

2020

## Adult Attachment Functioning of Former Foster Youth Initially Placed in Early Adolescence

Adrienne Miller  
*Walden University*

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# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Adrienne Marie Miller

has been found to be complete and satisfactory in all respects,  
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Walden University  
2020

Abstract

Adult Attachment Functioning of Former Foster Youth Initially Placed in Early  
Adolescence

by

Adrienne Marie Miller

MA, Purdue University Global, 2014

BS, Wayland Baptist University, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human and Social Services

Walden University

November 2020

## Abstract

Child attachment has been an area of study among scholars for several decades; however, early adolescent attachment is a specific age period that few scholars have examined, especially pertaining to child welfare where placement is a necessary but forced attachment disruption. The purpose of this nonexperimental study was to examine the likelihood of early adolescent attachment during initial placement and to explore the frequencies of this population securely attaching postplacement based on the added variables of placement setting (foster home/kinship home/group home/institution) and sibling accessibility. Attachment theory was the lens through which to analyze the 83 results received via anonymous online national survey from young adults ages 18- to 24-years-old who had previously been in foster care. The survey responses were analyzed using chi-square/crosstabulation. The results of these analyses showed that early adolescents were almost half as likely to be securely attached postplacement compared to others outside of the early adolescent age range and must have both placement in a family-like setting that has been trained in early adolescent attachment/development and have been placed with their siblings to have the highest likelihood of secure attachment. Because a large number of the children entering foster care each year are early adolescents, positive social change would occur by using the results of this study to change child welfare practices during initial placement of youth in this age group and regarding foster/kinship home training to increase the number of these youth becoming securely attached adults.

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## Dedication

This dissertation study is dedicated to all early adolescents, but especially those in placement. I have both affectionately and with great despair during this process termed the young adolescents in placement “the lost ones” due to the lack of research information on them and the incredible need for it. It is my greatest hope that this one small pebble in the pond will create ripples of conversation that will start a larger movement and these amazing young individuals will get the attention from the people in charge that they deserve. My very first supervisor in the world of child advocacy, Sabrina “Kehau” Golis, told me to always remember advocacy means to give voice/speak for those who can’t (in this case, minor children who have no say in being removed from their home, where they will live next, if they will live with their sibling, or get the help they need) and to make sure you are speaking with their voice, not your own. It is with this in mind that I dedicate this dissertation to those who are not only unable to speak for themselves, but whose unique attachment needs have been largely overlooked by the research community and the child welfare field.

## Acknowledgments

I want to send my sincerest thanks and love to my husband Steve Miller for his never-ending patience these past years. He has been my cheerleader, shoulder to cry on, butt-kicker, flashlight on my path, and both father and mother to my children during times when my schooling had to come first. I also want to thank my children, Molly and Caleb for their understanding and patiently waiting on the sidelines at times for me to finish “one more thing” for school.

I want to thank my chair, Dr. Rebecca Stout, who has talked me down from the figurative ledge, listened to me cry, given me encouragement and praise all along this process, and has made this journey far more enjoyable than I imagined it could be. I couldn't have done this without her. I also want to thank Dr. Sarah Matthey, for her positive spin on corrections and for making APA far less intimidating than I had imagined. My entire dissertation team has been amazing and I wouldn't have wanted to go through this gauntlet with any other combination of people. They held my feet the fire and pushed me to get the best out of me. Many thanks go out to the brave souls who took the survey for this study as well.

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## Chapter 1: Introduction to the Study

### **Introduction**

Attachment researchers have conducted studies for over 60 years. Bowlby (1982), Ainsworth (1989), and Main and Solomon (1990) observed hundreds of infants and toddlers, resulting in the evolution of the four-category model of attachment theory. The importance of attachment since Bowlby's initial studies in the 1960s has permeated society, particularly among the foster care population where children are involuntarily removed from their primary caregiver for their own safety. Specific to the child welfare system, infant mental health initiatives are used to help infants and toddlers (Chinitz et al., 2017; Letourneau et al., 2019), while independent living programs and initiatives attempt to help older adolescents build relationships before they age out of the foster care system (Okpych, 2015; Williams-Mbengue, 2016). However, researchers confirm that early adolescence (between the ages of 10 and 14 years) is the second most critical attachment period (after the infant/toddler period), with rapid changes in the physical, neurological, cognitive, and social-emotional areas (Allen & Waterman, 2019; Kuhn et al., 2010; Pan et al., 2016; Piaget, 2008; Sikora, 2016 ). Despite the importance of an attachment intervention during this time period, especially after a severe attachment disruption such as foster care placement (Tatnell et al., 2017), no studies specific to early adolescent attachment and interventions while in foster care have been found. Because federal law states that a child should have his/her permanency goal created by their 12th month in care (U.S. Department of Health and Human Services, 1998), there is a likelihood that a child entering care during early adolescence will never receive

independent living services aimed to assist older adolescents establish new relationships. Scholars have had mixed positions on whether or not secure attachment postplacement can be achieved. However, researchers (Chesmore et al., 2017; Joseph et al., 2014) found that when secure attachment was accomplished after foster care placement, the type of foster care setting and the placement with siblings was a factor in secure attachment, hence their inclusion as variables in this study.

Potential positive social change can be made when early adolescents entering foster care are placed in the setting that promotes secure attachment. Child welfare agencies should take attachment into consideration when making placement decisions for youth ages 10- to 14-years-old and their siblings. Another potential change is that child welfare agencies will explore trainings that equip their foster parents with the skills and abilities that promote successful attachment and/or foster parent associations request these trainings. Lastly, national foster youth advocacy foundations, such as Casey Family Programs, could use the information from this study to advocate for national child welfare policy changes and funding allocation to promote attachment and resiliency research and programs for early adolescents in foster care.

In the first chapter of this study, I provide the background of why the population and variables were chosen for this study, and I address the gap in literature. I will discuss the problem that necessitated this study, the overview of the intended study, and its relationship to the theoretical framework. I will also address operational definitions and assumptions the reader needs for this study and examine the significance and positive social change associated with the outcomes of this study.

## **Background**

There is little research on the area of early adolescent attachment, and I have found a lack of research specific to early adolescents in foster care. Current foster care attachment researchers focus on two polar initiatives: immediate solutions to help older adolescents age out of the foster care system as functional adults and on infant mental health for secure attachments throughout life (Chintz et al., 2017; Okpych, 2015; Williams-Mbengue, 2016). The researchers focusing on infant attachment use over 60 years of infant attachment studies to explore infant attachment malleability as they are more easily able to achieve secure attachments to new primary caregivers under proper circumstances, in relation to adult attachment functioning (Behrens et al., 2016; Bowlby, 1982; Chintz et al., 2017; Letourneau et al., 2019). Conversely, older adolescent attachment researchers center their efforts on what programs and resources older adolescents need to become functional adults as they are in a position of emancipating from the foster care system with no permanent caregiver/attachment figure (Okpych, 2015; Williams-Mbengue, 2016). However, members of world-renowned health organizations recognize early adolescence as between 10 and 14 years of age, and they acknowledge this as a separate, critical attachment period (Association of Maternal and Child Health Programs, 2018; Maltais et al., 2017; Moretti & Peled, 2004; United Nations International Children's Emergency Fund [UNICEF], 2011; World Health Organization [WHO], 2019). Literature found on early adolescent attachment was often general adolescent attachment studies with many participants in the same study ranging from ages 9-years-old to 18-years-old and almost always qualitative in methodology.



Those studies that did address early adolescence did so as a predictor of a negative behavior (i.e., eating disorders, suicidal tendencies, etc.) in late adolescence. Scholars have not addressed foster care and early adolescent attachment except with early adolescence as a component of general adolescence, and no studies were found that addressed all of the variables proposed in this study. Due to the lack of information regarding early adolescent attachment, further research is needed on this population.

### **Problem Statement**

Adult attachment functioning of former foster youth who were placed into foster care for the first time during early adolescence is an area that needs further exploration. According to the Adoption and Foster Care Analysis System (AFCARS) report, 20% of youth entering the foster care system (51,000 out of 251,000 youth per year) are between the ages of 10- and 14-years-old (Children's Bureau, 2020). Youth who are placed in foster care during early adolescence (ages 10-to 14-years-old) are removed from their primary caregiver, with whom they already have formed an attachment, either securely or insecurely (Chesmore et al., 2017; Tatnell et al., 2017). This is during the second most critical attachment period of a child's life (Blomgren et al., 2016; He et al., 2018; Williams-Mbengue, 2016). During these 5 years, early adolescents are seeking independence, relying on the opinions of their peers for social support and self-worth, while still returning to their caregivers for the necessities of life and security (Blomgren et al., 2016; He et al., 2018; Tatnell et al., 2017). The disruption of this relationship during early adolescence can result in poor choices in relationships, low self-esteem, anger, mental health concerns, and trust and communication dysfunction, both for early

adolescents and their future adult selves (Blomgren et al., 2016; Joseph, 2014). Many foster youth in the United States have experiences that impact attachment functioning.

### **Purpose of the Study**

The purpose of this quantitative, nonexperimental correlational study is to examine the relationship, if any, of individuals who were placed into foster care for the first time during the early adolescent attachment period (ages 10- to 14-years-old), the type of foster care placement setting (foster care home/kinship home versus group home/residential/institutional setting), the accessibility of siblings, and adult attachment functioning (one of four attachment categories).

### **Research Questions and Hypotheses**

The research questions and hypotheses of this study are the following:

Research Question 1 (RQ1): Is there a statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning?

Null Hypothesis ( $H_01$ ): There is no statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning.

Alternative Hypothesis ( $H_{a1}$ ): There is a statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning.

Research Question 2 (RQ2): Is there a statistically significant relationship between foster care placement setting type and adult attachment functioning?

Null Hypothesis ( $H_02$ ): There is no statistically significant relationship between foster care placement setting type and adult attachment functioning.

Alternative Hypothesis ( $H_a2$ ): There is a statistically significant relationship between foster care placement setting type and adult attachment functioning.

Research Question 3 (RQ3): Is there a statistically significant relationship between accessibility of siblings while placed in foster care and adult attachment functioning?

Null Hypothesis ( $H_03$ ): There is no statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

Alternative Hypothesis ( $H_a3$ ): There is a statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

### **Theoretical Framework for the Study**

The theoretical framework for the study was Bowlby's (1982) attachment theory. I used the lens of attachment theory to compare and contrast each article in the literature review and to explain why I chose the variables for this study. Adolescent attachment theory rose out of infant attachment theory, and it shares similar traits throughout the same attachment categories (Joseph et al., 2014; Moretti & Peled, 2004; Withington et al., 2017). Attachment theorists focus on the importance of the relationship and bond that exists between a child and primary caregiver, not individual experiences (Bowlby, 1982; He et al., 2018). These theorists focus on security of that relationship, as the security/insecurity can be seen in a child's functioning of social-emotional learning, self-autonomy, self-actualization, and self-regulation (Bowlby, 1982; He et al., 2018;

Withington et al., 2017). As researchers shift attachment theory from childhood toward early adolescence, the same paradigm remains, with the primary caregiver acting a secure base or touchstone to return to for safety, security, and guidance as the child start to venture into mature activities, creating an identity independent from caregivers and looking toward peers for validation (Blomgren et al., 2016; He et al., 2018; Moretti & Peled, 2004).

Bowlby's (1982) premise that relationships and attachment experiences follow people throughout life aligns with the idea that early adolescents, who are in a transition period of parent and peer attachment, would have possible lasting ramifications due to the disruption in their attachment/relationship development period by being placed into foster care (Tatnell et al., 2017). However, several researchers (Chesmore et al., 2017; Miranda et al., 2019; Withington et al., 2017) found that under the right conditions, conditions usually found in a foster home or kinship home, secure attachment postplacement is possible; therefore, the type of setting is one independent variable of this study. By using this theory as a lens, placement with siblings is seen as another indicator of secure attachment. Researchers (Affronti et al. 2015; He et al., 2018; Jones, 2016; Wojciak et al., 2018) have supported this connection; thus, this variable is also included in this study.

I chose early adolescents (10-to 14-year-olds) as the population of this study and the final independent variable because of their unique physical, neurological, cognitive, and social-emotional changes during this time period that make it the second most critical attachment time period in the human lifespan. Ainsworth (1989) created names for the three categories in the attachment theory model, creating the first instrument to measure

attachment. Ainsworth noted that 9- to 14-year-olds were different and needed to have their own set of attachment studies. The four categories of Main and Solomon's (1990) studies (secure, insecure/anxious, insecure/avoidant, and insecure/dismissive), which include Bowlby's (1982) original three categories, were the categories that I used in identifying the functioning of adults in this study and the dependent variable. These same four attachment categories were confirmed in Bartholomew and Horowitz's (1991) study on adult attachment and were the foundation of Fraley et al.'s (2015) comparison study regarding categorical versus dimensional adult attachment assessment. The fourth category, insecure/dismissive, is a necessary component to this study, as during Main and Solomon's (1990) observations that resulted in the addition of the fourth category, they found that the majority of children who met the traits associated with the fourth category were maltreated; researchers (Granqvist et al., 2017; Miranda et al., 2019) have stated that this category often applies to foster children.

### **Nature of the Study**

This was a quantitative, nonexperimental correlational survey study. I gave the anonymous survey online and anyone could access the URL; however, participants had to affirm that they were between the ages of 18 and 24 before completing the survey. Participants were asked questions related to the independent variables of age of initial placement (age of initial placement: 0-to 5-years-old, 6-to 9-years-old, 10-to 14-years-old, 15-to 17-years-old, and never placed in foster care), foster care placement setting (foster home, kinship home, group home, residential/institutional setting), and sibling accessibility (if the individual has siblings were they placed together yes/no). I asked

participants to answer survey questions to determine their attachment category, the dependent variable. These survey questions were the revised Adult Attachment Scale (AAS; Collins, 1996), which consists of 18 Likert scale questions on a 5-point scale (*not characteristic of me* (1) to *very characteristic of me* (5)); this scale has been shown to be both reliable and valid in multiple studies (Ahmad & Hassan, 2014; Collins et al., 2018; Jang et al., 2015). The participants were placed into one of the four categories according to self-reported answers based on statements related to important quality relationships.

Participants were from national former foster youth organizations. I sent national foster youth alumni organizations information regarding my study, and they disseminated that information and the link to the study to their members, maintaining anonymity of the participants. Because more participants were needed than initially anticipated, I requested distribution of the study information and URL to 18-to 21-year-olds in independent living homes throughout the state of Florida. I used random and snowball sampling. The survey was available on Google Forms, and I analyzed the data in SPSS v25.

### **Definitions**

*Attachment:* The bond or relationship between two people over time based on interactions and reactions; it is not based on one experience or incident (Bowlby, 1982). Infant attachment researchers define these people as the caregiver and child (usually the mother), adolescent researchers include peers into the relationship circle, and during adult attachment, researchers state this relationship no longer includes the parent, and, while intimate and important, may not necessarily be romantic in nature.

*Foster home:* For the purpose of this study, the term foster home will be used on the survey to mean both the traditional foster home and the therapeutic or treatment foster home (Boyd, 2013). The difference in homes lie in clinical training, support, and education, which is a professional distinction that is not believed a child would know.

*Kinship home:* A kinship home is the home of a relative or nonrelative (someone the child considers a relative or has a relationship with, but is not related by blood) that is not a certified foster home, but may receive training and provides the same duties and meets the same responsibilities of a foster home (i.e., take the child to court hearings, visitation with the parents, cooperate with the state agency, etc.; Child Welfare Information Gateway, 2016)

*Placement:* For the purpose of this study, placement is defined as when a child under the age of 18 is removed from his or her primary caregiver and relocated into one of multiple foster care setting types such as a foster home, kinship(relative/nonrelative) home, group home (sometimes called congregate care), shelter, residential treatment facility, or institutional facility.

### **Assumptions**

I assumed that the participants would answer the survey honestly and would only take the survey one time. I assumed that the participants would be aware of what age they were initially placed into the foster care system. I made these assumptions because participants were anonymous, and it was unrealistic to look at the case file of each former foster youth to determine the veracity of answers.

### Scope and Delimitations

The scope of this study was to examine attachment functioning of young adults initially placed in foster care between the ages of 10- and 14-years-old and currently between the ages of 18 and 24 from across the United States. I chose the early adolescent time period (10-to 14-years-old) due to the unique factors found in the literature that could affect attachment functioning, and I chose the participant current age range of 18- to 24-years-old, as they have recently achieved legal adulthood. Sawyer et al. (2012) determined that adolescence extends out to age 24 due to biological, neurological, and cognitive development, as well as social roles. Hence, I believed that these individuals' attachment functioning would correlate to that of their early adolescent selves and the attachment interventions (the independent variables of sibling placement and foster care placement setting) that were applied during their first/only placement.

Although generalizability could be considered geographically as participants could be from anywhere in the United States, each child is unique and each family's story surrounding why a child entered foster care is different. For example, according to researchers (Ellis & Saadabadi, 2019; Granqvist et al., 2017; Zeanah & Gleason, 2015), this study and general attachment theory will not apply if a child has a clinical attachment disorder diagnosis as found in the *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* (American Psychiatric Association, 2013). However, for the purposes of this study, I used an instrument that places individuals in one category of four generally accepted and applicable attachment categories for ease of trend analysis and descriptive statistics.



### **Limitations**

The limitations of this study included the inability to follow early adolescents from the time of their initial placement until they reach adulthood to examine factors pertaining to attachment functioning, which would have been difficult, as this would entail gaining approval to study vulnerable populations. This study was also limited in that it did not account for the number of placements a child may incur during his or her time in care, nor could I examine the training that foster families receive or do not receive that would address the factors needed to facilitate secure attachments with their charges. Remedies to these limitations would be to change an anonymous survey to a confidential survey and request authorizations for information from the participants regarding this information from the initial foster care placement agency. However, due to the time limitations of this study, it was not a viable option for this study.

### **Significance**

The results of this study may provide information that could influence child welfare best practices during the removal process, during policy creation, and during case planning with service providers and families. The implications for positive social change from this study are changes during the initial placement of early adolescents, training and supports for foster and biological families, assessment of practices in service providers and child welfare agencies, and potentially changes in child welfare policy at several levels to mitigate attachment deficits and increase attachment resiliency postplacement.

## Summary

Approximately 20% of children entering foster care each year are between the ages of 10- and 14-years-old, which is the early adolescent period (Children's Bureau, 2020). This is a critical attachment period due to the physical, neurological, cognitive, and social-emotional development that occurs; however foster care placement, although necessary for the safety of the child, disrupts their attachment from their primary caregiver and their peers. Researchers have shown that certain factors allow for secure attachment postplacement. In this study, I examined those factors to explore the attachment functioning of young adults who were removed for the first time during the early adolescent period.

In the next chapter, I provide an examination of the literature regarding attachment theory in general, attachment categories and their characteristics throughout the lifespan of an individual, why early adolescence is a critical attachment period, the gap in the literature, and the justification for the variables in this study. In Chapter 3, I review the research method and design. Chapter 4 includes a discussion of the data collection and an analysis of the data, and Chapter 5 includes an interpretation of the data, as well as recommendations for future research.

## Chapter 2: Literature Review

### **Introduction**

According to the Children's Bureau (2020), 20% of youth entering the foster care system (over 50,000 out of 250,000 youth per year) are between the ages of 10- and 14-years-old. In Bowlby's (1982) attachment theory, relationships and attachment experiences follow people throughout life, and early adolescents who are in a transition period of parent and peer attachment may experience possible lasting negative ramifications due to the disruption in their attachment/relationship development period by being placed into foster care. Despite members of world-renowned health organizations recognizing early adolescence (between 10 and 14 years of age) as a separate, critical attachment period (Association of Maternal and Child Health Programs, 2018; Maltais et al., 2017; Moretti & Peled, 2004; UNICEF, 2011; WHO, 2019), the majority of attachment researchers have focused on infant attachment or older adolescent attachment in relation to adult attachment functioning. This leaves a gap in information regarding the foster care population.

Quantitative scholars have not addressed the attachment functioning of adults who were placed into foster care for the first time during the early adolescent attachment period and the variables surrounding that placement (i.e., foster care versus group home placement, whether the individual was placed with siblings versus not placed with siblings, and adult attachment functioning). Scholars have only addressed some of the variables for the population of this study. Therefore, there is a need to explore the

attachment functioning of adults who were removed during early adolescence to fill the gap in research.

In this literature review, I discuss the conceptual framework for this study, using the lens of theoretical attachment and the foundation of attachment theory, and how it presents in different developmental time periods of an individual's life. I also explore the importance of looking at early adolescence as a separate attachment period, factors that scholars have found to assist in creating secure attachments post foster care placement, and why the presence of siblings postplacement is believed to be a necessary variable in this study.

### **Literature Search Strategy**

I initially used the terms *adolescent attachment* and *foster care* in the Walden Library and on a Google Scholar search, with possible articles in Google Scholar being cross-checked in the Walden Library. These terms yielded articles by Joseph et al. (2014) and Atwool (2006), which addressed the importance of maintaining contact with the biological parent, of primary caregiver involvement even after foster care placement, and repercussions of the disruption of that attachment. I then changed the parameter terms to *adult attachment, adolescence, and foster care*, and to parameter terms *early adolescence, attachment, and foster care*, which did not result in articles less than 5-years-old.

As there was no current research found on adult attachment functioning in relation to early adolescents in foster care and adolescent attachment, I conducted a broader search to learn more about *adolescent attachment, early adolescent attachment*, and

*adolescent attachment theory*. Searches using these terms resulted in articles on general adolescent attachment (Blomgren et al., 2016), adolescent attachment theory in general, and one article on the importance of the early adolescent attachment period (Moretti & Peled, 2004). I used even broader terms about the importance of attachment and foster care. *Attachment theory* queries yielded recognized attachment theory foundational studies of Bowlby (1982), Ainsworth (1989), and Main and Solomon (1990).

Due to a lack of recent publications surrounding my problem statement and to verify the gap in literature, I conducted a library search with the search terms: *foster care or foster youth or foster child or foster children or foster care system, adolescent or youth or tween or teen or teenager or adolescence, and attachment or attachment behavior*. These combined terms (along with the parameters of full text, peer-reviewed scholarly journal articles published from 2015 through 2019) yielded 569 articles, none of which addressed all the variables in this topic of study. Furthermore, I conducted a Google Scholar citation chain search on articles found in the initial Walden Library searches, which addressed some of the variables of this topic of study, but were not current. Citation chain searches yielded over 500 additional current articles that addressed parts of this study, but not the entire study. Some of the initial noncurrent articles are maintained in this literature review due to the relevant information the authors put forth that was not found in any other publication.

As the importance of sibling placement and family-like setting foster care placement are accepted as general knowledge in the child welfare field, I initially found several references to articles related to sibling placement and foster placement in

newsletters from the Child Welfare Information Gateway, the information service of the Children's Bureau, and the federal child welfare office under the Administration of Children and Families under the Department of Health and Human Services. I then found these articles in the Walden Library to confirm their scholarly integrity and cross-checked in Ulrichsweb to confirm peer-reviewed status, as were any articles from unknown journals. I found all articles for this dissertation in the PsychInfo, SocIndex, ERIC, and/or EBSCO databases. Despite multiple searches related to my topic and problem, I found no articles that addressed adult attachment functioning and foster care placement during the early adolescent period (ages 10-14).

## **Theoretical Framework**

### **Concept/Phenomenon**

Foster care placement is a traumatic event that affects the attachment functioning of youth who are removed from their primary caregivers. Although the majority of youth entering foster care placement have already experienced complex trauma, the act of foster care placement itself is a trauma, and it can further be intensified by placement instability (Murphy et al., 2017; Withington et al., 2017). Removal from primary caregivers disrupts the bond and attachment children have formed with caregivers, whether that attachment is secure or insecure (Bowlby, 1982; Chesmore et al., 2017; Tatnell et al., 2017). Tatnell et al. (2017) found that although generally attachment styles do not change over time, a traumatic event, such as loss of a primary attachment figure or abuse, can change an individual's attachment style. Bowlby (1982) stated that attachment theory is used to explain why attachment to a caregiver is apparent or not apparent and why children may

form attachments to other individuals outside of biological parents. Because of the agreement of both researchers and attachment theorists in this area, an individual's attachment functioning after placement in foster care is not necessarily reflective of his or her functioning prior to placement.

### **Attachment Theory**

**Overview of attachment theory in infancy and adolescence.** Bowlby's (1982) attachment theory and subsequent adolescent attachment theory (Joseph et al., 2014; Moretti & Peled, 2004; Withington et al., 2017) served as the foundation and lens for this study. In the 1950s and 1960s, there was a movement among pediatricians and clinical researchers to explore the difference between children raised in institutions (i.e., orphanages) and those raised solely by their mother (Bowlby, 1982). Bowlby (1982) was a part of this permutative investigation, moving from the idea that mothers must have a child latched onto them (both figuratively and literally as in nursing) toward the premise that being near and having a relationship with someone who can protect and provide support is the key to attachment and child behavior. Attachment theorists focus on the importance of the relationship and bond that exists between a child and primary caregiver, not individual experiences (Bowlby, 1982; He et al., 2018). The security of that relationship plays a role in a child's functioning in the realms of social-emotional learning, self-autonomy, self-actualization, and self-regulation (Bowlby, 1982; He et al., 2018; Withington et al., 2017). As a child moves toward early and late adolescence, the primary caregiver provides a secure base for the adolescent to return to for safety, security, and guidance as he or she starts to venture into mature romantic relationships,

seek acceptance from and rely on peers for validation (related directly to self-esteem and perception of self-worth), and create a self-identity that encompasses what he or she visualizes his or her adult/independent self to be (education goals, career goals, and personality/morality decisions; Blomgren et al., 2016; He et al., 2018; Moretti & Peled, 2004). The primary relationship corresponding to attachment functioning fluctuates across the spectrum from parent to peer as children mature and grow.

**Categories of attachment functioning.** The presenting characteristics of attachment categories vary across stages of child development and result in contrasting presentation of attachment functioning from infancy to adulthood. Bowlby (1982) based the theory of attachment on how close a child remained to his/her mother and his or her level of comfort or discomfort when a mother was absent or getting ready to leave (Fletcher & Gallichan, 2016). Ainsworth (1989) developed classification categories for the behaviors Bowlby identified in the attachment theory and that Ainsworth also observed in research with toddlers. These categories are secure autonomous, anxious-avoidant insecure, and anxious-ambivalent/resistant insecure (Ainsworth, 1989). Ainsworth claimed that there were children whose behaviors did not fit in any of these three categories. Main and Solomon (1990) added a fourth category—disorganized—which is often a category into which children have been maltreated or have child welfare involvement fall (Fletcher & Gallichan, 2016; Miranda et al., 2019). Bartholomew and Horowitz (1991) confirmed the existence of a four-category model for young adult attachment. Despite the change in attachment figure from the mother (Bowlby, 1982), moving toward peers in adolescence (Blomgen et al, 2016), and looking toward



romantic/intimate relationships in adulthood (Bartholomew & Horowitz, 1991; Fraley, 2019), the similarities of attachment category traits can be seen throughout the lifespan of an individual.

**General characteristics of each attachment period.** Ainsworth (1989), Bowlby (1982), and Main and Solomon (1990) observed hundreds of infants and toddlers up to the age of 5 with their parents. What they (Ainsworth, 1989; Bowlby, 1982; Main & Solomon, 1990) found was the child most often identified with the caregiver that provides food and spent the most time with them, most often a maternal figure. Bowlby observed (confirmed by Ainsworth, 1989) that the attachment style was based on the reaction to previous attempts to get comfort and nourishment from the mother (i.e., if the mother was inconsistent in providing food and comfort, the child would be anxious/preoccupied; if the mother rarely gave comfort, the child most often was avoidant attachment). Therefore, the accessibility of the caregiver to meet the needs of the child played a large part in the attachment style development of the infant/toddler.

Adolescent attachment consists of a shift from attachment solely on the primary caregiver to attachment to peers as well (Blomgren et al., 2016; He et al., 2018; Theisen et al., 2018; Zhao et al., 2015). Peer acceptance and attachment makes a difference in coping and resiliency (Blomgren et al., 2016; Zhao et al., 2015), self-esteem and self-worth (Blomgren et al., 2016; Theisen et al., 2018; Zhao et al., 2015), and adult functionality (Fraley & Roisman, 2019). However, the importance of a steady, secure adult attachment cannot be overlooked, as both He et al. (2018) and Fraley and Roisman (2019) found the balance of both peer and parental attachment in adolescence to be

essential to secure attachment and positive adult functioning. McElhaney et al. (2009) stated that the degree to which an adolescent can detach from wholly believing everything his or her parent says and either forming his or her own opinions divergent of the parental beliefs or being able to state why he or she may believe similarly to the parent, but for different reasons, is the hallmark of self-autonomy. During adolescence, the focus shifts from parents to peers, but that touchstone remains for a level of security and safety as the child is not completely independent yet.

The adult manifestation of attachment styles is similar to childhood and adolescence; however, it centers around intimate relationships, most often romantic in nature, but not always. Bartholomew and Horowitz (1991) confirmed the four-category attachment model with adults, and Fraley et al. (2015) reconfirmed the four categories, but believed that individuals may sit in those categories dimensionally or on a scale/spectrum. Feeney and Collins (2015) explored how close relationships and attachment effect quality of life and Nisenbaum and Lopez (2015) studied how romantic relationships and attachment interact and influence behaviors. Fraley and Roisman (2019) pointed out that although adult attachment styles have their roots in childhood and adolescence, these foundations do not solidify attachment outcomes and that predictors are still unreliable and explored by adult attachment researchers. Despite the research on adult attachment, Fraley and Roisman (2019) stated that this is still a nebulous area with few concrete answers; therefore, the characteristics listed are in terms of *more likely* and *less likely* in this literature review. Adult attachment is the result of relationships over

time but may not be predicated on childhood attachment and is an uncertain area of attachment theory.

***Secure autonomous attachment.*** Bowlby (1982) and Ainsworth (1989) and Main and Solomon (1990) used similar observational studies to determine if infants/toddlers were securely or insecurely attached to their mothers. These studies (Ainsworth, 1989; Bowlby, 1982; Main & Solomon, 1990) consisted of researchers observing toddlers playing in a room with their mother, the mother leaving the room for a time, and then returning and the researcher observing the child's reactions. Bowlby (1982), Ainsworth (1989), and Main and Solomon (1990) agreed that the following observed characteristics are congruent with a securely attached infant/toddler:

- They appear confident their needs will be met.
- They express upset when mother is gone and greet her when she returns.
- They use mother as a touchstone while playing with mother in the room, venture away independently, return for reassurance of safety, and venture away once more.

Vrticka et al. (2014) conducted a study regarding how adolescents read social cues and facial expressions and He et al. (2018) explored the importance of maintaining parent attachment with peer attachment. Theisen et al. (2018) studied attachment styles in adolescence compared to childhood. Zhao et al. (2015) explored adolescent attachment and mental health, and Fraley and Roisman (2019) conducted a meta-analysis of adolescent attachment in relation to adult attachment. The combination of those studies led to the following traits associated with securely attached adolescents:

- They seek to be independent from primary caregiver but know they can go to them if they are ill or in danger.
- They see caregiver as not right all the time and explore their personal beliefs but considers what has been discussed with caregiver in the past as a comparison.
- They read social cues appropriately, and they are able to navigate and instigate exploratory behavioral challenges, such as dating, attending prom, wanting to join a new activity, going to college.

Much of the securely attached adult traits are based on the opposite of what constitutes insecurely attached adult attachment traits (Fraley & Roisman, 2019; Fraley et al., 2015) and can be traced back to the primary caregiver facets that correlated to secure children (Bowlby, 1982). Looking at Kong et al.'s (2018) study on insecure adults, Nisenbaum and Lopez's (2015) research on attachment and anger in relationships, Bartholomew and Horowitz's (1991) categorization study of adult attachment, and Fraley et al.'s (2015) confirmation of that study, adults with secure attachment can be identified as having the following traits:

- They are more likely to be committed to relationships.
- They have better coping skills and are less likely to exhibit depressive or mental health concerns.
- They are more likely to display appropriate parenting skills from the onset of child's birth.

*Insecure anxious/ambivalent/resistant/preoccupied attachment.* (Names for this category change from infant to adult and from the 1960s to present day. Generally accepted terms as of the writing of this chapter are *anxious* and *preoccupied*). Ainsworth (1989), Bowlby (1982), and Main and Solomon (1990) observed the following traits in infants and toddlers with anxious-preoccupied attachment when mother left the room/returned to the room and was in the room during play:

- The child did not explore and constantly remained by mother's side but took no comfort from her proximity. The child always played near mother.
- The child cried when mother left the room but expressed anger upon her return.
- The child did not gain comfort from attempts to soothe but tried to move away.

Based on the work of McElhaney et al. (2009), Vrticka et al.'s (2014) neurological study, He et al.'s (2018) parent versus peer attachment study, and Theisen et al.'s (2018) childhood versus adolescent attachment study, the following characteristics are found in insecure - anxious attached adolescents:

- They are reluctant to explore new independent activities or social experiences, preferring to remain with the caregiver.
- They maintain that primary caregiver's beliefs are always true and correct.
- They incorrectly interpret social/peer cues and expressions, believing social exclusion and punishment are more prevalent than not and are emotionally conflicted in peer settings.

Insecure – anxious adults may look similar to their adolescent counterparts. Kong et al. (2018) presented findings of adult insecure attachment based on mental health and Nisenbaum and Lopez's (2015) research regarding anger and attachment in relationships looks at the didactic interaction. While incorporating Fraley et al.'s (2015) research on the four categories and adult attachment, as well as parenting styles and attachment (Bowlby, 1982), insecure – anxious adults share these characteristics:

- They are more likely to be constantly worried about self-worth and assessing their relationships.
- They are more likely to base their worth on whether they have a relationship and seek perpetual reassurance and approval from partners. They may be categorized by others as clingy or needy in relationships.
- They are more likely to have anxiety and depression than securely attached adults.
- They are more likely to be overly permissive as a parent to gain child approval.

***Insecure avoidant/fearful attachment.*** During their observations, Ainsworth (1989), Bowlby (1982), and Main and Solomon (1991) found the following behaviors to be indicative of an insecurely attached avoidant/fearful infant or toddler when mother was in the room and/or left/returned to the room:

- The child expected that his or her needs would not be met (based on previous parent reactions) and preemptively avoided rejection by minimizing (avoiding) attachment behaviors.
- The child did not use mother as a touchstone, explored on his or her own with no check-ins with the mother.
- The child showed no distress when mother left the room and no reaction when she returned.

Similar to insecure – anxious, insecure – avoidant characteristics are also derived from the studies of McElhaney et al. (2009), Vrticka et al. (2014) He et al. (2018), and Theisen et al. (2018). Blomgren et al.'s (2016) study on attachment and coping/resiliency and Zhao et al.'s (2015) research on adolescent attachment and mental health also contribute to the amalgamation of insecure – avoidant attached adolescent traits:

- Although the youth already avoids the primary caregiver, during this time they disengage completely.
- This youth is more likely to engage in risk-taking behavior to establish him or herself as independent from the caregiver and an emancipated individual. This can include promiscuity, running away from home, and substance use.
- This youth views his or herself to be irrelevant to social relationships and any social feedback is treated as an unnecessary annoyance. As a result, he or she is more likely to be truant or drop out of school with the idea of being his or her own person (i.e., getting a job, going to the military, etc.)

- They most often internalize feelings and give no outward expression of emotions, although some may externalize by appearing angry or constantly simmering under the surface. However, they rarely lash out or have bursts of emotion. They are in control.

Characteristics of insecure – avoidant adult attachment seem polar to those of insecure – anxious. According to Nisenbaum and Lopez (2015), Fraley et al. (2015), Feeney and Collins (2015), Fraley (2019), Kong et al. (2018), and Bowlby (1982), behaviors associated with adults with insecure – avoidant attachment functioning include the following:

- They have little tolerance for intimate relationships and are unlikely to have more than perfunctory friendships.
- They desire relationships but will end relationships before getting too close to avoid getting hurt.
- They are loners; however, as opposed to a securely attached adult who is single, but satisfied with his or her life/accomplishments, this adult feels unfulfilled, albeit internally or subconsciously only (i.e., a nagging feeling that something is off or missing).
- They have unresolved inner turmoil of wanting relationships, but are afraid of being /unwilling to emotionally open as required for relationships.
- They are more likely to have anxiety and depression than securely attached adults.



- They are more likely to be strict as a parent with thoughts of keeping a child from getting hurt.

***Insecure dismissing/disorganized attachment.*** Ainsworth (1989) posited that there were children who did not definitively fall within Bowlby's three categories but seemed to be a combination of insecure anxious and insecure avoidant. Main and Solomon (1991) gave this fourth category the name of disorganized and observed the following traits associated with children that fell within this category:

- The child showed characteristics of other two insecure categories but was afraid or confused.
- The child's behavior had no clear goal (i.e., comfort or avoidance), and the child appeared disoriented.
- This attachment style was most often seen in children who have experienced maltreatment.

Although Main and Solomon (1990) characterized disorganized attachment as representative of child maltreatment, Granqvist et al. (2017) stated that it may also occur due to parent's unresolved trauma and their lack of parenting/attachment ability. Beeney et al. (2017) posit that the convoluted, unconstructive nature of disorganized attachment evolves during adolescence into mental health concerns, behavioral concerns, and the child seeking to control or punish the caregiver. Beeney et al.'s (2017) and Granqvist et al.'s (2018) findings, in conjunction with those previously used for insecure – anxious and insecure – avoidant (which are both found in insecure – disorganized), lead to the following traits in insecure – disorganized attached adolescents:

- They may display avoidant or anxious characteristics or a combination of both, but due to trauma and/or maltreatment, the cause behind actions and reactions is contradistinctive. For example, substance use may be trauma self-medication, avoidance of relationships may be due to experiences with sexual abuse, and promiscuity may be due to experience with sexual abuse.
- The child may have extreme fear and/or anger in conjunction with anxious/avoidant behaviors, to the point of behavioral disorders or dissociative disorders.
- The desire for attachment is still present, unlike clinical attachment disorders.

Many of the traits of insecure – disorganized attachment in adults appear similar to those in Felitti et al.’s (1998) foundational adverse childhood experiences (ACEs) study, which aligns with the premise of child maltreatment, as this is the foundation for both. In the ACEs study (Felitti et al., 1998), the more ACEs (or trauma) a child endured, the worse his or her mental, behavioral, and societal health as an adult. Because insecure – disorganized is often found with individuals with either firsthand or vicarious trauma (Beeney et al., 2017; Granqvist et al., 2017; Main & Solomon, 1990), the similarities from childhood trauma to adulthood attachment dysfunction correspond. Based on Beeney et al.’s (2017), Granqvist et al.’s (2017), Kong et al.’s (2018), and Felitti et al.’s (1998) research, adults with insecure – disorganized attachment have the following characteristics:

- They are more likely to have mental health concerns, substance use, and physical health concerns than securely attached adults.
- They have little to no meaningful relationships and are more likely to be in a violent relationship, either as the perpetrator or recipient.
- They are more likely to have dissociative disorders.
- They are more likely to perpetuate dismissive attachment characteristics with their own children.

**Clinical attachment disorder diagnoses.** Disorganized/dismissive attachment is often indicative of child maltreatment. Bowlby (1982) stated that although a person's attachment functioning is based off the primary caregiver, an alternate relationship and different level of attachment may exist with other caregivers. Fraley et al. (2015) posited that because attachment is based on multiple interactions, a person may have characteristics across multiple attachment categories. However, according to Ellis and Saadabadi (2019) and Zeanah and Gleason (2015), reactive attachment disorder (RAD) and disinhibited social engagement disorder (DSED), both clinical attachment disorders meeting *DSM-V* diagnosable criteria, do not fall within the four attachment categories as they are not based on interactions, but internal conditions. Unlike disorganized/dismissive attachment, RAD and DSED take attachment dysfunction to a different level.

Both RAD and DSED are rare, and RAD is often mislabeled instead as disorganized attachment (Ellis & Saadabadi, 2019; Granqvist et al., 2017; Zeanah & Gleason, 2015); however, there are key differences between the common attachment categories and clinical attachment dysfunction diagnoses. Although

disorganized/dismissive attachment is often found in cases of child maltreatment, in some cases it may be reflective of unresolved issues of parent trauma (Granqvist et al., 2017). Although disorganized/dismissive attachment and RAD may share some of the same observable symptoms (fear, anger, and confusion), children (in the case of RAD assessments, usually children under the age of 5) with RAD become violent when caregivers offer comfort and may go to the extreme of self-injurious behavior (Ellis & Saadabadi, 2019; Zeanah & Gleason, 2015), which is not found in those with disorganized/dismissive attachment (Granqvist et al., 2017; Main & Solomon, 1991). Unlike RAD, children with DSED initially appear to be positively attached; however, children with DSED indiscriminately latch on to adults (often strangers), invade personal space, and display no preference for one adult over another (Zeanah & Gleason, 2015). Those children within insecure attachment categories have the desire to attach and are able to maintain friendships; children with RAD and DSED have no desire to attach to anyone and lack the social-emotional functioning to obtain/maintain friendships (Ellis & Saadabadi, 2019; Granqvist et al., 2017; Zeanah & Gleason, 2015). These distinctions separate traditional attachment theory from clinical attachment disorder diagnoses.

According to Zeanah and Gleason (2015), RAD and DSED assessment is still unreliable as these disorders often present as/with symptoms from other concerns. Although the majority of assessment occurs during early childhood, Zeanah and Gleason (2015) recommended exploration of assessments in adolescents. According to the *DSM-V* (American Psychiatric Association, 2013), RAD and DSED can only be diagnosed if developmental delays and autism are ruled out. Zeanah and Gleason (2015) stated that

anxiety and depression are often found with RAD and DSED, and ADHD is often present with DSED. These factors, along with the fluctuation of moods in toddlers and teenagers, may account for the difficulty in conclusive assessment.

### **Current Gap in Literature**

Although researchers have completed studies on infant and general adolescent/late adolescent attachment, they have not examined early adolescent attachment in the way I explored it in this study in relation to the disruption of attachment. Ainsworth (1989) claimed that adolescent attachment should be studied as a distinct population and noted that children between the ages of 9 and 14 were more likely to expect reciprocity and trust in friendships and social attachments before opening up to others. Ainsworth acknowledged that this cognition was not present in younger subjects, but due to the age cap of 14-year-olds in her study, she did not differentiate early adolescence from general adolescence. However, there are several dimensions in which early adolescence differs from middle and late adolescence, which is the reason for the population of this study.

**Attachment categories and themes of previous studies.** Child development is the natural bridge from infant attachment to adolescent attachment. Blomgren et al. (2016), He et al. (2018), and Monaco et al. (2019) used the cognitive and social-emotional changes associated with adolescence as the catalyst for their studies, exploring how the shift from complete reliance on the primary caregiver to seeking independence and self-reliance outside of the primary caregiver presents itself across attachment categories in adolescence and/or does this change over time. These two themes are found

in the majority of adolescent attachment studies, either alone or in combination with other variables (i.e., how the adolescent attachment categories relate to eating disorders, self-harming tendencies, mental health disorders, and change over time). The social-emotional swing from parent to peer attachment is the foundational premise of adolescent attachment, and He et al. (2018) predicted adolescent psychological outcomes based on the balance or imbalance of parent-peer attachment. Placement into foster care is an unnatural, systemic-forced severance from the primary caregiver and, in many instances, the isolation from previously developed peer relationships, saving possibly that of siblings.

**Stability of attachment categories over time.** The second theme of stability of attachment over time rises from the infant to adolescent to adult attachment timeline. Theisen et al. (2018) found that securely attached children will shift toward an avoidant attachment toward their parents during adolescence. Fraley and Roisman (2019) discussed that attachment styles are more likely to shift in early childhood with intervention, which aligns with Tatnell et al.'s (2017) findings that attachment styles are unlikely to change over time except for a trauma, such as loss of primary caregiver. However, Fraley and Roisman stated that attachment styles can be shaped or reshaped by experiences throughout life. Joseph et al. (2014) used attachment theory as the foundation for their study as to whether adolescents who experienced abuse/neglect early in life and had little to no bond with the primary caregivers would be able to have secure attachments with primary caregivers subsequent to removal from the primary caregivers, specifically a secure attachment with foster parents. Joseph et al. showed that a secure

attachment with foster parents after removal from birth parents is possible. Similarly, Withington et al. (2017) explored adolescent attachment in foster care placement and what factors were indicative and/or found to present in both secure and insecure attachment with foster parents after removal from the primary caregiver. Withington et al. found that internal factors of both the foster family and the child, as well as external factors from the systemic perspective (i.e., number of placements), determined the likelihood of successful attachment. Based on this research, it is believed there is no set attachment (i.e., just because many children who experience maltreatment are dismissive/disorganized style, it is not guaranteed they will be or stay that way into adulthood) and in that premise it is more likely that their adult functioning is reflective of the attachment of their early adolescence, as, per Tatnell et al. (2017) attachment style is less malleable the older the child.

**Attachment and resiliency/coping.** The last category of adolescent attachment studies found relates to resiliency and coping, often in relation to trauma. Blomgren et al. (2016) found that secure attachment is a key factor in positive coping strategies for adolescents, specifically in regard to parents as the primary caregiver. Atwool (2006) focused on attachment of children in foster care, discussing the need for child welfare workers to address both internal and external factors associated with attachment in order for children in placement, who are more likely to be of a dismissive/disorganized attachment, to become functional, securely attached individuals. Løkkeholt et al. (2019) conducted a meta-analysis research of 10 adolescent attachment and resiliency correlational studies (33 studies from 1979 to 2017 were initially included; however, only

10 met all qualifying requirements; it should be noted that none of the studies chosen for this literature review were used in Løkkeholt et al.'s meta-analysis). Løkkeholt et al. concurred with Atwool that the internal factors (self-regulation and self-esteem) and external factors (stable relationships and supports to turn to) of resiliency are foundational to attachment; therefore, attachment and trauma resiliency are correlational elements. Similarly, Withington et al. (2017) examined whether it is possible for a foster child to securely attach to a new caregiver and what elements are necessary for this to occur, and uncovered both internal and external aspects must be considered and possibly repaired to create a space for secure attachment to mature. Although, according to Ganqvist et al. (2017) and Main and Solomon (1991), there is a likelihood that youth coming into foster care are insecurely attached, most likely in the dismissive/disorganized category, based on this research regarding resiliency and attachment, it is possible this need not remain the case throughout adolescence and into adulthood.

The previous scholars of adolescent attachment focused on what attachment looks like during the adolescent period, how these characteristics presented themselves, how they can be predictors of or relate to future functioning (i.e., trauma resiliency, mental/physical health concerns), and whether the current level of adolescent attachment is indicative of infant attachment, therefore holding stable overtime. Although none of these researchers addressed the variables and population of this study, they provided the foundational justification for its worth. Based on previous research, although general attachment styles can remain over time, traumatic events, such as foster care placement, can change the attachment style; however, the right nurturance of internal and external



trauma resiliency components can culminate in secure attachment. Therefore, the attachment functioning of adults who were removed during the population of this study was not a foregone conclusion, and I believe that not all internal and external factors of attachment were included in this study, the variables chosen were those easiest for self-reporting measures after several years from placement to the study and were believed to have the most influence on attachment functioning.

### **Literature Review of Key Variables**

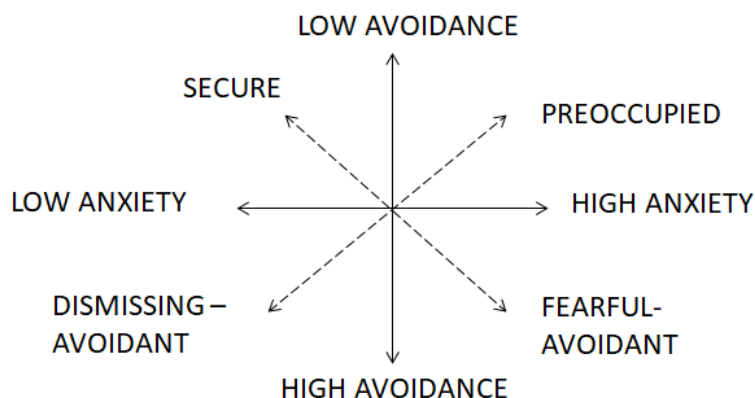
#### **Adult Attachment Functioning**

Adult attachment functioning is the dependent variable of this study. Based on the research of Fraley and Roisman (2019), who posited that the older a youth is, the less likely his or her attachment style will change, and Tatnell et al. (2017), who stated that attachment styles are fairly stable over time unless a traumatic event occurs, it is believed that the attachment functioning of young adults will be collinear to their functioning during early adolescence.

Attachment functioning theory has ameliorated from infant attachment to adult attachment in multiple studies. Main et al. (2003), the creator of the fourth attachment category, started the exploration of childhood attachment in relation to adults by looking at attachment from the mother perspective with her creation of the Adult Attachment Interview instrument in the late 1980s. Hazan and Shaver (1987) were the first to translate infant attachment to adult attachment by asking adults to self-report romantic love and categorize answers into the original three attachment categories. However, Bartholomew and Horowitz (1991) used a combination of both studies to produce a four-

category model, aligned with the four infant categories, based on a 2-point perspective: how the person perceived him/herself (positive/negative self-worth) and how he/she perceives others (positive/negative reliability/trustworthiness). Based on coded answers from qualitative interviews (Bartholomew & Horowitz, 1991), respondents fell within one of the four attachment categories (secure, dismissing, preoccupied, or fearful), with no derivation or scaled possibility. Collins and Read (1990) created the first self-reported quantitative assessment that placed individuals within the original three attachment categories based on answers to 18 Likert scale questions, called the Adult Attachment Scale (AAS — the proposed instrument for this study). However, these questions aligned with Hazan and Shaver's (1987) romantic relationship model of adult attachment. Seven years later, Collins (1996) updated the instrument with rephrased questions reflective of any close relationship, not just those romantic in nature. Although the AAS is written for the three original attachment categories, the instrument has directions on coding to include the fourth attachment category.

Fraley et al. (2015) expounded on the Bartholomew and Horowitz (1991) model, finding that although all four categories remain salient, the degree to which a person may gravitate toward a certain category or another may vary and that an individual may have some traits from another category simultaneously. Figure 1 shows the Fraley et al. (2015) model.



*Figure 1.* Multidimensional model of attachment as opposed to the four-quadrant model. Adapted from “Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations.” by R. Fraley, N. Hudson, M. Heffernan, and N. Segal, 2015 *Journal of Personality and Social Psychology*, 109(2), p.355. Copyright 2015 by the American Psychological Association.

Fraley (2019) and Fraley and Roisman (2019) found adult attachment to be based on relationships and interactions, foundational, and time-sensitive, and a complex area that needs further exploration. Feeney and Collins (2015) supported the importance of adult attachment in relationships, as they found adult attachment to not only be important in resilience postadversity (similar to the importance of attachment in resilience in foster care), but also in the area of overall wellbeing, with meaningful relationships and attachment directly related to personal supports (self-esteem, confidence, personal growth opportunities) and outer-level functioning (healthy lifestyles versus not, sleep quality, living a person’s best life). It is because of this level of importance in adult attachment, and the possible correlation to the independent variables, that it is the dependent variable of this study. Attachment is an ordinal variable, with participant answers sorting into the

possible categories of secure, insecure-preoccupied, insecure-dismissing, and insecure-fearful.

### **Foster Care Placement**

Foster care placement is a necessary independent variable, as scholars have already found that not only the act of removal from the primary caregiver, but the type of placement setting, predicate different attachment functioning outcomes. Although the Adoption and Safe Families Act (ASFA) of 1997 put limits on the time children could languish in foster care, this foundational child welfare legislation did not differentiate a in priority between foster care or institutional settings (U.S. Department of Health and Human Services, 1998). However, because of ASFA, the U.S. Department of Health and Human Services, specifically the Children's Bureau, is required to provide annual progress reports to congress on the progress of seven child welfare outcomes, one of which is the number of children in institutional care, a data element mandated in the 1997 act (U.S Department of Health and Human Service, 2016). The Fostering Connections to Success and Increasing Adoptions Act of 2008 (Library of Congress, 2019b) promoted placement in the most family-like setting and placement with siblings; however, the most recent piece of child welfare legislation, the Family First Prevention Services Act (Library of Congress, 2019a), restructured the federal funding system that was put in place with ASFA of 1997 to try and keep children in their homes, foster homes, and kinship homes with preventative and wraparound services, restricting the congregate or institutional care placement to only 2 weeks of subsidized payments. This federal shift

discouraging congregate care and institutional placement is in keeping with attachment research regarding types of foster care placement.

The more family-like setting, the more fertile conditions for secure attachment and resiliency postplacement according to previous research. Placement into foster care disrupts the initial attachment a child had, which is most likely insecure (Chestmore et al., 2017; Miranda et al., 2019) as the majority of youth who enter placement do so as a result of at least one parent-inflicted trauma (Miranda et al., 2019; Murphy et al., 2017). Half of the adolescents with insecure attachments and foster care placements in Joseph et al.'s (2014) study were able to form secure attachments to foster parents, and Chesmore et al. (2017) also found that foster youth were able to form secure attachment to substitute caregivers after foster care placement; however, youth with internalizing behaviors were less likely to successfully attach. An offsetting factor of youth internalizing behaviors and insecure attachment to previous caregivers is the sensitivity, empathy, and support of the foster parents (Harkin & Houston, 2016; Joseph et al., 2014; Withington et al., 2017). Although there are conflicting studies as to the impact continued contact with birth parents has on the attachment relationship with the substitute caregiver (Chesmore et al., 2017; Withington et al., 2017), the family-like setting of foster homes and kinship homes remains the legitimate breeding ground for the secure attachments postplacement (Chesmore et al., 2017). Hence, if a child is placed in a foster home or kinship home, he or she a greater likelihood of creating secure attachments with his or her substitute caregivers.

Based on previous research, children who are placed in group homes or in residential treatment facilities/institutional settings are less likely to find secure attachments postplacement. Children with disorganized attachment styles (indicative of either the child having been a recipient of maltreatment or the parent's unresolved trauma inhibiting their parental attachment capabilities) and those with the clinical attachment disorders of RAD and DSED are found in the majority of the population in residential treatment facilities/institutional placement settings (Granqvist et al., 2018; Miranda et al., 2019). However, as Gabrelli et al. (2015) and Portwood et al. (2018) pointed out, youth who enter residential/institutional placement are placed there as a result of professional opinion of clinical needs beyond what can be offered through traditional foster care placement (e.g., mental health). Portwood et al. found no difference in progress and functioning between youth in congregate care (also called group homes) and those in residential/institutional care, which dispels any argument that congregate care is a better attachment setting than residential/institutional placement. According to the Children's Bureau (2018), 13% of children entering care in 2017 were placed into either a group home or residential/institutional placement setting. Therefore, over 10% of children entering foster care in 2017 started out at a disadvantage for establishing a secure attachment with a substitute caregiver and had a difficult time creating a secure attachment throughout their time in a nonfamily-like setting (Children's Bureau, 2018).

An alternative that is gaining favor in light of federal funding changes and attachment research is the therapeutic foster home or treatment foster care. Boyd (2013) described treatment foster care as the family-like setting of foster parents who have been

trained in trauma-informed practices targeted to mental, emotional, and behavioral health concerns that would normally warrant a child to be placed in residential or congregate care. These foster parents are licensed and receive clinical support to provide a safe, strengths-based environment that still allows for an environment conducive to secure attachment (Boyd, 2013). The traditional foster home, kinship home, and therapeutic foster home provide an opportunity for inclusivity, youth voice, individualized engagement and relationships, and activities and resources, which are factors for successful attachment according to Affronti et al. (2015) and Withington et al. (2017) and are not found or consistent in congregate care or residential/institutional placements (Affronti et al., 2015). This alternative to group homes and institutional settings allows foster youth an opportunity to receive clinical care needed in an environment that promotes secure attachments, providing an opportunity that meets multiple needs of these youth.

The last contributing factor to successful attachment is placement stability. The more often a child changes placements, the less likely he or she is to attach to each subsequent caregiver (Miranda et al., 2019; Withington et al., 2017) and the longer it will take to initiate attachment trust and openness if at all (Chesmore et al., 2017; Withington et al., 2017). Gabrelli et al. (2015) found that the older a child entered care, the harder it was for him or her to attach, which was supported by Withington et al. (2017), many times as a consequence of internalizing and externalizing behaviors that caused foster parents to ask for removal prior to establishing an attachment, resulting in multiple placements. The U.S. Department of Health and Human Services (2016) reported that in

2016, 83% of children in care fewer than 12 months experienced two moves or less in foster care, 65% of children in care between 12 and 24 months had two or fewer moves, and only 39% of children in care more than 24 months were able to achieve two moves or fewer.

In this study, the independent variable of foster care placement is nominal (were you in foster care yes/no) and ordinal (type of placement during the majority of time in care), as it was believed that both of these factors would have significance with regard to the adult attachment functioning category. The types of placement were limited to foster care, kinship care, group home/congregate care, and residential/institutional care, as it was believed a child would be able to differentiate a therapeutic foster home from a traditional foster home as licensing and therapeutic responses would not be known outside of the clinical/professional realm.

### **Initial Placement Between 10- and 14-Years-Old**

Early adolescence is an independent variable of this study, as all adolescent attachment studies found (over 2,000 returns between the Walden Library and Google Scholar) did not address early adolescence as a separate time period, but either amalgamated this era within general adolescence or only made note of it when something significant occurred. For example, in Vrticka et al.'s (2014) study of neurological social feedback cues with adolescents, it was reported that the younger the adolescent, the better he/she was at assessing visual social cues given. Likewise, all other adolescent attachment scholars explored for this study mentioned that adolescence is a process from early to late, but did not account for these factors in their studies, using the broad ranges



of 12- to 18-year-olds, and sometimes 9- to 18-year-olds, in their studies. However, in looking at child and adolescent development, early adolescence should be a variable differentiated from general adolescence for multiple reasons.

**Physical/sexual/neurological changes.** Puberty is the cause of physical and sexual changes during the early adolescent time period. According to Allen and Waterman (2019) and the WHO (2019), although puberty can start in girls as young as age 9 and can continue later with boys through middle and late adolescence, early adolescence is the time with the most rapid hormonal fluctuations, physical changes, increased sexual curiosity, and need for personal privacy. In addition to these observable adjustments, early adolescence is also the second most accelerated modification opportunity for the brain (Kuhn et al., 2010). Brain cell production can almost double, and neural networks are restructured for adulthood with the extreme overhauling of existing neural pathways (Kuhn et al., 2010; United Nations International Children's Emergency Fund, 2011), which Kuhn et al. (2010) states leads to both conscious and subconscious conflict within the youth. However, as Allen and Waterman (2019) and Sikora (2016) found, the physiological, sexual, and neural propensity toward adulthood does not necessarily reflect the cognitive maturity needed for rational and safe decision making. Therefore, this disparate growth results in outward adult appearances and adult feelings, but a lack of adult logic and rational decision making.

**Cognitive development and behaviors.** Scholars have found despite early adolescents' reproductive capabilities, cognitively, they lack the ability to think as logical adults. In following Piaget's (2008) operational stages of cognitive development, early

adolescents teeter between the concrete and formal operational periods, meaning the majority of this time period is spent with black and white thinking and little ability to comprehend abstract concepts. Although children will traditionally start to explore abstract thought toward ages 13 and 14, children with trauma (e.g., foster youth) are known to be delayed developmentally (Cameron et al., 2017; Chesmore et al., 2017), and therefore many foster youth in the early adolescent period most likely lack abstract cognitive functioning, which includes thoughts of cause and effect (i.e., what could happen if I do this). Youth at this age focus all of their thinking on themselves, called egocentrism, which allows for the misaligned simultaneous thinking that nothing can hurt the youth (invincibility) and that everything that happens does so directly to affect/because of them (if something goes wrong it only happens to make them unhappy, not accounting for external factors), contributing to the nonlogical reasoning paradigm (Allen & Waterman, 2019; Brown et al., 2015; Gould & Howelson, 2019).

The combination of egocentrism and neurological/physiological changes creates a false sense of wisdom that leads to risky decision making. Kuhn et al. (2010) found that the excessive hormones that flow during puberty affect the dopamine neurons, increasing the positive reward a person gets from euphoric high from drug use or orgasm from sexual activity. Sikora (2016) found that early adolescents chose risky behaviors for their thrill-seeking, sensationalism, and feelings of self-importance. These risky behaviors (alcohol/cigarette use, risky/early intercourse, fast-driving/jumping from high places, damaging personal property, defying curfew/being truant) were most often done in conjunction with an older peer and were found to be precursors for more excessive

versions (i.e., substance use, criminal activity; Sikora, 2016). However, He et al. (2018), Kuhn et al. (2010), and Tatnell et al. (2017) discovered that adult intervention and secure attachment can mitigate future delinquent behaviors. Therefore, the dangerous trajectory of early adolescent behavior that can occur in conjunction with peers can be alleviated with secure attachment to an adult.

**Social emotional efficacy.** Self-regulation and self-esteem play a large part of early adolescent functioning. According to previous scholars (Allen & Waterman, 2019; Blomgren et al., 2016), youth between the ages of 10- and 14-years-old have high levels of emotions, as well as false notions that they are responsible, in some capacity, for all things that go wrong. Blomgren et al. (2016) and Withington et al. (2017) agreed that although these youth start looking toward peers for validation of self-worth, the majority of internalized reassurance still comes from primary caregivers. Blomgren et al. (2016), Farley and Kim-Spoon (2014), and Pan et al. (2016) posited that self-regulation, the ability to identify and control emotions, plays a key role in academic success and coping/resiliency; however, the most important key to this success hinges on the youth not just controlling their emotions, but that they must believe they are capable of positive emotions and outcomes. Pan et al. found that those youth securely attached were more likely to have this self-fulfilling belief. Hence the necessity of the support system to self-efficacy cannot be understated, as early adolescents, aside from their personal angst and conflict, also experience external pressures associated with school and peers.

**Importance of early adolescence as a variable.** Based on the amalgamation of literature previously discussed, on a spectrum between infants and adults, the category of

early adolescence would be closer to infants in rational thinking and needed reassurance; however, physically their bodies and independent exploration would move toward adulthood. They are constantly bombarded with emotions but need to control them to reach their full potential and avoid impulsive dangerous decisions. They look toward peers who have the same deficits and conflicts as they do, but they still need the guidance of a secure primary caregiver (He et al., 2018; Sikora, 2016). This unique dichotomy, along with the three areas of attention specific to early adolescent functioning, create an experience exclusive to only those youth between the ages of 10- and 14-years-old.

### **Sibling Placement**

One theme that appears in several articles regarding foster care and attachment is the accessibility of siblings. Several authors (Affronti et al., 2015; He et al., 2018; Jones 2016; Wojciak et al., 2018) found that whether siblings were placed together had an impact on resiliency after the trauma of foster care placement/loss of a primary caregiver and on the likelihood of attachment to a new caregiver (usually in the form of lasting permanency placements). Siblings play such a critical role in attachment that in the absence of a maternal figure, siblings attach to each other (primarily to the older sibling) before they will attach to a father (Kosonen, 1996). Thus, sibling attachment can mitigate the loss of the primary caregiver and create resilience stronger than even when the other caregiver is accessible.

The study of the importance of sibling placement and foster care has reached the federal level. In 2008, the federal Fostering Connections to Success and Increasing Adoptions Act of 2008 was passed, which required each state to submit a plan to the

federal government addressing how they intended to ensure siblings were placed in the same foster, kinship, or adoptive home (Library of Congress, 2019b). If siblings are placed together, there is an increased likelihood of permanency for those children, whether that is reunification, adoption, or permanent guardianship, as opposed to siblings who are not placed together (Affronti et al., 2015; Jones 2016). Alternately, siblings who are not placed together have higher instances of behavioral and mental health concerns, as well as problems with socialization (Wojciak et al., 2018). He et al. (2018) recommended that future adolescent attachment studies consider both parent (caregivers) and peer (sibling) relationships and proximity when looking at attachment functioning. It is because of these studies that the independent variable of sibling placement is included in this study.

### **Summary and Conclusions**

Over 60 years of research has been done on attachment and attachment theory. The main categories of attachment studies are on infants (Ainsworth, 1989; Bowlby, 1982; Main & Solomon, 1990), adolescents in general (Blomgren et al., 2016; He et al., 2018; Monaco et al., 2019), and adults (Fraley, 2019). Many adolescent attachment scholars focus on too broad of an age range (some as much as 9-to 18-years-old), and few look at the complex, unique time period of early adolescence (10-to 14-years-old), with its bio-neural-social-emotional changes (Allen & Waterman, 2019; Kuhn, 2010; Pan et al., 2016). Those researchers who do look at early adolescent attachment do so only as a predictor of behavior variables (usually negative), such as eating disorders and self-harming tendencies (He et al., 2018), not as a related variable to adult attachment.

Foster care placement, although necessary for the safety of a child, is a disruption of an attachment to a primary caregiver. He et al. (2018) and Tatnell et al. (2017) posited that under certain circumstances, secure attachment can be achieved with substitute caregivers and resilience from previous trauma and attachment disruption can occur. Based on the sibling placement research of Affronti et al. (2015), Jones (2016), and Wojciak et al. (2018), as well as the foster care placement attachment research of Chesmore et al. (2017), Joseph et al. (2014), Miranda et al. (2019), and Withington et al. (2017), it is believed that both placement with siblings and the type of placement setting could have an impact on the attachment category outcome.

Although articles were found on adolescent attachment, few were found on early adolescent attachment. Articles were found on foster care and attachment and resiliency, as well as adult attachment functioning. However, no articles were found on the adult attachment functioning of former foster youth who were placed for the first time during the early adolescent period of 10-to 14-years-old and that explored whether there was any significance regarding placement type and/or sibling placement. The purpose of this study is to fill this gap in knowledge in the child welfare human services and child welfare field via the proposed study.

## Chapter 3: Research Methods

### **Introduction**

The purpose of this quantitative, nonexperimental study was to examine the relationship, if any, for individuals who were placed into foster care for the first time during the early adolescent attachment period, the type of placement (foster care versus group home/institutional setting), the accessibility of siblings, and adult attachment functioning (secure or insecure). The majority of attachment studies on the foster care population focus on infants and older adolescents, despite international health organizations, such as the Association of Maternal and Child Health Programs (2018), UNICEF (2011) and the WHO (2019) calling attention to the time of early adolescence, 10-to 14-years-old, as a separate and critical attachment period. The few studies that have been conducted regarding early adolescence and attachment have been used to predict variables later in adolescence, such as self-harming behaviors, or to determine if attachment functioning is related to child development deficiencies. I found no research regarding the investigation of the correlation of early adolescent foster care placement and adult attachment functioning, specifically none involving all of the proposed independent variables, all of which researchers have shown to have an influence on attachment likelihood postplacement. Because no known researchers have addressed this specific combination of variables, I explored whether there was a relationship between foster care placement during the early adolescent time period, the type of foster care placement setting, sibling accessibility, and adult attachment functioning to fill this gap in

knowledge. In this chapter, I will discuss the research design and rationale, the methodology, and the threats to validity.

## **Research Design and Rationale**

### **Overall Research Design**

This is a quantitative, nonexperimental study, as none of the independent variables will be manipulated, as described by Steiner and Wong (2018). The purpose of this correlational study was to explore possible relationships between the dependent variable (current attachment category functioning) and the independent variables of age at placement, foster care placement setting, and sibling placement. The survey for this study was delivered online and consisted of qualifying questions related to the independent variables and the AAS (Collins, 1996) to assess the dependent variable. To answer the research questions, the chi-square test was used in accordance with Franke et al. (2012). I used the chi-square test for independence/association as my intention was to determine if each categorical independent variable correlated (was associated) with the adult attachment categories (dependent variable) or not (see Franke et al., 2012). I used an 80% confidence level, as well as a  $p$ -level of less than .05 for levels of significance as recommended by Franke et al. (2012). All assumptions were included as per McHugh (2013), and, if necessary, posthoc tests were conducted in accordance with Franke et al. (2012). I conducted chi-square testing and crosstabulation via SPSS v25 Statistics software.

This study was unique in that almost all foster care attachment studies have been qualitative in nature. Similarly, this study diverged from any previous attachment studies



specific to the early adolescent population, as those were all predicative in nature (i.e., if an early adolescent is insecurely attached, are they more likely to display a certain negative behavior in later adolescence). Although studies exist on the importance of sibling attachment and/or the most family-like setting in foster care placement, none were found to correlate to young adult attachment functioning in conjunction with the other independent variables in this study. Because other studies have shown at least one of the variables may influence attachment functioning, I went one step further by exploring multiple variables at one time.

The AAS, the instrument used for the dependent variable, was originally created in 1990 for a three-category attachment assessment and was revised in 1996 to change romantic relationships to close relationships per Collins (1996) and Collins and Read (1990). The AAS is an 18-question survey measured by a 5-point Likert scale (Joshi et al., 2015), with 1 meaning *not at all characteristic of me* and 5 meaning *very characteristic of me* (Collins, 1996; Josh et al., 2015). The AAS is one of the few attachment surveys to be used in quantitative studies that aligns with Main and Solomon's (1990) and Bartholomew and Horowitz's (1991) research and findings of the four-category attachment model. Although Collins (1996) advised against using the AAS for the four-category model, Collins has only done so as part of the field of attachment paradigm shift that an individual does not always fall within one category, but is made up of various characteristics of all categories, similar to Fraley et al.'s (2015) dimensional model. However, this is the only quantitative attachment instrument that is reliable and valid, provides instruction for SPSS scoring, and has the capability of assigning

individuals to one of the four attachment categories; whereas, all other quantitative instruments used Bowlby's (1982) original three categories. The ability to assign the fourth category is important to this study, as the majority of individuals who fall into the fourth category have experienced maltreatment and/or trauma that would coincide with those who would precipitate the need for foster care placement in accordance with the research of Fletcher and Gallichan (2016), Main and Solomon (1990), and Miranda et al. (2019). For the purposes of this study, it is important to know into what attachment category the majority of the individuals' characteristics place them, and so the AAS is the preferred instrument, as opposed to the Fraley et al.'s (2015) model, which is more complicated and includes questions regarding parenting styles, which may not be as relevant for young adults who were placed into foster care.

Initial validity and reliability of the AAS were close to the .70 threshold of Cronbach's alpha coefficients, with .69 for secure, .75 for preoccupied, and .72 for anxious (Collins & Read, 1990). Once the AAS was revised in 1996, the Cronbach's alpha remained above .70 in all categories for other studies (Collins et al., 2018; Jang et al., 2015). The survey was available via a link to Google Forms, and no identifying information was gathered, such as name or e-mail address to maintain anonymity.

### **Research Questions**

Because there were three independent variables, there were three research questions. Chi-square testing for variable independence/association was used with each research question as the dependent variable remained the same for each research question (attachment functioning based on the category the individual falls into),.

RQ1: Is there a statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning?

$H_01$ : There is no statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning.

$H_a1$ : There is a statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning.

RQ2: Is there a statistically significant relationship between foster care placement setting type and adult attachment functioning?

$H_02$ : There is no statistically significant relationship between foster care placement setting type and adult attachment functioning.

$H_a2$ : There is a statistically significant relationship between foster care placement setting type and adult attachment functioning.

RQ3: Is there a statistically significant relationship between accessibility of siblings while placed in foster care and adult attachment functioning?

$H_03$ : There is no statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

$H_a3$ : There is a statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

### **Independent Variables**

The independent variables for this study included the following:

1. Age at placement: Age of initial placement. Categories were 0-to 5-years-old, 6-to 9-years-old, 10-to 14-years-old, 15-to 17-years-old, or never placed in foster care. By maintaining the “age of placement versus not in placement” as opposed to “10-to 14-year-old placement and no placement,” a larger sample may be obtained. This also allows an ethical, holistic observation of the early adolescent category by being able to compare the population with others removed during Ainsworth’s (1989), Bowlby’s (1982), and Main and Solomon’s (1990) infant/toddler attachment studies (0-to 5-year-olds). It also includes those populations found in other general adolescent attachment studies, which ranged from 9- year-olds to 17-year-olds, and it includes populations that coincide with Piaget’s (2008) operational stages of cognitive development of which early adolescents teeter between the concrete and formal operational periods, typically 7-to 11-years-old and 12 years and older respectively.
2. Foster care placement setting: The placement setting for the majority of the individual’s time in foster care. The type of placement was based on the one most often used since scholars have shown that the longer a child is in care, the more likely he/she is to have multiple placements (Miranda et al., 2019; Withington et al., 2017). Categories were foster care, kinship care, group home, or residential/institutional setting.
3. Sibling accessibility: The placement with one or more siblings. Qualifying questions of “do you have siblings.” If yes, then the question was asked, “were

you placed with at least one of your siblings during the time you were in foster care.”

### **Dependent Variable**

The dependent variable was the individual’s current attachment category (functioning level). This was based on the self-reported answers to the updated version (Collins, 1996) of Collins and Read’s (1990) AAS. The four possible categories are secure, insecure; preoccupied, insecure; fearful, insecure; and dismissing. This was also assessed in binary form (secure or insecure).

## **Methodology**

### **Population**

The sample population of this study was former foster youth currently between the ages of 18- and 24-years-old. To meet the independent variable of those who were placed into foster care for the first time between the ages of 10- and 14-years-old and those who were never placed into foster care, inclusion criteria was the time of initial foster care placement with possible age ranges for comparison (i.e., 0-to 5-years-old, 6-to 9-years-old, 10-to 14-years-old, 15-to 17-years-old, and never placed in foster care) and the age of the participant (age 18-24).

### **Sampling/Sampling Procedures**

According to G\*Power statistical software version 3.1, the number of participants was intended to be 160 for this study (for a large effect sample) with a goodness of fit test, p-value of less than .05, confidence level of 80%, and 7 degrees of freedom. However, because of the COVID-19 pandemic, I used a medium effect sample size

( $n=80$ ) instead to adjust from the large effect sample size initially proposed, which will be discussed in detail in Chapter 4. Because I believed that it would be difficult to find a large pool of former foster youth currently between the ages of 18- and 24-years-old who were initially placed between the ages of 10- and 14-years-old in a limited amount of time for this study, the “time in placement versus not in placement” as opposed to “10-to 14-year-old placement and no placement” qualifying criteria was used so that a larger sample could be obtained.

### **Procedures for Recruitment, Participation, and Data Collection**

Two different methods were used to find adults who were placed into foster care. The primary form of recruitment was national foster care alumni organizations. These organizations allow for distribution of survey links to former foster youth, which produced a large pool of former foster youth participants. I also found former foster youth participants in independent living homes when the desired sample size was not reached. These homes are for young adults who have aged out foster care, but maintain foster care benefits by meeting certain educational, career, and/or programmatic requirements. These adults, who are former foster youth themselves, had access to other former foster youth adults, which provided an opportunity for snowball sampling to occur.

The questions for this study were housed in Google Forms. Participants were able to access the study via a general URL and did not have to enter any identifying information, such as an e-mail address. They did, however, have to read the disclosure statement and informed consent, which not only gave an overview of the study and

intended use of results, but acknowledged that participation is voluntary and the respondent may exit the survey at any time. They also had to acknowledge my own contact information at the beginning of the survey for the respondents to contact me if there were any questions or if they would like to leave their e-mail address for me to send the results of the survey once the dissertation is complete. Also, I had contact information available for counseling services in case any of the questions on the AAS was a trauma trigger and the individual would like to seek professional help.

I exported all answers from Google Forms into Excel format to open directly into SPSS Statistical software. I only incorporated the data from participants who completed all of the survey questions. I assigned a nonidentifying participant ID number to identify a participant's data in the Excel spreadsheet once either the desired number of participants was met or a preset amount of time for the survey to be open had occurred (ideally 30 days). I will discuss the data analysis that was conducted once the data was entered in SPSS in Chapter 4.

### **Instrumentation and Operationalization of Constructs**

The AAS was the instrument used. This 18-question survey consists of 18 5-point Likert scale questions ranging from *not characteristic of me* (1) to *very characteristic of me* (5). Collins and Read (1990) created the AAS as a quantitative instrument to assess which of Bowlby's three original categories (secure, insecure/preoccupied, or insecure/fearful) adults fell into. However, in 1996, Collins adjusted the AAS questions from a romantic relationship focus to include one of important, close relationships and that is the version used for this study. The instrument and the scoring instructions can be

found publicly at <https://scales.arabpsychology.com/adult-attachment-scale-revised.pdf> and [statisticsolutions.com](http://statisticsolutions.com), as well as several other sites. I made several attempts to contact the original developer for permission to use this instrument with no response; however, upon talking with the Walden librarian, I discovered that because the instrument is available for public consumption, no permission is necessary as long as credit for the instrument's developer is given.

The original version of the AAS had validity and reliability close to the .70 threshold of Cronbach's alpha coefficients, with .69 for secure, .75 for preoccupied, and .72 for anxious (Collins & Read, 1990). However, after the AAS was revised in 1996, Cronbach's alphas for the secure, preoccupied, and fearful attachment subscales were .77, .78, and .85, respectively (Collins, 1996). Since then, this scale has been used in various studies, most recently in assessing adult attachment as a precursor for possible childhood trauma (Collins et al., 2018), to explore the transferability of the instrument if used another culture (Ahmad & Hassan, 2014), and as a standard for another attachment assessment due to the reliability and validity of the instrument over time (Jang et al., 2015). In all of these recent studies, the Cronbach's alpha remained above .70 for all attachment categories and did not go above .87. Thus, there is confidence in the reliability and validity of the instrument, as well as in the relevance of the questions to today's individuals 24 years after revision.



## **Threats to Validity**

### **External**

One possible external threat to validity was the proposed population of study. Although there are 50,000 youth between the ages of 10 and 14 placed into foster care each year (Children's Bureau, 2020), finding a large enough sample of young adults who were placed in foster care during that time period was difficult, as oftentimes youth age out of care at 18 and avoid the system or have no way to be tracked and found (Okpych, 2015). Also, youth who enter foster care are more likely to fall into the disorganized/dismissive attachment category due to first or secondhand trauma (Main & Solomon, 1990; Miranda et al., 2019), which could be a threat to external validity. Although there are researchers who posit that under the right circumstances secure attachment postplacement is possible (Joseph et al., 2014; Withington et al., 2017), the majority of researchers believe that reaching those optimum circumstances is extremely rare, and this could cause skewed results. Similarly, seeking participants from foster care alumni clubs could skew results, as membership in those clubs requires voluntary application.

### **Internal**

Operator error with Google Forms or SPSS Statistics software was a possible internal threat to validity. Although the AAS has proven valid and reliable in recent studies, there was always a chance that it would not be so, especially as the last revision occurred 24 years ago.

## **Ethical Procedures**

Use of an adult population in this study is one form of ethical procedures. I obtained institutional review board (IRB) approval prior to the start of any portion of this study. The participants had to acknowledge the informed consent and a description of the study before they were allowed to enter the survey. Participants were able to leave the survey at any time with no repercussions, and their data was not saved or used in the study, which they were made aware of upon exiting the survey. Contact information for national counseling services was provided in case there were any trauma triggers as a result of participating in this study because there was a likelihood that individuals participating in this study may have a history of trauma. This information would also pop-up for those individuals who left before the end of the survey. I asked no identifying information of any participant; however, I provided my contact information and gave the opportunity for any participant to contact me should he or she desire the results of the study. I kept the data obtained from the survey on a password-protected laptop, of which only I have the password, and on a usb drive kept in a 4-digit encrypted safe. I assigned nonidentifying numbers that had no correlation to their answers (i.e., their age of placement was not part of their assigned data identifier) to each participant's data post survey. I will maintain data only 5 years postcollection in case the university or the participants have any questions or concerns. After 5 years, all data will be destroyed.

There are no incentives associated with this study. There is no conflict of interest regarding the study and myself. However, because I have over a decade of work experience in the child welfare field, I want to fill this gap in knowledge in the hope that

whatever information is derived from this study may be used in child welfare best practices.

### **Summary**

In this nonexperimental, quantitative study, I used the revised AAS (Collins, 1996) for the dependent variable of individual attachment functioning and qualifying questions for the independent variables. I sent these questions to the random sample and snowball sample via Google Forms. I used chi-square testing for variable independence/association with each independent variable and the dependent variable to explore whether a relationship exists between foster care placement, the age at initial placement, the type of foster care placement setting, the accessibility of siblings while in foster care, and adult attachment functioning. I discuss the analysis of these results in Chapter 4 of this study.

## Chapter 4: Results

### **Introduction**

The purpose of this quantitative, nonexperimental study was to examine the relationships, if any, for individuals who were placed into foster care for the first time during the early adolescent attachment period (ages 10- to 14-years-old), the type of placement (foster care versus group home/institutional setting), the accessibility of siblings, and adult attachment functioning (secure or insecure). Through my literature review in Chapter 2, I confirmed that early adolescence is a critical attachment period. I explored the work of researchers (Chesmore et al., 2017; He et al., 2018; Jones, 2016; Withington et al., 2017; Wojciak, McWey, & Waid, 2018) who found that adolescents need a balance of parent and peer attachment for successful attachment postplacement. I used placement setting type and being placed with siblings as the variables in this study to meet those attachment variables of parent and peer. Although I found studies of adolescent attachment and foster care, none of them addressed early adolescence as a critical attachment period and/or included all of the variables of this study.

As stated in Chapter 3, because there were three independent variables, there were three research questions associated with this study. The dependent variable remained the same for each research question (attachment functioning of secure or insecure based on one of four categories the individual falls into from survey instrument score); therefore, I used chi-square testing for variable independence/association with each research question.

RQ1: Is there a statistically significant relationship between placement into foster care during early adolescence (10- to 14-years-old) and adult attachment functioning?

*H<sub>0</sub>1*: There is no statistically significant relationship between placement into foster care during early adolescence (10- to 14-years-old) and adult attachment functioning.

*H<sub>a</sub>1*: There is a statistically significant relationship between placement into foster care during early adolescence (10- to 14-years-old) and adult attachment functioning.

RQ2: Is there a statistically significant relationship between foster care placement setting type and adult attachment functioning?

*H<sub>0</sub>2*: There is no statistically significant relationship between foster care placement setting type and adult attachment functioning.

*H<sub>a</sub>2*: There is a statistically significant relationship between foster care placement setting type and adult attachment functioning.

RQ3: Is there a statistically significant relationship between accessibility of siblings while placed in foster care and adult attachment functioning?

*H<sub>0</sub>3*: There is no statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

*H<sub>a</sub>3*: There is a statistically significant relationship between accessibility of siblings while in foster care and adult attachment functioning.

This chapter will discuss the data collection and recruitment efforts used, deviations from the original plan in Chapter 3, the results of the data and analysis of those results, and conclusion and summary of this chapter.

### **Data Collection and Recruitment**

Approval from Walden University IRB was obtained in April 2020 (approval # 04-14-20-0585534) for the measures outlined in Chapter 3 (see Appendix A for the invitation to participate). However, upon inquiry to the contact at the national foster care alumni organization, it was discovered that, due to COVID-19, the organization was no longer considering outside projects, only looking toward advocating for permanency for older youth due to their permanency instability in the time of the global pandemic. As a possible solution to not having the national alumni organization send the invitation to participate directly to their youth, the contact, who was in charge of the organization's social media page that had over 4000 followers, was willing to post the invitation to participate on their social media page. I submitted a request to the Walden IRB to post an invitation to participate on social media (found in Appendix B; the only change is the greeting). At the same time, I requested permission to include state and local independent living and older out-of-home youth advocacy agencies in my recruitment efforts, as by this time my survey had been active for over 30 days and I had received only six responses.

Upon approval from the IRB for these changes, I sent an email requesting distribution of the invitation to participate to the independent living program manager in each of the 50 states and the District of Columbia, as well as several nonprofit agencies that work with the target population of 18- to 24-year olds who have ever been in out-of-home placement. Thirteen out of the 51 independent living programs, one national organization, and one large local organization, let me know they distributed the invitation

to participate to their young adults between the ages of 18 and 24, some as many as four times. One state agency required me to attend its own IRB and requested the addition of clarification language to the invitation to participate and the informed consent. I did so with the approval of the dissertation chair as it removed nothing that was approved by the Walden IRB and changed nothing related to the study, only added clarification language for the survey participants (see Appendix C for the invitation to participate). Three states declined participation, and the others never responded.

The social media invitation to participate was posted in the national foster care alumni organization and 30 other social media pages that had a minimum of 250 followers, posted at least weekly (to meet the criteria of an “active” page), and was targeted to the population of young adults who had been in out-of-home care. Many times, I attempted to post on pages of states that openly declined participation or did not respond to my attempts to contact. I also sent emails requesting contact to 15 organizations that had closed social media groups, meaning direct posting of the social media invitation to participate could not occur. None of those emails received a response. Although the social media invitation was posted on the national foster care alumni organization and 30 other pages at least three times over a 4-month period, there were five other pages in which the social media invitation was posted and removed. The most common reason was that the host felt that they needed to protect their young adults and they believed the survey could be disturbing and/or invasive.

The respondents accessed the survey through an online link sent to them in the invitation to participate that was emailed to them or accessed via the posted social media

version. This allowed for random sampling to be used, with a possibility of snowball sampling as participants could share/repost the invitation to participate. As no identifying information was asked in the survey, such as name, contact information, or location, respondents were completely anonymous.

### **Deviation from the Plan**

In Chapter 3, I stated that I would be keeping the survey open for 30 days or until the G\*Power ideal number of respondents (160) was met. However, due to COVID-19, I only had six responses after the initial 30 days and had to request a change in recruitment procedures from the Walden IRB. The survey was open for a total of 6 months to meet the corrected minimum sample size.

The minimum sample size was corrected from 160 to 80 via recalculation in G\*Power as the degrees of freedom were incorrect (the original degrees of freedom calculation was for 7 *df* and the corrected *df* was for 2 based on three independent variables and one dependent variable). I capped the corrected minimum sample size due to an inability to reach the original sample size of 160 as per G\*Power software in Chapter 3. However, after I conducted a post hoc sensitivity test, the corrected sample size meets medium effect size (.342), whereas the sample size in Chapter 3 was for large effect size.

### **Results and Analysis**

The survey for this study was a combination of one qualifying question (appropriate age range of 18- to 24-years-old), six demographic questions, three foster care questions (independent variables), and the 18 Likert-scale questions of the revised



Adult Attachment Scale (Collins, 1996), close relationships version (see Appendix D). The complete revised Adult Attachment Scale, which includes both the romantic relationships and close relationships versions as well as SPSS scoring instructions, can be found in Appendix E. The independent variable foster care questions had the option to choose “was never placed in foster care.” Had a person chosen this answer, their responses would not have been counted, as this was an option for checks and balances and reliability of data because only those individuals who had been in out-of-home placement meet the criteria for this study.

### **Demographics of the Sample**

The total number of participants in this study was 83 ( $n = 83$ ). In addition, 74.7% of respondents were female, 20.5% were male, 2.4% identified as neither male nor female, and 2.4% preferred not to answer which gender they identified with. Respondent race/ethnicity was comprised as follows: Caucasian 45.8%, Black/African American 19.3%, Hispanic/Latino(a) 16.9%, American Indian or Alaskan Native 7.2%, Asian 2.4%, and Native Hawaiian or other Pacific Islander; 2.4%. 1.2% identified as “none of the above” and 4.8% “preferred not to answer.” According to the most recent federal Adoption and Foster Care Analysis System report (Children’s Bureau, 2020), the mean percentage of the gender of children in foster care as of June 2020 was 52% male and 48% female, meaning there was a disproportionately larger number of females in this study than in the child welfare system. However, the racial representation was relatable to that of the child welfare system, as the Children’s Bureau (2020) reported Caucasian

children at 44%, Black/African American children at 23%, and Hispanic children at 21%.

Table 1 shows the crosstabulation of race by gender.

Table 1

*Crosstabulation of Race/Ethnicity by Gender*

Race/Ethnicity	Gender			Prefer Not to Answer
	Male (n=17)	Female (n=62)	Neither	
Caucasian	9 (52.9%)	27 (43.5%)	2 (100%)	0
Black/ African American	3 (17.6%)	13 (21.0%)	0	0
Hispanic/Latino(a)	4 (23.5%)	10 (16.1%)	0	0
American Indian/ Alaskan Native	0	6 (9.7%)	0	0
Asian	0	2 (3.2%)	0	0
Hawaiian or Other Pacific Islander	0	2 (3.2%)	0	0
None of the Above	0	1 (1.6%)	0	0
Prefer Not to Answer	1 (5.9%)	1 (1.6%)	0	2 (100%)

Other demographic questions answered by respondents included current marital/relationship status, average annual household income, highest education level attained, and if the respondent has any children. If the respondent answered “yes” they have children, they were asked how many. Tables 2, 3, 4, and 5 show the responses to these questions as a whole and by gender.

Table 2

*Current Marital/Relationship Status by Gender*

Current Marital/Relationship Status	Overall Frequency (out of n=83)	Overall Percentage	Gender			
			Males (out of n=17)	Females (out of n=62)	Neither (out of n=2)	Prefer not to answer (out of n=2)
Single/Dating	60	72.3	16	42	1	1
Engaged	5	6.0	0	4	1	0
Married	6	7.2	0	6	0	0
Cohabiting/Long-term Relationship (more than 2 years in a monogamous relationship)	8	9.6	1	7	0	0
Widowed/Widower	0	0	0	0	0	0
Divorced	3	3.6	0	3	0	0
Prefer not to answer	1	1.2	0	0	0	1

There were no widows/widowers in this sample. The majority (almost 75%) of individuals were single/dating, and 16.8% of individuals were either married or in a relationship lasting longer than 2 years. The age of respondents was between the ages of 18 and 24; over 3% of these individuals had been divorced.

Table 3

*Average Annual Household Income by Gender*

Average Annual Household Income	Overall Frequency (out of n=83)	Overall Percentage	Gender			
			Males (out of n=17)	Females (out of n=62)	Neither (out of n=2)	Prefer not to Answer (out of n=2)
\$0-20,000	48	57.8	10	36	1	1
\$20,001-30,000	9	10.8	0	9	0	0
\$30,001-40,000	9	10.8	3	6	0	0
\$40,001-50,000	2	2.4	0	2	0	0
\$50,001-60,000	1	1.2	0	1	0	0
\$60,001-70,000	2	2.4	1	1	0	0
\$70,001-80,000	0	0	0	0	0	0
\$80,001 and above	3	3.6	0	3	0	0
Prefer not to answer	9	10.8	3	4	1	1

Table 4

*Highest Level of Education Attained by Gender*

Highest Level of Education	Overall Frequency (out of <i>n</i> =83)	Overall Percentage	Gender			
			Males (out of <i>n</i> =17)	Females (out of <i>n</i> =62)	Neither (out of <i>n</i> =2)	Prefer not to Answer (out of <i>n</i> =2)
Did not complete high school education	8	9.6	0	7	0	1
Graduated high school/GED	60	72.3	13	45	2	0
Associates degree/Vocational or professional degree/certification	9	10.8	4	5	0	0
Bachelor's degree	5	6.0	0	5	0	0
Master's degree	0	0	0	0	0	0
Doctorate Degree/Professional Doctorate (i.e. MD, JD, etc.)	0	0	0	0	0	0
Prefer not to answer	1	1.2	0	0	0	1

A crosstabulation was run of average income and highest education level attained.

Of the 48 individuals within the \$0 and \$20,000 annual household income category, 40 (83.3%) had either not finished high school or the highest they had achieved was high school.

Table 5

*Do Respondents have Children*

Do you have any children?	Overall Frequency (out of n=83)	Overall Percentage
Yes	18	21.7
No	64	77.1
Prefer not to answer	1	1.2

Only female respondents answered “yes” to the question do they have children. Of those who answered “yes,” nine individuals had one child, six individuals had two children, one individual had four children, and two individuals did not report how many children they had. Of the 18 women who answered “yes” they have children, 10 were single/dating, three were married, three were divorced, one was engaged, and one was cohabitating/in a long-term relationship.

### **Research Questions Results and Analysis**

I conducted a chi-square test/crosstabulation for each of the three research questions. The chi-square test/crosstabulation was the appropriate test for this study as I was testing for independence/association of variables across categories and examining frequencies/trends of the variables (see Franke et al., 2012). The assumption for chi-square is that minimum cell frequency must be 5 or greater. The corrected confidence level of .80 was used and Pearson chi-square alpha level of significance of .05 or less was used (A confidence level of .95 was also run to see if this made any difference in

significance or outcomes and it did not). A post hoc sensitivity test was conducted in G\*Power to confirm the medium effect size of this study.

**Research question one.** RQ1: Is there a statistically significant relationship between placement into foster care during early adolescence (10- to 14-years-old) and adult attachment functioning? Table 6 shows the crosstabulation of whether respondents entered foster care placement for the first/only time during early adolescence or not and their current attachment functioning (one of the four attachment categories). Table 7 shows the same crosstabulation data as Table 6 of whether respondents entered foster care placement for the first/only time during early adolescence or not and the four categories have been recoded into the simplified binary categories of whether these individuals were securely or insecurely attached at the time of their responses.

Table 6

*Crosstabulation of Placement During Early Adolescence and Attachment (4 Categories)*

Age at Placement (Early Adolescence)	Attachment Category			
	Secure	Preoccupied	Dismissive	Fearful
Yes (n=35)	3 (8.6%)	15 (42.9%)	7 (20.0%)	10 (28.6%)
No (n=48)	7 (14.6%)	18 (37.5%)	9 (18.8%)	14 (29.2%)

Note: df=3, p-value=.856

Table 7

*Crosstabulation of Placement During Early Adolescence and Attachment (Binary)*

Age at Placement (Early Adolescence)	Attachment	
	Secure	Insecure
Yes (n=35)	3 (8.6%)	32 (91.4)
No (n=48)	7 (14.6)	41 (85.4)

Note: df=1, p-value=.406

Although answers the survey question “how old were you the first/only time you were placed into the foster care system” are listed in age ranges for ease of taking the survey, this question in relation to the literature review is based on early adolescence versus non-early adolescence. Therefore, I recoded the answers into a binary format of early adolescence (Yes) and non-early adolescence (No). The assumption of five items per cell was not maintained as there were only three individuals who were securely attached who had been removed during early adolescence. I ran the chi-square test two times, once with all four attachment categories and once with the binary attachment dependent variable of secure/insecure. There was no statistical significance in the attachment functioning of individuals removed in early adolescence versus non-early adolescence, as the alpha level was .856 in the four category test and .406 in the binary test, both well above the .05 threshold. Therefore, I cannot reject the null hypothesis  $H_0$  that there is no statistically significant relationship between placement into foster care during early adolescence and adult attachment functioning.



**Research question two. RQ2:** Is there a statistically significant relationship between foster care placement setting type and adult attachment functioning? Table 8 shows the chi-square/crosstabulation of the placement type during the first/only placement and the respondents' current attachment functioning in the binary categories of secure and insecure attachment.

Table 8

*Crosstabulation of Placement Type and Attachment (Binary)*

Placement Type	Attachment	
	Secure (n=10)	Insecure (n=73)
Foster Home	2 (20.0%)	45 (61.6%)
Kinship Home	7 (70.0%)	9 (12.3%)
Group Home	1 (10.0%)	17 (23.3%)
Residential Home/ Treatment Facility	0 (0.0%)	2 (2.7%)

Note: df=3, p-value=.000\*

Once again, the assumption of five items per cell was not met as there were not five individuals in each category. However, this chi-square test indicated that there was statistical significance in the proportion of out-of-home placement settings when compared to securely and insecurely attached individuals as the  $p$ -value was .000, well below the alpha threshold of .05. Therefore, I can reject the null hypothesis ( $H_0$ ) that there is no statistical significance between foster care placement setting type and adult attachment functioning and accept the alternate hypothesis ( $H_a$ ) that there is a

statistically significant relationship between foster care placement setting type and adult attachment functioning.

**Research question three.** RQ3: Is there a statistically significant relationship between accessibility of siblings while placed in foster care and adult attachment functioning? Table 9 shows the crosstabulation of whether respondents had siblings or not and their current level of attachment in the binary categories of secure and insecure. Table 10 shows the crosstabulation of whether those individuals who answered “yes” they had siblings in Table 9 lived with those siblings during their first/only placement in foster care and their current attachment functioning in the binary categories of secure and insecure.

Table 9

*Crosstabulation of Siblings and Attachment (Binary)*

Siblings	Attachment	
	Secure (n=10)	Insecure (n=73)
Yes	10 (100%)	69 (83.1%)
No	0 (0.0%)	14 (16.9%)

Note: This is the precursor (set-up) to the next table. If individuals had a sibling, they were asked if they lived with their sibling during placement (Table 10).

Table 10

*Crosstabulation of Lived with Siblings and Attachment (Binary)*

Lived with Sibling	Attachment	
	Secure (n=10)	Insecure (n=69)
Yes	7 (70%)	39 (53.4%)
No	3 (30%)	56 (55.4%)

Note: df=2, p-value=.401

All 10 of the securely attached individuals had siblings and seven out of those 10 lived with them during their first/only foster care placement. However, the  $p$ -value was .129 for the proportions of having siblings to attachment functioning and .401 for the proportions of living with those siblings and attachment functioning, both of which are greater than the alpha threshold of .05; therefore, I cannot reject the null hypothesis ( $H_0$ ) that there is no statistically significant relationship between the accessibility of siblings while in foster care and adult attachment functioning.

**Overview of Securely Attached Respondents.** Table 11 shows the characteristics of the 10 securely attached individuals across the three independent variables (age at placement, placement setting type, access to siblings). Only one of these individuals was not in a family-like setting; all of the individuals have siblings, and seven out of the 10 individuals lived with those siblings during this placement.

Table 11

*Overview of all Independent Variables of Securely Attached Respondents*

Respondent ID	Early Adolescent at Placement	Placement Setting	Siblings	(If Siblings) Lived Together in Placement
01	Yes	Group Home	Yes	No
02	Yes	Kinship Home	Yes	No
03	Yes	Kinship Home	Yes	Yes
04	No	Kinship Home	Yes	Yes
05	No	Kinship Home	Yes	Yes
06	No	Kinship Home	Yes	Yes
07	No	Kinship Home	Yes	Yes
08	No	Kinship Home	Yes	Yes
09	No	Foster Care	Yes	No
10	No	Foster Care	Yes	Yes

Note: Respondent ID numbers are not in any particular order or assignment.

***Comprehensive Overview of All Variables.*** Table 12 shows a comprehensive overview of respondents who had siblings and explored their attachment (secure or insecure) based on whether they lived with those siblings, in what placement setting they were living with those siblings (or not), and if those individuals were early adolescents at the time of removal. No statistical significance was found in these results as the overall  $p$ -level was .401, well above the .05 alpha threshold.

Table 12

*Crosstabulation Age x Placement x Lives with Siblings and Attachment (Binary)*

Early Adolescent	Placement	Lived with Sibling	Attachment		
			Secure	Insecure	
Yes	Foster Home	Yes	-	10	
		No	-	5	
	Kinship Home	Yes	1	3	
		No	1	2	
	Group Home	Yes	0	2	
		No	1	5	
	Residential/Treatment Facility	Yes	-	-	
		No	-	1	
	No	Foster Home	Yes	1	20
			No	1	7
Kinship Home		Yes	5	9	
		No	-	-	
Group Home		Yes	-	2	
		No	-	4	
Residential/Treatment Facility		Yes	-	0	
		No	-	1	

Note: “-“ indicates there was no data in this category as this table included only individuals who had siblings.

### Summary and Conclusions

In this research study, there are three research questions. The data for the first research question did not result in statistical significance. However, I discovered that those individuals who were placed for the first time during the early adolescent period were almost half as likely to be securely attached, which aligned with the literature review. The data for the second research question did result in statistical significance.

Nine out of 10 securely attached individuals were in either foster homes or kinship homes (the most family-like setting), which aligned with the literature review. The data for the third research question did not result in statistical significance. However, all 10 securely attached individuals have siblings, and 70% of those individuals had their siblings living with them during their first/only placement. The data results also align with information discussed in the literature review.

While not all of the data were statistically significant, they do have meaning that relates to the real world and aligns with attachment theory and previous researchers' findings on individual variables as found in the literature review. This information can be used to increase awareness in the area of child welfare about best practices and promote training and policy and procedure opportunities, as will be discussed in Chapter 5.

## Chapter 5: Discussion, Conclusions, and Recommendations

### **Introduction**

The purpose of this nonexperimental quantitative study was to determine if there was any relationship between placement during early adolescence (ages 10-to 14-years-old)—which was found to be a the second-most critical attachment period in the literature review—foster care placement setting type, sibling accessibility during placement, and adult attachment functioning. I conducted this study because although adolescent attachment studies regarding foster care exist, none of them address adult attachment functioning and foster placement during the early adolescent period (ages 10-to 14-years-old), nor did they specifically address all the variables used in this study.

The key findings of this study are that early adolescence was confirmed as a critical attachment period in foster care because those individuals placed for the first/only time during early adolescence were about half as likely as those outside that age period to be securely attached as adults. Siblings are key to this attachment, as 70% of the securely attached individuals (placement occurred during all age ranges) lived with their siblings during their first/only placement, and only individuals with siblings were securely attached. All individuals without siblings were insecurely attached. Ninety percent of the securely attached individuals (all age ranges) lived in foster or kinship homes.

### **Interpretation of the Findings**

This study was guided by three research questions:

1. Is there a statistically significant relationship between placement into foster care during early adolescence (10-to 14-years-old) and adult attachment functioning?
2. Is there a statistically significant relationship between foster care placement setting type and adult attachment functioning?
3. Is there a statistically significant relationship between accessibility of siblings while placed in foster care and adult attachment functioning?

I used the revised Adult Attachment Scale (Collins, 1996) to determine adult attachment functioning, which was assessed for all four categories for the first research question and in the binary format of secure or insecure for all three research questions. However, because the necessary assumption of having a minimum of five items in each cell of the chi-square/crosstabulation was not met, correlation could not be measured, only observable traits/frequencies.

Eighty-three young adults, ages 18 to 24, who had previously been in out-of-home placement participated in this study. Individuals who were placed in foster care for the first/only time during early adolescence were about half as likely to be securely attached compared to those who were placed outside of that age bracket (8.6% vs 14.6%). My findings confirmed the research of Ainsworth (1989), Allen and Waterman (2019), Blomgren et al. (2016), Chesmore et al. (2017), He (2018), Kuhn (2010), Piaget (2008), and Sikora (2016), who revealed that early adolescence is the second-most critical attachment period and a difficult one in which to attain secure attachment with the added complication of foster care placement, because secure attachment is tied to physical,



neurological, cognitive, and social-emotional development that requires a balance of both parent and peer attachment.

Although statistical significance ( $p=.000$ ) was found in regard to the second research question, the assumption of five items per cell was not met; therefore, correlations could not be ascertained. However, when looking at the data regarding foster care placement setting and adult attachment functioning, 90% of securely attached individuals (no restriction on the age of placement) were placed in either a foster home or a kinship home for their first/only placement. These findings supported the research of Chesmore et al. (2017), Joseph et al. (2014), Harkin and Houston (2016), and Withington et al. (2017), who found that foster homes and kinship homes (the most family-like settings) are where children are most likely to find secure attachments postplacement.

Finally, when looking at the impact of siblings on attachment, all of the 10 securely attached individuals in this study had siblings, and 70% of those individuals lived with them during their first/only placement. Additionally, all of the respondents without siblings were insecurely attached, no matter their age at removal or placement setting type. These findings supported the research outcomes of Affronti et al. (2015), He et al. (2018), Jones (2016), and Wojciak et al. (2018), whose research established the necessity of siblings on the likelihood of attachment postplacement. The data from this study also showed that child welfare practices of placing agencies, for the most part, align with federal child welfare legislation promoting access to siblings in foster care as two-

thirds of those individuals (both securely and insecurely attached) who have siblings lived with those siblings during their placement .

Data trends and frequencies outside of the three research questions were also analyzed. I assessed an overall chi-square crosstabulation, looking at the respondents by their age of first/only placement (early adolescence versus nonearly adolescence), their placement setting during that time, whether they had siblings and if those siblings lived with them, and if they were securely or insecurely attached at the time of their response to this survey. Although in-depth comparisons could not be obtained as only three individuals who were placed for the first/only time during early adolescence were securely attached, all three individuals had siblings, and two out of the three lived in a kinship home. For the third individual, who lived in a group home initially and did not live there with their sibling, it is possible after leaving the group home that they were reunited with their sibling or had sibling contact other than living with them during their placement. The data aligned with research in the literature review that early adolescence is a critical attachment period and the findings of He et al. (2018) and Wojciak et al. (2018) regarding the importance of balance of parent and peer attachment for adolescents. The data from this study confirmed the importance of both of those factors for the early adolescent age group.

This study fills a gap in literature in that it looked at early adolescence as its own attachment category (see results for RQ1). Because the results for Research Questions 2 and 3 confirmed previous studies, and He (2018) and Wojciak et al. (2018) determined the importance of having both parent and peer attachments in order to have securely

attached adolescents, professionals would think that the equation for securely attached early adolescents is as simple as early adolescents=most family-like placement setting + placement together with siblings. However, the findings of this study, specifically the overall data crosstabulation of combined variables for early adolescents versus nonearly adolescents, showed that is not entirely true. When looking at the data of the 32 insecurely attached individuals who were removed between the ages of 10- to 14-years-old, researchers can see why it is important that foster families and kinship families understand early adolescent attachment and their developmental needs. The majority of insecurely attached respondents, 10 out of 15 individuals, who were placed into foster care between the ages of 10- to 14-years-old had siblings and lived with them (five did not live with their siblings) and three out of five individuals who lived in kinship homes had siblings who lived with them (two did not live with their siblings). According to the individual and compartmentalized results of RQ2, RQ3, and previous researchers, these 13 individuals should be securely attached. However, because of the efforts of this study to bring together previously uncollaborated literature and looking at early adolescence as its own critical attachment period, researchers can understand why secure attachment most likely did not occur, even though these individuals had what would have been a trifecta of successful factors in another age bracket.

Researchers (Ainsworth,1989; Allen & Waterman, 2019; Blomgren et al., 2016; Chesmore et al., 2017; Kuhn, 2010; Piaget, 2008; Sikora, 2016) found that simply being in the early adolescent age group makes it difficult to attach based on the internal bio-neural-cognitive-social-emotional changes. Withington et. al. (2017) confirmed this;

however, Harkin and Houston (2016), Joseph et al. (2014), and Withington et al. (2017) each stated that the internal factors of the foster family contribute to adolescent attachment postplacement and can mitigate the attachment inhibition of personal internalizing factors of adolescents. The combination of the internal factors of the respondents during the age of placement (specific to the early adolescent period) and the lack of developed internal factors associated with early adolescent attachment/development on the part of the foster families and kinship families are a possible cause of insecure attachment as posited by Withington et al. (2017) and in alignment with the literature review. Another possible factor is that these individuals did not remain in one placement, as Miranda et al. (2019) and Withington et al. (2017) found that the more often a child changes placements, the longer it takes to attach.

In this study, I looked at the attachment functioning of adults who were placed for the first time during adolescence. It fills the gap in literature as no other study has been found that examines early attachment as its own attachment category in relation to adult attachment functioning and foster care placement. I also pooled literature on this population and on foster care and sibling attachment, making this the first study to look at the population with the combined variables of placement setting, sibling accessibility, and attachment functioning to get a true picture of how the needs of these individuals differ from other age brackets in relation to attachment. By culling out the early adolescent age group and examining what they need to securely attach postplacement, this study brings information to the child welfare field that will allow for changes to occur to meet those needs as addressed in the recommendations portions of this chapter.

### **Limitations of the Study**

The first limitation of this study was the sample size. Although the survey was open for 6 months, only 83 responses were received. Agencies from two states told me that it was unlikely I would receive responses from the target population as this population was used to receiving incentives for requested participation efforts. It is believed that had I used incentives I would have achieved a larger sample size. The smaller-than-anticipated sample size also did not allow for the fulfillment of the assumption of at least five items in each cell for the chi-square/crosstabulation. Therefore, even though statistical significance was achieved in regard to RQ2, I can only discuss results based on observed results and cannot discuss any correlations.

The second limitation was the limited information gained from a solely quantitative study. I chose this type of study because I only found qualitative studies that discussed early adolescence in any capacity. However, when looking at the data, I wished I had case information or qualitative information in conjunction with the quantitative data to present a more complete picture of some of the outliers (e.g., the individual who was securely attached, but had a group home for their first/only placement).

The third limitation was the unknown possible subvariables associated with the kinship homes and foster homes and placement stability. What training do the foster/kinship families receive? Are they one-parent or two-parent households? Are there other children in the home? When the individual was placed there, was that the only placement or was the individual they moved to another placement? How many placements did the individual have over their time in foster care? Differences in foster

and kinship homes and the number of placements could have an impact on attachment (Chesmore et al., 2017; Joseph et al., 2014; Withington et al., 2017) and these were the questions I had when analyzing the data for this study and ones I believe could have provided more insight into the data results.

### **Recommendations**

Based on the findings of this study, which confirmed the literature review, I recommend future research using this study as a mixed-methods study and asking respondents if they would be willing to receive a follow-up contact interview. I would include questions about sibling contact if they did not live together, the make-up of the foster/kinship home, and the number of placements. This could also be done with secondary data from respondents' redacted child welfare cases files, should informed consents be obtained in future studies. Another recommendation would be a longitudinal study of early adolescent attachment as they enter placement, at another point during their case, and when the case closes in permanency, while exploring internal factors of the foster parents and the training they receive and sibling accessibility over the life of the case.

### **Implications**

The possible potential areas of impact for positive social change from this study are changes during the initial placement of early adolescents, training and supports for foster and biological families, assessment of practices in service providers and child welfare agencies, and changes in child welfare policy at several levels to mitigate attachment deficits and increase attachment resiliency postplacement. Therefore, positive

social change could permeate the individual, micro, meso and macro levels in accordance with the socio-ecological model (Schölmerich & Kawachi, 2016).

Early adolescents, even without the added complication of foster care placement, experience biological, neurological, social, and emotional changes that require a level of developmental understanding from anyone who regularly interacts with them. Positive adult attachment and a securely attached early adolescent who has a balanced attachment to both parent and peer can become a healthy functional independent adult and mitigate risky behaviors that occur in early adolescence. For early adolescents entering the foster care system, the number of individuals who are in charge of their future multiplies exponentially. Decisions are made from the moment of removal from the home and are out of the early adolescents' control: the family they will stay with, what school they will go to, when they will see their parents, and will they live with their siblings. Because every person affects this child and every training, policy, and procedure affects the decisions those people make, it is imperative that everyone who would interact with early adolescents in the child welfare system (child welfare workers, foster/kinship parents, the judicial/legal system) receive training on attachment, specifically early adolescent attachment and the importance of the parent/peer balance. Training specific to early adolescent attachment should be offered for biological parents who have had their children removed, as the primary goal is reunification. In addition, that parent may have other children.

Because of the information in this study, child welfare policies and procedures should also take into consideration the needs of early adolescents, ensuring siblings are living together, that they are placed in a foster home/kinship home, ensuring those foster/kinship homes receive training specific to early adolescent attachment, and promoting those factors researchers (Chesmore et al., 2017; Harkin & Houston, 2016; Joseph et al., 2014; Withington et al., 2017) have shown create a greater likelihood of secure attachment postplacement and can offset youth internalizing behaviors. Child welfare agencies should also collect data on their early adolescents in foster care, their permanency outcomes, and the variables surrounding those youth similar to those in this study in order to make decisions regarding placements, training, and policy and procedure.

There have previously been no studies found that addressed early adolescence, foster care placement setting, sibling accessibility, and adult attachment functioning as variables in the same study. Although the assumption for chi-square was not met and, therefore, correlational associations could not be determined, the information derived from the literature review and confirmed in the study brings knowledge to light in the field of child welfare previously unexplored in a single study. This information has the potential to change child welfare best practices and increase secure attachment around an entire 5-year age range demographic.

### **Conclusion**

This study brings to light information to the child welfare system that was previously uncoordinated and unavailable to the field of child welfare. Early adolescence



is the second most critical attachment period and needs particular attention in the child welfare system, as placement is a forced attachment disruption. Early adolescents need a balance of parent and peer attachment to become securely attached adults. In this study, I showed that early adolescents entering the child welfare are half as likely to attain secure attachment as those entering placement outside of this age bracket. However, based on the results of this study and the literature review, only the combination of placing those youth together with their siblings and placing them in a foster home/kinship home that understands early adolescent development and attachment will increase the likelihood of secure attachment for this population postplacement.

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## Appendix A: IRB Approved Invitation to Participate

### Invitation to Participate

Dear Invitee,

My name is Adrienne Miller. I am a doctoral student in Walden University's Human and Social Services program. I am kindly requesting your participation in a doctoral research study that I am conducting titled "Adult Attachment Functioning of Former Foster Youth Initially Placed in Early Adolescence." The purpose is to explore whether certain ages a child was placed into foster care, where they were placed in foster care, and if they were placed with their siblings makes a difference in their attachment style as an adult.

This study involves answering 28 survey questions and may take about 35 minutes of your time. Your participation is completely voluntary and you may exit the survey at any time. Only former foster youth who are now between the ages of 18 and 24 are being asked to take this survey.

Your participation in this study will increase knowledge around attachment and foster care practices that are currently limited in the child welfare community. Possible positive social change outcomes from this study include changes in child welfare best practices and updated training and policy opportunities related to the field of child welfare.

If you are between the ages of 18 and 24 years old and would like to participate in this study, please click on the survey link below to read and acknowledge the letter of consent if you are in agreement.

[https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk\\_R7XHb5f7fR4CrnuU51rH4\\_bw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk_R7XHb5f7fR4CrnuU51rH4_bw/viewform)

If you aren't a former foster youth between the ages of 18 and 24 years old, but know someone who is, please feel free to share this invitation to participate with them.

Thank you for your participation!

Sincerely,

Adrienne Miller, MPhil, MAT  
Doctoral Student, Walden University

## Appendix B: Social Media Invitation to Participate

### Social Media Invitation to Participate

Dear current/former foster youth (ages 18-24 years old),

My name is Adrienne Miller. I am a doctoral student in Walden University's Human and Social Services program. I am kindly requesting your participation in a doctoral research study that I am conducting titled "Adult Attachment Functioning of Former Foster Youth Initially Placed in Early Adolescence." The purpose is to explore whether certain ages a child was placed into foster care, where they were placed in foster care, and if they were placed with their siblings makes a difference in their attachment style as an adult.

This study involves answering 28 survey questions and may take about 35 minutes of your time. Your participation is completely voluntary and you may exit the survey at any time. Only former foster youth who are now between the ages of 18 and 24 are being asked to take this survey.

Your participation in this study will increase knowledge around attachment and foster care practices that are currently limited in the child welfare community. Possible positive social change outcomes from this study include changes in child welfare best practices and updated training and policy opportunities related to the field of child welfare.

If you are between the ages of 18 and 24 years old and would like to participate in this study, please click on the survey link below to read and acknowledge the letter of consent if you are in agreement.

[https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk\\_R7XHb5f7fR4CrnuU51rH4\\_bw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk_R7XHb5f7fR4CrnuU51rH4_bw/viewform)

If you aren't a former foster youth between the ages of 18 and 24 years old, but know someone who is, please feel free to share this invitation to participate with them.

Thank you for your participation!

Sincerely,

Adrienne Miller, MPhil, MAT  
Doctoral Student, Walden University



## Appendix C: Invitation to Participate with Clarifying Language

### Invitation to Participate

Dear Invitee,

My name is Adrienne Miller. I am a doctoral student in Walden University's Human and Social Services program. I am kindly requesting your participation in a doctoral research study that I am conducting titled "Adult Attachment Functioning of Former Foster Youth Initially Placed in Early Adolescence." The purpose is to explore whether certain ages a child was placed into foster care, where they were placed in foster care, and if they were placed with their siblings makes a difference in their attachment style as an adult. (According to research, there are four different ways we interact with others in our relationships based on how our needs were met in relationships over time. These four different ways are called "attachment styles.")

This study involves answering 28 survey questions and may take about 35 minutes of your time. Your participation is completely voluntary and you may exit the survey at any time. Only former foster youth who are now between the ages of 18 and 24 are being asked to take this survey.

Your participation in this study will increase knowledge around attachment and foster care practices that are currently limited in the child welfare community. Possible positive social change outcomes from this study include changes in child welfare best practices and updated training and policy opportunities related to the field of child welfare.

If you are between the ages of 18 and 24 years old and would like to participate in this study, please click on the survey link below to read and acknowledge the letter of consent if you are in agreement.

[https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk\\_R7XHb5f7fR4CrnuU51rH4\\_bw/viewform](https://docs.google.com/forms/d/e/1FAIpQLSf2atEFrjm8hfCzVxPvW1UTk_R7XHb5f7fR4CrnuU51rH4_bw/viewform)

If you aren't a former foster youth between the ages of 18 and 24 years old, but know someone who is, please feel free to share this invitation to participate with them.

Thank you for your participation!

Sincerely,

Adrienne Miller, MPhil, MAT  
Doctoral Student, Walden University

Appendix D: Survey Questions (Researcher and Adult Attachment Scale)

Researcher-Created Questions (Demographics and Independent Variables)

(The first question is a qualifying question - participant must answer yes to enter survey after acknowledging informed consent)

1. Are you between the ages of 18 and 24 years old?

After answering yes and reading and signing informed consent

2. What gender do you identify as?

Female

Male

Neither

Prefer not to answer

3. What race/ethnicity do you primarily identify as?

White/Caucasian

Black/African American

Hispanic/Latino(a)

Asian

American Indian or Alaskan Native

Native Hawaiian or other Pacific Islander

None of the Above

Prefer not to answer

4. What is your current marital/relationship status?

Single/Dating

Cohabiting/Long-term Relationship (more than 2 years in a monogamous relationship)

Engaged

Married

Divorced

Widowed/Widower

Prefer not to answer

5. What is your average annual household income?

- \$0-20,000
- \$20,001-30,000
- \$30,001-40,000
- \$40,001-50,000
- \$50,001-60,000
- \$60,001-70,000
- \$70,001-80,000
- \$80,001 and above
- Prefer not to answer

6. What is your highest education level attained?

- Did not complete high school education
- Graduated high school/GED
- Associates degree/Vocational or professional degree/certification
- Bachelor's degree
- Master's degree
- Doctorate Degree/Professional Doctorate (i.e. MD, JD, etc.)
- Prefer not to answer

7. Do you have any children? Yes No Prefer not to answer

If yes, how many?

8. How old were you the first/only time you were placed into the foster care system?

- 0-5 years old
- 6-9 years old
- 10-14 years old
- 15-17 years old
- Never entered the foster care system

9. What type of setting did you live in for the majority of your time during the first/only time you were placed into the foster care system?

Foster home  
 Kinship home (relatives by blood, marriage, or kinship)  
 Group home/congregate care (can also be a shelter home)  
 Residential Treatment Facility (RTF)/Institution/Detention Center  
 Never entered the foster care system

10. Did you have siblings during the first/only time you were placed into the foster care system?

Yes No Never entered the foster care system

If yes, did you live together with them for any amount of time during the first/only time you were placed into the foster care system?

Yes or No

**Revised Adult Attachment Scale (Collins, 1996) - Close Relationships Version**

The following questions concern how you *generally* feel in *important close relationships in your life*. Think about your past and present relationships with people who have been especially important to you, such as family members, romantic partners, and close friends. Respond to each statement in terms of how you *generally* feel in these relationships.

Please use the scale below by placing a number between 1 and 5 in the space provided.

1-----2-----3-----4-----5  
 Not at all Very  
 characteristic characteristic  
 of me of me

- 1) I find it relatively easy to get close to people.  
 \_\_\_\_\_
- 2) I find it difficult to allow myself to depend on others.  
 \_\_\_\_\_
- 3) I often worry that other people don't really love me.  
 \_\_\_\_\_

- 4) I find that others are reluctant to get as close as I would like.  
\_\_\_\_\_
- 5) I am comfortable depending on others.  
\_\_\_\_\_
- 6) I don't worry about people getting too close to me.  
\_\_\_\_\_
- 7) I find that people are never there when you need them.  
\_\_\_\_\_
- 8) I am somewhat uncomfortable being close to others.  
\_\_\_\_\_
- 9) I often worry that other people won't want to stay with me.  
\_\_\_\_\_
- 10) When I show my feelings for others, I'm afraid they will not feel the  
\_\_\_\_\_ same about me.
- 11) I often wonder whether other people really care about me.  
\_\_\_\_\_
- 12) I am comfortable developing close relationships with others.  
\_\_\_\_\_
- 13) I am uncomfortable when anyone gets too emotionally close to me.  
\_\_\_\_\_
- 14) I know that people will be there when I need them.  
\_\_\_\_\_
- 15) I want to get close to people, but I worry about being hurt.  
\_\_\_\_\_

16) I find it difficult to trust others completely.

\_\_\_\_\_

17) People often want me to be emotionally closer than I feel comfortable being.

\_\_\_\_\_

18) I am not sure that I can always depend on people to be there when I need them.

\_\_\_\_\_



- 8) I am somewhat uncomfortable being close to others.  
\_\_\_\_\_
- 9) I often worry that romantic partners won't want to stay with me.  
\_\_\_\_\_
- 10) When I show my feelings for others, I'm afraid they will not feel the  
\_\_\_\_\_ same about me.
- 11) I often wonder whether romantic partners really care about me.  
\_\_\_\_\_
- 12) I am comfortable developing close relationships with others.  
\_\_\_\_\_
- 13) I am uncomfortable when anyone gets too emotionally close to me.  
\_\_\_\_\_
- 14) I know that people will be there when I need them.  
\_\_\_\_\_
- 15) I want to get close to people, but I worry about being hurt.  
\_\_\_\_\_
- 16) I find it difficult to trust others completely.  
\_\_\_\_\_
- 17) Romantic partners often want me to be emotionally closer than I feel  
\_\_\_\_\_ comfortable being.
- 18) I am not sure that I can always depend on people to be there when I need them.  
\_\_\_\_\_

**Scoring Instructions for the Revised Adult Attachment Scale**



This scale contains three subscales, each composed of six items. The three subscales are CLOSE, DEPEND, and ANXIETY. The CLOSE scale measures the extent to which a person is comfortable with closeness and intimacy. The DEPEND scale measures the extent to which a person feels he/she can depend on others to be available when needed. The ANXIETY subscale measures the extent to which a person is worried about being rejected or unloved.

**Original Scoring Instructions:**

Average the ratings for the six items that compose each subscale as indicated below.

<u>Scale</u>	<u>Items</u>					
CLOSE	1	6	8*	12	13*	17*
DEPEND	2*	5	7*	14	16*	18*
ANXIETY	3	4	9	10	11	15

\* Items with an asterisk should be reverse scored before computing the subscale mean.

**Alternative Scoring:**

If you would like to compute only *two* attachment dimensions – attachment *anxiety* (model of self) and attachment *avoidance* (model of other) – you can use the following scoring procedure:

<u>Scale</u>	<u>Items</u>											
ANXIETY	3	4	9	10	11	15						
AVOID	1*	2	5*	6*	7	8	12*	13	14*	16	17	18

\* Items with an asterisk should be reverse scored before computing the subscale mean.

Cronbach's alpha coefficient in 3 samples of undergraduates:

<u><i>n</i></u>	<u><i>Close</i></u>	<u><i>Depend</i></u>	<u><i>Anxiety</i></u>
173	.81	.78	.85
130	.80	.78	.85
100	.82	.80	.83



- 9) I often worry that other people won't want to stay with me.  
\_\_\_\_\_
- 10) When I show my feelings for others, I'm afraid they will not feel the  
\_\_\_\_\_ same about me.
- 11) I often wonder whether other people really care about me.  
\_\_\_\_\_
- 12) I am comfortable developing close relationships with others.  
\_\_\_\_\_
- 13) I am uncomfortable when anyone gets too emotionally close to me.  
\_\_\_\_\_
- 14) I know that people will be there when I need them.  
\_\_\_\_\_
- 15) I want to get close to people, but I worry about being hurt.  
\_\_\_\_\_
- 16) I find it difficult to trust others completely.  
\_\_\_\_\_
- 17) People often want me to be emotionally closer than I feel comfortable being.  
\_\_\_\_\_
- 18) I am not sure that I can always depend on people to be there when I need them.  
\_\_\_\_\_

**SPSS COMMANDS FOR CREATING FOUR ATTACHMENTS STYLES  
USING THE REVISED ADULT ATTACHMENT SCALE**

The following SPSS commands will create Bartholomew's (1990) four attachment styles (secure, preoccupied, fearful, dismissing) based on scores on the three attachment dimensions (close, depend, anxiety). Please note that, at present, this method is quite exploratory and, in general, ***I do not recommend it*** (please see my note below). I have defined the styles in terms of theoretically expected profiles along the

dimensions. For example, a secure person should score high on the close and depend dimensions, and low on the anxiety dimension. I define a “high” score as being above the midpoint on a 5-point scale, and a low score as below the midpoint. (Please note that this is NOT the same as performing a median split.) However, what this means is that individuals who score at the midpoint will be excluded from the sample. On the one hand, this method provides a more clear assessment of attachment style because we exclude individuals who appear to fall on the boundary of more than one style, or who don’t clearly belong to any style. On the other hand, this is problematic because we lose important data points, and we have to worry whenever we remove any subjects from our sample. At present, we have used this procedure in only a handful of samples but we are finding that we lose about 7% of our sample. We are continuing to explore the validity of this method of scoring and we suggest that it be used with caution, and only in conjunction with the continuous measures that include the entire sample.

\*\*\*\*\* Reverse code the appropriate items \*\*\*\*\*

```
RECODE      AT8 AT13 AT17 AT2 AT7 AT16 AT18
            (1=5) (2=4) (3=3) (4=2) (5=1)
            INTO AT8R AT13R AT17R AT2R AT7R AT16R AT18R.
```

\*\*\*\* Compute the three attachment dimensions \*\*\*\*.

```
COMPUTE      CLOSE = MEAN (AT1, AT6, AT8R, AT12, AT13R, AT17R).
COMPUTE      DEPEND = MEAN (AT2R, AT5, AT7R, AT14, AT16R, AT18R).
COMPUTE      ANXIETY = MEAN (AT3, AT4, AT9, AT10, AT11, AT15).
```

\*\*\*\* Combine the CLOSE and DEPEND dimensions into a single composite \*\*\*\*.

```
COMPUTE      CLOSDEP = MEAN(CLOSE,DEPEND).
```

\*\*\* Compute an attachment style variable by using cutoff scores above/below the midpoint \*\*\*\*.

```
IF      (CLOSDEP GT 3)      AND      (ANXIETY LT 3)      STYLE = 1.
IF      (CLOSDEP GT 3)      AND      (ANXIETY GT 3)      STYLE = 2.
IF      (CLOSDEP LT 3)      AND      (ANXIETY LT 3)      STYLE = 3.
IF      (CLOSDEP LT 3)      AND      (ANXIETY GT 3)      STYLE = 4.
```

```
VALUE LABELS      STYLE 1 'SECURE' 2 'PREOCC' 3 'DISMIS' 4 'FEARFUL'
```

***An important note on data analysis:*** Although researchers often want to assign respondents to attachment style categories, a more appropriate statistical procedure is to conduct regression analyses using the *continuous* attachment dimensions and then, if desired, plot the predicted values corresponding to each of the four attachment prototypes. In this type of analysis, the Close and Depend dimensions of the AAS can be averaged (and then reverse scored) to form an overall index of attachment-related *avoidance*, and the Anxiety dimension of the AAS can be used as an index of attachment-related *anxiety*. The predicted means corresponding to each of the four attachment prototypes can then be easily plotted. For example, the mean for “secure” individuals can be obtained by computing the predicted value (of your dependent variable) at 1 standard deviation (SD) below the mean on Anxiety and 1 SD below the mean on Avoidance. Likewise, the predicted mean for “preoccupied” is obtained by computing the predicted value at 1 SD above the mean on anxiety and 1 SD below the mean on avoidance. Please see Collins & Feeney (2004) for an example of this procedure.