

2010

# Family Predictors of Negative Instability in Adopted Emerging Adults

Danila S. Musante

*University of Massachusetts Amherst*, [dmusante@psych.umass.edu](mailto:dmusante@psych.umass.edu)

Follow this and additional works at: <http://scholarworks.umass.edu/theses>



Part of the [Child Psychology Commons](#), and the [Clinical Psychology Commons](#)

---

Musante, Danila S., "Family Predictors of Negative Instability in Adopted Emerging Adults" (2010). *Masters Theses 1911 - February 2014*. 532.

<http://scholarworks.umass.edu/theses/532>

This thesis is brought to you for free and open access by the Dissertations and Theses at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact [scholarworks@library.umass.edu](mailto:scholarworks@library.umass.edu).

FAMILY PREDICTORS OF NEGATIVE INSTABILITY IN ADOPTED EMERGING  
ADULTS

A Thesis Presented

by

DANILA S. MUSANTE

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

MASTER OF SCIENCE

September 2010

Psychology

FAMILY PREDICTORS OF NEGATIVE INSTABILITY IN ADOPTED EMERGING  
ADULTS

A Thesis Presented

by

DANILO S. MUSANTE

Approved as to style and content by:

---

Harold Grotevant, Chair

---

David Scherer, Member

---

Christine McCormick, Member

---

Melinda Novak, Department Head  
Psychology Department

## ABSTRACT

### FAMILY PREDICTORS OF NEGATIVE INSTABILITY IN ADOPTED EMERGING ADULTS

September 2010

DANILA S. MUSANTE, B. A., HARVARD COLLEGE

M.A., UNIVERSITY OF MASSCHUSETTS AMHERST

Directed by: Professor Harold Grotevant

This study evaluated the associations between filial relationships and young adults' adjustment to the period of emerging adulthood in adoptive families. Adopted individuals' attachment to their adoptive parents and affect about adoption were assessed at adolescence and young adulthood and compared with their feelings of negative instability about the period of emerging adulthood. Findings demonstrate that affect about adoption and attachment to each parent during adolescence and emerging adulthood are associated with negative instability in emerging adulthood. Specifically, individuals whose attachment to each parent and affect about their adoption remained high from adolescence to emerging adulthood had the lowest ratings of negative instability in emerging adulthood whereas individuals whose attachment and affect remained low across this period had the highest ratings of negative instability. Additionally, results found more mobility than stability in attachment and adoption affect across this time.

## TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
LIST OF FIGURES.....	vi
CHAPTER	
1. INTRODUCTION.....	1
Overview.....	1
Literature Review.....	3
Individuation and Emerging Adulthood.....	14
Adoption, Attachment, and Affect.....	21
The Current Study.....	29
2. METHOD.....	33
Participants.....	33
Procedure.....	35
Measures.....	35
3. RESULTS.....	39
4. DISCUSSION.....	43
Stability and Change in Family Relationships.....	44
IPPA.....	50
Negative Instability in Emerging Adulthood.....	53
General Implications.....	57
Limitations.....	59
Future Directions.....	61

APPENDIX: THE INVENTORY OF PARENT AND PEER ATTACHMENT.....66  
BIBLIOGRAPHY.....70

## LIST OF TABLES

Table	Page
1. Intercorrelations for Attachment, Affect about Adoption, and Negative Instability...64	
2. NI According to Patterns of Change from Adolescence to Emerging Adulthood.....65	

# CHAPTER 1

## INTRODUCTION

### Overview

In American families, “complexity” has become the norm rather than the exception; many families do not fit into the traditional definition of the “nuclear family” and instead may include individuals who do not all have full biological ties to one another. This study considers adoptive families a valuable case study of family complexity and examines the relationships between parents and their adopted children in adolescence and emerging adulthood. Emerging adulthood is a distinct developmental period between adolescence and adulthood which has arisen as a result of significant changes in demographics over the past 25 years (Arnett, 2000). Typically lasting from the late teens to the late twenties, emerging adulthood is a unique phase of development in terms of family relationships; during this time, individuals are establishing independence from their families of origin while simultaneously striving to maintain strong family bonds (Aquilino, 2006*a*). Additionally, this period presents young adults with a multitude of choices regarding life direction and lacks the structure and support of earlier stages of life. While some emerging adults thrive in this context which endorses self-sufficiency and personal initiative, others struggle to find their footing and may stagnate during what can be a confusing and unstable time.

Developmental perspectives emphasize the importance of parent-child attachment to early psychological health and later psychosocial adjustment, and adoptive families provide a unique perspective on attachment processes across the lifespan. While the relationship between parent and child is influential throughout the life course (Amato,

1994; Rossi & Rossi, 1990; Umberson, 1992), this relationship evolves across the life span (Aquilino, 1997). Questions exist regarding the degree to which early family relationships affect establish future dynamics; however, literature suggests the “potential for both continuity and change in patterns of family interaction over the life course” (Aquilino, 1997, p. 671; Elder, 1984). While learned patterns of interactions impact the relationships between parents and their adult children, these past dynamics do not determine the course of future relationships. Specifically, transitions that occur during emerging adulthood such as leaving home, college enrollment, and/or employment can be powerful stimulators of changes in parent-child roles and interactions (Aquilino, 1997). This study will explore the stability and change in adopted individuals’ relationships with their parents as they move from adolescence to adulthood.

The purpose of this study is to evaluate the associations between filial relationships and young adults’ adjustment to the period of emerging adulthood in adoptive families. In addition to studying attachment in adoptive families, this study will also examine adopted individuals’ feelings about their adoption as affect about adoption has been demonstrated to be strongly linked to psychological health, encompassing externalizing behaviors and internalizing behaviors and emotions (Benson, Sharma, & Roehlkepartain, 1994). Both attachment and affect about adoption are important factors in adoptive family dynamics and provide meaningful information about the perspectives of adopted emerging adults.

The particular aims of the current study include examining the stability of both attachment to adoptive parents as well as affect about adoption from adolescence to emerging adulthood. Additionally, the relationships between attachment and affect will

be examined at both time points. Lastly, this study will examine the relationship between longitudinal patterns of attachment to both parents and adoption affect, from adolescence to emerging adulthood, and subjective feelings of negative instability in emerging adulthood.

## **Literature Review**

**Attachment. *Attachment theory.*** Attachment theory, originally formulated by Bowlby (1969, 1977), concerns the ability of humans to develop strong affectional bonds to specific others. Attachment behavior attempts to attain and maintain proximity to an attachment figure (caregiver) for the evolutionary/survival purpose of protecting the infant from danger (Bowlby, 1969). According to this theory, infants become attached to caregivers who are sensitive, responsive, and provide them with consistent care. Bowlby (1969) explains that a strong attachment between young child and parent(s) gives the child “a sense of worth, a belief in the helpfulness of others, and a favourable model on which to build future relationships” (p. 378). This positive sense of self and others allows children to confidently explore their environments and effectively respond to it, furthering their sense of competence. So long as the relationship between parent and child remains positive, these “early patterns of thought, feeling, and behavior” endure and influence the child’s personality such that “personality becomes increasingly structured to operate in moderately controlled and resilient ways, and increasingly capable of continuing so despite adverse circumstances” (Bowlby, 1969, p. 378). Thus, a strong attachment between infant and parent(s) provides a young child with the foundation upon which a psychologically healthy, well-adjusted self can develop.

Family relationships and dynamics generally change a great deal during adolescence and young adulthood; however, the relationship between parent(s) and “child” continues to be profoundly significant. As children mature, they no longer need the proximity to their parents they once needed as infants, yet “they continue to demonstrate in many ways that their sense of security is dependent on their parents’ continued accessibility” (Weiss, 1982, p. 175). While security for adolescents no longer depends upon constant parental receptiveness, most youth still value and even require the assurance that their parents’ commitment to them continues despite their being increasingly free of parental surveillance (Weiss, 1982). Furthermore, as adolescents navigate the tasks of achieving autonomy, their ability to cope with conflicts surrounding independence and identity is most likely influenced by parental trust and mutual respect as well as good parental relationships (Bloom, 1980; Blos, 1975). Though adolescents may not always acknowledge it, parents serve as “essential allies” to them as they cope with the challenges of maturation (Weiss, 1982, p. 176).

Additional research suggests that parental support in a context of family cohesion and love is important to the promotion of the critical adolescent developmental tasks of growth and independence (Ryan & Lynch, 1989). A study examining the parental attachments of 19-22 year-old participants reported that young adults viewed the affective quality of their relationships with their parents as generally positive and described their parents as concurrently fostering autonomy and providing emotional support when needed (Kenny, 1994). Thus, far from intruding on adolescents’ journey towards independence, strong and secure parental bonds actually stimulate this process

(Grotevant & Cooper, 1986). Positive filial relationships that endure into adolescence and young adulthood continue to foster a child's confidence and identity such that s/he is able to cope with the challenges of growing up and realizing autonomy.

The bond between parent and child persists into adult life and continues to be significant (Bowlby, 1969). While an early attachment between infant and parent(s) is important to a young child's early learning experiences and influential in emotional development at this sensitive age, relationships between "child" and parent(s) sustain powerful importance into the adult years. Bowlby (1973) explains that

human beings of all ages are found to be at their happiest and to be able to deploy their talents to best advantage when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise. (p. 359)

Individuals who are relatively stable and self-reliant typically have family experiences characterized by "unfailing parental support when called upon but also by a steady yet timely encouragement towards increasing autonomy" (Bowlby, 1973, p. 323). Strong attachment is fundamentally rooted in parental responsiveness to children's needs, however, as children age, such needs evolve to focus on support for individuation and autonomy, critical tasks of adolescence and young adulthood. Thus, the attachment model's focus on the significance of supportive family relationships throughout the life span encompasses both the importance of family connections and closeness as well as the value of family support for individual autonomy. Both of these are believed to be crucial elements in promoting an individual's psychological growth and adaptive functioning (Leondari & Kiosseoglou, 2002).

*Measurement of attachment.* Attachment theory is quite broad and pervasive in its scope and, correspondingly, there is substantial diversity in the conceptualization and measurement of adult attachment (Feeney, Noller, & Hanrahan, 1994; Simpson & Rholes, 1998). While an in-depth discussion of the measurement of adult attachment is beyond the scope of this paper, the varied types of assessments of adult attachment are worth noting. Measures of adult attachment differ in terms of domain, method, dimensionality, and categorization systems (Bartholomew & Shaver, 1998). Despite this diversity, all research on adult attachment has its roots in Bowlby's attachment theory and Ainsworth's (1982) "Strange Situation" technique, an instrument for studying patterns of attachment. In the Strange Situation, an infant and mother are brought into a laboratory room and a stranger enters. After a series of seven episodes in which the mother and stranger leave and return to the room, the nature of the attachment relationship between the infant and the mother is assessed (Ainsworth, 1982).

In the 1980s, two distinct research programs were examining attachment in adults. One line of research focused on the effect of adults' attachment styles on their parenting and their children's attachment style (Bartholomew & Shaver, 1998). Specifically, the Adult Attachment Interview (AAI) was developed to predict infants' behavioral response to the Strange Situation based on their parents' attachment style (Simpson & Rholes, 1998). This hour-long interview identified adults' states of mind with regard to attachment (secure-autonomous, dismissing, preoccupied, and unresolved/disorganized) by asking participants about their early attachment experiences and the effects of these experiences (Main, 1995; Main, 1996). The other line of research stemmed from the peer/romantic partner research tradition. This tradition developed a different measure of

adult attachment which was based on the reasoning that the three patterns of attachment found in young children by Ainsworth and colleagues was transformed into three styles of romantic attachment in adulthood (Hazan & Shaver, 1987; Simpson & Rholes, 1998).

There has been considerable debate regarding the convergence of attachment-related findings based on measurements from these two schools of thought. Specifically comparing self-report and interview formats, measures of adult attachment have been reported by some to converge to some extent, especially when “reliability and statistical power are sufficiently high” (Bartholomew & Shaver, 1998, p. 42). Bartholomew and Shaver explain that “the results produced by attachment researchers are all compatible with the possibility that various forms of adult attachment arise from a continuous but branching tree of attachment experiences, beginning in infancy and developing throughout the life course” (p. 42). However, other researchers have found that, when focusing on adult attachment, there are low correlations, if any, between interview and self-reported assessment of attachment (McElhaney, Allen, Stephenson, & Hare, 2009). Despite these discrepancies, studies that have examined both forms of attachment assessment reveal that both types of measures are predictive of significant outcomes, such as interpersonal intimacy in future relationships (Mayseless & Scharf, 2007; McElhaney et al., 2009;).

The measure of attachment used in the current study is the Inventory of Parent and Peer Attachment (IPPA). It is a self-report assessment which measures security, or perceived quality, of adolescents’ relationships with their parents and peers (Armsden & Greenberg, 1987). The self-report format allows for the assessment of both behavioral elements of proximity and support seeking as well the “affectively toned cognitive

expectancies that are part of the ‘internal working model’ the individual has of attachment figures” (Armsden & Greenberg, 1987, p. 431; Bretherton, 1985). The self-report format also underscores the fact that attachment reflects features of a relationship from the perspective of one individual in the dyad (Armsden & Greenberg, 1987). In a study assessing the validity of the IPPA in a sample of college students, Armsden and Greenberg (1987) found the quality of parent attachment to be highly related to adolescent well-being.

Research has demonstrated significant relationships between parental attachment as assessed by the IPPA, and important individual outcomes of adjustment and psychosocial behavior that align with attachment theory and are relevant to the present study. Specifically, scores of attachment to parents, measured by the IPPA, have been found to correlate significantly with college undergraduates’ reported levels of cohesiveness, expressiveness, and conflict as well as the inclination to seek out parents in times of need (Armsden & Greenberg, 1987). Research has also demonstrated that weak parental attachment scores, measured by the IPPA, are predictive of increased depression, anxiety, resentment, and alienation among undergraduates (Armsden & Greenberg, 1987). Additionally, in a clinical sample of young adolescents, less secure parental attachment, measured by the IPPA, was related to depression, separation anxiety, hopelessness, and suicidal ideation (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990). IPPA parental attachment scores have also been found to be predictive of features of college adjustment as well as life satisfaction, self-esteem, and personal and social identity in college undergraduates (Armsden & Greenberg, 1987; Lapsley, Rice, & FitzGerald, 1990). Interestingly, findings have been contradictory in terms of sex and

age differences in attachment scores (Lopez & Gover, 1993). In sum, research which has specifically used the IPPA to measure adolescent and young adult parental attachment has demonstrated the efficacy of this measure in predicting issues salient to the current study in terms of family relationships and personal adjustment/psychological health in adolescence and young adulthood.

*Attachment and adjustment.* According to attachment theory, early parent-child attachment relationships lead to the development of individuals' internal working models. These working models are psychological structures which hold information about the self, others, and interpersonal relationships (Bowlby, 1969). They are theorized to "guide functioning, particularly interpersonal functioning, over the life course, and, in doing so, form the underpinnings of personality" (Davila & Cobb, 2004, p. 133). Working models determine attachment styles, which involve attachment-related patterns of cognitions, emotions, behaviors, and needs. These needs develop from a history of attachment experiences which typically begin with parental relationships (Fraley & Shaver, 2000) and are usually divided into three discrete patterns: secure, avoidant, and anxious/ambivalent (Cooper, Albino, Orcutt, & Williams, 2004; Rholes & Simpson, 2004). Such styles are reflective of an individual's "most chronically accessible working models and the typical functioning of his or her attachment system in a specific relationship (relationship-specific style) or across relationships (global or general attachment styles)" (Mikulincer & Shaver, 2003, p. 66). These styles were first characterized by Ainsworth (1967) based on her work observing infants with their mothers.

According to theories of attachment styles, rooted in traditional attachment theory, secure attachment grows out of early relationships with responsive, sensitive, and nurturing parents who demonstrate to the child that his/her needs will be met and that stressful experiences are manageable. On the other hand, insecure attachment, which includes avoidant and anxious-ambivalent attachment styles, is believed to develop from parents who are unable to regulate their child's discomfort and demonstrate a sense of inefficacy in relieving distress (Bowlby, 1973; Mikulincer & Florian, 1998). Overall, secure attachment is conceptualized as "an inner resource that may help a person to positively appraise stressful experiences, to constructively cope with these events, and to improve his or her well-being and adjustment" whereas insecure attachment is considered a "potential risk factor, leading to poor coping and to maladjustment" (Mikulincer & Florian, 1998, p. 143). While attachment styles are theoretically viewed as a source of "within-person continuity in attachment-system functioning," (Mikulincer & Shaver, 2003, p. 71), their continuity is often been assumed without proper assessment; attachment continuity across the lifespan has not been conclusively established by research findings (Rothbard & Shaver, 1994).

Nevertheless, according to theory, individuals with secure attachment are generally believed to be self-confident, socially skilled, and able to form stable and satisfying long-term relationships (Cooper et al., 2004). They are thought to usually deal with distress by recognizing it, taking constructive action, and seeking out support from others (Mikulincer & Florian, 1998). Anxiously attached individuals are theorized as typically lacking confidence and worried about rejection and abandonment, however, often impetuously diving into romantic relationships (Cooper et al., 2004). These

individuals are believed to cope with stress by hypervigilantly focusing their attention on it and ruminating on negative thoughts and feelings (Mikulincer & Florian, 1998).

Avoidantly attached individuals, on the other hand, are theorized as lacking social skills are inhibited and uncomfortable with closeness, self-disclosure, and dependence on others (Cooper et al., 2004). They are thought to deal with discomfort by avoiding its acknowledgment, inhibiting the display of negative emotion, and focusing exclusively on autonomy and self-reliance (Mikulincer & Florian, 1998).

Research supports a link between attachment styles, emotional difficulties, mental health, and adjustment. Mikulincer and Shaver (2003) report a series of studies examining the connection between attachment style and global ratings of psychological well-being and distress, all of which were assessed in adulthood. These studies uniformly found that secure attachment style is positively linked with well-being and inversely associated with distress. Correspondingly, anxious attachment style was found to be inversely related to well-being and positively related with distress. These results were identified in a wide range of samples, including community samples and samples of individuals experiencing stressful events, as well as in cross-sectional and prospective longitudinal research designs (Mikulincer & Shaver, 2003). The findings for avoidant attachment are more complicated and the studies discussed above report differential associations between avoidant attachment and mental health depending on the presence of stressful situations. According to this research, avoidant attachment is strongly related to poor mental health in stressful situations (Mikulincer & Shaver, 2003).

Furthermore, a study which examined adolescents and young adults' (ages 15-22 years) self-reported attachment to parents found those who were securely attached reported more frequent positive emotions and less frequent negative emotions than their insecurely attached counterparts (Leondari & Kiosseoglou, 2002). In this study, secure attachment style was also associated with higher self-esteem, better affect regulation, and a stronger sense of agency than insecure attachment style. Among adolescents and young adults, outcomes associated with secure attachment styles also include social competence, psychological well-being, better adjustment to separation, and affect regulation (Leondari & Kiosseoglou, 2002). More broadly, insecure attachment styles have been linked to lower self-esteem and higher levels of depression, hostility, loneliness, anxiety, anger, and resentment in adolescence through adulthood (Kobak & Sceery, 1988; Mikulincer & Shaver, 2003). Among adults, insecure attachment styles have also been found to be related to physical symptoms, negative affect, alcohol consumption, eating disorders, shame, and fear of negative evaluation (Mikulincer & Florian, 1998).

Another relevant study examined the relationship between attachment styles assessed in adolescence and intrapersonal adjustment in young adulthood (Cooper et al., 2004). As attachment theory would predict, this study found that "individual differences in attachment styles predicted unique patterns of adjustment across multiple developmentally relevant domains nearly 5 years later" (Cooper et al., p. 458). Securely attached individuals were the "healthiest" group, anxious adolescents demonstrated the most "poorly adjusted" profile, and, corresponding with past research, avoidant adolescents exhibited the "most complex profile" (Cooper et al., 2004, p. 458). Securely attached adolescents reported positive self-concepts, moderate engagement in risk and

problem behaviors, and relatively low levels of distress as young adults whereas anxious adolescents reported the highest rates of engagement in risky or problematic behaviors, the highest psychological distress, and the poorest self-concepts as young adults.

Avoidantly attached adolescents reported similar levels of distress and negative self-concepts as anxiously attached adolescents, however they were less engaged in problem or risk behaviors as young adults. Interestingly, avoidantly attached youth were involved in the majority of risk behaviors as young adults at similar rates as their securely attached counterparts. However, avoidantly attached adolescents reported more lifetime sexual partners, risky sexual practices, and educational loss as young adults than their securely attached counterparts (Cooper et al., 2004). Another study by Cooper and colleagues found that securely attached adolescents reported superior functioning across multiple domains, demonstrating effective coping styles and a sense of self-efficacy compared to adolescents with anxious or avoidant attachment styles, who were found to be less well-adjusted (Cooper, Shaver, & Collins, 1998). Taken together, such research suggests that positive attachment styles promote instrumental competence and adaptive behavior in adolescence and young adulthood (Leondari & Kiosseoglou, 2000).

*Continuity and change in attachment.* Attachment theory reasons that attachment, for the most part, is a stable characteristic which guides an individual's thoughts, feelings, and behaviors over time, however, it also leaves room for the possibility of change in attachment across an individual's life span (Davila & Cobb, 2004). While an individual's attachment style is largely influenced by past experiences, typically dating back to infancy, attachment dynamics are not static nor are they defined solely by childhood factors; attachment dynamics, in fact, include a "broad array of

contextual factors” (Mikulincer & Shaver, 2003, p. 139). Bowlby (1969) proposed that while people may “be more likely to assimilate new information into their existing attachment models, people are also capable of accommodating new information by updating existing models” (Davila & Cobb, 2004, p. 133). Controversy exists regarding the degree of stability in attachment across the life span, however, data suggest that changes in environment and/or recurring interactions with model-disconfirming situations and/or partners can force individuals to alter their working models to adjust to their current experiences (Rothbard & Shaver, 1994). Specifically, findings from a year long longitudinal study which assessed attachment security during late adolescence and adulthood suggest that self-reported and interviewer assessed attachment security have the capability to change during these developmental time periods (Davila & Cobb, 2004). Currently, there are three models which typically explain discontinuity in adult attachment. Explanations given by these models for change in attachment across time include changes caused by considerable life events or significant changes in life situations, changing states of mind, and differences among individuals in vulnerability factors which affect change (Davila & Cobb, 2004). While most would agree that attachment styles are not set in stone, the degree and causes of discontinuity in attachment across time are still uncertain and in need of further research.

### **Individuation and Emerging Adulthood**

A substantial amount of contemporary research on young adulthood advocates the existence of a distinct period of life between adolescence and adulthood, termed emerging adulthood (Arnett, 2006*b*; Cohen, Kasen, Chen, Hartmark, & Gordon, 2003; Eccles, Templeton, Barber, & Stone, 2003). Proponents of emerging adulthood believe

that significant changes in demographics occurring in America and other industrialized societies over the last 25 years have carved out a discrete stage of life from what was previously considered a transitional period between adolescence and adulthood (Arnett, 2004). Specifically, between the 1960s and mid-1990s, median ages of marriage and entering parenthood rose dramatically in industrialized societies (Arnett, 2006a). Participation in higher education and the rate of residential change also increased considerably. Emerging adulthood researchers describe this period, which lasts from the late teens to the late twenties, as having shifted from being a time of “settling down into adulthood roles of marriage, parenthood, long-term work, and a long-term residence” to a time of unsettledness, exploration, and instability (Arnett, 2006a, p. 7). Research on this period, which tends to focus on ages 18-25, suggests that emerging adulthood is a distinctive period, both demographically and subjectively, characterized by the exploration of possible life directions and experimentation with different worldviews, occupations, and romantic partners (Arnett, 2000).

While emerging adulthood has been embraced by many as a new developmental period which appropriately characterizes the time between youth and adulthood experienced by modern young adults, the concept of emerging adulthood has also been met with skepticism. One main point of critique is that emerging adulthood is not universal and thus should not be categorized as a distinct developmental time period (Bynner, 2005). Some argue that emerging adulthood is a luxury afforded to privileged individuals who have the flexibility to explore different life paths and access to

opportunities associated with such exploration. Another related criticism of emerging adulthood research is that most studies examining this construct have not used diverse samples specifically with regard to race and socioeconomic status (SES) (Bynner, 2005).

Research on emerging adulthood suggests that this time period is not universal, at least at this time, and may be limited to specific recent conditions as well as certain places, namely western industrialized or post industrialized countries (Arnett, 2004). Additionally, even in wealthier countries, individuals who are of lower SES may not have the same freedom to explore or access to opportunities compared to individuals of a higher SES. While emerging adulthood is not currently considered a universal, developmental stage of life, a growing amount of research supports the utility of examining this time period independently from adolescence and adulthood. Specifically, the unique challenges faced by modern American young adults and the coherence of their experience of being neither adolescents nor adults make this time period an important topic of specific study and research. Furthermore, emerging adulthood is a particularly useful framework for the current study because the demographic characteristics of emerging adulthood align with those of the study participants. The vast majority of participants in this study are middle to upper-middle class Caucasian young adults, all of whom were raised and currently live in the United States. The period of emerging adulthood will thus be used in the current study because it provides a valuable lens through which to examine and understand the experiences of the young adult participants.

Emerging adulthood is a time of “pervasive and often simultaneous personal, contextual, and social role changes” which are all occurring within the global transition from adolescence to adulthood (Schulenberg & Zarrett, 2006, p. 140). Emerging adults

experience changes in cognition, biology, emotions, identity, perspective, affiliation, achievement, roles, responsibilities, and context. How an emerging adult deals with the plethora of changes presented by this period both affects and is affected by his or her mental health. Furthermore, reduced institutional structure and support typically characterize this period and require increased self-direction and independence. While many emerging adults relish the independence, spontaneity and possibility afforded by this time, others adjust poorly and feel overwhelmed and distressed without the stability, direction, and structure that typify earlier stages of life (Schulenberg & Zarrett, 2006). Emerging adulthood is thus a period of major life transition and often instability, experienced by some as exciting and liberating and by others as overwhelming and confusing.

The parent-child relationship is a continuous bond that endures significant transformations between adolescence and emerging adulthood as “it is renegotiated from patterns of relatively unilateral authority towards mutuality” (Grotevant & Cooper, 1986). The sense of autonomy from parents generally achieved during emerging adulthood does not dictate a cessation of attachment to parents; in fact, most adults maintain meaningful relationships with their parents throughout the lifespan (Ainsworth, 1989). An important task of emerging adulthood is thus to restructure the parent-child relationship such that independence is achieved within a framework of continuing parental bonds (Lapsley & Edgerton, 2002). This relationship renegotiation process corresponds to the normative developmental process of separation-individuation which begins in adolescence and is typically resolved as a task of emerging adulthood (Tanner, 2006). Individuation is a “quality of dyadic relationship generated by both its members, and is seen in the interplay

between the individuality and connectedness of the partners” (Grotevant & Cooper, 1986, p. 87). While individuation entails establishing autonomy from parental figures, the goal of the separation-individuation process is relational autonomy in which independence is declared in the context of a “continuous, mutually validating” relationship between parent and child (Josselson, 1988; Lapsley & Edgerton, 2002, p. 484).

While emerging adulthood is in some ways a time of disconnecting from the family and establishing oneself in the world, the support of parents during this time is nonetheless quite influential. The family is the “base of operations” for explorations common in emerging adulthood and, while emerging adults legally have adult status, many still rely on some degree of parental support during this time (Aquilino, 2006, p. 195). Thus, inherent to the period of emerging adulthood is the incongruity between society’s granting of (legal) adult status and the economic realities which often beget lingering parental reliance, an inconsistency which can be difficult to manage. In summary, the developmental task of emerging adulthood is flexible management of the “ongoing dialectic between separation and connectedness,” involving “avoiding the undesirable outcomes of fusion and enmeshment, on the one hand, and complete detachment and isolation, on the other” (Lapsley & Edgerton, 2002, p. 484)

The ability to separate and individuate is largely dependent on an individual’s history of firm attachment and family relationships (Schechter & Bertocci, 1990). Research suggests that adolescents and emerging adults whose parents support the separation-individuation process are better able to accomplish the process of restructuring the parent-child relationship and gaining self-sufficiency (Tanner, 2006). Research also

demonstrates that the existence of both individuality and connectedness in family relationships influences an adolescent's ability to explore identity related choices and manage multiple perspectives, two crucial elements of psychosocial competence (Grotevant & Cooper, 1986). Discussing the interconnection between autonomy and dependence, Bowlby (1973) explained:

a well-founded self-reliance...not only is compatible with a capacity to rely on others but grows out of it and is complementary to it. Both, moreover, are alike products of a family that provides strong support for its offspring combined with respect for their personal aspirations, their sense of responsibility, and their ability to deal with the world. So far from sapping a child's self-reliance, then, a secure base and strong family support greatly encourage it. (p. 362)

Correspondingly, a series of studies have reported that autonomy and relatedness in adolescent-parent interactions is associated with several significant markers of adjustment in young adulthood including educational and occupational attainment, psychopathology, drug use, and attachment security (Allen, Hauser, Bell, & O'Connor, 1994; Bell, Allen, Hauser, & O'Connor, 1996; O'Connor, Allen, Bell, & Hauser, 1996). Such research demonstrates that "successfully negotiating a stage-salient task of adolescence - establishing autonomy while maintaining a close, affectionate relationship with parents - has important implications not only for concurrent adjustment but also for successful resolution of later developmental tasks" (O'Connor et al., 1996, p. 40-41).

Levy, Blatt, and Shaver (1998) examined the relationships between attachment styles and the content and structure of mental representations of parents among college undergraduates. They found that representations of parents as supportive and nurturing,

which are indicators of secure attachment, were related to the capacity for individuation in young adults. These findings correspond with those of Ryan and colleagues which demonstrate that the representation of parents as nurturing is significantly associated with self-esteem, perceived competence, and perceptions of parental support for autonomy in middle childhood and adolescence (Avery & Ryan, 1988; Ryan & Lynch, 1989). Taken together, these studies demonstrate that attachment is “a dynamic process that facilitates development by providing the emotional support necessary for healthy autonomy and relatedness” (Levy et al., p. 417).

Development during emerging adulthood is inevitably linked to the parent-child relationship; while emerging adults are branching out from their families of origin and seeking to independently establish themselves in the world, their lives are still largely intertwined with their families, and family relations continue to influence their developmental trajectories (Aquilino, 2006). However, the importance of family relationships across the life course does not mean that family relationships are static, and family dynamics may in fact change significantly during adolescence and emerging adulthood. Research suggests that three types of factors influence the quality of parent-child relationships during emerging adulthood: “earlier patterns of parent-child interaction, history of family composition and transitions, and the individual development and life-course transitions of family members” (Aquilino, 2006, p. 196).

Social learning theory and traditional attachment theory support continuity over time in parent-child relationships, however research reports varying degrees of continuity between earlier patterns of parent-child interactions and parent-child relationships in emerging adulthood (Aquilino, 2006). The connections between current family

relationships and past interactions seem to lessen as children age into adulthood, suggesting that parents and their emerging adult children “are not locked into the styles of interaction that characterized previous stages” (Aquilino, 2006, p. 199). Thus, while the ongoing parent-child relationship continues to profoundly influence individuals’ psychosocial development during emerging adulthood, the transitions and changes inherent to this time period often induce a reappraisal and renegotiation of this relationship; this can lead to changes in the ways that parents and “children” relate to each other. The possibility for change in filial relationships supports the study of family relationships across time, a line of inquiry that is possible with the longitudinal data set examined by the current study. The dynamic nature of parent-child relationships across the life span are especially pertinent in terms of the possibility of change in attachment dynamics.

### **Adoption, Attachment, and Affect**

Adopted individuals are raised by adults who are not their biological parents, and, consequently, adoptees may not have been provided with responsive and/or consistent care early in life, prior to their adoption. As a result, the separation from and loss of birth parents experienced by adopted individuals could potentially translate into insecure attachment (Bowlby, 1982; van den Dreis, Juffer, van Ijzendoorn, & Bakermans-Kranenburg, 2009). According to attachment theory, the attachment relationship between parent and child develops gradually over the first six to eight months of a child’s life (Ainsworth, 1982; Brodzinsky, 1990). Thus, changes in care-givers during this time could potentially be detrimental to the attachment relationships that infants are developing at this formative age. However, while children’s expectations of how they

will be treated by attachment figures (internal working models) are strongly impacted by their early experiences with caregivers, experiences that could be negative for adopted individuals, these expectations can be altered as a result of changing experiences in the first five years of life (Bowlby, 1982). Positive attachment experiences with adoptive parents can thus offset early adversity with regard to biological parents and changes in caregivers early in life (Bowlby, 1988). Adoption therefore adds complexity to the inferences that are typically drawn from attachment theory. Consequently, attachment theory has mixed implications for the attachment-related outcomes of adopted individuals, and research reports correspondingly inconsistent findings.

Yarrow and Goodwin (1973) studied infants in foster homes and later, at repeated intervals during their first two months in their adoptive homes. Their findings demonstrated that while infants showed a wide range of reactions to the changes in mother figure, only 15% were completely free of overt disturbances as assessed by direct observations, developmental tests, and interviews with the new mother; 36% exhibited mild reactions, 23% exhibited a moderate degree of disturbance, 23% showed severe disturbances, and 6% exhibited extremely disturbed behavior immediately following placement. Furthermore, a longitudinal study examining the dimensions of early maternal care and intellectual and personality development compared ten-year-old children who were adopted directly from the hospital (control group), children who were adopted before six months of age (early separated), and children who were adopted after six months of age (later-separated) (Yarrow & Goodwin, 1973). No significant differences between these three groups were found in intellectual functioning or overall

adaptation, however the later-separated children were significantly lower than the control group and the early-separated children on measures reflecting their capacity to establish different levels of relationships with others (“variable social discrimination”).

More recent studies report somewhat contradictory findings. Juffer and Rosenboom (1997) found that 74% of children adopted internationally before the age of 6 months demonstrated secure attachment relationships to their mothers at 12 and 18 months of age. This rate is comparable to that found in non-adopted samples. Chisholm (1998) studied children from Romanian orphanages who were subjected to poor conditions and adopted internationally. Of the children adopted by 4 months of age, 66% developed secure attachment to their parents by the time they were roughly 4.5 years old. This was not statistically different from the attachment patterns of children in the Canadian non-adopted control group, 58% of whom were found to be securely attached at about the same age. However, only 37% of children adopted from the orphanage after 8 months of age were classified as securely attached at about 4.5 years old (Chisholm, 1998).

One study examined attachment in 13-18 month old children in intraracial adoptive families, interracial adoptive families, and nonadoptive families (Singer, Brodzinsky, Ramsay, Steir, & Waters, 1985). Adopted children in intraracial families were adopted at the age of about one month and adopted children in interracial adoptive families were adopted at the age of about four months. Of the non-adopted 13-18 month-olds, 26% were classified as insecurely attached compared to 48% of adopted infants. This difference approached significance, however interracial adoptees accounted for a disproportionate number of anxious attachments, and no difference was found in

attachment between non-adopted and intraracial adopted children. This study concluded that that “lack of early contact per se does not place middle-class adoptive families at risk for the development of anxious mother-infant attachment relationships” (Singer et al., 1985, p. 1547). Furthermore, Singer and colleagues (1985) believe it is “unlikely that the higher incidence of psychological and academic problems that some research has found among adoptees in middle childhood and adolescence...can be explained in terms of insecure family attachment patterns in infancy” (p. 1547).

These studies are just a sampling of the research examining attachment in adopted individuals, and research is generally inconclusive regarding attachment in adopted individuals. The mixed conclusions reported by such research can be at least partially explained by specific factors that differ across studies such as age of adoption, type of adoption (interracial versus intraracial versus international), and/or more specific family or individual factors (parental attachment patterns, family dynamics etc.). In addition, the varying control groups used in adoption research also complicate conclusions that can be made from these inconsistent findings. A recent meta-analysis of attachment of adopted children was conducted to address the disparate findings and various moderators in adoption research (van den Dries et al., 2009). Using observational measures of attachment, this meta-analysis found that, overall, adopted children were as securely attached as their non-adopted counterparts. However, children who were adopted after their first birthday demonstrated significantly less attachment security than non-adopted children. Additionally, disorganized attachment was found to be more common among adopted children than non-adopted children. Few of the moderators examined in this meta-analysis were found to significantly impact attachment security and disorganization.

Specifically, attachment findings were independent of type of placement (domestic vs. international and same-race vs. transracial), age of assessment, time in the family, and study characteristics (such as year of publication and continent of study) (van den Dries et al., 2009). Van den Dries and colleagues (2009) concluded that “adopted children can overcome early adversity and risks and form secure attachments as often as their normative counterparts,” lending support to Bowlby’s theory (1952, 1988) that “corrective attachment experiences may enhance attachment security” (van den Dries et al., 2009, p. 418-19).

Additionally, a large study of adoptive families conducted by Benson, Sharma, and Roehlkepartain (1994) found high rates of secure attachment among adopted adolescents. Their sample, similar to the sample used in the present study, consisted of adopted adolescents who were adopted by American families before they were 15 months old. No differences were found between 12-18 year-old adopted adolescents and their non-adopted siblings on measures of attachment to each of their parents. In addition, secure attachment among adopted adolescents was found to decrease between the ages of 12-15 and 16-18, a pattern also found among non-adopted adolescents. Specifically, Benson and colleagues found that 54% of adopted adolescents were highly attached to both parents, 12% were highly attached to the father only, 18% were highly attached to the mother only, and 16% were highly attached to neither parent. Only 2% of their sample was characterized as having no attachment to either parent (Benson et al., 1994).

Interestingly, Benson and colleagues (1994) report that attachment patterns have strong mental health implications by demonstrating a relationship between attachment and a number of at-risk behaviors among adolescents. Specifically, high attachment to

neither parent was found to dramatically escalate risk behavior, high attachment to both parents was found to be a buffer against engagement in risk behavior, and high attachment to one parent was found to be better than attachment to neither in this regard. They conclude that “most adopted adolescents fall within a normal range on multiple indicators of mental health” (Benson et al., 1994, p. 88). However, there is variability on each indicator of mental health, as is expected in any population of adolescents, and their broad study allows for a synthesis of factors that predict mental health. They conclude that two of the factors that strongly influence the psychological health of adopted adolescents are emotional attachment between child and parent and affect about adoption. More specially, adopted adolescents’ views that adoption is a negative factor in their lives have been found to contribute to the onset of psychological problems. Conversely, more realistic and balanced views of adoption have been identified as preventative of mental health problems, encompassing externalizing and internalizing behaviors/feelings, in adopted adolescents (Benson et al., 1994). Adoption is an important aspect of adopted individuals’ family and identity and, correspondingly, adopted individuals’ sentiments about their adoption are significant aspects of their relationship with their parents.

Adoption as a family form is intimately connected to circumstances of culture, history, and ideology and thus context plays an important role in the study of adoptive families (Grotevant & Von Korff, 2009). In American society, adoption is commonly viewed “through the lens of loss,” particularly “the child’s loss of his or her first set of parents and biological heritage” (Leon, 2002, p. 652.). Even those adopted individuals who are placed quickly after birth may grieve for the parents they never knew as well as the parts of themselves lost through adoption, specifically the “loss of origins, of a

completed sense of self, of genealogical continuity” (Brodzinsky, Schechter, & Henig, 1992, p. 11-12). While framing adoption in the context of loss is a social construction and is thus culturally relative, it is nonetheless something that many adopted individuals must cope with based on the cultures into which they are adopted. Therefore, adopted individuals in America are often compelled to address their own adoption history in light of the abandonment, rejection, and/or loss narratives that can be ascribed to adoption, or, perhaps more appropriately, stigmatize adoption, in American society.

Infant attachment in adoptive families grows from the day-to-day care-giving provided by the adoptive parents and is not irreparably destroyed by the initial loss of biological parents (Leon, 2002). However, American children with knowledge of their own adoption are confronted with the value placed on procreation and biological heritage in American society and are challenged to integrate their understanding of themselves and their families with their knowledge of their adopted history (Leon, 2002). Certain factors related to adoptive family dynamics may contribute to the ability of adopted individuals to incorporate their understanding of their own adoption into their understanding of their adoptive families and themselves. Research suggests that such factors may include the type and degree of contact between the adopted child and the biological family, the openness with which adoption is discussed in the adoptive family, and the adoptive family’s satisfaction with their interactions with the birth family (Grotevant, Reuter, Von Korff, & Gonzalez, 2009). In fact, associations have been found between these factors and psychological outcomes, particularly between the family’s satisfaction with the openness arrangements of the adoption and externalizing behaviors in adopted adolescents and emerging adults (Grotevant et al., 2009).

Circumstances and emotions surrounding adoptive family dynamics can thus have important implications for adopted individuals' identity, mental health, and adjustment. While an in-depth analysis of the structural and communicative dynamics of adoptive family arrangements is beyond the scope of the current study, adopted individuals' affect about their adoption will be examined. As discussed earlier, the experience of emerging adulthood is impacted by the filial relationship. For adopted emerging adults, affect about adoption is a component of family dynamics. Correspondingly, because adoption is an important part of adopted individuals' families and their understanding of themselves, their adoption affect could influence their relationship with their adoptive parents or, on the contrary, be impacted by their family relationships. Individuals who feel negatively about their adoption may have increased difficulty developing a healthy understanding of themselves because of subsequent poor family relationships, poor family relationships that this negative affect reflects, and/or simply because of their negative adoption feelings. Without a clear sense of self, such individuals may struggle to maneuver through the unstructured and challenging period of emerging adulthood. On the other hand, individuals who exhibit positive affect about their adoption may be better able to develop a coherent sense of themselves and the direction they wish to follow in emerging adulthood because of their subsequent ability to establish mature family relationships, the positive family relationships that this affect reflects and/or simply because of their positive adoption feelings.

## **The Current Study**

The period of emerging adulthood presents many challenges to the young adult navigating the transition into adulthood. The lack of structure and abundance of options/directions that correspond with this stage of life are experienced by many as unsettling; approximately 20% of adopted emerging adults in the current study endorsed feeling unstable in their lives. Individuals who lack, or feel they lack, the confidence and resources to live independently and succeed may experience anxiety and stress during emerging adulthood. Additionally, the proliferation of choices, a central feature of this time period, can be overwhelming and lead to feelings of instability (Reifman, Arnett, & Colwell, 2007). This study explores predictors of negative instability (NI) during emerging adulthood, specifically evaluating adopted young adults' ratings of negativity and instability about the current stage of emerging adulthood. NI refers to the confusion, stress, and instability emerging adults may experience specifically regarding the period in which they are living (emerging adulthood). NI also encompasses the unpredictability, pressure, worry, and constraints that may be associated with emerging adulthood. While emerging adulthood can be a time of great possibility and excitement, some may experience stagnation and confusion during this time. Understanding predictors of NI during emerging adulthood is important because of the integral role that this period of life plays in establishing the foundation for a healthy, well-adjusted adult life.

This study explores the associations between “child”-parent relationships and NI in adopted emerging adults. This study examines two main predictors of NI in emerging adulthood: *attachment* to each parent at adolescence and emerging adulthood and *affect*

about adoption at adolescence and emerging adulthood. The longitudinal patterns of attachment and adoption affect are also examined to evaluate their continuity from adolescence to emerging adulthood.

Parent-child relationships in adolescence and emerging adulthood are predicted to be associated with NI in emerging adulthood because of the profound role that parents play in their children's development and well-being (van Wel, ter Bogt, & Raaijmakers, 2002). Specifically, attachment to parents influences children's adjustment across the life span (Berman & Sperling, 1994). Individuals who have secure attachment are believed to be better able to navigate the critical developmental task of separation-individuation, more secure in their identities, and consequently better prepared for the challenges of emerging adulthood. Thus, secure attachment to both parents at adolescence and adulthood is predicted to be associated with decreased NI in emerging adulthood. Furthermore, affect about adoption is predicted to be associated with instability in emerging adulthood because of its demonstrated value in predicting mental health outcomes in adopted individuals (Benson et al., 1994). Thus, individuals with increased positive affect about their adoption are predicted to exhibit decreased NI about emerging adulthood. Additionally, stability in attachment and affect about adoption from adolescence to young adulthood will be examined to explore patterns of continuity and discontinuity in these predictors. It is hypothesized that individuals who are securely attached to each parent at emerging adulthood will have decreased NI in emerging adulthood regardless of their attachment at adolescence. Similarly, it is predicted that individuals with high positive affect about their adoption at emerging adulthood will have decreased NI during this time regardless of their adoption affect at adolescence.

Research on adoptive families reports inconsistent findings in terms of psychosocial development and adjustment of adopted individuals. Consequently, this study hopes to examine more closely the individual differences that affect developmental outcomes in adopted emerging adults. Additionally, this study seeks to contribute to the understanding of the relationship between parent-child relationships in adoptive families, one type of family complexity, and instability in emerging adulthood, a period in need of additional research.

The specific hypotheses to be addressed in this study are as follows

Within time: During adolescence

1. Attachment to mother will be positively correlated with affect about adoption during adolescence.
2. Attachment to father will be positively correlated with affect about adoption during adolescence.
3. Attachment to mother and attachment to father will be positively correlated during adolescence.

Within time: During emerging adulthood

4. Attachment to mother will be positively correlated with affect about adoption during emerging adulthood.
5. Attachment to father will be positively correlated with affect about adoption during emerging adulthood.
6. Attachment to mother and attachment to father will be positively correlated during emerging adulthood.

Across time: From adolescence to emerging adulthood

7. Attachment to mother in adolescence will be positively correlated with attachment to mother in emerging adulthood.
8. Attachment to father in adolescence will be positively correlated with attachment to father in emerging adulthood.
9. Affect about adoption during adolescence will be positively correlated with affect about adoption during emerging adulthood.
10. Change patterns of attachment to mother from adolescence to emerging adulthood that are high stable or increasing will be negatively associated with Negative instability (NI) in emerging adulthood.
11. Change patterns of attachment to father from adolescence to emerging adulthood that are high stable or increasing will be negatively associated with NI in emerging adulthood.
12. Change patterns of affect about adoption from adolescence to emerging adulthood that are high stable or increasing will be negatively associated with NI in emerging adulthood.

## CHAPTER 2

### METHOD

#### Participants

Participants in this study are involved in the Minnesota/Texas Adoption Research Project (MTARP), a longitudinal research study which has been following a nationwide sample of 190 adoptive families since the mid-1980s (Grotevant & McRoy, 1998). MTARP began with the primary focus of examining the consequences of variations in openness in adoption arrangements for all members of the adoptive kinship network. The project has most recently been funded by the National Institute of Child Health and Human Development, the National Science Foundation, and the William T. Grant Foundation and is directed by Harold Grotevant, PhD. Because MTARP has been ongoing for over 20 years and has involved the collaboration of multiple research groups, this research has been reviewed and approved by Institutional Review Boards (IRB) at the University of Texas, the University of Minnesota, and the University of Massachusetts, Amherst. The current study has been reviewed and approved by the IRB at the University of Massachusetts, Amherst.

Each of the families involved in MTARP adopted a child in the late 1970s or early 1980s and were recruited to participate in the study through 1 of 35 adoption agencies located across the United States. Families were sought in which there was at least 1 adopted child between the ages of 4 and 12 who was adopted through an agency before his/her first birthday, in which the adoption was not transracial, international, or “special needs,” and in which both adoptive parents were still married to the partner they had at the time of the adoption. Participating adoption agencies were asked to select

families who met the criteria described above and select randomly among them within levels of openness until a set number of families willing to be interviewed were identified. The vast majority of adoptive parents were Caucasian, Protestant, and middle to upper-middle class. These demographics reflect the population of families typically involved in formally adopting unrelated infants and birthmothers who tend to place their infants for adoption. Virtually all adoptive parents in the study had adopted because of infertility.

Three waves of data have been collected over the past 20 years. Wave 1 data collection occurred between 1987 and 1992 (Grotevant & McRoy, 1998). At Wave 1, 720 individuals participated in the study, including both parents in 190 adoptive families, and at least one adopted child in 171 of the families. Wave 2 data collection occurred between 1996 and 2000. During this time period, the same participants were interviewed approximately eight years after their first interview (Grotevant, Perry, & McRoy, 2005). Participants were parents and an adopted adolescent from 177 families including 173 adoptive mothers, 162 adoptive fathers, and 156 adopted adolescents. The adopted adolescents ranged in age from 11 to 20 ( $M = 15.7$  years). Wave 3 data collection occurred between 2005 and 2008. In Wave 3, adopted individuals who were children when the study began were young adults between the ages of 20 and 30 ( $M = 25.0$  years). Participants in Wave 3 included 151 adoptive mothers, 134 adoptive fathers, and 169 adopted young adults. The data examined in this study was drawn from data collected at Waves 2 and 3.

## **Procedure**

At Wave 2, adoptive families were interviewed in their homes during a single session that lasted 4-5 hours. The session included interviews with each parent and the adopted adolescent as well as administration of several questionnaires and a family interaction task. Some family members were interviewed by telephone when it was impossible to gather everyone together for the home visit.

At Wave 3, adopted young adults completed their interviews using an internet chat format through a secure server. They also completed questionnaires using a web interface through a secure server. Adoptive parents completed an interview by telephone and questionnaires through the mail. The adopted young adults were compensated for their participation in Wave 3. None of the participants were compensated in Wave 2.

## **Measures**

**Attachment to parents.** Two scales from the Inventory of Parent and Peer Attachment (IPPA) were used to measure adopted individuals' attachment to each of their adoptive parents (Armsden & Greenberg, 1987). The IPPA is a self-report measure that was developed to assess adolescents' perceptions of the positive and negative affective/cognitive dimensions of their relationships with their parents and close friends. Bowlby's attachment theory provided the theoretical underpinnings for the development of this questionnaire, and the IPPA specifically measures how well these "attachment figures" serve as sources of psychological security (Armsden & Greenberg, 1987). The IPPA measures three broad dimensions of attachment: degree of mutual trust, quality of communication, and extent of anger and alienation.

A revised version of the IPPA was given to adopted adolescents and young adults in Waves 2 and 3 of MTARP and is comprised of 25 five-point Likert-type questions about attachment to mother, 25 five-point Likert-type questions about attachment to father, and 25 five-point Likert-type questions about attachment to peers, yielding three separate scores of attachment. Total scores for each attachment figure range from 25-125, and high scores indicate strong attachment. Test-retest reliabilities for the original version of the IPPA were .93 for the parent attachment subscales. Using MTARP data, the internal consistency reliability coefficients (Cronbach's alpha) for the revised version were .96 for mother attachment and .97 for father attachment. Because peer attachment is not relevant to the present analysis, only the attachment to mother and attachment to father subscales will be examined.

**Affect about adoption.** One scale from the Adoption Dynamics Questionnaire (ADQ) was used to assess adopted individuals' affect about their adoption (Benson et al., 1994). The ADQ is a self-report measure which was developed by the Search Institute and used in its large study of adoptive families in the early 1990s (Benson et al., 1994). For the current study, two slight modifications were made to the original questionnaire. The modified ADQ was given to participants in Waves 2 and 3 of MTARP. It is comprised of 44 five-point Likert-style questions which form three scales assessing positive affect about adoption, preoccupation with personal adoption history, and negative experience with adoption. The present study only examined the positive affect about adoption subscale which includes 20 items. Questions that comprise this subscale include "I like the fact that I'm adopted," "I'm glad my parent(s) adopted me," "I think my parent(s) are happy that they adopted me," "Being adopted makes me feel special,"

and “I feel that my parent(s) are proud they adopted me.” Scores range from 20-92, and high scores indicate strong positive feelings regarding adoption. Analysis of this subscale using Wave 3 data found an internal consistency reliability coefficient (Cronbach’s alpha) of .89.

**Negative instability.** One scale from the Inventory of Dimensions of Emerging Adulthood (IDEA) was used to assess negative instability (NI) in emerging adulthood (Reifman et al., 2007). The IDEA is a self-report measure which assesses identification with themes related to the transition to adulthood and is designed for emerging adults. It measures the extent to which emerging adults feel that their lives are currently a time of identity exploration, feeling in-between, possibilities, self-focus, instability, and focus on others. Exploratory and confirmatory factor analyses largely supported the six subscale conceptualization of emerging adulthood. In addition, Reifman and colleagues (2007) report internal consistency reliability coefficients (Cronbach’s alpha) ranging between .70 and .85 for all of the subscales, and test-retest correlations, which were completed over a one-month interval, ranging from .64 to .76 for all of the subscales (excluding the feeling in-between subscale). Analysis of the NI subscale using Wave 3 data found an internal consistency reliability coefficient (Cronbach’s alpha) of .84.

The IDEA was administered to the adopted young adults in Wave 3 of MTARP. For the purposes of this study, only the instability/negativity subscale, re-named in this study as negative instability (NI), was examined. Using Wave 3 MTARP data, the reliability for the NI subscale was .84. There are seven questions that assess NI, all of which begin with “Is this period of your life a time of...?” and continue to say “confusion,” “feeling restricted,” “feeling stressed out,” “instability,” “high pressure,”

“unpredictability,” “many worries?” Individuals scoring high on the NI subscale were found to score low in life satisfaction and sense of mastery over one’s life (Reifman et al., 2007). After being averaged, total NI scores ranged from 1-4, with high scores indicating increased NI regarding emerging adulthood.

## CHAPTER 3

### RESULTS

Multiple correlational analyses were conducted to evaluate the various links between attachment to mother and father and affect about adoption in adolescence and emerging adulthood. Significant correlations were found between the majority of these constructs across both time periods and can be viewed in Table 1. Additionally, multiple analyses of variances (ANOVA) were used to analyze the relationships between longitudinal patterns of affect about adoption and attachment to each adoptive parent, from adolescence to emerging adulthood, and NI in emerging adulthood. Specific results will be presented below with respect to each of the hypotheses discussed earlier.

The first set of hypotheses examined relationships between the constructs of attachment and affect about adoption during adolescence (within time). The first two hypotheses were supported as attachment to mother and attachment to father were indeed both significantly correlated with affect about adoption during adolescence (attachment to mother and affect about adoption,  $r = .48, p < .01$ ; attachment to father and affect about adoption,  $r = .50, p < .01$ ). Additionally, as stated in hypothesis 3, attachment to mother and father were significantly correlated with one another during adolescence ( $r = .70, p < .01$ ).

The second set of hypotheses examined the relationship between these constructs during emerging adulthood (within time). The fourth and fifth hypothesis were both confirmed as attachment to mother and attachment to father were both significantly correlated with affect about adoption during emerging adulthood (attachment to mother and affect about adoption,  $r = .67, p < .01$ ; attachment to father and affect about adoption,

$r = .70, p < .01$ ). In addition, as stated in hypothesis 6, attachment to mother and father were significantly correlated with one another during emerging adulthood ( $r = .66, p < .01$ ).

The third set of hypotheses examined relationships between the constructs of attachment, affect about adoption, and NI across the time periods of adolescence and emerging adulthood. Attachment to mother in adolescence was indeed correlated with attachment to mother in emerging adulthood (hypothesis 7,  $r = .37, p < .01$ ). Attachment to father in adolescence was also correlated with attachment to father in emerging adulthood (hypothesis 8,  $r = .36, p < .01$ ). Lastly, affect about adoption during adolescence was also correlated with affect about adoption during emerging adulthood (hypothesis 9,  $r = .52, p < .01$ ).

To analyze change patterns of affect about adoption and attachment to mother and father, as outlined in hypotheses 10-12, scores from each construct were each grouped as either “low,” “medium,” or “high” at both time points, adolescence and emerging adulthood. For all three constructs, scores designated as low were in the bottom third of studied scores, scores designated as high were in the top third of scores, and scores designated as medium were in the middle third of scores. Thus each score was categorized in one of three categories relative to the distribution for each construct, at each time point (See Table 2). Five groups were then categorized based on the stability of each construct across these two time points; longitudinal patterns were grouped as “high stable,” meaning that scores were high at both adolescence and emerging adulthood, “low stable,” meaning that scores were low at both time points, “medium stable,” meaning that scores remained in the mid-range across both time points,”

“decreased,” meaning that scores were in a lower group at emerging adulthood than at adolescence, or “increased,” meaning that scores were in a higher group at emerging adulthood compared to adolescence. Three ANOVAs were conducted with these five longitudinal patterns of affect about adoption and attachment to mother and father each as predictors and scores on NI in emerging adulthood as the outcome. Descriptive statistics for all three ANOVAs can be viewed in Table 2.

With respect to hypothesis 10, a one-way ANOVA revealed significant differences in NI between individuals with differing longitudinal patterns of attachment to their adoptive mother from adolescence to emerging adulthood ( $F(4, 105) = 2.62, p < .05$ ). Specifically, individuals categorized in the “low stable” group had a mean NI score of 2.62 ( $SD = .62$ ), individuals in the “medium stable” group had a mean NI score of 2.72 ( $SD = .65$ ), and individuals in the “high stable” group had a mean NI score of 2.06 ( $SD = .70$ ). Individuals whose attachment to mother decreased over time had a mean NI score of 2.55 ( $SD = .63$ ) whereas individuals whose attachment to mother increased over time had a mean NI score of 2.50 ( $SD = .59$ ). A follow-up analysis was conducted to evaluate pairwise differences between the means using a Tukey HSD test. For attachment to mother, group differences were driven by differences between the “high stable” and “medium stable” group ( $M$  difference = .66,  $p < .05$ ).

With respect to hypothesis 11, an additional one-way ANOVA revealed significant differences in NI among individuals following differing longitudinal patterns of attachment to their adoptive father from adolescence to emerging adulthood ( $F(4, 104) = 3.21, p < .05$ ). Individuals categorized in the “low stable” group had a mean NI score of 2.74 ( $SD = .59$ ), individuals categorized in the “medium stable” group had a mean NI

score of 2.77 ( $SD = .49$ ), and individuals categorized in the “high stable” group had a mean NI score of 2.09 ( $SD = .65$ ). Individuals whose attachment to their father decreased from adolescence to emerging adulthood had a mean NI score of 2.59 ( $SD = .62$ ) whereas individuals whose attachment to their father increased over time had a mean NI score of 2.47 ( $SD = .70$ ). A follow-up analysis (Tukey HSD) demonstrated that group differences were driven by differences between the “high stable” and “low stable” attachment to father groups ( $M$  difference = .65,  $p < .05$ ).

Lastly, to address hypothesis 12, a third one-way ANOVA revealed significant differences in NI among individuals with differing patterns of affect about adoption from adolescence to emerging adulthood ( $F(4, 109) = 3.44, p < .05$ ). Specifically, individuals categorized in the “low stable” group had a mean NI score of 2.95 ( $SD = .64$ ), individuals categorized in the “medium stable” group had a mean NI score of 2.55 ( $SD = .39$ ), and individuals in the “high stable” group had a mean NI score of 2.22 ( $SD = .71$ ). Individuals whose affect about adoption decreased from adolescence to emerging adulthood had a mean NI score of 2.43 ( $SD = .60$ ) whereas individuals whose affect about adoption increased had a mean NI score of 2.48 ( $SD = .69$ ). A follow-up analysis (Tukey HSD) demonstrated that group differences were driven by differences between the “low stable” and “high stable” groups ( $M$  difference = .73,  $p < .01$ ) and between the “low stable” and “decreased” groups ( $M$  difference = .52,  $p < .05$ ).

## CHAPTER 4

### DISCUSSION

These results demonstrate that, within each time period, that is during adolescence and during emerging adulthood, scores of attachment to mother and attachment to father were each highly correlated with affect about adoption. Scores of attachment to mother and attachment to father were also correlated with one another during both time periods. Additionally, results demonstrate correlations between constructs, attachment and affect about adoption, measured at both time points; however, these correlations, particularly attachment to each parent, were weaker than the correlations between constructs within a time period. Furthermore, results reveal that individuals who reported feeling the most unstable about emerging adulthood had self-reported attachment (to both parents) and adoption affect scores which were categorized as low stable or medium stable across the period from adolescence to emerging adulthood. Likewise, individuals who reported feeling the least unstable about emerging adulthood had high stable attachment and adoption affect scores.

In addition, a greater number of participants exhibited change in attachment across the period from adolescence to emerging adulthood (to mother,  $N = 63$ ; to father,  $N = 65$ ) compared with those who exhibited attachment stability over this time (to mother,  $N = 47$ ; to father,  $N = 44$ ). Change was defined as movement between the categories of low, medium, or high (labeled as increased or decreased) whereas stability was defined as scores which stayed in the same category across both time points. Similarly, more individuals exhibited change in adoption affect across time ( $N = 62$ ) than those who had stable patterns ( $N = 52$ ), though this difference was somewhat smaller.

Thus, overall, individuals who had more stable, strong family relationships across time reported lower NI than individuals whose family relationships fluctuated and were more negative. Additionally, taken together, findings indicate stronger correlations in constructs related to family relationships within each time period and more moderate correlations across time periods.

### **Stability and Change in Family Relationships**

While the original focus of the planned analyses involved the exploration of the effect of attachment change versus stability on NI, the large degree of fluctuation in family relationships necessitates a discussion of instability in attachment across the period from adolescence to emerging adulthood. Although most would agree that attachment dynamics are not static nor solely dictated by childhood bonds, theories and research findings differ regarding the degree to which attachment is believed to be a stable characteristic across time. Bowlby (1969) theorized that, while it is more likely that individuals will integrate their new experiences into pre-existing attachment models, individuals are also capable of updating these working models to integrate new information, which generally comes in the form of experiences/relationships.

However, according to traditional attachment theory, with the exception of those who experience transformative life events, the majority of individuals exhibit stability in attachment (Bowlby, 1969). The implication is that such life events, which are generally relevant to interpersonal relationships/emotional security, are uncommon, and, correspondingly, attachment stability is the norm. It should be noted, however, that Bowlby's theory was not geared toward adopted individuals, and adoption would most

likely be characterized as such a transformative experience. Nonetheless, according to traditional attachment theory, changes in attachment are expected to occur specifically following a significant event, such as adoption for adopted individuals.

The current study did not examine attachment in the time period surrounding the adoption, which occurred before one year of age for all participants. Thus, Bowlby's theory would still predict stability in attachment for the majority of adopted individuals during the time period examined, barring the minority of individuals who experience additional significant life events between adolescence and emerging adulthood. Contrary to what would be predicted by traditional attachment theory, however, the current study reveals fairly significant change in attachment scores to each parent from adolescence to emerging adulthood. The majority of participants demonstrated change in their attachment across this period, which provides some insight into the higher correlations found within each time period compared to across time periods.

Beyond traditional attachment theory, a fair amount of research has examined the degree to which attachment is a stable individual difference steering thought, feeling, and behavior over time versus a dynamic characteristic that changes in levels and patterns over time. The view of attachment as a stable characteristic entails the assimilation of new information/experiences into established attachment models, whereas the view of attachment as a dynamic characteristic involves the accommodation of new information or experiences through adaptation of attachment models (Bowlby, 1969; Davila & Cobb, 2004). Research on childhood attachment reveals that children experience changes in

attachment over time, and such change has been found, for the most part, to be a result of interpersonal changes/experiences (Egeland & Farber, 1984; Bridges, Connell, & Belsky, 1988).

For example, a longitudinal study by Sroufe and colleagues examined attachment, assessed by Ainsworth's Strange Situation procedure, in infants born to impoverished mothers and found significant stability (62% of participants) but also substantial change (38%) in attachment from 12 to 18 months of age (Sroufe, Egeland, Carlson, & Collins, 2005). Change from secure to insecure attachment was associated with maternal affective and personality characteristics whereas change from insecure to secure attachment was associated with a reduction in stressful life events and maternal and infant growth and development. Sroufe and colleagues concluded that, because attachment is a reflection of one's "interaction history," it is thus "subject to change" (p. 103). These findings have important implications for adopted children, who experience significant change in the interpersonal environment at a very young age and who are thus likely to experience early changes in attachment. Additionally, overall, the existence of early change in attachment suggests that attachment is not necessarily a fixed characteristic, allowing for the possibility of change in attachment later in life (Davila & Cobb, 2004). Attachment research has not yet directly examined the implications of early changes in attachment for later attachment stability.

Beyond childhood attachment, multiple studies have found that change in attachment occurs across the life span, revealing varying levels of correspondence between attachment in childhood, typically assessed using the Strange Situation paradigm, and attachment in adulthood, typically assessed using the AAI (Davila &

Cobb, 2004). Research has reported correspondence in attachment across time ranging from very little concordance to significant but not perfect concordance (Lewis, Feiring, & Rosenthal, 2000; Weinfeld, Sroufe, & Egeland, 2000). For example, the longitudinal study of children born to impoverished mothers, discussed earlier, failed to find a link between infant secure, avoidant, and resistant attachment, assessed by the Strange Situation procedure, and attachment security at age 19, assessed by the AAI (Sroufe et al., 2005). However, stronger connections were found between infant and young adult (age 26) attachment ratings. Sroufe and colleagues cite multiple studies which also failed to identify significant connections between infant and adolescent attachment (Becker-Stoll & Fremmer-Bombik, 1997; Lewis et al., 2000; Zimmerman, 1994). However, other studies are referenced which have found connections in attachment measures across time (Hamilton, 2000; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). Research examining predictors of change in attachment has revealed that change toward insecure attachment is linked with negative life experiences such as major family life events (Davila & Cobb, 2004; Waters et al., 2000; Weinfeld et al., 2000), which is consistent with traditional attachment theory.

Additional research examining attachment stability in adulthood, as assessed by self-report measures, has revealed moderate stability of attachment such that many individuals report differing attachment styles and variability in levels of attachment security across adulthood (Baldwin & Fehr, 1995; Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Davila, Burge, & Hammen, 1997). While it is unclear to what extent these changes in attachment indicate lasting or temporary change in attachment (Davila & Cobb, 2004), such research nonetheless suggests that attachment mobility is more

common than predicted by traditional attachment theory. These findings thus resonate with the current results of significant mobility in attachment from adolescence to emerging adulthood.

Interestingly, Sroufe et al.'s (2005) longitudinal study examining a high risk population revealed significant continuity of attachment, as measured by the AAI, between ages 19 and 26, however the degree in continuity was modest; 48% of participations changed attachment categories over this time period (Sampson, 2005). According to these findings, more participants were classified as securely attached in emerging adulthood compared with late adolescence. The quality of romantic relationships and friendships were associated with movement toward secure attachment in emerging adulthood, however life stress and increased autonomy from caregivers (moving out of caregiver residence) were not (Sampson, 2005). It should be noted that the sample used for this longitudinal study differed from the sample in the current study in that it was comprised of non-adopted individuals who were categorized prenatally as "high risk." It is also important to note the differences between types of attachment measurements used. The concordance in findings revealing change in attachment across time is significant, however, and further supports the existence of attachment discontinuity across the life span.

Furthermore, research examining change in attachment, assessed by interview, over fairly short time periods provides evidence of change in attachment later in life (Davila & Cobb, 2003). Interestingly, this research has found that most individuals who exhibit change in attachment move toward greater security (Crowell, Treboux, & Waters, 2002). This is notable given that, in the current study, there were roughly equal numbers

of participants who followed increasing and decreasing attachment patterns from adolescence to emerging adulthood. While long-term longitudinal research on attachment has not identified a particular time of change with respect to attachment, short-term longitudinal studies have demonstrated that “self-reported and interviewer-assessed security has the capacity to change during these developmental periods” of adolescence and adulthood (Davila & Cobb, 2004, p. 137). Findings from the current study add to existing evidence that attachment can and does change over the lifetime.

Affect about adoption was correlated more strongly with attachment ratings within each time period compared to across time periods, in a similar fashion as was found with attachment ratings for each parent. However, affect about adoption was correlated much more strongly across time periods than attachment ratings were. Additionally, more individuals demonstrated change in adoption affect across time than those who had stable patterns, although this difference was smaller than it was for attachment ratings. Thus, affect about adoption was found to be somewhat more stable across this time span compared to self-reported attachment to each parent. Adoption affect was also linked to concurrent attachment ratings, particularly in emerging adulthood, indicating that together these two constructs may serve as important indicators of adoptive family dynamics. Of course, the link between these two constructs within each time does not distinguish the direction of possible influence of attachment on adoption affect or vice versa.

It seems that despite the changes in family relationships and life circumstances that occur between adolescence and emerging adulthood, participants’ views on their own adoption are somewhat more stable over time than their feelings of closeness with their

parents. Perhaps this reflects that for their whole lives, participants have been aware of and integrating, at various levels of depth and acceptance, their status as adopted individuals and not simply at adolescence and/or emerging adulthood. However, while the correlation analysis reveals greater stability across time for adoption affect compared to attachment, the number of participants with changing trajectories nevertheless demonstrates a significant amount of mobility for adoption affect.

Taken together, these findings support notions which posit the existence of significant change from the period spanning adolescence through emerging adulthood. While there is considerable debate regarding the degree to which individual characteristics and family dynamics change from adolescence to emerging adulthood, this research suggests that there is substantial change both individually and in family relations during this time. There is also a great deal of debate regarding the degree of turmoil during this period of growth and maturity. While this research did not directly examine family turbulence, these findings correspond with theories which emphasize transformation in family relationships during this time as opposed to theories which stress continuity.

### **IPPA**

It is important to remember that attachment in the current study was measured using the IPPA because the research reviewed used a variety of attachment measures and there is significant debate as to the most accurate attachment measure. The self-report IPPA uses a continuous scale to assess attachment as opposed to categorizations of secure or insecure attachment as other measures use. The IPPA thus does not categorize

individuals into particular attachment types nor does it claim to assess attachment at infancy or childhood. It specifically examines how well each parent serves as a source of psychological security by assessing adolescents' perceptions of the positive and negative affective/cognitive dimensions of their parental relationships (Armsden & Greenberg, 1987).

More generally, self-report self-reported attachment measures are believed to report more "conscious aspects of internal working models, including attitudes, feelings and behaviors with regard to *specific* close relationships" (McElhaney et al., 2009, p. 363). Despite substantial differences between self-report and interview measures in terms of focus and method, self-report measures of attachment in close relationships are related to AAI coding scales (Bartholomew & Shaver, 1998; Mikulincer & Shaver, 2003). Specifically, research has found that scores from these two types of measures are "related to each other in sensible ways, and that both are reflections of an underlying sense of attachment security" (Mikulincer & Shaver, 2003, p. 71; Shaver, Belsky, & Brennan, 2000). This suggests that it is possible to make interpretations about attachment across research using varying methods of assessing attachment, however, it is nevertheless still important to be cognizant of such differences.

In this study, participants were asked about their relationship to each parent independently, and thus information was gathered separately with respect to attachment to mother and father. Data were left in the form of separate scores for attachment to mother and attachment to father, and not grouped into one composite attachment rating, to allow for comparison within families and to avoid information potentially lost by

collapsing data into one score. Correlations between parental attachment ratings were high in both time periods, and this finding of high but not perfect correlations concurs with previous research findings.

Research examining the degree of agreement in attachment to mother and father across the lifespan has found that these two scores are fairly unrelated to one another in infancy and early childhood (Furman & Simon, 2004). This is believed to indicate differences in “underlying representations” of infants’ relationships with each of their parents because infants are presumed to have independent sets of attachment expectations (internal working models/states of mind) for each parent (Furman & Simon, 2004, p. 1239). However, theorists have suggested that, by adulthood, these independent working models generally “coalesce” into a unitary state of mind in terms of attachment (Furman & Simon, 2004; Main, 1999). Because of the cognitive skills enabled by the development of formal operational thought, adolescents and emerging adults become increasingly able to reflect on their relationships, and this reflection is believed to lead to the coalescence of attachment working models. This developmental process of integration is believed to be “a critical one because it means that security is no longer just a relationship characteristic but [it] is also a characteristic of the individual” (Furman & Simon, 2004, p. 1239).

A comparison of attachment styles, assessed by the Behaviors Systems Questionnaire (BSQ), a self-report measure, and maternal and paternal attachment states of mind, assessed by the AAI, found that ratings of attachment to mother and father were significantly related to one another regardless of measurement type (Furman & Simon, 2004). These findings coincide with the high correlations of scores of attachment to each

parent, within each time period, found in the present study. Furman and Simon (2004) interpreted their findings to indicate the existence of an internal working model or, as they refer to it, an overall state of mind with respect to attachment to both parents. However, similar to the current findings, ratings of attachment to each parent were not perfectly correlated with one another in Furman and Simon's study; there is thus some evidence that attachment is, to some degree, specific to each parent. In summary, both the current findings, and their agreement with previous research, suggest that there is, in general, an overall attachment state of mind but that relationship-specific attachment states of mind can also exist. This is exemplified by situations in which individuals' attachment ratings to each parent have low concordance with one another; most likely, this occurs when individuals have very distinct relationships with each of their parents (Furman & Simon, 2004). It is important to note that in the current study, the vast majority of adoptive parental relationships were intact.

### **Negative Instability in Emerging Adulthood**

While significant differences were found in NI based on longitudinal patterns of adoption affect and parental attachment, these differences were driven, for the most part, by differences between the stable groups (low, medium, high). More specifically, in terms of attachment to mother and father, results revealed that continuous high levels of attachment to each parent from adolescence to emerging adulthood were predictive of low NI in emerging adulthood, whereas continuous low levels of attachment across this period were predictive of high NI. Although significant differences in attachment to mother were actually found only between the medium and high stable groups, NI ratings

in these groups were very close together; there was not a large distinction, in terms of NI, between the medium and low stable attachment to mother ratings. Interestingly, mean NI ratings in the decreased and increased groups were quite close together for both attachment to mother and attachment to father and were both between the low/medium stable and high stable groups.

It thus appears that patterns of stability with respect to attachment are more strongly related to NI than patterns of change. This suggests that strong, consistent attachment to parents from adolescence to emerging adulthood serves as a buffer against negatively experiencing instability in emerging adulthood whereas continuous weak attachment functions as a risk factor for difficulty dealing with the challenges of emerging adulthood. Analyses were not conducted which compared change patterns of attachment to mother to patterns of attachment to father with regard to NI ratings; however, mean scores of NI followed notably similar patterns with respect to the five change groupings for each parent.

Thus, while there was a substantial number of participants whose parental attachment ratings changed over this time, NI was more strongly related to attachment for individuals who exhibited attachment stability. This aligns with theories which conceptualize secure attachment as a resource which guides individuals to cope with stressful experiences, such as those encountered in the unstructured period of emerging adulthood, in constructive ways. Along these lines, secure attachment, which corresponds with high scores on the IPPA, is related to the ability to improve one's well-being and adjustment whereas insecure attachment, associated with low stable ratings on

the IPPA, is viewed as a potential risk factor, leading to insufficient coping ability and maladjustment (Mikulincer & Shaver, 1998). Previous research has repeatedly identified connections between attachment style in adolescence and young adulthood/adulthood and concurrent psychological well-being, social competence, adjustment to separation, and affect regulation (Leondari & Kiosseoglou, 2002; Mikulincer & Shaver, 1998).

It is difficult to determine precisely what high self-reported scores of NI reflect, however, the confusion, stress, and worry associated with high NI coupled with the challenges associated with emerging adulthood, relate to indices of psychological difficulties and poor adjustment studied in attachment outcome literature. Thus, while the research cited, which examined outcomes associated with attachment, did not assess attachment stability, the connection between secure attachment and low NI in the current study, aligns with findings regarding the adaptive value of secure attachment. Of note, recent research suggests that individuals adopted before their first birthday, as was the case for the adopted young adults in the current study, display similar attachment styles to non-adopted individuals (Benson et al., 1994; van den Dries et al., 2009). Thus, the similarity between the present findings regarding the adaptive value (i.e. low NI) of secure attachment and previous research findings is unsurprising, yet notable.

Similar to findings with regard to attachment, NI scores in the low stable and high stable adoption affect groups differed significantly. This suggests a similar pattern in terms of stable, positive adoption affect having a buffering effect with regard to NI and continuous negative affect serving as a risk factor in terms of NI. Specifically, it appears that individuals with negative feelings about their adoption may have heightened difficulty developing a healthy understanding of their background and thus themselves;

this fragmented sense of self may be unable to successfully tackle the difficulties posed by the period of emerging adulthood. Individuals with positive feelings about their adoption, however, may develop a more integrated sense of self, which includes their adopted background and better equips them to face the challenges of emerging adulthood. These findings correspond with research which has demonstrated that affect about adoption strongly influences adopted adolescents' psychological health (Benson et al., 1994).

However, analyses revealed an additional group difference that is perplexing. Significant differences were found between the low stable and decreased group such that individuals whose affect about adoption followed a low stable pattern from adolescence to emerging adulthood exhibited higher NI than individuals whose affect about adoption decreased across this time period. While a conclusive explanation cannot be determined, it is possible that decreased adoption affect reflects a process of detachment or acceptance, with regard to difficult experiences with one's adoption, which might thereby be associated with decreased NI. This is compared with consistent low adoption affect, which was associated with the highest NI of all change groups and may reflect great difficulty coping with one's adoption status, which most likely affects adjustment outcomes such as NI. The lack of research examining adoption affect makes it difficult to further interpret this intriguing outcome and thus additional research examining adoption affect is needed to shed light on this finding.

## **General Implications**

As a whole, this research underscores the need for attachment literature and research to accept a view of attachment as a construct which fluctuates and evolves over time. This entails a divergence from traditional attachment theory which has so powerfully shaped the modern view of family relationships and child development; however, this more recent conceptualization provides great opportunity for research and has powerful implications for intervention efforts. Given the multitude of significant outcomes linked with parental attachment, it is essential that a more accurate, well-rounded view of attachment is attained in which the possibility and likelihood of change in attachment across the life span is assumed and incorporated into theory and research. In sum, the possibility of change in attachment over time provides hope for individuals who have had less than ideal attachment histories, such as adopted individuals, and highlights the value of therapeutic intervention at the family or individual level across the life span.

Additionally, viewing the adoptive family as a case study of family complexity, this research accentuates the continued importance of family relationships in adolescence and emerging adulthood for adopted young adults. As numerous research has demonstrated, the importance of family relationships does not diminish after the formative years of infancy and childhood. The current research reiterates the integral role that family relationships play in the lives of young adults and shows the importance of sustained solid and supportive family relationships for adopted individuals through adolescence and emerging adulthood. The current study also promotes the construct of affect about adoption as a significant aspect of family relationships and an important

measure of adaptive functioning for adopted adolescents and young adults. Lastly, this study imparts the construct of NI and demonstrates the variation in adopted young adults' experience of emerging adulthood, reflecting that some emerging adults feel grounded and enthusiastic while others feel uncertain and confused. Although the present results show that it is difficult to generalize about this period of life, these findings also underscore the importance of raising societal awareness of the difficulties that emerging adulthood poses. It is essential that parents and mental health professionals are cognizant of the range of reactions that contemporary emerging adults may experience with regard to this period of life.

It is important to note that these results were found in a specific sample of adopted families; while research suggests that attachment and adjustment is similar in adopted (same race, same nationality) individuals and their non-adopted counterparts, the degree to which the present findings apply to non-adopted individuals or individuals in differing types of adoptions is unclear. Overall, this research suggests the existence of a substantial amount of change in adoptive family relationships from adolescence through young adulthood. While family relationships and familial closeness may look and feel quite different in adolescence and emerging adulthood, this research underscores the importance of continued closeness and emotional support/availability despite the physical distance that often exists between family members during this time. In conclusion, as adopted emerging adults face the challenges of navigating their way toward adulthood and establishing themselves in the world, it is essential that they have the foundation of a stable, strong parental relationship throughout their journey toward autonomy from adolescence through emerging adulthood.

## **Limitations**

It is important to note some of the limitations of the current study. First, findings were based solely on self-report assessments from the adopted individuals, and thus the parental perspective was not assessed. While NI is viewed as a personal, subjective experience that is perhaps most appropriately assessed by self-report, attachment is often measured using parental report, and debate continues regarding the most accurate assessment of this construct. Specifically, concern has been raised regarding the construct validity of various self-report attachment measures, and some attachment researchers assert that self-report measures do not tap the same construct as interview measures or measures which examine behavior (Davila & Cobb, 2004). It is argued, however, that, at this age, the young adult's perspective with regard to attachment supersedes parental report.

In addition, controversy persists regarding the most accurate measurement of attachment; some researchers resolve this concern by concluding that adult attachment involves both conscious, explicit aspects, typically assessed by self-report measures such as the IPPA, as well as more latent, implicit features, typically assessed by interview or behavior-based measures (Davila & Cobb, 2004). Others believe that attachment includes trait and state components and that state components are more sensitive to life events. Additionally, the present study only includes assessments of attachment at adolescence and young adulthood whereas previous studies have assessed attachment at infancy and/or early childhood. The strength of using the IPPA to assess attachment is thus that it is a well established attachment measure which provides information that is based solely on the adolescent and young adult perspective. However, the limitations of

the IPPA include the skepticism that some maintain regarding the validity of this form of measurement as well as the fact that significant information may have been excluded due to the absence of parental input.

Furthermore, patterns of change in attachment and adoption affect were assessed by grouping each score at adolescence and emerging adulthood into the high, medium, or low category and then comparing individuals' classifications at each time point. This manner of assessment of change does not examine the degree of change over time. Thus, individuals who moved from the low to high category were placed in the same category, "increased," as individuals who moved from the low to medium category. This may have neglected meaningful differences in NI based on the degree of change. Additionally, scores were categorized into each time group based on the distribution of scores for that construct at each time point. The strength of this method is that it evaluates the change relative to other scores at this time point, however, the weakness is that the definition of change varied somewhat at each time point and for each construct.

It is also important to note that the sample used in the current study was fairly homogenous in terms of race, religion, SES, family structure, and adoption type. The majority of the participants are Caucasian, Protestant, and from middle to upper middle class, 2-parent (adoptive) families, which reflects the population of families typically involved in formally adopting unrelated infants and birthmothers who tend to place their infants for adoption during the late 1970s and early 1980s. Thus, these findings may not generalize to individuals from more diverse backgrounds and the homogeneity of the sample should be considered when interpreting these findings. The strengths of this sample, however, include that these participants have been followed for over 20 years,

allowing for rich comparisons of individual and family characteristics across time. Additionally, the specific focus on adoptive families is a strength with regard to its applicability to complex family dynamics more broadly.

### **Future Directions**

The current research raises many stimulating questions and provides the groundwork for future study in a multitude of intriguing directions. Overall, these results promote the need for additional research examining the trajectory of attachment from adolescence through adulthood as well as consequences of change in attachment security across the life span. More specifically, one direction of study could involve deconstructing the categories of attachment used in the present study and examining the differences in outcomes, including family and individual characteristics, according to the degree of change. Furthermore, while individuals in the increased and decreased attachment groups had similar NI scores, it would also be interesting to further compare individuals in these groups on other individual and family outcomes.

Future research could also explore degrees and predictors or catalysts of attachment change, including individual and family factors. It would also be interesting to investigate individuals whose attachment to each parent widely differed. This might provide a better understanding of attachment processes when the coalescence described earlier is not present. In sum, the current research builds upon prior research in suggesting that attachment is less clean-cut than traditional theory implies; complexity in conceptualizing and examining attachment is necessary in order to truly uncover the rich nature of attachment across the life span.

Furthermore, NI is a budding construct in need of additional investigation. Research efforts are needed to more definitively identify what underlies NI and to uncover a broader range of predictors and outcomes related to NI during emerging adulthood. Specifically, it would be interesting to examine the relationships between NI and adjustment outcomes, such as quality of life, or psychological symptoms, such as anxiety or depression. NI is understood to be related to difficult adjustment to emerging adulthood and subsequent struggles in adulthood, however these predictions are in need of additional substantiation. Additionally, the items on the IDEA which assess NI are fairly global, inquiring about subjective feelings of distress regarding the current period of emerging adulthood. Future research may wish to examine whether there are certain aspects of emerging adulthood, such as relationship status or career development, or specific demographic variables which hold more weight than others in influencing NI.

Additionally, this research suggests that adoption affect is a significant aspect of adoptive family dynamics and, consequently, future theory and research should integrate this construct into its conception of the adoptive filial relationship. It is suggested that future research examine the predictors and consequences of an individual's adoption affect, the trajectory and stability of adoption affect across the life span, and the direction of the relationship between adoption affect and parental attachment. Because positive feelings about one's adoption have been found to be related to adopted individuals' psychological health and well-being, it is suggested that research examine the efficacy of interventions designed to increase positive adoption affect.

Lastly, the current study examined young adults who were adopted by two parents of the same race and nationality. It is recommend that future research use a broader sample to include individuals whose adoptions were transracial and/or international as well as individuals who were not raised by two married parents, as some studies have shown differing outcomes according to adoption characteristics. Additionally, future research could compare adopted and non-adopted families along the factors examined in the current study. It would be interesting to examine whether attachment stability as well as adoption affect are equally important with regard to NI across these samples as well as whether similar attachment mobility exists in these various groups.

Table 1.

*Intercorrelations for Attachment, Affect about Adoption, and Negative Instability*

Construct	1	2	3	4	5	6	7	M (SD)
1. Attachment to mother in AD	--	.70	.37	.31	.48	.27	-.15	98.05 (18.05)
2. Attachment to father in AD		--	.30	.36	.50	.34	-.15	95.53 (19.88)
3. Attachment to mother in EA			--	.66	.41	.67	-.31	103.97(17.86)
4. Attachment to father in EA				--	.26	.70	-.35	102.32 (19.94)
5. Affect about adoption in AD					--	.52	-.26	73.48 (10.07)
6. Affect about adoption in EA						--	-.31	73.54 (10.75)
7. Negative instability in EA							--	2.49 (.66)

*Note.* All coefficients greater than .20 are significant at  $p < .01$ . AD = Adolescence. EA = Emerging Adulthood.

Table 2.

*NI According to Patterns of Change from Adolescence to Emerging Adulthood*

Change Group	NI Scores with Respect to Each Construct					
	Affect about Adoption		Attachment to Mother		Attachment to Father	
	M(SD)	N	M(SD)	N	M(SD)	N
Low Stable <sup>1</sup>	2.95 (.64)	20	2.62 (.62)	15	2.74 (.59)	14
Medium Stable <sup>2</sup>	2.55 (.39)	16	2.72 (.65)	16	2.77 (.49)	10
High Stable <sup>3</sup>	2.22 (.71)	16	2.06 (.69)	16	2.09 (.65)	20
Decreased	2.43 (.60)	29	2.55 (.63)	31	2.59 (.62)	33
Increased	2.48 (.69)	33	2.50 (.59)	32	2.47 (.70)	32
Mean	2.52 (.65)	114	2.50 (.65)	110	2.50 (.66)	109

*Note.* <sup>1</sup>In wave 2, scores in the low stable group ranged from 43-91 for attachment to mother, 36-89 for attachment to father, and 33-72 for affect about adoption. In wave 3, scores in the low stable group ranged from 44-100 for attachment to mother, 37-97 for attachment to father, and 32-71 for affect about adoption.

<sup>2</sup> In wave 2, scores in the medium stable group ranged from 92-109 for attachment to mother, 90-105 for attachment to father, and 73-79 for affect about adoption. In wave 3, scores in the medium group ranged from 101-114 for attachment to mother, 98-114 for attachment to father, and 72-79 for affect about adoption.

<sup>3</sup>In wave 2, scores in the high stable group ranged from 110-125 for attachment to mother, 106-125 for attachment to father, and 80-84 for affect about adoption. In wave 3, scores in the high group ranged from 115-125 for attachment to mother, 115-125 for attachment to father, and 80-84 for affect about adoption.

**APPENDIX**

**THE INVENTORY OF PARENT AND PEER ATTACHMENT**

This questionnaire asks about your relationships with important people in your life: your adoptive mother, your adoptive father, and your close friends. Please read the directions to each part carefully.

<b>I. Adoptive Mother Questions</b> Part I. The following statements ask about your <u>adoptive mother</u> . Please read each statement and click on the <u>ONE</u> number that tells how true the statement is for you now. Please answer every question.	<b>Almost Never or Never True</b>	<b>Not Very Often True</b>	<b>Sometimes True</b>	<b>Often True</b>	<b>Almost Always or Always True</b>
1. My mother respects my feelings.					
2. I feel my mother does a good job as my mother.					
3. I wish I had a different mother.					
4. My mother accepts me as I am.					
5. I like to get my mother's point of view on things I'm concerned about.					
6. I feel it's no use letting my feelings show around my mother.					

7. My mother can tell when I'm upset about something.					
8. Talking over my problems with my mother makes me feel ashamed or foolish.					
9. My mother expects too much from me.					
10. I get upset easily around my mother.					
11. I get upset a lot more than my mother knows about.					
12. When we discuss things, my mother cares about my point of view.					
13. My mother trusts my judgment.					
14. My mother has her own problems, so I don't bother her with mine.					
15. My mother helps me to understand myself better.					
16. I tell my mother about my problems and troubles.					
17. I feel angry with my mother.					
18. I don't get much attention from my					

mother.					
19. My mother helps me to talk about my difficulties.					
20. My mother understands me.					
21. When I am angry about something, my mother tries to be understanding.					
22. I trust my mother.					
23. My mother doesn't understand what I'm going through these days.					
24. I can count on my mother when I need to get something off my chest.					
25. If my mother knows something is bothering me, she asks me about it.					
<b>II. Adoptive Father Questions</b> Part II. The following statements ask about your <u>adoptive father</u> . Please read each statement and check the <u>ONE</u> number that tells how true the statement is for you now. Please answer every question.					

26. My father respects my feelings.					
27. I feel my father does a good job as my father.					
28. I wish I had a different father.					
29. My father accepts me as I am.					
30. I like to get my father's point of view on things I'm concerned about.					
31. I feel it's no use letting my feelings show around my father.					
32. My father can tell when I'm upset about something.					
33. Talking over my problems with my father makes me feel ashamed or foolish.					
34. My father expects too much from me.					
35. I get upset easily around my father.					
36. I get upset a lot more than my father knows about.					
37. When we discuss things, my father cares about my point of view.					

38. My father trusts my judgment.					
39. My father has his own problems, so I don't bother him with mine.					
40. My father helps me to understand myself better.					

## BIBLIOGRAPHY

- Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist*, 44(4), 709-716.
- Ainsworth, M. S. (1982). Attachment: Retrospect and prospect. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 3-30). New York: Basic Books.
- Ainsworth, M. (1967). *Infancy in Uganda*. Baltimore: Johns Hopkins
- Allen, J. P., Hauser, S. T., Bell, K. L., & O'Connor, T. G. (1994). Longitudinal assessment of autonomy and relatedness in adolescent-family interactions as predictors of adolescent ego development and self-esteem. *Child Development*, 65(1), 179-194.
- Amato, P. (1994). Father-child relations, mother-child relations, and offspring psychological well-being in early adulthood. *Journal of Marriage and the Family*, 56, 1031-1042.
- Aquilino, W. S. (1997). From adolescent to young adult: A prospective study of parent-child relations during the transition to adulthood. *Journal of Marriage & the Family*, 59(3), 670-686.
- Aquilino, W. S. (2006). Family relationships and support systems in emerging adulthood. In J. J. Arnett, & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 193-217). Washington, DC: American Psychological Association.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 15(5), 427-453.
- Armsden, G.C., McCauley, E., Greenberg, M. T., Burke, P., & Mitchell, J. (1990). Parent and peer attachment in early adolescence depression. *Journal of Abnormal Child Psychology*, 18, 683-697.

- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*(5), 469-480.
- Arnett, J. J. (2006a). Emerging adulthood: Understanding the new way of coming of age. In J. J. Arnett & J.L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 3-19). Washington, DC: American Psychological Association.
- Arnett, J. J. (2006b) Emerging adulthood in Europe: A response to Bynner. *Journal of Youth Studies* *9*(1), 111-123.
- Avery, R. R., & Ryan, R. M. (1988). Object relations and ego development: Comparison and correlates in middle childhood. *Journal of Personality*, *56*(3), 547-569.
- Baldwin, M. W., & Fehr, B. (1995). On the instability of attachment style ratings. *Personal Relationships*, *2*, 247-261.
- Baldwin, M. W., & Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effect. *Journal of Personality and Social Psychology*, *71*, 94-109.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing in adult attachment: Do they converge? In J. A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25-45). New York: Guilford.
- Becker-Stoll, F., & Fremmer-Bombik, E. (1997, April). *Adolescent-mother interaction and attachment*. Paper presented at the meeting of the Society for Research in Child Development, Washington, DC.

- Bell, K. L., Allen, J. P., Hauser, S. T., & O'Connor, T. G. (1996). Family factors and young adult transitions: Educational attainment and occupational prestige. In J. A. Graber, J. Brooks-Gunn, & A. C. Petersen (Eds.), *Transitions through adolescence: Interpersonal domains and context* (pp. 345-366). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Benson, P. L., Sharma, A. R., & Roehlkepartain, E. C. (1994). *Growing up adopted*. Minneapolis: Search Institute.
- Berman, W. H., & Sperling, M. B. (1994). The structure and function of adult attachment. In M. S. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 1-30). New York: Guilford.
- Bloom, M. V. (1980). *Adolescent-Parental Separation*. New York: Gardner Press.
- Blos, P. (1975). The second individuation process of adolescence. In A. H. Esman (Ed.), *The Psychology of Adolescence*. New York: International Universities.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Bowlby, J. (1969). *Attachment and loss: Vol.1 Attachment*. New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2 Separation*. New York: Basic Books.
- Bowlby, J. (1982). *Attachment and loss: Vol. 2 Attachment*, 2<sup>nd</sup> ed. New York: Basic Books.
- Bowlby, J. (1952). *Maternal care and mental health*, 2<sup>nd</sup> ed. Geneva: WHO.
- Bowlby, J. (1977). The making and breaking of affectional bonds: II. Some principles of psychotherapy. *British Journal of Psychiatry*, 130, 421-431.
- Bretherton, I. (1985). Attachment theory: Retrospect and Prospect. In I. Bretherton & E. Waters (Eds.), *Growing points in attachment theory and research. Monograph of the Society for Research in child development*, 50(1-2) (pp. 3-35). Chicago: University of Chicago Press.

- Bridges, L., Connell, J. P., & Belsky, J. (1988). Similarities and differences in infant-mother and infant-father interaction in the Strange Situation. *Developmental Psychology, 24*, 92-100.
- Brodzinsky, D. M. (1990). A stress and coping model of adoption adjustment. In D. M. Brodzinsky & M. D. Schechter (Eds.), *The psychology of adoption* (pp. 3-24). New York: Oxford
- Brodzinsky, D. M., Schechter, M. D., & Henig, R. M. (1992). *Being adopted*. New York: Doubleday.
- Bynner, J. (2005). Rethinking the youth phase of the life-course: The case for emerging adulthood? *Journal of Youth Studies, 8*(4), 367-384.
- Chisholm, K. (1998). A three year follow-up of attachment and indiscriminate friendliness in children adopted from Romanian orphanages. *Child Development, 69*(4), 1092-1106.
- Cohen, P., Kasen, S., Chen, H., Hartmark, C., & Gordon, K. (2003). Variations in patterns of developmental transitions in the emerging adulthood period. *Developmental Psychology, 39*(4), 657-669.
- Cooper, M. L., Albino, A. W., Orcutt, H. K., & Williams, N. (2004). Attachment styles and intrapersonal adjustment: A longitudinal study from adolescence into young adulthood. In W.S. Rholes & J. Simpson (Eds), *Adult attachment: Theory, research, and clinical implications* (pp. 438-466). New York: Guilford.
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology, 74*(5), 1380-1397.
- Crowell, J.A., Treboux., D., & Waters, E. (2002). Stability of attachment representations: The transition to marriage. *Developmental Psychology, 38*, 467-479.

- Davila, J., Burge, B., & Hammen, C. (1997). Why does attachment style change? *Journal of Personality and Social Psychology*, 73, 826-838.
- Davila, J., & Cobb, R. J. (2003). Predicting change in self-reported and interviewer-assessed adult attachment: Test of the individual difference and life stress models of attachment change. *Personality and Social Psychology Bulletin*, 29, 859-870.
- Davila, J., & Cobb, R. J. (2004). Predictors of change in attachment security during adulthood. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 133 -158). New York: Guilford.
- Eccles, J., Templeton, J., Barber, B., & Stone, M. (2003). Adolescence and emerging adulthood: The critical passage ways to adulthood. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.), *Well-being: Positive development across the life course* (pp. 383-406). Mahwah, NJ: Lawrence Erlbaum Assoc.
- Egeland, B. & Farber, E. A. (1984). Infant-mother attachment: factors related to its development and changes over time. *Child development*, 55, 753-771.
- Elder, G. H. (1984). Families, kin, and the life course: A sociological perspective. In R. Park (Ed.), *Advances in child development research: The family* (pp. 80-135). Chicago: University of Chicago Press.
- Feeney, J. A., Noller, P., & Hanrahan, M. (1994 ) Assessing adult attachment. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 128-154). New York: Guilford.
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4, 132-154.

- Furman, W., & Simon, V. (2004). Concordance in Attachment States of Mind and Styles With Respect to Fathers and Mothers. *Developmental Psychology, 40*(6), 1239-1247.
- Grotevant, H. D., & Cooper, C. R. (1986). Individuation in family relationships. *Human Development, 29*, 82-100.
- Grotevant, H. D., & McRoy, R. G. (1998). Openness in adoption: Exploring family connections. Thousand Oaks, CA: Sage.
- Grotevant, H. D., Perry, Y. V., & McRoy, R. G. (2005). Openness in adoption: Outcomes for adolescents within their adoptive kinship networks. In D. M. Brodzinsky & J. Palacios (Eds.), *Psychological issues in adoption: research and practice* (pp. 167-186). Westport, CT: Praeger Publishers/Greenwood Publishing Group.
- Grotevant, H. D., Reuter, M., Von Korff, L., & Gonzalez, C. (2009). *Adoption openness arrangements and satisfaction as predictors of externalizing behavior in adolescence and emerging adulthood*. Manuscript submitted for publication.
- Grotevant, H. D., & Von Korff, L. (2009). *Adoptive identity*. Manuscript submitted for publication.
- Hamilton, C. (2000). Continuity and discontinuity of attachment from infancy through adolescence. *Child Development, 71*, 690-694.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.
- Josselson, R. (1988). The embedded self: I and thou revisited. In D. K. Lapsley & F. R. Power (Eds.), *Self, ego, identity: Integrative processes too* (pp. 91-108). New York: Springer.
- Juffer, F. & Rosenboom, L. G. (1997). Infant-mother attachment of internationally adopted children in the Netherlands. *International Journal of Behavioral Development, 30*, 53-75.

- Kenny, M. E. (1994). Quality and correlates of parental attachment among late adolescents. *Journal of Counseling and Development, 72*(4), 399-402.
- Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulations, and representation of self and others. *Child Development, 59*, 135-146.
- Lapsley, D. K., & Edgerton, J. (2002). Separation-individuation, adult attachment style, and college adjustment. *Journal of Counseling & Development, 80*(4), 484-492.
- Lapsley, D. K., Rice, K.G., & FitzGerald, D. P. (1990). Adolescent attachment, identity, and adjustment to college: Implications for the continuity of adaptation hypothesis. *Journal of Counseling & Development, 68*, 561-565.
- Leon, I. G. (2002). Adoption losses: Naturally occurring or socially constructed? *Child Development, 73*(2), 652-663.
- Leondari, A., & Kiosseoglou, G. (2000). The relationship of parental attachment and psychological separation to the psychological functioning of young adults. *Journal of Social Psychology, 140*(4), 451-464.
- Leondari, A., & Kiosseoglou, G. (2002). Parental psychological control and attachment in late adolescents and young adults. *Psychological Reports, 90*, 1015-1030.
- Lewis, M., Feiring, C., & Rosenthal, S. (2000). Attachment over time. *Child Development, 71*, 707-720.
- Levy, K. N., Blatt, S. J., & Shaver, P. R. (1998). Attachment styles and parental representations. *Journal of Personality and Social Psychology, 74*(2), 407-419.
- Lopez, F. G., & Gover, M.R. (1993). Self-report measures of parent-adolescent attachment and separation-individuation: A selective review. *Journal of Counseling & Development, 71*, 560-569.

- Main, M. (1999). Attachment theory: Eighteen points with suggestions for future studies. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 845–887). New York: Guilford.
- Main, M. (1995). Recent studies in attachment: Overview, with selected implications for clinical work. In J. Kerr (Ed.), *Attachment theory: Social, developmental, and clinical perspectives*. (pp. 407-474). Hillsdale, NJ England: Analytic Press, Inc.
- Main, M. (1996). Introduction to the special section on attachment and psychopathology: 2. overview of the field of attachment. *Journal of Consulting and Clinical Psychology*, *64*(2), 237-243.
- Mayseless, O., & Scharf, M. (2007). Adolescents' attachment representations and their capacity for intimacy in close relationships. *Journal of Research on Adolescence* *17*(1), 23 -50.
- McElhaney, K. B., Allen, J. P., Stephenson, J. C., & Hare, A. L. (2009). Attachment and autonomy during adolescence. In R. M. Lerner, L. Steinberg, R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology, Vol 1: Individual bases of adolescent development (3rd ed.)*. (pp. 358-403). Hoboken: John Wiley & Sons Inc.
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. S. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, *35* (pp. 53-152). San Diego: Elsevier Academic Press.

- O'Connor, T. G., Allen, J. P., Bell, K. L., & Hauser, S. T. (1996). Adolescent-parent relationships and leaving home in young adulthood. In J. A. Graber & J. S. Dubas (Eds.), *Leaving home: Understanding the transition to adulthood* (pp. 39-52). San Francisco: Jossey-Bass.
- Reifman, A., Arnett, J. J., & Colwell, M. J. (2007, summer). Emerging adulthood: Theory, assessment, and application. *Journal of Youth Development, 2*(1).
- Rholes, W. S., & Simpson, J. A. (2004). Attachment theory: Basic concepts and contemporary questions. In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 3-16). New York: Guilford.
- Rossi, A., & Rossi, P. (1990). *Of human bonding: Parent-child relations throughout the life course*. New York: Aldine de Gruyter.
- Rothbard, J. C., & Shaver, P. R. (1994). Continuity of attachment across the life span. In M. S. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 31-71). New York: Guilford.
- Ryan, R. M., & Lynch, J. H. (1989). Emotional autonomy versus detachment: Revisiting the vicissitudes of adolescence and young adulthood. *Child Development, 60*(2), 340-356.
- Sampson, M. (2005). Continuity and change in patterns of attachment between infancy, adolescence, and early adulthood in a high risk sample. *Dissertation Abstracts International, 66*.
- Schechter, M. D., & Bertocci, D. (1990). The meaning of the search. In D. M. Brodzinsky & M. D. Schechter (Eds.), *The psychology of adoption* (pp. 62-90). New York: Oxford.

- Schulenberg, J. E., & Zarrett, N. R. (2006). Mental health during emerging adulthood: Continuity and discontinuity in courses, causes, and functions. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 135-172). Washington, DC: American Psychological Association.
- Shaver, P. R., Belsky, J., & Brennan, K. A. (2000). The adult attachment interview and self-reports of romantic attachment: Associations across domains and methods. *Personal Relationships, 7*, 25-43.
- Simpson, J. A., & Rholes, W. A. (1998). Attachment in adulthood. In J. A. Simpson & W. S. Stevens (Eds.), *Attachment theory and close relationships* (pp. 3-24). New York: Guilford.
- Singer, L. M., Brodinzinsky, D. M., Ramsay, D., Steir, M., & Waters, E. (1985). Mother-infant attachment in adoptive families. *Child Development, 56*(6), 1543-1551.
- Sroufe, L., Egeland, B., Carlson, E., & Collins, W. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. New York: Guilford.
- Tanner, J. L. (2006). Recentering during emerging adulthood: A critical turning point in life span human development. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 21-55). Washington, DC: American Psychological Association.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family, 54*, 664-674.
- van den Dries, L., Juffer, F., van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2009). Fostering security? A meta-analysis of attachment in adopted children. *Children and Youth Services Review, 31*, 410-421.

- van Wel, F., ter Bogt, T., & Raaijmakers, Q. (2002). Changes in the parental bond and the well-being of adolescents and young adults. *Adolescence*, 37(146), 317-333.
- Waters, E., Merrick, S., Treboux, D., Crowell, J., Albersherim, L. (2000). Attachment security in infancy and early adulthood. *Child Development*, 71, 684-689.
- Weiss, R. S. (1982). Attachment in adult life. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 171-194). New York: Basic Books.
- Weinfeld, N. S., Sroufe, L. A., & Egeland. B. (2000). Attachment from infancy to early adulthood in a high-risk sample: Continuity, discontinuity, and their correlates. *Child Development*, 71, 695-702.
- Yarrow, L. J., & Goodwin, M. S. (1973). The immediate impact of separation: Reaction of infants to a change in mother figure. In L. J. Stone, H. T. Smith, & L. B. Murphy (Eds.), *The competent infant: Research and commentary* (pp. 1032-1040). New York: Basic Books.
- Zimmerman, P. (1994). *Attachment in adolescence: Development while coping with actual challenges*. Unpublished doctoral dissertation, University of Regensburg, Germany.