possible inconvenience of your time. However, if you experience any distress while completing the questionnaires please feel free to contact me directly for a referral to a licensed psychotherapist who will provide you with one consultation session paid for by this researcher.

Although there may not be any direct benefit to you, your participation and the data from it could help in gaining a more in-depth understanding of adopted women. If you decide to participate in this study know that you are contributing to an area of study which lacks research and can benefit from greater understanding and study. Upon completion of this doctoral dissertation research project I hope to submit the study findings to a scholarly journal for publication.

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Thank you for your consideration of participation in this study!

Sincerely,

Mary Ann A. Groncki, MSW, LCSW
University of Pennsylvania School of Social Policy & Practice Doctoral Candidate
Appendix C

Experiences in Close Relationships

*Instructions:* The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Neutral/Mixed</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I prefer not to show a partner how I feel deep down.
2. I worry about being abandoned.
3. I am very comfortable being close to romantic partners.
4. I worry a lot about my relationships.
5. Just when my partner starts to get close to me I find myself pulling away.
6. I worry that romantic partners won't care about me as much as I care about them.
7. I get uncomfortable when a romantic partner wants to be very close.
8. I worry a fair amount about losing my partner.
9. I don't feel comfortable opening up to romantic partners.
10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
11. I want to get close to my partner, but I keep pulling back.
12. I often want to merge completely with romantic partners, and this sometimes scares them away.
13. I am nervous when partners get too close to me.
15. I feel comfortable sharing my private thoughts and feeling with my partner.
16. My desire to be very close sometimes scares people away.
17. I try to avoid getting too close to my partner.
18. I need a lot of reassurance that I am loved by my partner.
19. I find it relatively easy to get close to my partner.
20. Sometimes I feel that I force my partners to show more feeling, more commitment.
21. I find it difficult to allow myself to depend on romantic partners.
22. I do not often worry about being abandoned.
23. I prefer not to be too close to romantic partners.
24. If I can't get my partner to show interest in me, I get upset or angry.
25. I tell my partner just about everything.
26. I find that my partner(s) don't want to get as close as I would like.
27. I usually discuss my problems and concerns with my partner.
28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
29. I feel comfortable depending on romantic partners.
30. I get frustrated when my partner is not around as much as I would like.
31. I don't mind asking romantic partners for comfort, advice, or help.
32. I get frustrated if romantic partners are not available when I need them.
33. It helps to turn to my romantic partner in times of need.
34. When romantic partners disapprove of me, I feel really bad about myself.
35. I turn to my partner for many things, including comfort and reassurance.
36. I resent it when my partner spends time away from me.
Appendix D

**PBI**

This questionnaire lists various attitudes and behaviors of parents. As you remember your mother/father in your first 16 years, would you place a tick in the most appropriate brackets next to each question.

<table>
<thead>
<tr>
<th></th>
<th>Very like</th>
<th>Moderately like</th>
<th>Moderately unlike</th>
<th>Very unlike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Spoke to me with a warm and friendly voice</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>2. Did not help me as much as I needed</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>3. Let me do those things I liked doing</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>4. Seemed emotionally cold to me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>5. Appeared to understand my problems and worries</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>6. Was affectionate to me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>7. Liked me to make my own decisions</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>8. Did not want me to grow up</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>9. Tried to control everything I did</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>10. Invaded my privacy</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>11. Enjoyed talking things over with me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>12. Frequently smiled at me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>13. Tended to baby me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>14. Did not seem to understand what I needed or wanted</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>15. Let me decide things for myself</td>
<td>( )</td>
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<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>16. Made me feel I wasn’t wanted</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>17. Could make me feel better when I was upset</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>18. Did not talk with me very much</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>19. Tried to make me dependent on her/him</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>20. Felt I could not look after myself unless she/he was around</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>21. Gave me as much freedom as I wanted</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>22. Let me go out as often as I wanted</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>23. Was overprotective of me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
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<tr>
<td>24. Did not praise me</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
<tr>
<td>25. Let me dress in any way I pleased</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
</tr>
</tbody>
</table>
Appendix E-1

Background Information Questionnaire – Adopted Woman

1. Date of Birth:___________________

2. At what age were you when you were adopted? (Please specify age in months)
   _______________________ months

3. Did you live anywhere else before coming to live in your adoptive family?
   Yes      No

4. If you answered yes to question # 3, how many families had you lived with prior to being adopted?
   1    2    3    4    5    More Than 5

5. How old were you when you told you were adopted?
   _______________________ years of age

6. Your adoption was:
   Closed    Open    Semi-open

7. How old were your parents when you were adopted?
   Adoptive Mother:___________ years of age
   Adoptive Father:___________ years of age

8. Do you identify as ethnically same or different than your adoptive family?
   Same      Different

9. Are your adoptive parents still living?
   Adoptive Mother:    Yes    No
   Adoptive Father:    Yes    No
10. Number of siblings in your adoptive family:

1  2  3  4  5  More Than 5

11. Are any of the siblings in your adoptive family the biological children of your adoptive parents?

Yes  No  Not Applicable

12. Are any of the siblings in your adoptive family also adopted?

Yes  No  Not Applicable

13. Have you searched for any members of your biological family?

Yes  No

14. If you answered yes to question # 13, who have you searched for? (Circle all that apply)

Biological Mother  Biological Father  Biological Siblings  Other

15. If you answered no to question # 13, do you have any plans to search for any members of your biological family?

Yes  No

16. If you answered yes to question # 15, who do you plan to search for? (Circle all that apply)

Biological Mother  Biological Father  Biological Siblings  Other

17. Have you ever been in psychotherapy treatment?

Yes  No

18. If you answered yes to question # 17, for how long?

3 to 5 Months  6 to 11 Months  1 to 2 Years  3 to 5 Years
6 to 10 Years  11 to 15 Years  16-20 Years  Over 20 Years

19. Are you currently engaging in psychotherapy treatment?

Yes  No
20. Have you ever been a victim of physical abuse?
   Yes  No

21. Have you ever been a victim of sexual abuse?
   Yes  No

22. Have you ever been a victim of emotional abuse?
   Yes  No

23. Have you ever been arrested for a felony?
   Yes  No

24. If you answered yes to question # 23, were you convicted?
   Yes  No

25. Are you currently in a committed relationship?
   Yes  No

26. If you answered yes to question # 25, for how long?

<table>
<thead>
<tr>
<th>Duration</th>
<th>3 to 5 Months</th>
<th>6 to 11 Months</th>
<th>1 to 2 Years</th>
<th>3 to 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 to 10 Years</td>
<td>11 to 15 Years</td>
<td>16-20 Years</td>
<td>Over 20 Years</td>
</tr>
</tbody>
</table>

27. How long was the longest period of time that you were in a committed relationship?

<table>
<thead>
<tr>
<th>Duration</th>
<th>3 to 5 Months</th>
<th>6 to 11 Months</th>
<th>1 to 2 Years</th>
<th>3 to 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 to 10 Years</td>
<td>11 to 15 Years</td>
<td>16-20 Years</td>
<td>Over 20 Years</td>
</tr>
</tbody>
</table>

28. Current Relationship status:

Single  Cohabiting  Married
Divorced
Remarried
Separated
Widowed

29. Sexual orientation:

Lesbian
Bisexual
Heterosexual
Other

30. Parental status (number of children):

1  2  3  4  5  More Than 5

31. Using the following categories, what is your highest level of education?

Less than high school
High school or GED diploma
Some college
College graduate
Some graduate training
Graduate degree (Masters, Doctorate)

32. Employment Status:

Full-time
Part-time
Not currently employed
Student

33. Annual Household Income:

Under $10,000  $11-20,000  $21-30,000  $31-40,000
$41-50,000  $51-75,000  $76-125,000  $126-175,000
$176 and above
Appendix E-2

Background Information – Nonadopted Woman

1. Date of Birth: ____________________

2. Are your parents still living?

Mother:  Yes  No
Father:  Yes  No

3. Number of siblings in your family:

1  2  3  4  5  More Than 5

4. Have you ever been in psychotherapy treatment?

Yes  No

5. If you answered yes to question # 4, for how long?

3 to 5 Months  6 to 11 Months  1 to 2 Years  3 to 5 Years
6 to 10 Years  11 to 15 Years  16-20 Years  Over 20 Years

6. Are you currently engaging in psychotherapy treatment?

Yes  No

7. Have you ever been a victim of physical abuse?

Yes  No

8. Have you ever been a victim of sexual abuse?

Yes  No

9. Have you ever been a victim of emotional abuse?

Yes  No
10. Have you ever been arrested for a felony?
Yes  No

11. If you answered yes to question # 10, were you convicted?
Yes  No

12. Current Relationship status:
Single  Cohabitng  Married  Divorced  Remarried  Separated  Widowed

13. Are you currently in a committed relationship?
Yes  No

14. If you answered yes to question # 13, for how long?
3 to 5 Months  6 to 11 Months  1 to 2 Years  3 to 5 Years
6 to 10 Years  11 to 15 Years  16-20 Years  Over 20 Years

15. How long was the longest period of time that you were in a committed relationship?
3 to 5 Months  6 to 11 Months  1 to 2 Years  3 to 5 Years
6 to 10 Years  11 to 15 Years  16-20 Years  Over 20 Years

16. Sexual orientation:
Lesbian  Bisexual  Heterosexual  Other
17. Parental status (number of children):
1  2  3  4  5  More Than 5

18. Using the following categories, what is your highest level of education?
Less than high school
High school or GED diploma
Some college
College graduate
Some graduate training
Graduate degree (Masters, Doctorate)

19. Employment Status:
Full-time
Part-time
Not currently employed
Student

20. Annual Household Income:
Under $10,000  $11-20,000  $21-30,000  $31-40,000
$41-50,000  $51-75,000  $76-125,000  $126-175,000
$176- and above