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Attachment, Parentally Bereaved Adolescents, and High School Outcomes in a Large Inner-City High School

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Walden University
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Abstract

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MA, New Jersey City University, 1992

BA, Seton Hall University, 1982

Dissertation Submitted in Partial Fulfillment

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Abstract

U.S. and world communities face the challenges of understanding how children grieve and of giving them sufficient social and educational support. Inner-city minority adolescents have not been represented well in the bereavement and attachment literature. The purpose of the quantitative study was to use the attachment theory to understand the impact of parental bereavement on these adolescents. Data were collected using the Adult Attachment Interview (AAI), the Piers-Harris Children's Self- Concept Scale (2nd ed.), and school records. MANOVAs were used to analyze the influence of attachment organization, bereavement status, and gender on self-concept and academic and behavioral functioning in school. Results indicated that securely attached adolescents functioned better across all 3 variables than did insecure and unresolved/disorganized adolescents. There were no differences in functioning in the bereaved group according to attachment organization. Results according to gender indicated that although the female participants experienced more academic success and had fewer behavioral difficulties in school, their self-concept was more negative than that of their male counterparts. There were no differences in functioning in the bereaved group according to gender, but compared to the entire sample, the bereaved females no longer functioned better than males academically or behaviorally, and there were no longer differences in self-concept. Possible positive social changes include improvements in school-related student support such as promoting the use of the AAI, linking educational and clinical environments, and assisting schools in developing safe-base classroom environments that could better meet students' needs according to their attachment organization and bereavement status.

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Dedication

This dissertation is dedicated to the loving memory of my daughter, Sophia Vucetaj. Sophie, you left me too soon, and I miss you with every beat of my heart. Well, I finished this huge project, and I only wish that you were here to share it with me. My darling daughter, I learned so much from your life and from your death, and you keep teaching me new things every day.

This dissertation also is dedicated to my son, Enver Vucetaj. Enver, you are full of goodness, creativity, hope, and all the other great things that most of us wish we had. I have your back, but you also have mine in more ways than you can imagine. From the time that you were born, you and I have lived through extraordinary difficulties and sadness, but we have always managed to find joy and see the beauty in life.

Finally, this dissertation is dedicated to my daughter, Sindey Amar. Sindey, you came into our lives at the perfect time, and you inspired me to smile, laugh, and never give up. You keep me young and give me the courage to continue. Your happiness also is mine, and this dissertation journey probably would not have been completed without you.

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Jersey City Public Schools granted me permission to conduct the research, and I am very grateful to them, especially to Ms. Paula Christen, who encouraged me to complete the study, and to the principal of the school, who gave me permission to conduct the study at the site. I am extremely grateful to all of the participants, whose

willingness to be open and honest with me about very private matters made the research meaningful and valuable on many different levels.

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Chapter 1: Introduction to the Study

Introduction

Each year, thousands of children worldwide lose one or both parents to accidents, wars, terror attacks, and illness. According to UNAIDS (2004), 13 to 18 million children have been orphaned by AIDS. The Actuarial Society of South Africa (2005) has estimated that in South Africa alone, by 2020, approximately 2.3 million children will have been orphaned because of AIDS. A fact sheet published by the Social Security Administration (SSA, 2012) reported that in 2012, 1.9 million children, survivors of deceased workers, received financial support from the SSA. The number of children under the age of 18 receiving benefits from the SSA did not include all parentally bereaved children in the United States. The SSA numbers also did not include children who were illegal immigrants, children whose parents were illegal immigrants, or children who were not eligible to receive SSA benefits.

These facts present the world community and smaller communities with a need to better understand how children grieve and what types of social, educational, and familial supports children require to adjust to living without one or both parents. Educators and mental health care workers have specific challenges that include helping children to cope not only with the loss of a parent but also with a wide range of possible associated emotional, psychological, and educational difficulties. For at least the past 10 years, a significant amount of research (Abdelnoor & Hollins, 2004; Balk, 1996; Bonanno & Field, 2001; Cluver, Gardner, & Operario, 2007; Goodman & Brown, 2008; Haine, Ayers, Sandler, & Wolchik, 2008) has focused on children's mental health problems

following the death of a parent. It has been empirically established that some children experience complicated bereavement that can result in depressive symptoms; anxiety; academic difficulties; hopelessness; and, at times, suicidal ideation (Dowdney, 2000; Lawrence, Jeglic, Matthews, & Pepper, 2006; Wolchik, Tein, Sandler, & Tyers, 2006). Eppler (2008) stated, "Research suggests that bereaved children are a vulnerable population, at risk for social impairment and psychopathology" (p. 190). Male children tend to externalize, that is, they experience more behavioral difficulties across settings and have academic problems, whereas female children tend to internalize and experience anxiety, depression, and somatic symptoms (Haine, Wolchik, Sadler, Millsap, & Ayers, 2006; Hope & Hodge, 2006; Worden, 2001).

Under ordinary circumstances, adolescence is a complex and developmentally challenging time, during which adolescents begin to learn how to establish and maintain stable intimate relationships, make decisions about career options, and develop an autonomous self-identity (Allen, Moore, Kuperminc, & Bell, 1998). The death of a parent is a significant and irreversible loss that results in grief, often changing the way a person functions, either temporarily or for an extended period of time (Dowdney, 2000; Lawrence et al., 2005-2006; Wolchik et al., 2006). Bereavement in adolescence has not been a well-researched area, having a short history of approximately twenty years (Blake & Corr, 2001). Researchers of adolescent bereavement have identified five broad issues that call for further investigation: "a) the need for cultural pluralism, b) the need for scientific openness, c) methodological issues, d) extension of research topics, and e) ethical obligations" (Blake & Corr, 2001, p. 208). Cultural pluralism, which this study

addressed, refers to the fact that most studies have been conducted in the United States with European American college students (Tyson-Rawson, 1996; Wrenn, 1999), although the prevalence of bereaved minority adolescents might be higher among adolescents who belong to the lower socioeconomic groups and who are still attending high school.

According to the bereavement literature, 18 months after the death of a parent, most children appear to adjust to their loss and score comparably to nonbereaved children and adolescents on surveys measuring anxiety and depression (Kalter et al., 2003). Several mediating factors can influence the adjustment of parentally bereaved adolescents. Based upon the current literature on attachment and psychological difficulties during adolescence, attachment has been hypothesized as one of these mediating factors. Attachment researchers have suggested that there is a relationship between attachment organization and the internalizing and externalizing of problems during adolescence (Ronnlund & Karlsson, 2006) and that gender impacts how these problems are experienced or manifested (Broberg et al., 2001). Researchers also have suggested that the attachment framework has an influence on the outcomes of grief and bereavement: depressive symptoms, perceptions of social support and social interactions, and feelings of self-worth (Cassidy & Shaver, 1999; Liu, 2008: Stroebe, Schut, & Stroebe, 2005; Wayment & Vierthaler, 2002).

Statement of the Problem

The problem addressed by this study is the relationship between the attachment organization of inner-city high school students and academic and behavioral functioning in school, and if the adolescents are parentally bereaved, their functioning in school after

the loss of a parent. Parentally bereaved minority adolescents are members of a vulnerable population who can experience ongoing difficulties resulting from complicated bereavement (Dowdney, 2000; Eppler, 2008; Lawrence et al., 2006; Wolchik et al., 2006). Attachment research has indicated that insecure attachment organization and unresolved/disorganized attachment can cause social, emotional, psychological, and behavioral difficulties in adolescence (Broberg et al., 2001; Liu, 2008; Ronnlund & Karlsson, 2006). However, there has been a lack of research addressing these two factors. Research on bereavement and attachment among inner-city minority adolescents also has been scant in the literature.

Purpose of the Study

The purpose of this quantitative study was to use attachment theory to investigate the impact of parental bereavement on inner-city adolescents as a group and according to gender. The relationship between various aspects of attachment and (a) the development of behavioral difficulties in school, (b) academic failure, and (c) self-concept was determined.

Research Questions and Hypotheses

This study was based upon the following research questions (RQs) and hypotheses, each of which was derived from a review of the literature on attachment and parentally bereaved children and adolescents. A detailed discussion of the nature of the study follows in Chapter 3.

1. What is the relationship between attachment organization and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{01}: There is no difference in adolescent attachment organization (secure, insecure [dismissive or preoccupied], or unresolved/disorganized), as measured by scores obtained on the Adult Attachment Interview (AAI) and self-concept, as measured by standard scores obtained on the Piers-Harris Children's Self-Concept Scale (2nd ed.; PHCSCS-2); academic functioning, as measured by the grade point average (GPA); and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a1}: There is a difference in adolescent attachment organization (secure, insecure [dismissive or preoccupied] or unresolved/disorganized), as measured by scores obtained on the AAI and self-concept, as measured by standard scores obtained on the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

2. What is the relationship between bereavement status and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{02}: There is no difference between adolescents who are parentally bereaved and those who are not in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a2}: There is a difference between adolescents who are parentally bereaved and those who are not in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

3. What is the relationship between gender and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{03}: There is no difference between males and females in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a3}: There is a difference between males and females in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

4. Do adolescents who have been identified as having a secure attachment and are parentally bereaved experience more academic and behavioral difficulties in school and do they have a more negative self-concept than those who are not parentally bereaved?

H_{04}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having a secure attachment on the AAI.

H_{a4}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept; as measured by the standard scores obtained on the

PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having a secure attachment on the AAI.

5. Do adolescents who have been identified as having an insecure attachment (dismissing and preoccupied) and those with unresolved/disorganized status and are parentally bereaved experience more academic and behavioral difficulties in school and do they have a more negative self-concept than those who are not parentally bereaved?

H_{05}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having an insecure attachment and those with an unresolved/disorganized status, as measured by the AAI.

H_{a5}: There is a difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having an insecure attachment and those with an unresolved/disorganized status, as measured by the AAI.

6. Do parentally bereaved females experience more academic and behavioral difficulties in school and a more negative self-concept than do parentally bereaved males?

H_{06}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved females and males.

H_{a6}: There is a difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved females and males.

Theoretical Framework

Attachment refers to the emotional bond that develops between children and their caregivers, who are typically their parents or parental figures (i.e., primary caregivers). The development of attachment is a function of the proximity and availability of caregivers. The early experiences that result in the attachment of infants to their caregivers regulate emotions. Attachment organization is a way to understand how emotions are regulated; it is the framework for the affect regulation system (Mikulincer, Shaver, & Pereg, 2003).

Bowlby (1969) wrote that the attachment between infants and their caregivers constitutes an innate behavioral system (i.e., an adaptive behavioral system) that ensures that the children will be cared for and will survive. Bowlby also commented:

> To say of a child that he is attached to, or has an attachment to means that he is strongly disposed to seek proximity to and contact with a specific figure and to do so in certain situations, notably when he is frightened, tired, or ill. (p. 371)

Bowlby (1969, 1988) noted that when infants are feeling ill, hungry, or cold, they experience anxiety and other negative feelings. If infants' needs are met in ways that alleviate negative emotions and satisfy the infants' needs, secure attachment to their caregivers is likely to develop; but if their needs are not met adequately or not at all, attachment insecurity might develop. These early emotional experiences are internalized, and they are used to understand the self and others throughout the life span. In addition, attachment organization shapes behavioral functioning in relationships and during times of stress and loss (Mikulincer et al., 2003).

Bowlby's (1969, 1973, 1980) theory of attachment continues to influence contemporary bereavement research. Individual attachment organization is still thought to have an effect on how individuals cope with the loss of attachment figures (Bowlby, 1969, 1973, 1980; Stroebe, 2002; Wayment & Vierthaler, 2002). In the past 10 years, there has been a flurry of research on measuring attachment throughout the life span, with some researchers paying particular attention to adolescents (O'Connor & Byrne, 2007; Tanaka et al., 2008). When one or both parents die, adolescents lose the person or people on whom they are emotionally and physically dependent, which creates emotional distress and uncertainty. Adolescents' attachment organization is believed to mediate the bereavement process, much as it does for adults. It is possible for researchers to identify the attachment organization and the grief response, and create an accurate and objective record of the bereavement process. I used the attachment theory and the literature available on bereavement to examine how parentally bereaved students function in school and compare them to their nonbereaved peers. This study took place in a large inner-city

high school, and most of the participants were minority students, which met the need for cultural pluralism in this area of research.

Operational Definitions

Attachment: A close emotional bond that forms between children and their primary caregivers, usually, but not exclusively, their mothers. These early bonds help to form mental representations of self and others (Bowlby, 1969, 1973, 1980). They also become internal working models for subsequent relationships and are a conceptual framework for affect regulation (Mikulincer et al., 2003).

Attachment insecurity: An organized pattern of attachment resulting from inadequate care giving. There are two insecure attachment organizations. Ainsworth, Blehar, Waters, and Wall (1978) identified them as avoidant and resistant-ambivalent patterns of attachment. Main (1996, 2000) and Main, Goldwyn, and Hesse (2002) developed a classification system corresponding to patterns of infant attachment initially developed by Ainsworth et al. (1978). Main's (1996, 2000) dismissing classification corresponds to the avoidant pattern, and the preoccupied classification corresponds to the resistant or ambivalent pattern.

Attachment security: An organized pattern of attachment resulting from the sensitivity of the primary caregivers, who respond to children's needs in timely and positive ways. This attachment organization enables children to explore their environment and respond with minimal avoidance or preoccupation (Ainsworth et al., 1978). In adolescence and adulthood, people who have been classified as having secure/autonomous attachment are able to discuss their attachment-related experiences

with coherence and objectivity; they seem to value attachment and discuss positive and negative life experiences with clarity (Main, 2000; Main et al., 2002).

Bereavement: The period in a person's life following the death of someone significant; it is an objective situation (Stroebe, Hansson, Stroebe, & Schut, 2001).

Bereavement status: For the purpose of this study, bereavement status specifically referred to whether or not the participants were parentally bereaved, that is, whether they did or did not experience the death of one or both parents.

Dismissing classification: Resulting from several factors, including consistent rejection from the primary caregivers. Children with these types of experiences learn to distance themselves from distressing situations with emotionally deactivating strategies, which might develop as the result of a need for unreasonable amounts of self-reliance (Ainsworth et al., 1978). In adolescence and adulthood, people who have an insecure dismissive attachment organization generally tend to idealize their parents, minimize the impact of negative life events, and generally claim to have extremely poor memories of childhood experiences (Main, 2000; Main et al., 2000).

Grief: The emotional response to the death of someone significant. It is the affective reaction that incorporates psychological and physiological manifestations. Grief can be marked by crying, sadness, pining for the lost person, and somatic symptoms such as a disturbance in sleep and an upset stomach. Grief is a normal reaction to the death of a loved one, but it sometimes can develop into a psychopathological condition such as depression (Stroebe et al., 2001) and other symptoms that have been identified as part of complicated bereavement.

Preoccupied classification: Resulting from several factors, including compulsive but inadequate care giving. Children learn to use hypervigilance in an effort to alleviate negative emotions. They usually cling to their primary caregivers because of their fear of being alone, and they show great distress and anger when there are changes in their environment (Ainsworth et al., 1978). In adolescence and adulthood, people who have an insecure preoccupied attachment organization generally have an angry preoccupation with parents, engage in long discussions that are typically not coherent, and might use vague phrases or psychological jargon to convey entangled thoughts (Main, 2000; Main et al., 2000).

Self-concept: What individuals think about themselves. For the purpose of this study, I assessed the participants on self-concept as manifested in how they perceived their physically appearance, personal attributes, intellect and school status, happiness and satisfaction in life, popularity, freedom from anxiety, and how well they could make behavioral adjustments (Hur, McGue, & Iacono, 1998).

Unresolved/disorganized classification: A classification assigned to individuals who are not consistent in their expressed attachment pattern and whose profiles are indicative of affective disruptions. Main and Solomon (1986) first identified children in Ainsworth's Strange Situation, whose responses appeared to suggest a collapse in behavioral strategy when separated from their mothers as having a disorganized/disoriented pattern of attachment. Correspondingly, in adolescence and adulthood, people who are classified with unresolved/disorganized attachment usually

discuss early losses and/or abuse with lapses in the monitoring of reasoning or discourse (Hesse, 1999).

Assumptions and Limitations

I made several basic assumptions when conducting this study:

1. The attachment organization of the adolescent participants could be measured accurately with the AAI.
2. In the inner-city high school where the study was conducted, there were many parentally bereaved adolescents who would volunteer to participate in the study.
3. Attachment organization, parental bereavement, and gender interact in a way that is measurable and their interactions have an impact on academic functioning and might result in behavioral difficulties in school.

I made these assumptions because they were necessary when developing the study design. The study does not have a large degree of external validity because it was limited to a specific location and population. Even with these limitations, this study makes an important contribution to the currently limited amount of knowledge in this area of research. Little is known about attachment patterns and the specific consequences of bereavement in the inner-city minority adolescent population; therefore, the results will contribute to the understanding of how much school failure is attributed to bereavement caused by the death of a parent(s), with the attachment framework as a mediator.

Potential weaknesses of the study included compounding variables such as multiple childhood trauma and loss. Many of the adolescents who participated in the

study had backgrounds that included not only the experience of the death of a parent but also the deaths of other significant people in their lives. They also had endured neglect or abuse, had been the victims of homelessness, and had suffered because of poverty. To ensure that any participating students who had suffered a recent loss or trauma were not further harmed or emotionally upset, they were excluded from the study if the compounding event had occurred 6 months or less prior to the study. The 6-month limitation was based upon research indicating that most individuals return to a degree of baseline functioning in this time period (Kalter et al., 2003; Wortman & Boerner, 2007).

Significance of the Study

I anticipated that this study will contribute to (a) the understanding of adolescent bereavement among minority populations of inner-city school systems, as well as promote further research of it, specifically in regard to academic and behavioral functioning, and (b) the research on a parental bereavement with attachment organization as a mediating factor. The results of the study could lead to positive social change in schools and communities by encouraging school systems to (a) be aware and keep records of students who are parentally bereaved; (b) develop school counseling programs for bereaved adolescents, including individual and group counseling for newly bereaved students as well as students who might be suffering from complicated bereavement; and (c) include death and bereavement as topics of discussion in mandatory health classes and other appropriate general study courses. Such initiatives could lead to an increased awareness of loss and bereavement. They could enable all students to acquire knowledge

of and sensitivity toward parentally bereaved adolescents, as well as reduce bereaved students' feelings of fear and shame.

Summary

The current literature on parentally bereaved children and adolescents has indicated that they are a vulnerable population who might experience complicated bereavement marked by depression, anxiety, and academic difficulties (Dowdney, 2000; Lawrence et al., 2006; Wolchik et al., 2006). Attachment theory suggests that the bonds formed early in life between children and their caregivers become working models for all subsequent relationships and that this attachment framework helps individuals to regulate their emotions. Attachment research has been linked to research on loss and bereavement. Secure, insecure, and unresolved/disorganized attachment patterns have been studied, and a correlation between bereavement status and attachment classification has been identified (Bowlby, 1969, 1973, 1980; Stroebe, 2002; Wayment & Vierthaler, 2002).

Research on adolescent bereavement and attachment has had a short history and has been largely limited to studies with European American college students (Tyson-Rawson, 1996; Wrenn, 1999). I conducted this quantitative study in an inner-city high school and closely examined parentally bereaved adolescents and their academic and behavioral functioning in school, and then attempted to determine whether attachment organization is a mediating factor in bereavement.

In Chapter 2, I provide a comprehensive literature review on attachment theory as well as research on parentally bereaved children and adolescents. In Chapter 3, I describe the study design, participants, methods, and assessment tools. In Chapter 4, I explain the

results of the data analysis, and in Chapter 5, I interpret the findings, describe the limitations of the study, offer recommendations for future research, and discuss the implications for social change.

Chapter 2: Literature Review

Introduction

The purpose of this quantitative study was to use attachment theory to investigate the impact of parental bereavement on inner-city minority adolescents as a group and then according to gender. The purpose of the chapter is to provide a comprehensive literature review of attachment theory as well as research on parentally bereaved children and adolescents.

Prior to and after World War II in Europe, Bowlby, a child psychiatrist, worked with children who were institutionalized, were separated from their parents, and were experiencing deprivation and bereavement. The sociopolitical environment of the times was pragmatic, and the emotional needs of institutionalized, displaced, and orphaned children were second to the practical needs of providing them with food, shelter, and medical care (Bowlby, 1944, 1949, 1951, 1958, 1959). The psychological trends and clinical practices of that time were primarily psychoanalytic or based upon emerging learning theory and behaviorism. Bowlby was not satisfied with either theoretical explanation about what children needed, so his observations could not be explained through the lens of those theories (Ainsworth & Bowlby, 1991).

Bowlby's (1969, 1973, 1980) thinking was significantly influenced by evolution theory, systems theory, and cognitive psychology, as well as Harlow's (1958) work with infant monkeys and Lorenz's (1935) work with geese and imprinting (as cited in Bretherton, 1992). Over time, Bowlby developed his attachment theory, which was formally introduced to the psychological community when he published his first book in

1969. The empirical support for his theory came from Mary Salter Ainsworth, who joined his research team in 1950 at the Tavistock Clinic in London and with whom he collaborated until his death in 1990 (Obituaries, 1992, 2000). Together, Bowlby and Ainsworth together mapped out a biologically based theory of personality development that has motivated psychologists for the past 50 years. Ainsworth and Bowlby (1991) stated, "The distinguishing characteristic of the theory of attachment that we have jointly developed is that it is an ethological approach to personality development" (p. 333).

From the very beginning of his theory development, Bowlby (1960) insisted that infants and children go through a phase of grief and bereavement that is similar to that of adults; and over the years, this assertion has been empirically supported. The research on parentally bereaved children has consistently indicated that following the death of a parent, children experience sadness and grief that could lead to complicated bereavement and clinical depression, depending on the circumstances, the children's support systems, and other intrinsic and extrinsic factors.

The literature review includes a discussion of the attachment theory as it was originally developed, subsequent research, and the specific impact that it had and continues to have on understanding emotions and bereavement. Further content in this literature review is about parentally bereaved children. The literature review begins with an overview of attachment theory, continues with a discussion of attachment and contemporary bereavement research as well as attachment classification, and ends with a discussion of current research on bereaved children and adolescents.

Supporting articles for this literature review were obtained through the PsycINFO and PscyARTICLES databases; traditional printed versions of peer-reviewed journals; and direct sources when attending an AAI Institute at the University of Western Ontario in London, Ontario, Canada. To identify articles for this literature review, I searched the PsycINFO and PscyARTICLES databases using with the following keywords: *attachment theory*, *attachment patterns*, *attachment organization*, *attachment style*, *bereaved children and adolescents*, *childhood grief*, and *measuring attachment*. I also researched scholarly books to understand the past 4 decades of research on attachment theory and bereavement (e.g., Ainsworth et al., 1978; Bowlby, 1969; Cassidy & Shaver, 2010).

Overview of Attachment Theory

The attachment theory states that the bond that forms between children and their mothers, or primary caregivers, is biologically driven and serves the purpose of ensuring survival and reproductive fitness. Attachment behaviors such as smiling and vocalizing bring mothers to their children and are called approaching behaviors. Attachment behaviors such as crying are considered following behaviors and also serve the purpose of bringing children and their mothers together. These behaviors are biologically driven in infancy and help to shape the developing personality. Behaviors that promote proximity and seek proximity to important people in life are considered normal and healthy characteristics not only in infancy and childhood but also throughout the life span. These behaviors are not maladaptive or immature; rather, they promote normal human functioning (Ainsworth, 1979; Bowlby, 1969, 1973).

Attachment behaviors are organized within individuals in an attachment behavioral system and maintain behavioral homeostasis. Bowlby (1969, 1973, 1980) always insisted that the attachment behavioral system did not develop because of a secondary drive, such as an association with feeding and pampering that the mother provides, nor as the result of the pleasure principle that the psychoanalytical developmental theory insisted on at that time. Bowlby (1969) theorized that the attachment behavioral system is biologically driven, flexible to environmental changes and enabling children to meet the goal of proximity. Ainsworth (1989) suggested that attachment behaviors change over time; meet developmental needs; and, under normal circumstances, are appropriate to the developmental stage of an individual. Emotions and cognition (Bowlby, 1969; Bretherton, 1992) are closely associated with the attachment behavioral system, which has a relationship with the exploratory and fear behavioral systems, but is different from the sociable or affiliation system.

Emotions

All emotions are believed to result from evolutionary pressures. The attachment bond is formed because of an affectional bond between mothers and their children (Bowlby, 1979). In the context of attachment theory, the affectional bond is not reciprocal, but it is a tie that people have to other people who are perceived to be (and in infancy and childhood, actually are) stronger, bigger, and wiser than they are. Affectional bonds are persistent, not transitory, and are specific. The affectional bond that is formed for one particular person cannot be interchanged, and it is always attached to one specific individual. For example, children form specific affectional bonds with their mothers and

fathers; the parents are not interchangeable, and children may seek proximity to each one of them with a different attachment behavior.

Once an affectional bond has been formed, maintaining proximity and contact is desired, and when there is an involuntary separation, distress is experienced. Relationships based upon affectional bonds provide security and comfort and are a base of the attachment that forms between children and parents. The attachment behavioral system in currently believed to be responsible for the development of the affective or emotional regulatory system (Sangler & Zimmerman, 1999).

Cognition

Children's experiences with their mothers (i.e., their primary caregivers) lead to mental representations of them, the children's self, and the environment. Emotional bonds and cognitive representational models develop over time and become permanent but flexible internal working models of self and others. These mental representations are efficient because they enable individuals to anticipate what is going to happen in the future; they enable individuals to have expectations and make plans. In infancy, children begin to expect their mothers to come to them when they are crying, for example. Cognitive processing based upon internal working models is unconscious and conscious, and can be revised as it is needed. In addition, internal working models of self in attachment relationships are believed to be used by individuals to guide social behavior, and these concepts have been used to explore attachment organization and its possible effects on psychological functioning in adolescence (Allen et al., 1998; Bowlby, 1980; Bretherton, 1985; Kobak & Screey, 1988; Main, Kaplan, & Cassidy, 1985). Cognitive

processes involved in establishing representational models include object permanence, attention and memory, interpretative biases, and discrimination learning.

Behavioral Systems

The attachment behavioral system works together with the fear behavioral system and the exploratory behavioral system. The exploratory behavioral system is used to navigate the environment, negotiate physical obstacles, discriminate between and use tools, obtain food, and gather information. Attachment is believed to foster exploration; the activation of the exploratory behavioral system reduces the activation of the attachment behavioral system. Alternatively, activation of the fear behavioral system triggers an increase in attachment behaviors. Therefore, when infants are frightened by environmental conditions, the attachment system is activated, and attachment behaviors are used to seek proximity (Ainsworth, Bell, & Stayton, 1971).

The activation, termination, and organization of behaviors are different for each behavioral system, including the sociable or affiliation system. The attachment, exploratory, fear, and sociable behavioral systems are separate systems, but the development of each system might ultimately depend on the attachment relationship between children and their caregiver.

The development of attachment bonds, attachment behaviors, and the attachment behavioral system in infancy has an influence on subsequent human development that can be summarized in the following ways:

1. Attachment experiences in infancy influence early brain development and leave a permanent imprint on the neurological level, which then might affect

ongoing brain function and development (Cicchetti & Tucker, 1994; Schore, 1994).

2. Early attachment relationships are the foundation for the development of emotional self-regulation, or the affect regulation system (Cassidy, 1994; Isabella, 1993; Sroufe, 1979, 1996).
3. Behavioral regulation and synchrony are learned through the experiences that lead to attachment relationships; infants learn that communication is dependent on cues, responses, and interactions, and that it is a coordinated effort.
4. Cognitive representations of self, others, and the environment develop and become the internal working models that enable individuals to have expectations of others and the world.

Therefore, the influence of the attachment behavioral system is evident in broad domains of adjustment that include level of self-reliance, efficacy, dependency on others, felt anxiety, anger, and empathy.

Most infants have a principal attachment relationship with specific individuals, who are typically their mothers or primary caregivers. Infants also attach to more than one person and have multiple attachments; these secondary attachment figures are normal and healthy adaptive relationships (Bowlby, 1969; Cassidy, 1999). The capacity to form attachment relationships is not limitless, and there is usually a hierarchy of major caregivers who are not equal and are not interchangeable to children.

Individual Differences

Shaver and Fraley (2008) defined the attachment framework as "the systematic pattern of relational expectations, emotions, and behaviors that result from internalization of a particular history of attachment experiences" (p. 56). The individual differences in attachment can be attributed to the interactions between infants and their mothers. Ongoing research has supported the theory that if mothers are adequately responsive to their infants' needs, then secure attachments are formed, but even when the mothers, or the primary caregivers, do not respond well, are hypervigilant, unavailable, or rejecting, most infants still form attachments, and most attachments in infancy are secure attachments (Main, 1996).

Ainsworth (1967) initially qualified individual differences in infants' relationships to their mothers as secure, insecure, and nonattached. In the early 1960s, she launched the Baltimore Study, which was groundbreaking and included detailed naturalistic observations of infant-mother attachments during the first 12 months of life, and a 20-minute laboratory assessment known as the Strange Situation. The Baltimore Study conducted by Ainsworth et al. (1978) had a total of 106 participants who were divided into four subsamples and observed in four separate projects. Strange Situation observations were conducted with infants who were approximately one year old. ANOVA, supplemented with *t* tests when relevant, were used to evaluate significant behaviors among the four subsamples. This research provided empirical support for Bowlby's attachment theory (as cited in Ainsworth et al., 1978).

Ainsworth et al.'s (1978) Strange Situation procedure was developed to determine the attachment patterns of infants, and it continues to be used in current research. It is believed to tap into the attachment process, which provides evidence of the outward organization of internal attachment mechanisms. Ainsworth's observations in the Strange Situation resulted in the following categories and descriptions of attachment (as cited in Ainsworth et al., 1978):

1. Securely attached infants explored the room and played with toys when their mothers were in the room with them. When their mothers left, they objected and protested, and some even cried, but when the mothers returned, they reunited with them without difficulties, avoidance, or rejection of them.
2. Insecurely attached avoidant babies interacted minimally with their mothers and cried when they left, but usually did not reestablish contact when they returned. Ainsworth believed that this attachment pattern was a response to irritable or angry mothers who was unavailable to or rejecting of their infants and who had little physical contact with their children.
3. Insecure resistant babies clung to their mothers in the Strange Situation setting; they appeared anxious and did not explore their environment. When the mothers left the room, they cried and protested, but when they returned, they did not want to reunite and typically fought against closeness. Ainsworth believed that this attachment pattern developed when the mothers were inconsistently available to the children and were not very affectionate, and when there was little synchrony in the interactions between the children and

their mothers. The insecurely avoidant and insecurely resistant babies were observed to experience extreme fearfulness in the presence of their mothers.

4. Babies with a disorganized attachment pattern were observed to be fearful, dazed, and confused in the Strange Situation. Ainsworth believed that this attachment state of mind was primarily the result of neglect and physical abuse, and this idea was further developed through subsequent research (Hesse & Main, 2000; Main & Solomon, 1986).

Ainsworth et al.'s (1978) descriptions of individual differences in attachment became the standard for measuring the attachment process throughout the life span. Equivalent classifications were used by Main and colleagues to develop the AAI, whose manuscript continues to be unpublished and restricted for use, and which is discussed in more detail in the next section of this chapter (Main, 1996; Main et al., 1985, 2002).

Early established pattern of responsiveness resulting from attachment relationships in infancy are not necessarily destiny. Researchers already mentioned have indicated that the attachment pattern can change over time and that its development throughout the life span depends on ongoing environmental conditions, personal circumstances, and prior history of adaptation. Ainsworth (1967), in her first study in Africa, observed that insecurely attached infants can become securely attached if their circumstances and the quality of care that they receive changes. However, if attachment relationships are relatively consistent from infancy to adulthood, the attachment pattern is a good predictor of how a person will respond to the deaths of significant attachment figures. People with insecure attachment patterns, both dismissing and preoccupied, as

well as people in the unresolved/disorganized group, are likely to experience psychological and physical distress following the deaths of loved ones that exceeds the distress of people with secure attachment patterns (Bowlby, 1973). Attachment and bereavement are discussed in more detail in a later section of this chapter.

Attachment Organization in Adolescence

Adolescence is a period of rapid physical, emotional, and psychological changes. Allen (2008), a leading researcher in adolescent attachment from the University of Virginia, identified nine primary "developmental transformations that reflect changes in the attachment system during adolescence" (p. 419). The following descriptions of the nine points include additional relevant references:

1. By the time a child becomes an adolescent, a stable, overreaching attachment organization has developed and it can predict future behavior. This organization occurs because of cognitive changes that include formal operational thinking and advances in logical and abstract reasoning skills, (Keating, 1990). The new attachment organization is used to function in the family, and works similarly to the way it worked in childhood, but it is also used to function outside of the family relationships (Hesse, 1999). Because of the development of cognitive abilities, including metacognitive skills, it is possible and valid to measure the attachment process using the AAI.
2. The attachment organization as a construct helps adolescents to further develop emotional regulation, perceptions of self, coping strategies in times of distress, and assists in many other areas of intrapsychic development. The

ongoing monitoring of multiple attachment relationships also is dependent on the attachment organization (Sroufe & Waters, 1977; Thompson, 1997, 1999).

3. In order for normal social and emotional development to occur, one of the goals during adolescence is to establish autonomy. This developmental push to independence requires a shift and a transformation in parent-child relationships and a modification of attachment relationship behaviors. In a healthy family environment, the attachment relationship behaviors become goal corrected, often need to be negotiated, and frequently create conflict, behaviors that are significantly different from the goal-corrected attachment behaviors in infancy, which are a coordinated effort. Adolescents need to learn when to depend on parents and when to act alone; the parents need to learn when to push for obedience and when to allow independent activity. During adolescence, there is a significant shift in exploratory and attachment behaviors that results in a new balance of the two behavioral systems. Securely attached adolescents, that is, adolescents who have goal-correcting secure relationships with their parents, have more positive experiences during this challenging transitional phase of life. There also are able to evaluate their parents objectively and establish a healthy critical distance that fosters cognitive and emotional freedom (Allen, Hauser, O'Connor, & Bell, 2002).
4. In infancy and childhood, peer relationships are not attachment relationships. In adolescence, there is a transformation of peer relationships that involves transferring attachment and dependence from parents to peers. Over time, peer

relationships take on attachment functions and begin to take adult quality, such as in close friendships and romantic relationships.

5. Elaborating the above idea and extending it: Ainsworth (1989) said that not all enduring social relationships are attachment relationships. In order for a peer relationship to be an attachment relationship, it needs to meet the criteria of the following qualities that Ainsworth identified: (a) There is clear proximity seeking, (b) there is distress upon unexplained separation, (c) there is pleasure or joy upon reunion with the attachment figure, (d) there is a period of grief following the loss of the attachment figure, and (e) there is clear evidence of secure-base behavior that includes comfort and more readily obvious exploratory behavior in the presence of an attachment figure.

Kobak, Rosenthal, and Serwik (2005) noted that the attachment figure is perceived as someone who has an ongoing and enduring commitment to the individual and is always available in time of need. Attachment relationships that were previously established with parents shift during adolescence, and attachment behaviors begin to be directed toward peers and work to establish new attachment relationships.

6. Given the intensity and significance of changes occurring during adolescence, developing new attachment relationships with peers is extremely important because attachment behaviors help to establish emotional security; manage high levels of physiological arousal; and on the neurological level, deactivate the “flight” impulse when experiencing significant amounts of stress (Coan,

Schaefer, & Davidson, 2006; Hofer, 2006). In midadolescence, peer attachment relationships and romantic relationships begin to emerge, and they appear to have all the qualities that Ainsworth described.

7. The attachment organization in adolescence can be classified in the same way as it is in infancy and adulthood. Individual differences in the attachment patterns can be identified as secure or insecure. Insecure attachment during adolescence is believed to stem from communication difficulties that prevent adolescents from clearly communicating their internal states to others, the inability to find peers who are receptive to establishing new attachment relationships, and a parental lack of sensitivity to adolescents' internal emotional and psychological states. As in infancy, in adolescence, parental responsiveness is extremely important to adolescent security; parents who are sensitive to adolescents' internal states engage in open and honest dyadic communication, which foster a secure attachment state of mind (Allen et al., 2003).
8. In adolescence, there is chronic activation of the attachment system resulting from attachment-autonomy tension, which is resolved or not resolved according to adolescents' attachment states of mind. Tension, instability in mood, and an ongoing strain on the adolescent-parent relationship are typical and expected during this period of development. In addition, peer relationships are the context in which individual differences in attachment processes emerge. The following can be said:

a) Secure adolescents appear to be able to balance autonomy striving with productive interactions and discussions with parents (Allen et al., 2007). They continue to engage in secure base behaviors, which allows them to not only explore but also revise their relationships with parents so that they are developmentally appropriate. Secure adolescents are able to think and communicate with coherence, which assists them in forming secure peer relationships. Because they are comfortable with their own feelings, they are able to manage challenging situations productively and usually have good peer relationships (Allen & Miga, 2010).

b) Insecure adolescents have an insecure attachment organization that negatively impacts their behavioral functioning and their already strained parental relationships. Insecure adolescents have a difficult time coping with feelings associated with disagreements and tend to view each disagreement as a threat to their typically unstable relationships. More recent research on the relationship between fathers and insecure adolescents has indicated that these relationships are marked by harsh conflicts and tension (Allen et al., 2007). From the insecure group, dismissing adolescents have an impaired ability to relate to their parents and are the least autonomous (Becker-Stoll & Fremmer-Bombik, 1997). Preoccupied adolescents are typically overengaged with their attachment figures, and their relationships are not productive. In regard to peer relationships, insecure adolescents have problems in social functioning,

which is to the result of poor communication skills and excessive defensiveness that leads to negative expectations of others (Cassidy et al., 1996). Insecure adolescents' problematic relationships with parents creates a psychological organization that makes it difficult for them to move beyond these relationships and to establish developmentally appropriate, successful, and necessary relationships with their peers (Gavin & Furman, 1996).

Insecure attachment organization has been linked to negative indicators of metal health (Wallis & Steele, 2001). Dismissing adolescents demonstrate symptoms that serve to distract them from attachment-related cues in parental and peer relationships. Eating disorders might be an example of symptoms that serve as a distraction to emotional bonds and healthy emotional functioning (Cole-Detke & Kobak, 1996). Dismissing adolescents have poor social skills and lack productive social strategies. Their externalizing symptoms include conducts disorders and substance abuse, which are predictive of juvenile delinquency and externalizing behaviors. Alternatively, preoccupied adolescents demonstrate internalizing problems such as depression, anxiety disorders, and stress during transitions. Their externalizing behaviors might include suicidality, drug use, sexual activity, and some delinquent behaviors.

9. Preoccupied adolescents are highly sensitive to their social environment, and their internalizing symptoms serve to obtain a response from attachment

> figures; when they do not get the response that they desire, then they might engage in externalizing behaviors. Adolescents with an unresolved/disorganized state of mind regarding attachment experience the most difficulties and have the greatest number of symptoms associated with poor mental health. According to Allen (2008), the final transformation in the attachment system during adolescence is the emergence of new care-giving systems. In late adolescence, the developmental goal is for the emerging young adults to form new attachment bonds and attachment relationships with peers and romantic partners. In an ongoing process of maturation and human psychological development, it is a critical step in establishing autonomy and the ability to function independently (i.e., without parents).

Additional research addressing clinical and functional applications of attachment has explored the mediating effects of attachment security and attachment insecurity in adolescent psychopathology. Rosenstein and Horowitz (1996) reported that in their study of psychiatrically hospitalized adolescents, the participants with insecure dismissing attachment were more likely to have conduct or substance abuse disorders, whereas the participants with insecure preoccupied attachment organization were more likely to have mood disorders or borderline or schizotypal personality disorders. Allen, Hauser, and Borman-Spurrell (1996) similarly reported that in their study, all of the previously psychiatrically hospitalized adolescents displayed insecure attachment organization in adulthood.

Allen et al. (2002) examined to what degree attachment organization in adolescence might predict social skills and delinquent behaviors and also explored the moderator role of attachment as a link between developing age-appropriate autonomy, social skills, and deviance. Their results indicated that secure attachment predicted an increase in social skills during midadolescence and insecure attachment predicted and increase of delinquent behaviors.

Measuring Attachment Organization in Adolescence

Researchers interested in studying adolescent attachment have had a limited number of tools at their disposal. These tools have been either self-report inventories or the AAI. The Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994) assesses attachment style with 40 self-report items. The items are propositions about personal relationships, and the participants choose one of the 6-point Likert scale responses ranging from 1 (*totally disagree*) to 6 (*totally agree*). This inventory was developed for adults, but as noted in the previous sections, adolescents have the cognitive abilities needed to reliably answer questions on the ASQ and other tests initially developed for adults. The ASQ has been used to a limited capacity with adolescents (Ronnlund & Karlsson, 2006); the questionnaire that has been used more frequently is the Inventory of Parent and Peer Attachment (IPPA).

The IPPA was developed by Armsden and Greenberg (1987) and designed to measure the cognitive and affective dimensions of perceived relationships with people who serve as sources of psychological security for adolescents. It is a self-report that has been used to discuss the positive and negative perceptions of parent and peer

relationships. Specifically, the IPPA measures broad perceptions about the quality of communication, the degree of mutual trust, and the extent of felt anger and alienation that adolescents feel toward their parents and peers (Armsden & Greenberg, 2007).

The IPPA was developed based upon the results obtained from an original sample comprised mostly of adolescents between the ages of 16 and 20 years, but also some as young as 12 years. It is a self-report questionnaire with a 5-point Likert scale that ranges from 1 (*almost always* or *always true*) to 5 (*almost never* or *never true*). The original inventory contained 28 questions about parents and 25 questions about peer relationships, which yielded two attachment scores. The revised version, the IPPA-R, contains 25 items in each of the Mother, Father, and Peer sections, which yield three attachment scores (Armsden & Greenberg, 2007). Over the past 23 years, researchers using the IPPA have reported that the results obtained on the inventory are positively related to adolescents' social self-concept (Coley & Medeiros, 2007; Flight & Forth, 2007; Gomez & McLaren, 2007). The IPPA does not measure the same psychological processes as described by Ainsworth and as measured by the Strange Situation (as cited in Ainsworth et al., 1978).

According to Allen (personal communication, 2009),

> The IPPA is a useful measure of current parent-teen relationship quality. It just bears almost no empirical relation to the AAI or the Strange Situation. It's not really designed in the attachment tradition, and captures "attachment" primarily in the lay sense.

The only test that taps into the attachment process, as described by Bowlby (1969) and Ainsworth (1978), is the AAI (George, Kaplan, & Main, 1996). The AAI is a

structured, semiclinical interview focusing upon early attachment experiences and their effects on the developing personality.

Adult attachment classifications obtained after coding the AAI are related to corresponding patters of infant Strange Situation behavior as follows (Hesse, 1999):

1. AAI secure autonomous classification (F) - secure in the Strange Situation.
2. AAI dismissing classification (Ds) – avoidant in the Strange Situation.
3. AAI preoccupied classification (E) - resistant in the Strange Situation.
4. AAI unresolved/disorganized classification (U) – disorganized/disoriented in the Strange Situation.

A four-way distribution of adolescent attachment classifications based upon multiple studies ($N = 503$; Bakermans-Kranenburg & van IJzendoorn, 2009) yielded 34% Ds, 44% F, 11% E, and 11% U. Normative data for adolescents with low socioeconomic status (SES) was not available, but a large set of studies ($N = 1368$) of adults with low SES indicated a normative distribution of attachment classifications as 32% Ds, 30% F, & 7 E, and 32% U (Bakermans-Kranenburg & van IJzendoorn, 2009).

My aim in conducting this study was to tap into the attachment processes in adolescence, and the AAI was the only tool currently available for this purpose. The interviews, composed of 20 questions, were recorded, transcribed, and then coded. In order to be able to conduct AAIs, a researcher must receive a minimum of 2 weeks of training at an AAI institute. I attended the Adult Attachment Training Institute, Summer 2009, at the University of Western Ontario, London, Ontario, Canada, with Dr. David Pederson and Deanne Pederson. In order to be able to code with reliability, a researcher

must go through the reliability check process offered through the Psychology Department at Berkeley. Drs. Main and Hesse monitor all training institutes and the reliability checks and certifications.

I am currently in the process of becoming a certified coder and have obtained the services of Helene Deane Dozier, who has been a certified coder since December 28, 2006. For more than 2 decades, the AAI has been proven to be a reliable tool for identifying inner working models in regard to attachment relationships, and it has been recognized as a reliable and valid measure to use with adolescents (Bakermans-Kranenburg & van IJzendoorn, 1993; Crowell et al., 1996; Crowell, Fraley, & Shaver, 2008; Sagi et al., 1994; van IJzendoorn, 1995; van IJzendoorn & Bakermans-Kranenburg, 1996).

Attachment and Contemporary Bereavement Research

Bowlby as well as Parkes (1972, 2006) provided an ethological perspective on separation and loss, noting that the grieving process of adults can be summed up in the four stages: (a) numbness, a state where the loss is cognitively incomprehensible (denial); (b) yearning for the lost person; (c) disorganization and despair; and (d) reorganization. Cicely Saunders, founder of the Hospice movement, worked with Parkes, and together, they used the principles of attachment theory to develop programs for the emotional care and well-being of dying and bereaved individuals. Bretherton (1992) commented on their work by saying, “What they found particularly helpful in countering negative attitudes to the dying and bereaved was the concept of grief as a process toward attaining a new identity rather than as a state” (p. 764).

Subsequent research has supported the notion that children and adolescents also go through a process of grief and bereavement. Bowlby (1980) noted that grief is a natural feature of the attachment behavioral system. From an evolutionary perspective, the loss of an attachment figure results in grief meant to discourage prolonged separation. Hence, Bowlby considered the permanent loss of an attachment figure as having an important influence on personality development and suppressed or unresolved grief as having pathogenic potential.

Bowlby (1980) discussed grief and bereavement as having three distinct phases that can be applied to children and adolescents, and which are similar to the four stages noted earlier. The protest phase, a strong reaction to the separation from the attachment figure, is marked by separation anxiety and anger. With time, denial of the loss and other negative emotions turn into sadness and hopelessness, and may be marked with an ongoing preoccupation with the lost person. The despair phase is a natural reaction to the permanent loss of the attachment figure. In adults and children alike, this phase is characterized by disturbances in sleeping and eating patterns, social withdrawal, loneliness, and dysphoria. Because attachment is person specific, there is a yearning for the missing person that no other individual can fill. This psychologically difficult time can last for weeks or months. The detachment phase, or reorganization, occurs when attachment responses fail to bring back the attachment figure and are suppressed. Most people are able to reorganize or rearrange representations of self and the lost attachment figure so that they can continue to maintain a psychological bond with the lost person, and can adjust to living a life without that individual.

In accordance with Bowlby's (1980) theory of loss, grief, and mourning, during the reorganization period, the bereaved person is able to have a sense of a continuing psychological bond with the deceased person. This bond can take the form of positive memories, symbolic exchanges and conversations, and ongoing mental representations of the deceased individual, none of which is delusional or the result of a mental illness. Instead, these representations are expressions of effective coping strategies and the reorganization of inner working models (Field, Gao, & Paderna, 2005).

Parkes (2006) discussed adults who had lost romantic attachment figures and compared their reactions to those of infants. He noted that infants and adults go through similar reactions following a significant loss. Research conducted from the early 1970s to the late 1980s indicated that 12 months following a significant loss, 18% to 30% of bereaved individuals exhibited signs of depression, and 18% were still considered depressed 24 to 30 months following a loss, a rate 2 times higher than the nonbereaved population (Jacobs, Hansen, Berkman, Kasl, & Ostfeld, 1989).

More recent literature has indicated a less depressed bereaved population, which might be partly the result of a change in diagnostic criteria for depression and the current trend in psychology to focus on positive outcomes (Wortman & Boerner, 2007). The factors that influence the grief and bereavement response are complex and include age, gender, type and quality of relationship that the individual had with the deceased person, how the person died and by what means, whether the death was sudden or expected, and the religious beliefs of the bereaved individual (Stroebe, Folkman, Hansson, & Schut,

2006). Complicated or prolonged grief was discussed in detail by Maciejewski, Zang, Block, and Prigerson (2007).

Bowlby (1980) noted that some individuals who have lost an attachment figure experience chronic mourning, whereas others have a prolonged absence of conscious grieving. Middleton, Moylan, Raphael, Burnett, and Martinek (1993) noted that disordered mourning can be delayed or chronic. Wortman and Boerner (2007) discussed many forms of grieving and noted that following a loss, some people experience a temporary rise in distress and then return to normal functioning, some people experience an ongoing depression or other forms of distress, and others are resilient and do not exhibit any overt signs of distress. Positive psychology stresses the importance of positive emotions and meaning making during times of loss (Gillies & Neimeyer, 2006). However, Bonanno and Field (2006) as well as Mancini and Bonanno (2006) noted that following a significant loss, most people experience a modest or moderate degree of negative emotions, psychological disorganization, and health problems; however, others can react with considerable acceptance and resilience. Regardless of the theoretical exploration of grief and bereavement, researchers have agreed that following a significant loss, there is a distressful reaction that requires a degree of psychological reorganization. There also has been consensus in the literature that children and adolescents experience grief and bereavement and that their emotional reactions are not significantly different from those of adults (Christ, 2000; Currier, Holland, & Neimeyer, 2007; Hope & Hodge, 2006; Sussillo, 2005).

Coping mechanisms congruent with attachment theory were discussed by Stroebe and Schut (2005), who also wrote extensively about the reorganization (Bowlby, 1980) of inner-working models of self and others following the loss of a significant attachment figure. For bereaved persons to go through the bereavement process effectively and adjust to life following a loss, they need to use hyperactivating and deactivating cognitive strategies.

Hyperactivating strategies involve the willful exploration of the meaning and significance of the loss, and the active attempt to find ways to reorganize symbolic bonds between the bereaved person and the deceased person. These strategies are possible only when bereaved individuals can tolerate them and when they are not overwhelmed with grief or are psychologically disorganized. Hyperactive strategies enable bereaved individuals to embrace their personal histories and identities by incorporating the past and not splitting memories because of the emotional pain resulting from the loss. Hyperactivating helps bereaved individuals to integrate the past with new circumstances and enables them to remember the deceased persons in constructive ways that fit into the ongoing development of inner working models of self and others. Freud (1917/1957) also discussed mental representation following a significant loss, referencing them as hypercathexis and decathexis.

Deactivating strategies contributing to the postloss reorganization include momentary detachment and inhibition of painful emotions and disturbing thoughts. These strategies enable bereaved individuals to focus on the here and now, and to meet the demands of daily life. Deactivating strategies also help bereaved individuals to build

resilience and explore new ways of life without the attachment figures (Coifman, Bonanno, Ray, & Gross, 2007).

When successful reorganization occurs, for the bereaved individuals, the lost relationship continues to have meaning, but at the same time, they are able to accept new opportunities. If the bereaved persons fail to reorganize the inner working models of self and the lost attachment figure, they are likely to continue to pine, feel hopeless, and be unable to cope effectively with life's demands (Christ, 2000; Stroebe et al., 2005; Sussillo, 2005) and are susceptible to suffer from clinically significant complicated bereavement or prolonged grief. Stroebe et al. (2005) stated that "adaptation to bereavement is a matter of … exploring and discovering what has been lost and what remains: what must be avoided or relinquished versus what can be retained, created, and built on" (p. 52).

Attachment Classification and Bereavement

Attachment and coping research consistently has shown that individuals with a secure attachment classification have more flexible coping strategies during times of loss and are more successful in adjusting to and maintaining good adjustment following the loss (Mikulincer & Shaver, 2007; von Doorn, Kasl, Beery, Jacobs & Prigerson, 1998). Ongoing research, although has been limited and has rarely included adolescents, has indicated that people who are classified as securely attached generally report fewer clinical symptoms, such as anxiety depression and posttraumatic distress, during times of bereavement (Fraley & Bonanno, 2004; Wayment & Vierthaler, 2002; Wijngaards-de Meij et al., 2007). Securely attached individuals also tend to ruminate less about the

deceased, have positive memories of the lost person, and engage in positive fantasies or symbolic exchanges with the deceased individuals.

Individuals identified as having a preoccupied, or anxious, attachment have been found to experience psychological distress, which includes complicated grief reactions, for up to 60 months following the loss of an attachment figure (Field & Sundin, 2001; Fraley & Bonanno, 2004). However, preoccupied individuals also have been found to be prone to idealize the deceased individuals and have positive thoughts about them, regardless of the quality of the actual relationship that existed (Nager & de Vries, 2004).

A preoccupied attachment is an insecure attachment that can lead to chronic mourning (Boelen, van den Hout, & van den Bout, 2006) that includes ongoing, intense sorrow; anger; anxiety; inability to accept the loss; and extreme difficulty in adjusting to life following the significant loss. Adam, Sheldon-Keller, and West (1995) conducted a study with a clinic population of adolescents and used the AAI to determine attachment classifications. They found that 49% of the participants received an unresolved loss and trauma classification, 48% of whom also received a secondary classification of preoccupied. There has been an ongoing association in the literature between unresolved/disorganized and preoccupied attachment in regard to unresolved mourning (Ainsworth & Eichberg, 1991; Shaver & Fraley, 2008; Thomson, 2010).

Alternatively, individuals who have dismissing, or avoidant, attachment tend to use defense mechanisms to minimize attachment relationships. When they experience the loss of an attachment figure, they do not report significant anxiety, depression, or other conscious symptoms of psychological distress, but they do have somatic symptoms

(Wayment & Vierthaler, 2002) and are prone to develop complicated grief (Shear et al., 2007). Dismissing, or avoidant, attachment is an insecure attachment that can result in the absence of grief, and long periods of suppression of grief can result in physical and psychological illnesses (Bowlby, 1980; Shaver & Fraley, 2008). Some researchers have noted that individuals who have a significant combination of preoccupied and dismissing attachment have the most physiological difficulties during bereavement, experience trauma-related symptoms, and might even have behavioral difficulties such as problematic alcohol consumption (McChrystal, 2008; Wijngaards-de Meij et al., 2007).

Current Research on Bereaved Children and Adolescents

Research from different branches of psychology and social work that is not a part of current research on attachment is beginning to produce considerable data about how children and adolescents grieve. The consensus in the research continues to support what Bowlby discussed in his original theory on grief and mourning, which is that children and adolescents experience the loss on emotional and psychological levels and that some of them have what might be considered normal grief and others have complicated grief (as cited in Melhem et al., 2004). Sandler et al. (2010) and Melhem, Moritz, Walker, Shear, and Brent (2007) noted that complicated grief can result in functional impairments and can include symptoms of posttraumatic stress disorder and depression (Balk, 1996; Dillen, Fontaine, & Verhofstadt-Deneve, 2009).

Dowdney's (2000) work indicated that bereaved children have lower self-esteem, which affects broad domains of functioning. Brown and Goodman (2005) looked at 515 children whose parents died in the World Trade Center attack in 2001 and called their

complicated grief traumatic grief, which included the symptoms already noted as well as anxiety and poorer coping strategies. Warden (1996) noted that following the death of a parent, many children experience difficulties in concentration and learning in school, and that 15% to 20% continue to experience significant emotional and behavioral problems 2 years following the loss. Abdelnoor and Hollins (2004) looked at the standardized testing results of 73 parentally bereaved children living in the United Kingdom and 24 children bereaved following the death of a sibling. They reported that the bereaved children obtained scores that were, on average, half a grade below those of their nonbereaved peers.

The International Work Group on Death, Dying, and Bereavement (1999) reported that children as young as 4 years of age respond with grief and disorganization following the loss of significant persons in their lives. Factors affecting the bereavement process in children and adolescents who have lost significant attachment figures are complex and include the genders of the children and the genders of the deceased individuals; their ages; circumstances of death; adjustment to the remaining caregivers and quality of those relationships; participation in grief counseling; and support systems across settings (i.e., home, school, religious community, etc.; Currier et al., 2007; Hope & Hodge, 2006; Lawrence et al., 2006; Wolchik et al., 2006). Based upon the literature review presented in this chapter, the attachment organization of children and adolescents at the time of a parent's death also is a significant factor and influences the course and the outcome of the grief and bereavement processes.

Research focusing on gender differences during bereavement (Haine et al., 2006; Hope & Hodge, 2006, Warden, 1999) has indicated that females tend to internalize and male externalize their emotional distress. Lawrence et al. (2006) conducted research over 2 years with 65 parentally bereaved college students and examined coping style and psychological distress. Correlation analysis between males and females revealed that among the female participants, avoidant coping and psychological functioning persisted (bereavement [$r = .30$, $p < .01$]; hopelessness [$r = .38$, $p > .01$]; suicide [$r = .34$, $p < .05$]; and depression [$r = .56$, $p < .01$]). Sandler et al. (2003, 2010) suggested that females were more prone to experience a prolonged and disordered grief up to 6 years following the loss ($n = 244$, ANCOVA analysis). Research about bereaved adolescence of both genders has been limited and warrants further investigation.

Summary

The review of literature provided comprehensive insight into Bowlby's (1996) attachment theory; Ainsworth et al.'s (1978) empirical foundation for the theory; and an explanation of the attachment patters established in childhood and their respective corresponding classifications in adolescence and adulthood, as measured by the AAI. Also discussed in the review was Bowlby's (1980) theory of grief and mourning and how the individual's attachment organization influences the bereavement process.

The literature review discussed parentally bereaved children and adolescents, normal grief, and complicated and traumatic grief. Some long-term effects of the loss of an attachment figure were noted and included primarily internalizing problems for females and externalizing problems for males. Difficulties in learning, lower self-esteem,

depression, and impaired functioning across setting were some of the symptoms that the parentally bereaved children of both genders experience. However, a gap in the literature concerning parentally bereaved adolescence and attachment, and parentally bereaved high school students living in the inner cities in particular, has become evident. This study helps to close the gap in the literature by providing empirical data about attachment, parental death, and school functioning. Cognitive and psychological developments in adolescence have enabled researchers to use the AAI because it is a reliable and valid means of collecting data from this age group.

Included in Chapter 3 is an explanation of the methodology that I used to conduct this study and answer the RQs. The discussion focuses on the use of comparison of means as a valid procedure to analyze the relationships among attachment classification, self-concept, and the academic and behavioral functioning in school of inner-city adolescence. This chapter also includes descriptions of the ethical considerations, assessment tools, sample, and procedures.

Chapter 3: Research

Introduction

The purpose of this quantitative study was to use attachment theory to investigate the impact of parental bereavement on inner-city minority adolescents as a group and then according to gender. The purpose of Chapter 3 is to discuss the study design and methodological procedures, sample, assessment tools and data collection, data analysis, and procedures taken to protect the rights of the participants. The chapter includes a discussion of (a) the statistical analysis used to analyze the relationships among attachment classifications; (b) bereavement status; (c) self-concept; and (d) the academic and behavioral functioning in school of adolescents ages 14 to 19 years attending a large inner-city public high school.

Research Design

This study followed a quantitative approach using a MANOVA design to assess the relationships between the means of variables. The three independent variables (IVs) were attachment organization, bereavement status, and gender. The three dependent variables (DVs) were self-concept; academic functioning, as measured by GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year. Group 1 comprised adolescents classified with secure attachment; Group 2 comprised adolescents classified with insecure attachment, either a dismissive or a preoccupied attachment organization; and Group 3 comprised adolescents classified as having an unresolved/disorganized attachment organization based upon the AAI. Each group was subdivided into participants who were parentally bereaved and those who were

not; those groups were then subdivided according to gender. I conducted a MANOVA using SPSS v.20 for Windows with three IVs and three DVs to look at the relationships among the variables rather than look at each separately. The MANOVA tested whether the mean differences among groups on a combination of DVs were likely to have occurred by chance. It is usually more powerful to conduct a MANOVA analysis rather than separate ANOVAS for each DV (Tabachnick & Fidell, 2012).

Participants

To be eligible for this study, the students had to meet the following requirements: (a) full-time student status (b) ages 14 to 19 years, and (c) fluent in spoken English.

Sample Size

I determined the sample size for this study by conducting a power analysis, which revealed that for an alpha level of .05, effect size of .7, and statistical power of .80 (Cohen, 1992), I needed a minimum of 68 participants. However, because a larger sample size would have increased the significance of the results, I continued the recruitment period until I had secured 90 participants. The sample size of 90 participants was determined following a separate power analysis for an alpha level of .05, effect size of .6, and statistical power of .80. Given the complexity of the AAI and the time required to conduct the data collection for each participant, the goal was to recruit between 68 and 90 participants.

I obtained approval to conduct this study from Jersey City Public Schools, Office of Planning Accountability and Development, as well the principal of the high school where the research was conducted. At the time of the study, the high school had

approximately 1,400 students, 6% of whom were European American, 14% were Pakistani American and other Asian American, 28% were African American, and 52% were Hispanic American. Most participants were from the same city (most from the same neighborhood), had the same SES background (57% low SES based upon school records indicating that they received a reduced-price or free school lunch), and had the same history of educational opportunities.

Procedure

I recruited the participants by visiting 45 homeroom classes. The candidates received a verbal description of the study. At the end of the 10-minute presentation, each student received a manila envelope containing the informed consent documents, which included either a parent consent form for a child if the adolescent was 17 years of age or younger or the informed consent for adult student if the adolescent was 18 or 19 years of age. The envelope was labeled with my name and office number. All students had to return the signed documents to the office listed on the envelope on the following school day.

Following collection of the informed consent documents, I placed the students' names in a bag and randomly drew one name at a time until I had pulled 10 names. Once the first 10 participants had gone through the process of being screened, contacted, and interviewed, I then drew the names of the next 10 participants. This process continued until I had obtained the desired maximum sample of 90 potential participants. The names of the other interested students are in a locked file cabinet in my private home office.

I collected the data during three separate phases and according to the following procedures:

1. During the first structured interview, I obtained assent from the minor students. All of the participants completed the data sheet (see Appendix A) and the screening questionnaire (see Appendix B). If students met the exclusionary criteria, I removed them from the study. The remaining students completed the PHCSCS-2; Piers & Herzberg, 2002).
2. During the second interview, all of the participants completed the AAI, which I audiotaped.
3. I conducted Phase 3 of data collection without the participants being physical presence. I viewed school records and obtained GPA scores and number of disciplinary actions taken per school year for the students in the sample. These procedures took approximately 4.5 to 5 months to complete.

Instrumentation and Materials

Table 1, which shows the IVs and DVs, is a summary of the assessment measures used in the study. Following Table 1 is a comprehensive discussion of each measure.

Table 1

Summary of Variables and Assessment Measures

IVs	Scale of measurement	Instrument	Total score/Subscale score
Attachment organization	Nominal	AAI	Autonomous (F) Dismissing (Ds) Preoccupied (E) Unresolved/Disorganized (U/D)
Bereavement status	Nominal		Yes or no: loss of one or both parents.
Gender	Nominal		
DVs			
Self-concept	Interval	PHCSCS-2	
GPA	Interval	School records	
Average no. of disciplinary actions per school year	Interval	School records	s (suspension) 5 d (detentions) = 1s 2 ins (in-school suspension)=1s

Adult Attachment Interview

The AAI (George et al., 1996) is a structured, semiclinical interview focusing on early attachment experiences and their effects on the developing personality. Responses to its 20 questions are recorded, transcribed, and then coded. Adult attachment classifications obtained after coding the AAI are (a) Autonomous (F), (b) Dismissing (Ds), (c) Preoccupied (E), (d) Unresolved/Disorganized (U/D), and (d) Cannot Classify (CC).

In order to conduct the AAI, a researcher must receive a minimum of 2 weeks of training at an AAI institute. I attended the Adult Attachment Training Institute, Summer 2009, at the University of Western Ontario in London, Ontario, Canada, with Dr. David Pederson and Deanne Pederson. In order to be able to code with reliability, a researcher must go through the reliability check process offered through the Psychology Department at Berkeley. I am currently in the process of becoming a certified coder and have

obtained the services of Helene Deane Dozier, who has been a certified coder since December 28, 2006.

The AAI has been proven to be a reliable tool for identifying inner working models regarding attachment relationships, and it has been recognized as a reliable and valid measure to use with adolescents (Bakermans-Kranenburg & van IJzendoorn, 1993; Crowell et al., 1996; Kobak & Sceery, 1998; Sagi et al., 1994; Spangler & Zimmermann, 1999; van IJzendoorn, 1995; van IJzendoorn & Bakermans-Kranenburg, 1996; Zimmerman, 2004).

As outlined in Chapter 2, cognitive changes that occur by the time children reach adolescence include formal operational thinking and advances in logical and abstract reasoning skills (Keating, 1990). Adolescents have an overreaching attachment organization that they use to function outside of family relationships (Hesse, 1999). As a result of cognitive changes, including metacognitive skills, it is possible and valid to measure the attachment process in adolescence using the AAI. The AAI is the only test available that taps into the attachment process as described by Bowlby and Ainsworth (as cited in George et al., 1996).

Piers-Harris Children's Self-Concept Scale (2nd ed.)

The PHCSCS-2 (Piers & Herzberg, 2002) is a 60-item self-report composed of descriptive statements written at a Grade 3 reading level. The test is designed for children between the ages of 7 and 18 years. The children respond to the statements by noting whether they apply to them by marking yes or no on the answer form. Reliability coefficients range from 0.89 to 0.91. Raw scores are converted to standard scores for 6

domain scales: Behavioral Adjustment, Intellectual and School Status, Physical Appearance and Attributes, Freedom From Anxiety, Popularity, and Happiness and Satisfaction. The interpretive labels for all of the domain scales are very low, low, low average, average, and above average.

As noted in Chapter 2, research on parentally bereaved children and adolescents has indicated that following the loss, self-esteem and other areas of self-perception might be lowered. The results obtained also in this study provided comparisons of self-perceptions of the participants with secure, insecure, or disorganized attachment classifications. The PHCSCS-2 is standardized and normed measure, inexpensive to purchase, and simple to administer and score. It was developed for use with adolescents and was an appropriate measure for this study's participants.

Additional Measures

A screening questionnaire that I developed screened the volunteers for traumatic loss (confounding variables) that included the death of a parent and other significant losses, whether the volunteers had experienced the loss of other attachment figures or were parentally bereaved, and the dates of the events. The screening questionnaire also helped me to identify students whom I had to exclude from the study because they did not meet the inclusion criteria. The exclusionary criteria for the study were the following: traumatic loss of parent or any other close relative or friend 6 months or less prior to the study; environmental disasters; including dislocation or homelessness resulting from fire or economic devastation; and an inability to communicate fluently in spoken English. These exclusionary criteria were chosen to ensure that any students who had suffered a

recent loss or trauma were not further harmed or emotionally upset and that because of the short lapse in time, GPA and school discipline might not have reflected postloss trends.

Student school records are stored in a computer program on a secure server. I was given partial access to this program, JCPS400A, so that I could look up the students' GPAs and number of days (out-of-school) suspended. I gained this information while in a private office in the school building. Disciplinary actions also included the number of detentions and in-school suspensions per semester. I requested these data through the office of the vice principal responsible for school discipline. Discipline actions were weighted according to severity, that is, five detentions = one out-of-school suspension, and two in-school suspensions = one out-of-school suspension. I compiled the disciplinary data and calculated an average number of disciplinary actions for each student.

Data Collection and Analysis

I conducted the assessments after school hours and in a private office located on the first floor of the school building. The participants completed the PHCSCS-2 first, which took 10 to 30 minutes. Each participant then took part in the AAI interview, which was audiotaped and took from 40 minutes to 2 hours to conduct. I transcribed and deidentified the AAI responses before e-mailing the transcriptions to a certified AAI coder, who return the coded transcripts and score sheets back to me.

Coding requires a careful reading of each line of transcript and the assignment of numerical values to the attachment-related experiences and to the text revealing each

participant's current state of mind regarding attachment figures. The total scores are then converted to corresponding attachment classifications (Main et al., 2002). This process took approximately four months for the 69 AAI interviews. To ensure the accuracy of the attachment codes, two certified coders coded 14 of the 69 transcripts for reliability.

As noted in the Research Design section of this chapter, the participant groups were formed according to AAI classifications obtained from coding the transcripts. Group 1 comprised adolescents classified with secure attachment; Group 2 comprised adolescents classified with insecure attachment, which is either a dismissive or a preoccupied attachment organization; and Group 3 comprised adolescents classified as having an unresolved/disorganized attachment status on the AAI. Each group was subdivided into participants who were parentally bereaved and those who were not, and then those groups were subdivided according to gender.

I harvested the participants' GPA scores and out-of school suspensions from the school database, which was described earlier. I obtained detention and in-school suspension data from the school administrator separately rather than in the presence of the participants. I then imported all of the collected data into SPSS v.20, where they were statistically analyzed.

Using SPSS v.20 for Windows, I conducted a MANOVA with three IVs and three DVs. In addition, I conducted a series of univariate ANOVAs to discover which of the DVs (behavioral functioning in school, GPA, and self-concept) was being affected by the IVs (attachment classification, bereavement status, and gender). To counter the potential effect of an inflated error rate, I conducted a Bonferroni-type adjustment with a p of .01.

Significant results on the MANOVA and subsequent statistical analyses answered the six RQs and tested the proposed hypotheses:

1. What is the relationship between attachment organization and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{01}: There is no difference in adolescent attachment organization (secure, insecure [dismissive or preoccupied], or unresolved/disorganized), as measured by scores obtained on the AAI and self-concept, as measured by standard scores obtained on the PHCSCS-2; academic functioning, as measured by GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a1}: There is a difference in adolescent attachment organization (secure, insecure [dismissive or preoccupied] or unresolved/disorganized), as measured by scores obtained on the AAI and self-concept, as measured by standard scores obtained on the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

2. What is the relationship between bereavement status and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{02}: There is no difference between adolescents who are parentally bereaved and those who are not in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a2}: There is a difference between adolescents who are parentally bereaved and those who are not in regard to self-concept, as measured by the PHCSCS-2; academic

functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

3. What is the relationship between gender and the self-concept, academic functioning, and behavioral functioning of the participants?

H_{03}: There is no difference between males and females in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

H_{a3}: There is a difference between males and females in regard to self-concept, as measured by the PHCSCS-2; academic functioning, as measured by the GPA; and behavioral functioning, as measured by the average number of disciplinary actions per school year.

4. Do adolescents who have been identified as having a secure attachment and are parentally bereaved experience more academic and behavioral difficulties in school and do they have a more negative self-concept than those who are not parentally bereaved?

H_{04}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having a secure attachment on the AAI.

H_{a4}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept; as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having a secure attachment on the AAI.

5. Do adolescents who have been identified as having an insecure attachment (dismissing and preoccupied) and those with unresolved/disorganized status and are parentally bereaved experience more academic and behavioral difficulties in school and do they have a more negative self-concept than those who are not parentally bereaved?

H_{05}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having an insecure attachment and those with an unresolved/disorganized status, as measured by the AAI.

H_{a5}: There is a difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved adolescents and those who are not parentally bereaved and who have been identified as having an insecure attachment and those with an unresolved/disorganized status, as measured by the AAI.

6. Do parentally bereaved females experience more academic and behavioral difficulties in school and a more negative self-concept than do parentally bereaved males?

H_{06}: There is no difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved females and males.

H_{a6}: There is a difference in academic functioning, as measured by the GPA; behavioral functioning, as measured by the average number of disciplinary actions per school year; and self-concept, as measured by the standard scores obtained on the PHCSCS-2, between parentally bereaved females and males.

Ethical Considerations

As mentioned previously, I obtained informed consent from each participant before conducting this study. The records of this study will remain confidential and secure in a locked file in my private home office; only I have access to the records. I will keep all paper documents for 5 years and then destroy/shred them. I will keep all computerized records in a secure database on my personal computer, and no other person will have access to them; after 5 years, they also will be destroyed. Any reports based upon the data collected that might be published will not include any information that will make it possible to identify any of the participants; no specific information that I obtained from any of the participating students will be used. All data were assessed according to group responses and trends.

The AAIs were transcribed by one individual who did not know the participants or have any access to their last names or any other identifying information. The transcriber was a typist who had no knowledge of the nature of the study or the coding of the AAI. Each transcript was prepared so that the participants' names, specific dates, locations of birth and residence, and other identifying information were replaced with abbreviations such as G1 (Girl), P1 (Place), G2, P2, and so on. I was the only individual who had access to the participants' personal information; neither the transcriber nor the coders had access to any personal and confidential information. As noted, to ensure reliable attachment classifications, before conducting the data analysis, 20% of the transcripts were coded by a different certified coder.

Summary

I conducted this study with a sample of adolescents between the ages of 14 and 19 years who were attending a large inner-city high school. I assessed their attachment organization using the AAI and their self-concept using the PHCSCS-2. I also reviewed school data for GPA and average number of disciplinary actions per school year. These data were statistically analyzed to answer the six research questions. I explain the results of the analysis in Chapter 4.

Chapter 4: Results

Introduction

The purpose of this quantitative study was to use attachment theory to investigate the impact of parental bereavement on inner-city minority adolescents as a group and then according to gender. The goal was to determine whether the DVs of behavioral functioning in school, GPA, and self-concept were affected by the IVs of attachment classification, as measured by the AAI, bereavement status, and gender of the participants. Chapter 4 describes the data collection process, the descriptive statistics of the sample, and results. Because of the complexity of the research design and RQs, as well as the limitations of the sample size, the findings include the results of one three-way MANOVA, three two-way MANOVAs, and six one-way MANOVAs, with 25 corresponding tables in all.

Data Collection

The data collection phase of the study was uneventful and consistent with the proposal: The duration was from December 2011 through April 2012 (4.5–5 months predicted) and the sample size was 69 (68 predicted). I received 127 signed consent forms and randomly selected 69 students to be in the study. It would have been beneficial to collect data from all 127 volunteers because the MANOVA called for a larger sample size. However, because of the sensitive nature of the interviews and because many of the participants were minors, Walden University's Institutional Review Board (IRB) requested that only the minimum number of participants be used. Approval to conduct the

study was granted by the IRB before any data were collected from the participants (approval #11-15-11-0100522).

Descriptive Statistics

I developed three demographic tables for the participants according to the three IVs. The 69 participants ranged in age from 15.1 to 20 years (M = 17.6 years), and most of the participants were female (n = 37, 53.6%) rather than male (n = 32, 46.4%). More participants were born in the United States (n = 49, 71.0%) than not (n = 20, 29%). All participants had their time living in the United States computed with a mean of 13.95 years. Participants were categorized into one of three attachment groups, namely, secure (n = 20, 29.0%); insecure (n = 27, 39.1%); or unresolved/disorganized (n = 22, 31.9%), or into one of two bereavement status groups, that is, parentally bereaved (n = 18, 26.1%), or not parentally bereaved (n = 51, 73.9%). Approximately one third of the participants were parentally bereaved (see Tables 2-4).

It is important to note that a normative distribution of adolescent attachment based upon multiple studies with N = 503 (Bakermans-Kranenburg & van IJzendoorn, 2009) was 44% secure, 45% insecure, and 11% unresolved. The results of my study were closer to the adult low-SES population (30% secure, 39% insecure, and 32% unresolved; Bakermans-Kranenburg & van IJzendoorn, 2009) than to the adolescent population. As mentioned previously, the school population was 57% low SES, but what percentage of the study sample was low SES was unknown because these data were not collected. unknown, In addition, U. S. census data for 2011 indicated that 23.7% of people in the United States were under the age of 18, and the SSA (2012) indicated that 1.9 million

children had a deceased parent, meaning that approximately 2.6% of children and adolescents nationally were parentally bereaved. In my study, 26.1% (n = 18) of the study participants were parentally bereaved, a significantly higher percentage than the national average.

Table 2

Participant Characteristics by Attachment Organization

Characteristics	Secure	Insecure	Unresolved/ Disorganized	Total
M Age (*SD*)	17.5 (1.38)	17.6 (1.21)	17.7 (1.15)	17.6 (1.23)
Time in United States (*SD*)	11.45(6.75)	13.86(6.48)	16.35 (4.47)	13.95 (6.22)
Born in United States *n* (%)				
Yes	10 (14.5)	19 (27.7)	20 (29.0)	49 (71.0)
No	10 (14.5)	8 (11.6)	2 (2.9)	20 (29.0)
Total	20 (29.0)	27 (39.1)	22 (31.9)	69 (100.0)
Gender *n* (%)				
Male	10 (14.5)	13 (18.8)	9 (13.0)	32 (46.4)
Female	10 (14.5)	14 (20.3)	13 (18.8)	37 (53.6)
Total	20 (29.0)	27 (39.1)	22 (31.9)	69 (100.0)
Grade *n* (%)				
9	2 (2.9)	2 (2.9)	1 (1.4)	5 (7.2)
10	5 (7.2)	4 (5.8)	4 (5.8)	13 (18.8)
11	1 (1.4)	2 (2.9)	3 (4.3)	6 (8.7)
12	12 (17.4)	19 (27.5)	14 (20.3)	45 (65.2)
Total	20 (29.0)	27 (39.1)	22 (31.9)	69 (100.0)
Race/Ethnicity *n* (%)				
European American	1 (1.4)	3 (4.3)	3 (4.3)	7 (10.1)
African American	6 (8.7)	12 (17.4)	11 (15.9)	29 (42.0)
Hispanic American	8 (11.6)	8 (11.6)	5 (7.2)	21 (30.4)
Asian American	5 (7.2)	2 (2.9)	1 (1.4)	8 (11.6)
Other	0 (0.0)	2 (2.9)	2 (2.9)	4 (5.8)
Total	20 (29.0)	27 (39.1)	22 (31.9)	69 (100.0)
Bereavement status *n* (%)				
Bereaved	5 (7.2)	5 (7.2)	8 (11.6)	18 (26.1)
Not bereaved	15 (21.7)	22 (31.9)	14 (20.3)	51 (73.9)
Total	20 (29.0)	27 (39.1)	22 (31.9)	69 (100.0)

Note. N = 69

Table 3

Participant Characteristics by Bereavement Status

Characteristics	Parentally bereaved	Not parentally bereaved	Total
M Age (SD)	17.9 (1.12)	17.5 (1.23)	17.6 (1.23)
Time in United States (*SD*)	15.08 (5.24)	13.56 (6.53)	13.95 (6.22)
Born in United States *n* (%)			
Yes	14 (20.3)	35 (50.7)	49 (71.0)
No	4 (5.8)	16(23.2)	20 (29.0)
Total	18 (26.1)	51 (73.9)	69 (100.0)
Gender *n* (%)			
Male	8 (11.6)	24 (34.8)	32 (46.4)
Female	10 (14.5)	27 (39.1)	37 (53.6)
Total	18 (26.1)	51 (73.9)	69 (100.0)
Grade *n* (%)			
9	1 (1.4)	4 (5.8)	5 (7.2)
10	1 (1.4)	12 (17.4)	13 (18.8)
11	2 (2.9)	4 (5.8)	6 (8.7)
12	14 (20.3)	31 (44.9)	45 (65.2)
Total	18 (26.1)	51 (73.9)	69 (100.0)
Race/Ethnicity *n* (%)			
European American	2 (2.9)	5 (7.2)	7 (10.1)
African American	8 (11.6)	21 (30.4)	29 (42.0)
Hispanic American	4 (5.8)	17 (24.6)	21 (30.4)
Asian American	1 (1.4)	7 (10.1)	8 (11.6)
Other	3 (4.3)	1 (1.4)	4 (5.8)
Total	18 (26.1)	51 (73.9)	69 (100.0)
Attachment style *n* (%)			
Secure	5 (7.2)	15 (21.7)	20 (29.0)
Insecure	5 (7.2)	22 (31.9)	27 (39.1)
Unresolved	8 (11.6)	14 (20.3)	22 (31.9)
Total	18 (26.1)	51 (73.9)	69 (100.0)

Note. $N = 69$

Table 4

Participant Characteristics by Gender

Characteristics	Male	Female	Total
M Age (*SD*)	17.7 (1.40)	17.5 (1.07)	17.6 (1.23)
Time in United States (*SD*)	14.05 (6.54)	13.87 (6.02)	13.95 (6.22)
Born in United States *n* (%)			
Yes	23 (33.3)	26 (37.7)	49 (71.0)
No	9 (13.0)	11 (15.9)	20 (29.0)
Total	32 (46.4)	37 (53.6)	69 (100.0)
Grade *n* (%)			
9	4 (5.8)	1 (1.4)	5 (7.2)
10	6 (8.7)	7 (10.1)	13 (18.8)
11	0 (0)	6 (8.7)	6 (8.7)
12	22(31.9)	23 (33.3)	45 (65.2)
Total	32 (46.4)	37 (53.6)	69 (100.0)
Race/Ethnicity *n* (%)			
European American	3 (4.3)	4 (5.8)	7 (10.1)
African American	13 (18.8)	16 (23.2)	29 (42.0)
Hispanic American	9 (13.0)	12 (17.4)	21 (30.4)
Asian American	5 (7.2)	3 (4.3)	8 (11.6)
Other	2 (2.9)	2 (2.9)	4 (5.8)
Attachment style *n* (%)			
Secure	10 (14.5)	10 (14.5)	20 (29.0)
Insecure	13 (18.8)	14 (20.3)	27 (39.1)
Unresolved	9 (13.0)	13 (18.8)	22 (31.9)
Total	32 (46.4)	37 (53.6)	69 (100.0)
Bereavement status n (%)			
Bereaved	8 (11.6)	10 (14.5)	18 (26.1)
Not bereaved	24 (34.8)	27 (39.1)	51 (73.9)
Total	32 (46.4)	37 (53.6)	69 (100.0)

Note. $N = 69$

Results

There were no missing data. Before data analysis could begin, I had to calculate the DV of behavioral function by using the average number of disciplinary actions per school year. The derived values did not have a normal distribution, so using SPSS v.20, I performed the data transformation to use the ranks of the values rather than the values themselves. This process generated a Rank of DiscActionsAVG, which had a normal distribution.

I ran a three-way MANOVA was run to assess the effects of the interaction of the three IVs of attachment organization, bereavement status, and gender on the three DVs of self-concept, academic functioning, and behavioral functioning when looked at simultaneously. The assumptions were met: The *F* test for Box's M was not significant ($p = .275$), the DVs showed no multicollinearity using Pearson's *r*, and their distributions were normal using the Kolmogorov-Smirnov test.

The Wilks's lambdas for the interactions of attachment style, parentally bereaved, and gender were not significant, except for gender, so there were no simultaneous differences of the DVs of GPA, self-concept, and Rank of DispActionsAVG) by the IVs or their interaction, except for Gender (see Table 5).

Table 5

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization, Bereavement Status, and Gender

Effect	λ	*F*	*df*	Error *df*	Sig.
Attachment	.828	1.812	6	110	.103
Bereavement	.959	.777	3	55	.512
Gender	**.867**	**2.823**	**3**	**55**	**.047**
Attachment * bereavement	.920	.779	6	110	.588
Attachment * gender	.936	.621	6	110	.713
Bereavement * gender	.877	2.575	3	55	.063
Attachment * bereavement * gender	.937	.606	6	110	.725

Note. $p <$. 05 is bold

The lack of significance, except for gender, most likely resulted from the small sample sizes in some of the design cells. When looked at separately, GPA was significantly affected by attachment ($p = .023$) and gender ($p = .005$). Self-concept was significantly affected by bereavement * gender ($p = .011$; see Table 6). I would like to

offer the following data analysis as a guide to future research (Tabachnick & Fidell, 2012).

Table 6

Tests of Between-Subjects Effects for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization, Bereavement Status, and Gender

Effect	DVs	*SS*	*df*	*MS*	*F*	Sig.
Attachment	**GPA**	**731.152**	**11**	**66.468**	**4.052**	**.023**
	Rank of DispActionsAVG	2074.633	2	1037.316	2.680	.077
	Self-concept	127.276	2	63.638	.784	.461
Bereavement	GPA	48.433	1	48.433	2.161	.147
	Rank of DispActionsAVG	369.091	1	369.091	. 954	.333
	Self-Concept	8.464	1	8.464	.104	.748
Gender	**GPA**	**191.301**	**1**	**191.301**	**8.537**	**.005**
	Rank of DispActionsAVG	968.089	1	968.089	2.501	.119
	Self-concept	10.668	1	10.668	.131	.718
Attachment * bereavement	GPA	13.914	2	6.957	.310	.734
	Rank of DispActionsAVG	108.775	2	54.387	.141	.869
	Self-Concept	300.303	2	150.152	1.850	.167
Attachment * gender	GPA	39.157	2	19.579	.874	.423
	Rank of DispActionsAVG	481.323	2	240.662	.622	.541
	Self-concept	110.712	2	55.356	.682	.510
Bereavement * gender	GPA	3.576	1	3.576	.168	.684
	Rank of DispActionsAVG	53.447	1	53.447	.138	.712
	Self-concept	**565.904**	**1**	**565.904**	**6.971**	**.011**
Attachment * bereavement * gender	GPA	20.043	2	10.021	.447	.642
	Rank of DispActionsAVG	1374.605	2	687.302	1.776	.179
	Self-Concept	16.230	2	8.115	.100	.905

Note. $p < .05$ is bold

There were simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IV of gender, but not by attachment, bereavement, or any of their interactions. When looked at

separately, GPA was significantly affected by attachment and gender. Self-concept was significantly affected by the interaction of bereavement and gender.

I ran a two-way MANOVA to assess the effects of the interactions of the two IVs of attachment organization and bereavement status on the three DVs of self-concept, academic functioning, and behavioral functioning when looked at simultaneously. The assumptions were met: The *F* test for Box's M was not significant at $\alpha = .001$ ($p = .151$), the DVs showed no multicollinearity using Pearson's *r*, and their distributions were normal using Kolmogorov-Smirnov test. The Wilks's lambdas for the interactions of attachment style and parentally bereaved were not significant, so there were no simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IVs or their interaction (see Table 7).

Table 7

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization and Bereavement Status

Effect	λ	F	*df*	Error *df*	Sig.
Attachment	.876	1.396	6	122	.222
Bereavement	.967	.691	3	61	.561
Attachment * bereavement	.917	.898	6	122	.499

There were no simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IVs of attachment and bereavement or their interaction. This outcome also most likely resulted from the small sample sizes in some of the design cells.

I ran another two-way MANOVA to assess the effects of the interactions of the two IVs of attachment organization and gender on the three DVs of self-concept, academic functioning, and behavioral functioning when looked at simultaneously. The assumptions were met: The *F* test for Box's M was not significant at $\alpha = .001$ ($p = .046$), the DVs showed no multicollinearity using Pearson's *r*, and their distributions were normal using the Kolmogorov-Smirnov test. The Wilks's lambdas for attachment style and gender showed *F* values that were significant, but not for their interaction. There were simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IVs, but not by their interaction (see Table 8).

Table 8

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization and Gender

Effect	λ	*F*	*df*	Error *df*	Sig.
Attachment	**.785**	**2.622**	**6**	**122**	**.020**
Gender	**.817**	**4.569**	**3**	**61**	**.006**
Attachment * gender	.940	.635	6	122	.702

Note. $p < .05$ is bold

When looked at separately, academic functioning (GPA) also was significantly affected by attachment style and gender (see Table 9).

Table 9

Tests of Between-Subjects Effects for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization and Gender

Effect	DVs	*SS*	*df*	*MS*	*F*	Sig.
Attachment	**GPA**	**311.794**	**2**	**155.897**	**7.176**	**.002**
	Rank of DispActionsAVG	2356.328	2	1178.164	3.098	.052
	Self-concept	167.752	2	83.876	.935	.398
Gender	**GPA**	**284.390**	**1**	**284.390**	**13.091**	**.001**
	Rank of DispActionsAVG	658.599	1	658.599	1.719	.195
	Self-concept	66.266	1	66.266	.739	.393
Attachment * gender	GPA	40.232	2	20.116	.926	.401
	Rank of DispActionsAVG	55.851	2	27.925	.073	.929
	Self-concept	153.890	2	76.945	.858	.429

Note. $p < .05$ is bold

There were simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IVs, but not by their interaction. When looked at separately, GPA also was significantly affected by attachment style and gender.

I ran yet a third two-way MANOVA to assess the effects of the interactions of the two IVs of bereavement status and gender on the three DVs of self-concept, academic functioning (GPA), and behavioral functioning when looked at simultaneously. The assumptions were met: The *F* test for Box's M was not significant at $\alpha = .001$ ($p = .203$), the DVs showed no multicollinearity using Pearson's *r*, and their distributions were normal using the Kolmogorov-Smirnov test.

The Wilks's lambdas for gender and parentally bereaved showed *F* values that were not significant ($p = .104$ and .451, respectively), but the lambda for their interaction was significant ($p = .048$). There were no simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of

DispActionsAVG) by the IVs, but there was a simultaneous differences of the DVs of GPA, self-concept, and Rank of DispActionsAVG by their interaction gender* parentally bereaved (see Table 10).

Table 10

MANOVA for Self-Concept, Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status and Gender

Effect	λ	*F*	*df*	Error *df*	Sig.
Gender	.908	2.138	3	63	.104
Bereavement	.959	.891	3	63	.451
Gender *bereavement	**.883**	**2.785**	**3**	**63**	**.048**

Note. $p < .05$ is bold

When looked at separately, academic functioning (GPA) was significantly affected by gender ($p = .013$), and self-concept was significantly affected by gender * parentally bereaved ($p = .012$; see Table 11).

Table 11

Tests of Between-Subjects Effects for Self-Concept, Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Gender and Bereavement Status

Effect	DVs	*SS*	*df*	*MS*	*F*	Sig.
Gender	**GPA**	**164.215**	**1**	**164.215**	**6.488**	**.013**
	Rank of DispActionsAVG	368.191	1	368.191	.927	.339
	Self-concept	26.797	1	26.797	.323	.572
Bereavement	GPA	61.120	1	61.120	2.415	.125
	Rank of DispActionsAVG	611.214	1	611.214	1.539	.219
	Self-concept	.056	1	.056	.001	.979
Gender * Bereavement	GPA	16.707	1	16.707	.660	.420
	Rank of DispActionsAVG	5.141	1	5.141	.013	.910
	Self-concept	**560.513**	**1**	**560.513**	**6.747**	**.012**

Note. $p < .05$ is bold

There were no simultaneous differences of the DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by the IVs,

but there was a simultaneous differences of the DVs by their interaction gender* parentally bereaved. When looked at separately, GPA was significantly affected by gender, and self-concept was significantly affected by gender * parentally bereaved.

Most likely, the limitation of significance resulted from the small sample sizes in some of the design cells for the four MANOVAs and explained why I ran six additional MANOVAs to answer the RQs. I ran the first three using the full data set of 69 cases, the fourth using the subsample of 20 securely attached participants, the fifth using the subsample of 49 insecurely and unresolved/disorganized attached participants, and the sixth using the subsample of 18 parentally bereaved participants.

RQ1

What is the relationship between attachment organization and the self-concept, academic functioning, and behavioral functioning of the adolescent study participants? The assumptions of the MANOVA were met: The observed covariance matrices of the DVs were equal across groups because the *F* test for Box's M was not significant at $\alpha = .001$ (Box's M = 14.518, $F[12,18420] = 1.128$, $p = .331$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.513) was small (GPA and Rank of DispActionsAVG $r = -.513$**, GPA and Self-Concept $r = .058$, and Self-Concept and Rank of DispActionsAVG $r = .048$). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test was not significant at $\alpha = .001$, Wilks's lambda *F* test was used. Wilks's lambda = .822, $F(6,128) = 2.193$, $p = .048$ ($p < .05$); partial $\eta^2 = .093$; and observed power = .760. There were simultaneous differences on the

DVs of self-concept, academic functioning (GPA), and behavioral functioning (Rank of DispActionsAVG) by attachment classification (secure, insecure, or unresolved/disorganized). However, a partial η^2 of .093 indicated that the mild relationship explained about 10% of the variance (see Table 12).

Table 12

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Attachment	.822	2.193	6	128	.048	.093

Univariate tests. Because Levene's test for GPA was $F = 1.630$, $p = .204$ ($p > .05$); for self-concept was $F = .886$, $p = .417$ ($p > .05$); and for Rank of DispActionsAVG was $F = .005$, $p = .995$ ($p > .05$), the error variance of each DV was deemed equal across groups. The ANOVAs results (univariate tests) were significant for GPA, $F(2,66) = 5.391$, $p = .007$), but not for Rank of DispActionsAVG, $F(2,66) = 3.053$, $p = .054$ and self-concept, $F(2,66) = .951$, p = .392; see Table 13).

Table 13

Tests of Between-Subjects Effects for Academic Functioning (GPA), Self-Concept, and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization

Effect	DVs	*SS*	*df*	*MS*	*F*	Sig.
Attachment	**GPA**	**282.024**	**2**	**141.012**	**5.391**	**.007**
	Self-concept	168.542	2	84.271	.951	.392
	Rank of DispActionsAVG	2282.444	2	1141.222	3.053	.054

Note. $p < .05$ is bold

Results summary of one-way MANOVA for RQ1. Looking simultaneously at self-concept and academic and behavioral functioning, the secure adolescents scored significantly better than the insecure adolescents and the unresolved/disorganized

adolescents. Specifically, the secure adolescents scored significantly higher in GPA and self-concept and had a lower rank of discipline actions average than the insecure and unresolved/disorganized adolescents did. The insecure adolescents scored significantly higher in GPA and lower in self-concept, and they also had lower rank of discipline actions average than the unresolved/disorganized adolescents did (see Table 14).

Table 14

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Attachment Organization for All Participants

	Attachment style*	*M*	*SD*	*n*
GPA	F	84.6730	5.62323	20
	D/E	81.2511	5.29537	27
	U	79.5700	4.34586	22
	Total	81.7070	5.43477	69
Self-concept	F	52.05	9.378	20
	D/E	48.30	7.770	27
	U	49.23	11.144	22
	Total	49.68	9.407	69
Rank of DispActionsAVG	F	26.475	19.8590	20
	D/E	36.500	19.1291	27
	U	40.909	19.1085	22
	Total	35.000	19.9106	69

*F = Secure
D/E = Insecure
U = Unresolved

RQ2

What is the relationship between bereavement status and the self-concept, academic functioning, and behavioral functioning of the adolescent study participants? The assumptions of the MANOVA were met: The observed covariance matrices of the DVs were equal across groups because the *F* test for Box's M was not significant at $\alpha = .001$ (Box's $M = 9.267$, $F[6,6296] = 1.436$, $p = .197$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.513) was small (GPA and Rank of DispActionsAVG $r = -.513^{**}$, GPA and

Self-Concept r = .058, and Self-Concept and Rank of DispActionsAVG r = .048). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test resulted in Box's M = 9.267, $F(6, 6296) = 1.436$, $p = .197$ (not significant at $\alpha = .001$), Wilks's lambda F test was used. Wilks's lambda = .963, $F(3,65) = .829$, $p = .483$ ($p > .05$), partial $\eta^2 = .037$, and observed power = .220. There were no simultaneous differences on the DVs (self-concept, academic functioning [GPA], and behavioral functioning [Rank of DispActionsAVG]) by bereavement status (parentally bereaved or not parentally bereaved; see Table 15).

Table 15

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Bereavement	**.963**	**.829**	**3**	**65**	**.483**	**.037**

Note. $p < .05$ is bold

Univariate tests. No test was run because no multivariate test significance was shown.

Results summary of one-way MANOVA for RQ2. Looking at self-concept and academic and behavioral functioning simultaneously, bereaved adolescents did not have significantly different scores than not parentally bereaved adolescents (see Table 16).

Table 16

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status for All Participants

	Bereavement status	*M*	*SD*	*n*
GPA	Parentally bereaved	80.1122	3.35430	18
	Not parentally bereaved	82.2698	5.92502	51
	Total	81.7070	5.43477	69
Self- concept	Parentally bereaved	50.17	9.841	18
	Not parentally bereaved	49.51	9.343	51
	Total	49.68	9.407	69
Rank of DispActionsAVG	Parentally bereaved	39.972	17.4562	18
	Not parentally bereaved	33.245	20.5792	51
	Total	35.000	19.9106	69

RQ3

What is the relationship between gender and the self-concept, academic functioning, and behavioral functioning of the adolescent study participants? The assumptions of the MANOVA were met: The observed covariance matrices of the DVs were equal across groups because the *F* test for Box's M was not significant at $\alpha = .001$ (Box's M = 10.336, $F[6, 30676] = 1.638$, $p = .132$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.513) was small (GPA and Rank of DispActionsAVG *r* = -.513**, GPA and self-concept *r* = .058, and self-concept and Rank of DispActionsAVG r = .048). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test resulted in $M = 13.388$, $F(6, 30676) = 1.638$, p = .132 (not significant at $\alpha = .001$) Wilks's lambda *F* test was used. Wilks's lambda = .843, $F(3,65) = 4.023$, $p = .011$ ($p < .05$); partial $\eta^2 = .157$; and observed power =. 818. There were simultaneous differences on the DVs of GPA, self-concept, and

behavioral functioning by gender (male or female). However, a partial η^2 of .157 indicated that the mild relationship explained about 16% of the variance (see Table 17).

Table 17

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Gender for All Participants

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Gender	.843	4.023	3	65	.011	.157

Univariate tests. Because Levene's Test for GPA was $F = 2.857$ $p = .096$ ($p > .05$); for self-concept was $F = 2.083$ $p = .154$ ($p > .05$); and for Rank of DispActionsAVG was $F = 3.282$ $p = .075$ ($p > .05$), the error variance of each DV was considered equal across groups. The ANOVA results (univariate tests) were significant for GPA, $F(1,67) = 10.780$, $p = .002$, but not for Rank of DispActionsAVG , $F(1,67) = 1.291$, p = .260 or self-concept, $F(1,67) = .558$, $p = .458$; see Table 18).

Table 18

Tests of Between-Subjects Effects for Academic Functioning (GPA), Self-Concept, and Behavioral Functioning (Rank of DispActionsAVG) by Gender for All Participants

Effect	DVs	SS	df	MS	F	Sig.
Gender	**GPA**	**278.363**	**1**	**276.363**	**10.780**	**.002**
	Self-concept	49.699	1	49.699	.558	.458
	Rank of DispActionsAVG	509.472	1	509.472	1.291	.260

Note. $p < .05$ is bold

Results summary of one-way MANOVA for RQ3. Looking simultaneously at self-concept and academic and behavioral functioning, the female adolescents scored significantly better than the male adolescents on academic and behavioral functioning and significantly worse than the male adolescents on self-concept. Looking at the DVs separately, the female adolescents scored significantly higher in GPA and lower in self-

concept and had a significantly lower rank of discipline actions average than the male adolescents did (see Table 19).

Table 19

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Gender for all Participants

	Gender	*M*	*SD*	*n*
GPA	Male	79.5472	4.57005	32
	Female	83.5749	5.48404	37
	Total	81.7070	5.43477	69
Self-concept	Male	50.59	10.853	32
	Female	48.89	8.020	37
	Total	49.68	9.407	69
Rank of DispActionsAVG	Male	37.922	21.6289	32
	Female	32.473	18.2163	37
	Total	35.000	19.9106	69

As mentioned previously, RQs 4, 5, and 6 required a one-way MANOVA because they sought information about the influence of one specific IV on the three DVs. The relevant one-way MANOVAs were conducted with the corresponding and reduced data sets.

RQ4

Do adolescents who have been identified as having a secure attachment and are parentally bereaved experience more academic and behavioral difficulties in school and have a more negative self-concept than those who are not parentally bereaved? The assumptions of the MANOVA were that the observed covariance matrices of the DVs were equal across groups because the *F* test for Box's M was not significant at $\alpha = .001$ (Box's $M = 19.945$, $F(6, 325) = 2.306$, $p = .034$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.503) was small (GPA and Rank of DispActionsAVG $r = -.503$*, GPA and self-concept $r = .179$,

and self-concept and Rank of DispActionsAVG r = -.1.09). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test resulted in Box's $M = 19.945$, $F(6,325) = 2.306$, $p = .034$ (not significant at $\alpha = .001$), Wilks's lambda F test was used. Wilks's lambda = .855, $F(3,16) = .908$, $p = .459$ ($p > .05$); Partial $\eta^2 = .145$; and observed power = .205. There were no simultaneous differences on the DVs of self-concept and academic and behavioral functioning by bereavement status (parentally bereaved or not parentally bereaved; see Table 20).

Table 20

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status for Securely Attached Adolescents

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Bereavement	. 855	. 908	3	16	.466	.145

Univariate tests. No test was run because no multivariate test significance was shown.

Results summary of one-way MANOVA for RQ4. In the securely attached adolescents, and looking at self-concept and academic and behavioral functioning, the bereaved adolescents did not have significantly different scores than the adolescents who were not bereaved did (see Table 21).

Table 21

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status for Securely Attached Adolescents

	Bereavement status	*M*	*SD*	*n*
GPA	Parentally bereaved	81.8000	4.10290	5
	Not parentally bereaved	85.6307	5.84583	15
	Total	84.6730	5.62323	20
Self-concept	Parentally bereaved	47.80	4.764	5
	Not parentally bereaved	53.47	10.211	15
	Total	52.05	9.378	20
Rank of DispActionsAVG	Parentally bereaved	29.400	14.1395	5
	Not parentally bereaved	25.500	21.7724	15
	Total	26.475	19.8590	20

RQ5

Do adolescents who have been identified as having an insecure attachment (dismissing and preoccupied) and those with unresolved/disorganized status and are parentally bereaved experience more academic and behavioral difficulties in school and have a more negative self-concept than those who are not parentally bereaved? The assumptions of the MANOVA were met: The observed covariance matrices of the DVs were equal across groups because the *F* test for Box's *M* was not significant at $\alpha = .001$ (Box's $M = 9.743$, $F[6, 3148] = 1.461$, $p = .187$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.445) was small (GPA and Rank of DispActionsAVG $r = -.445$**, GPA and self-concept $r = -.080$, and self-concept and Rank of DispActionsAVG $r = .183$). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test was not significant at $\alpha = .001$, Wilks's lambda *F* test was used. Wilks's lambda = .950, $F(3, 45) = .782$; $p = .510$ ($p > .05$); partial $\eta^2 = .050$; and observed power = .205. In the insecure and unresolved/disorganized

attachment style adolescents, there were no simultaneous significant differences in the DVs of self-concept and academic and behavioral functioning by bereavement status (parentally bereaved or not parentally bereaved; see Table 22).

Table 22

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status for Insecurely Attached or Unresolved/Disorganized Adolescents

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Bereavement	.950	.782	3	45	.510	.050

Univariate tests. No test was run because no multivariate test significance was shown.

Results summary of one-way MANOVA for RQ5, In the insecurely and unresolved/disorganized attachment style adolescents, and looking at self-concept and academic and behavioral functioning, the bereaved adolescents did not have significantly different scores than the adolescents who were not bereaved did (see Table 23).

Table 23

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Bereavement Status for Insecurely Attached or Unresolved/Disorganized Adolescents

	Bereavement status	*M*	*SD*	*n*
GPA	Parentally bereaved	79.4631	2.94699	13
	Not parentally bereaved	80.8694	5.44278	36
	Total	80.4963	4.91584	49
Self-concept	Parentally bereaved	51.08	11.243	13
	Not parentally bereaved	47.86	8.573	36
	Total	48.71	9.341	49
Rank of DispActionsAVG	Parentally bereaved	44.038	17.3367	13
	Not parentally bereaved	36.472	19.4672	36
	Total	38.480	19.0490	49

RQ6

Do parentally bereaved females experience more academic and behavioral difficulties in school and a more negative self-concept than do parentally bereaved males? The assumptions of the MANOVA were met: The observed covariance matrices of the DVs were equal across groups because the *F* test for Box's *M* was not significant at $\alpha = .001$ (Box's *M* =7.004, $F(6, 1583) = .921$, $p = .479$). The DVs showed no multicollinearity using Pearson's *r* because the largest absolute value correlation coefficient (.432) was small (GPA and Rank of DispActionsAVG $r = -.432$, GPA and self-concept $r = -.146$, and self-concept and Rank of DispActionsAVG $r = .261$). The DV distributions were normal using the Kolmogorov-Smirnov test.

Multivariate test. Because Box's Test resulted in Box's $M = 7.004$, $F(6,1583) = .921$, $p = .479$ (not significant at $\alpha = .001$), Wilks's lambda *F* test was used. Wilks's lambda = .720; $F(3,14) = 1.813$; $p = .191$ ($p > .05$); partial $\eta^2 = .280$; and observed power = .371. For the bereaved adolescents, there were no significant differences in the DVs of self-concept, and academic and behavioral functioning by gender (male or female; see Table 24).

Table 24

MANOVA for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Gender for Parentally Bereaved Adolescents

Effect	λ	*F*	*df*	Error *df*	Sig.	Partial η^2
Gender	.720	1.813	3	14	.191	.280

Univariate tests. No test was run because no multivariate test significance was shown.

Results summary of one-way MANOVA for RQ6. For the bereaved adolescents, and looking at self-concept and academic and behavioral functioning, the female adolescents did not have significantly different scores than the male adolescents did (see Table 25).

Table 25

Descriptive Statistics for Self-Concept and Academic (GPA) and Behavioral Functioning (Rank of DispActionsAVG) by Gender for Parentally Bereaved Adolescents

	Gender	*M*	*SD*	*n*
GPA	Male	78.7763	2.90203	8
	Female	81.1810	3.44188	10
	Total	80.1122	3.35430	18
Self-concept	Male	45.75	8.515	8
	Female	53.70	9.764	10
	Total	50.17	9.841	18
Rank of DispActionsAVG	Male	42.563	17.0345	8
	Female	37.900	18.4162	10
	Total	39.972	17.4562	18

The purpose of Table 26 is to summarize and clarify the findings of the study.

Table 26

Summary of Findings

RQ	IVs of interest	Results
RQ1: What is the relationship between attachment organization and the self-concept, academic functioning, and behavioral functioning of the adolescent participants?	• Attachment organization	Secure adolescents: -Scored significantly higher in GPA and self-concept than insecure and U/D adolescents. -Had fewer behavioral difficulties than insecure and U/D adolescents. Insecure adolescents: -Scored significantly higher in GPA and lower in self-concept than U/D adolescents -Had fewer behavioral difficulties than U/D adolescents Table 26 Cont'd

RQ	IVs of interest	Results
RQ2: What is the relationship between bereavement status and the self-concept, academic functioning, and behavioral functioning of the adolescent study participants?	• Bereavement status	-No difference was found between parentally and nonparentally bereaved adolescents.
RQ 3: What is the relationship between gender and the self-concept, academic functioning, and behavioral functioning of the adolescent study participants?	• Gender	- Females scored better than males on academic and behavioral functioning. - Females scored worse than males on self-concept.
RQ 4: Do adolescents who have been identified as having a secure attachment and are parentally bereaved experience more academic and behavioral difficulties in school and have a more negative self-concept than those who are not parentally bereaved?	• Secure attachment • Parentally bereaved	-No differences between parentally and nonparentally bereaved secure and insecure adolescents.
RQ 5: Do adolescents who have been identified as having an insecure attachment (dismissing and preoccupied) and those with U/D status and are parentally bereaved experience more academic and behavioral difficulties in school and have a more negative self-concept than those who are not parentally bereaved?	• Insecure and Unresolved/Disorganized Attachment • Parentally Bereaved	No differences between parentally and nonparentally bereaved insecure and U/D adolescents.
RQ 6: Do parentally bereaved females experience more academic and behavioral difficulties in school and a more negative self-concept than parentally bereaved males do?	• Parentally bereaved • Females	No differences between males and females who were parentally bereaved.

Summary

MANOVA and univariate analysis indicated some significance of a complex combination of relationships between the IVs of attachment classification, bereavement status, and gender and the DVs of behavioral functioning in school (Rank of DispActionsAVG), academic functioning (GPA), and self-concept. The sample comprised 69 participants who had a mean age of 17.6 years. The breakdown of participants by gender was 53.6% (n = 37) female and 46.4% (n = 32) male. According to attachment classification, 29% (n = 20) were securely attached, 39.1% (n = 27) were insecurely attached (dismissive or preoccupied), and 31.9% (n = 22) were in the

unresolved/disorganized attachment group. The total sample size included 14.5% (n = 10) parentally bereaved females and 11.6% (n = 8) parentally bereaved males.

Looking simultaneously and separately at self-concept and academic and behavioral functioning, secure adolescents scored significantly higher in GPA and self-concept and lower in Rank of DispActionsAVG than the insecure and unresolved/disorganized adolescents did. In turn, the insecure adolescents scored significantly higher in GPA and lower in self-concept and Rank of DispActionsAVG than the unresolved/disorganized adolescents did.

Two-way MANOVA results showed simultaneous differences in the DVs of self-concept and academic and behavioral functioning by the interaction of gender and bereavement. When looked at separately, self-concept was significantly affected by the interaction of gender and bereavement. Multivariate and univariate analyses indicated that the female adolescents functioned better academically (higher GPA) and had fewer behavioral difficulties (rank of discipline actions average) in school than the male adolescents did. However, the male adolescents scored significantly better in self-concept on the PHCSCS-2 than the females did. When looking specifically at the adolescents who were parentally bereaved, the results showed no significant differences in either gender according to bereavement, academic and behavioral functioning in school, and self-concept.

Chapter 5 provides an interpretation of the findings, describes the limitations of the study, offers recommendations for future research, and discusses the implications for social change.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to use attachment theory to investigate the impact of parental bereavement on inner-city minority adolescents as a group and then according to gender. This chapter includes an overview of the results, a more in-depth discussion of the findings and the limitations, recommendations for future research, implications for social change, and a conclusion.

The study included adolescents who were parentally bereaved and those who were not parentally bereaved. Two subsamples of parentally bereaved participants received particular attention, namely, the number of females and the total number. The study was grounded in attachment theory and bereavement research. Research is lacking on parentally bereaved adolescents, especially among minorities in the inner city. I explored the relationship between various aspects of attachment and the development of behavioral difficulties in school, academic failure, and self-concept.

Of the six RQs examined, support was found for only two: RQ1 and RQ3. RQ1 looked at the self-concept and academic and behavioral functioning of the participants according to attachment classifications. The results indicated that the securely attached participants functioned better academically and had better self-concept scores than did the insecurely attached and unresolved/disorganized adolescents. The securely attached adolescents also had fewer behavioral difficulties in school than did the insecure and unresolved/disorganized adolescents. In comparing the insecurely attached to the unresolved/disorganized adolescents, the former scored significantly higher in GPA and

lower in self-concept than the latter did and had fewer behavioral difficulties. To summarize, support for RQ1 suggested that in terms of academic and behavioral functioning, the securely attached adolescents did better than the insecurely attached adolescents, and the insecurely attached did better than the unresolved/disorganized adolescents.

RQ3 explored the relationships between gender and self-concept and between academic and behavioral functioning in school. The results indicated that, although the female participants scored better than the male participants on academic and behavioral functioning, they had a more negative self-concept than the males did. The results also indicated that self-concept was affected by the interaction of bereavement and gender. The results of the remaining four RQs were not significant; thus, I found no functional differences between bereaved and nonbereaved adolescents.

Interpretation of the Findings

Based upon the literature review, I hypothesized that there would be a difference in academic and behavioral functioning and self-concept according to attachment organization. The results indicated that the secure adolescents functioned better across variables than the insecure and the unresolved/disorganized groups did. The insecurely attached adolescents did better across variables than the unresolved/disorganized group did. These findings confirm and extend prior research, which indicated that secure adolescents are able to communicate their feelings and manage challenging situations effectively (Allen et al. 2007), further suggesting that they might have better behavioral functioning (e.g., fewer disciplinary issues) because they can better navigate difficult

situations than insecurely attached adolescents can. Behavioral functioning in school was established by looking at disciplinary records, which included the number of in-school and out-of-school suspensions, as well as detentions per school year. The results indicated that the secure adolescents had fewer disciplinary problems requiring punishment. Earlier studies had indicated that adolescents with insecure attachment experienced either internalizing or externalizing behavioral difficulties, and possible engagement in delinquent behavior (Allen et al., 2002; Allen et al., 2007; Cole-Detke & Kobak, 1996; Wallis & Steele, 2001).

Prior research has indicated that secure adolescents are able to strive for autonomy while maintaining productive relationships with parents and peers (Allen et al., 2002, 2007); exploring their environment; and communicating their needs. Cognitive processes involved in establishing attachment relationships include the development of representational models and object permanence, attention and memory, interpretative biases, and discrimination learning (Cicchetti & Tucker, 1994; Schore, 1994), all of which are skills necessary for academic success. Significant results obtained in this study will extend this knowledge about securely attached adolescents , who had a more positive self-concept and better academic performance than the insecure and the unresolved/disorganized participants did.

The study results were consistent with earlier research indicating that adolescents with an unresolved /disorganized state of mind regarding attachment experience the most difficulties and have the greatest number of symptoms associated with poor mental health. Approximately 33% of the adolescents in this study sample were unresolved, a

percentage that was consistent with the distribution of attachment classifications among previously studied participants in the low-SES group (Bakermans-Kranenburg & van IJzendoorn, 2009). This study results yielding a high percentage of inner-city minority adolescent participants with an unresolved/disorganized attachment adds to the pool of knowledge regarding adolescent attachment, with previously reported distributions between 11% to 17% as unresolved/disorganized. The unresolved/disorganized participants in this study had the most behavioral difficulties, lowest academic functioning, and the least positive self-concept in comparison to the securely and insecurely attached participants, which was consistent with expectations and theory.

RQs 2, 4, and 5 attempted to find support for the hypotheses that bereavement was a significant factor and that functioning would be effected, regardless of attachment organization. No difference in functioning was found between the bereaved and the nonbereaved participants across attachment groups. Specifically, RQ2 compared functioning of all bereaved and nonbereaved participants, and RQs 4 and 5 compared bereaved to nonbereaved participants in each attachment group. Bereavement research has not been consistent in reporting the amount of time that it takes adolescents to resume baseline functioning following the death of a parent, with estimates ranging from approximately six months to six years (Abdelnoor & Hollins, 2004; Kalter et al., 2003; Warden, 1996). Adolescents who had experienced the death of a parent within 6 months prior to the study were excluded for several reasons, including issues concerning normal grief as well as complicated and traumatic grief and bereavement.

Assumptions could be made about the study results, including the idea that the bereaved participants in this study had had sufficient time to go through a normal grieving process and had resumed a level of preloss functioning, resulting in no differences being found between the groups. In addition, it was possible that the instruments used in this study were not sensitive enough to detect differences in relevant functioning between the two groups. Finally, it was possible that the study group was too small and that a larger sample size might be needed to obtain significant results. A larger sample size was not possible in this study because of its limitations, which I discuss in the next section. Either way, the results of this study do not confirm or disconfirm prior knowledge about the functional effects of parental loss in adolescence.

Based upon the literature review, the response to parental loss might vary according to gender (Haine et al., 2006; Hope & Hodge, 2006; Sandler et al., 2003, 2010; Warden, 1999). Two RQs addressed possible gender differences in the total sample and then according to bereavement. RQ3 compared the academic and behavioral functioning and self-concept of bereaved and nonbereaved males and females (total study sample). The results were significant and indicated that the female participants functioned better academically and had fewer behavioral difficulties in school. At the same time, they also had more negative self-concept than the male participants did. These results served as a baseline to identify any differences in functioning according to gender in the sample.

RQ6 specifically was developed to determine whether parentally bereaved females experience more academic and behavioral difficulties in school and have a more negative self-concept than parentally bereaved males do. The results were not significant

and do not appear to add to the research on gender differences in parentally bereaved adolescents. However, the results were meaningful in this study because when looking at the total sample, there were differences in functioning, and the female participants did better in two of the three variables examined. These results suggested that bereavement is a significant factor for girls and support the significant finding regarding the interaction of gender and bereavement.

I further hypothesized that bereavement affects females in such a way that their academic functioning decreases and behavioral difficulties increase in school. Prior research has indicated that females are more prone to experience a prolonged and disordered grief, up to 6 years following the loss, and that they might have a more avoidant coping style with psychological symptoms of hopelessness and depression (Sandler et al., 2003, 2010). The limitations of this study, which I discuss in the following section, might preclude positive results regarding gender differences and bereavement. There were only 18 participants in the bereaved group, and 10 of them were females. Even though prior literature has suggested that bereavement has a large effect on functioning, because of the small sample size, I could not obtain statistical significance within the bereaved subsample.

Findings in the Context of the Theoretical and Conceptual Framework

The theoretical foundation for this study was Bowlby's (1969, 1973, 1980) and Ainsworth et al.'s (1978) attachment theory, which states that the early bonds formed between children and their primary caregivers are biologically driven and foster personality development, with emotional and cognitive components, including the

development of inner working models of self and others. By adolescence, attachment organization is believed to be well established and can be assessed with the AAI. Attachment research has suggested that there is a relationship between attachment organization and the internalization and externalization of problems during adolescence (Ronnlund & Karlsson, 2006) that influences perceptions of social support and social interactions as well as feelings of self-worth (Cassidy & Shaver, 1999, 2010; Liu, 2008; Stroebe et al., 2005; Wayment & Vierthaler, 2002). The results of this study supported existing theory because the securely attached participants performed better academically, had fewer disciplinary problems in school, and had a more positive self-concept than the insecurely attached adolescents and then by the unresolved./disorganized adolescents, respectively.

In accordance with attachment, Bowlby (1980) developed a theory of loss, grief, and mourning and discussed the concept of reorganization or rearrangement of representations of self and others following the loss of an attachment figure. During the reorganization period, the bereaved individuals have a sense of a continuing psychological bond with the deceased figures. This bond can take the form of positive memories, symbolic exchanges and conversations, and ongoing mental representations of the deceased figures that are not delusional or the result of a mental illness; rather, they are expressions of effective coping strategies and the reorganization of inner working models.

According to attachment theory, adolescents in the insecurely attached and unresolved/disorganized groups have more difficulty reorganizing and are likely to suffer

from psychological and physical distress following the deaths of loved ones that exceeds the distress of people with a secure attachment organization (Bowlby, 1973, 1980). Because of these previous findings, I had predicted a significant difference in functioning in the parentally bereaved participants according to their attachment organization. However, even though the results were approaching statistical significance, I did not obtain significant results. Because of the small sample size, it is fair to say that the implications of these results were nonconclusive; they did not add or take away from prior research on attachment and bereavement. In order to further test the theory, a larger sample of bereaved adolescents needs to be studied.

Limitations of the Study

Before conducting the study, I had a major concern about compounding variables, such as multiple trauma that might have been experienced by the participants, including neglect, abuse, and the consequences of poverty. To protect the participants from additional harm and emotional upset, anyone who had experienced a traumatic event or a significant loss 6 months prior to the commencement of the study was excluded from the sample. The 6-month time period was based upon research indicating that most people return to a degree of baseline functioning in this period of time (Kalter et al., 2003; Wortman & Boerner, 2007). As predicted, many of the participants had experienced abuse and trauma in early childhood, and 18 of the 69 participants were parentally bereaved. The methods that I used to ensure further harm to the participants were effective, and the process used was not a limitation of the study. All of the participants were attending school regularly and were able to participate in the interview process.

Data collected through the interview process appeared to yield valid reliable attachment classifications, as evidenced by the overall quality of the transcripts and because the transcripts were coded for reliability by a second coder, with the result being 100% congruency. Even though the classification rates might not be generalizable to the adolescent population across settings, they can be considered a fair and accurate addition to what is already known about the attachment organization in inner-city youth with low SES.

The AAI interview and the methodology used for the study were a limitation to securing a larger sample size because the interview was a time-consuming effort and difficult to score. The sample size also was limited by the IRB because of the sensitive and potentially traumatic nature of some of the questions. This type of study is better conducted with a team of people and with a research budget. The amount of money required to conduct this research also was a limitation. Each participant received a $5 coupon to the local sandwich shop, the transcriber was paid an average of $41/interview, and the coders were paid $120/transcript.

For four of the six RQs, data analysis did not yield significant results. In order to prove or disproved the alternative hypotheses with certainty, a larger sample size is needed for the groups, which were assigned according to attachment classifications and bereavement status, as well as gender. Finally, even though the focus of this study was the sample of parentally bereaved participants, there was no measure of the grief response or an inventory asking the adolescents about their immediate responses to their losses and their current state of mind regarding the losses. Because I conducted this study in the

school setting, ethical responsibility dictated that I omit such questioning and data collection. The AAI does pose some questions about a loss, but this instrument cannot provide normative scores about the grief response, such as instruments specifically designed for this purpose could. The school setting might have been a limitation to conducting research about sensitive and typically clinical topics such as grief and bereavement, even though parental loss is believed to have short- and long-term effects on daily functioning, including academic and behavioral performance in school.

Recommendations

Based upon the lack of research on the attachment and bereavement of inner-city minority adolescents, more studies should be conducted with this population. It is my opinion that the scope of this study was too broad. I suggest that future researchers focus on attachment and school functioning only and that separate research could focus on attachment, bereavement, and school functioning.

1. Attachment research in inner-city high schools should continue in an effort to establish reliable attachment classification rates for this population. As noted previously, the rates of this study were very similar to the rates obtained with the low-SES population, not with what has been reported for adolescents. In addition, more researchers should examine the possible connections between insecure and unresolved/disorganized attachment and academic and behavioral functioning in school. If attachment organization is a meaningful predictor or mediator of functioning, then more data need to be collected to

narrow the gap in the literature for the minority inner-city adolescent population.

2. Studies dedicated to examining the functioning of parentally bereaved inner-city adolescents have been lacking in the literature, so future researchers should recruit parentally bereaved students to ensure larger sample size. This increase in sample sizes might lead to a more meaningful discussion of postloss functioning according to attachment classification and gender, and specifically with attachment organization as a mediating factor.
3. Interviewing adolescents about the deaths of one or both parents has ethical implications. These children experience trauma at the time of the loss, and the educational environment is not the ideal setting for stirring up painful memories. Collecting data about grief and bereavement is necessary, and developing studies that bridge educational and clinical environments is needed. For example, an ideal situation would see researchers collecting relevant data in the school setting and then inviting the participants to a clinical setting to be interviewed and complete grief inventories.

Implications

In Chapter 1, I noted that the results of this study can lead to positive social changes in schools and communities by encouraging school systems to (a) be aware of and keep records of students who are parentally bereaved; (b) develop school counseling programs for bereaved adolescents that include individual and group counseling for newly bereaved students, as well as for students who might be suffering from

complicated bereavement; and (c) include death and bereavement as topics for discussion in mandatory health classes and other appropriate general study courses. These initiatives should result in increased awareness and enable all students to acquire knowledge of, and sensitivity to, loss and bereavement.

However, because there were no significant differences between the bereaved and nonbereaved participants, discussion about implications and positive social change based upon the study results needs to focus on attachment organization in adolescents and on the AAI, which would include students who are parentally bereaved. The points just mentioned continue to be valid, but instead of focusing on bereavement status, institutional changes can be made so that the AAI is administered in schools and students who are insecure and unresolved/disorganized in regard to attachment can be identified. I am not suggesting school-wide mandated participation in the AAI, but I am suggesting that students who have chronic behavioral problems, have consistent academic failure, are classified as special education with emotional or behavioral disabilities, and experience trauma or loss while attending school participate in the AAI.

Clinical applications of the AAI have been well documented (Steele & Steele, 2008), and practical applications of attachment theory and the AAI are well on their way to being embraced by social service agencies around the world, such as in Toronto, Canada, and London, England. In U.S. schools, school psychologists and school social workers are providing counseling services, crisis intervention, and ongoing emotional and social support to general education and special education students. If these professionals were trained to administer and score the AAI, they quickly would be able to establish

meaningful rapport, accurately determine the sources of students' ongoing emotional difficulties, and develop more appropriate and effective intervention strategies and behavioral support plans. On the individual level, the use of the AAI has the potential not only to improve the quality of services provided to inner-city students but also to provide an opportunity for students to develop meaningful and appropriate attachments to supportive professionals.

Professionals trained in the use of the AAI also would be able to provide teachers with valuable insight into ways to develop a safe-base classroom environment for their students, a classroom environment where all students are supported according to their personality needs and ability to learn. In order to implement the AAI in schools, the school districts need to be willing to pay for professional training and develop a standard operating procedure of its use.

Conclusion

The findings of this study support and extend prior knowledge about attachment organization and how it impacts functioning. The securely attached adolescents who participated in this study experienced more academic success, had fewer behavioral difficulties in school, and had a more positive self-concept than the insecure and the unresolved/disorganized adolescents did. There were no differences in functioning in the bereaved participant group according to attachment organization, but these results might be considered unreliable because the subsample of parentally bereaved participants was not adequate enough to yield statistical significance.

The findings also indicate that although the female participants experienced more academic success and had fewer behavioral difficulties in school, they had a more negative self-concept than the male participants did. There was no statistically significant difference in functioning between parentally bereaved males and females, but when compared to the entire sample, the parentally bereaved females no longer functioned better academically or behaviorally in school, and there was no difference in self-concept across genders in the parentally bereaved group. There was a significant interaction, however, between gender and bereavement, which were reflected in these findings.

Attachment theory is primarily an ethological approach to personality development, which states that the bonds that form between children and their primary caregivers serve the purpose of survival and reproductive fitness. These bonds result in attachments that include emotional, cognitive, and behavioral consequences that continue and might change throughout the life span. In the simplest terms, attachment is based upon personal relationships that influence the ways individuals function. By the time children enter adolescence, their attachment organization is well established, but it can be influenced by positive or negative experiences and their environment. This study confirmed the theory and showed that the securely attached adolescents performed better in school and had more positive views of themselves. To promote optimum adolescent growth and development, it might benefit school systems to incorporate and use tools such as the AAI when working with students who have experienced the most academic and behavioral difficulties; who have been identified as emotionally disturbed; or who have experienced traumatic events in their personal lives, including parental death. The

results of this study indicated that inner-city minority students might have higher rates of unresolved/disorganized attachment than other adolescent populations tested, which presents school communities with the challenge of meeting these students' needs in ways that would encourage them to engage in safe-base behaviors and develop their communication skills so that they can strive for autonomy with success.

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Appendix A: Participant Data Sheet

Name: _____ DOB _____ Gender: Male__ Female __
Date: _____ Phone number: _____

1. Please circle your grade: 9 10 11 or 12

2. Ethnic background:
(Please circle one or all that apply)
Caucasian
African American
Hispanic-Latino:
Mexican
Puerto Rican
Cuban
South American
Filipino
Asian from Pakistan and India
Other ethnicity_____

3. Were you born in the United Sates: Yes / No
If not: How many months or years since you enter the United States?
____
Are you fluent in the English Language? _____

4. Please circle with whom you currently live:

a. Two parents (biological)
b. One parent (biological)
c. Two parents (one step)
d. One Grandparent
e. Two Grandparents
f. Other: _____

5. Please circle the appropriate response:

Mother:	Living	Deceased
Father:	Living	Deceased

Appendix B: Screening Questionnaire

Name: _____ Grade: _____ Home room: _____
Date: _____ Phone number: _____

Please circle Yes or No

1. Did you move from your home in the last six months?

   Yes or No

2. Was there a death in your family in the past six months?

   Yes or No

3. Were there any other significant changes in your family in the Last six months (separation, divorce, illnesses, etc.)?

   Yes or No

4. Has the way you feel or how you think changed in a BIG way in the last six months (your thoughts and feelings about self, family, school, etc.)?

   Yes or No

5. Do you think that you can comfortably talk about your early childhood experiences and about your parents for about an hour?

   Yes or No

Curriculum Vitae

Silvana Amar

Academic Experience

2004-2013	PhD, Clinical Psychology, Walden University, Minneapolis, MN
1991-1992	Post-Master Professional Diploma in School Psychology Certified School Psychologist New Jersey City University, Jersey City, NJ
1989-1991	MA in School Psychology New Jersey City University, Jersey City, NJ
1983-1994	Post-BA completion of Secondary Education requirements for teacher certifications: Seton Hall University, South Orange, NJ
1978-1982	BA in Psychology Seton Hall University, South Orange, NJ

Relevant Professional Experience

1993-Present	School Psychologist
2010-Present	Private practice as licensed professional counselor
2003-2006	Private practice as licensed professional counselor
1985-1992	Student Dean (1991-1992), New York City Public Schools
2009-2010	Woodbridge Developmental Center/Trinitas Hospital Psychological Intern
2008	Catholic Charities of the Archdiocese of Newark Immigration, Refugee Resettlement, and Human Trafficking Program
1993-2012	Jersey City Public Schools School Psychologist

1992 Lyndhurst Public Schools
School Psychology Extern

1992 The Harbor, Hoboken, NJ
Clinical Intern

Specialized Professional Training

2009 AAI Institute
Department of Psychology
University of Western Ontario, London, ON, Canada

Licenses and Certifications

Certified: New York City: Common Branch License – General teaching license Grades K-8.

Certified: New Jersey: School Psychologist
Teacher of Biology (K-12)
Teacher of Psychology (K-12)

Licensed: New Jersey: Licensed Professional Counselor

Poster Presentation

Amar, S. (2007). *Attachment, bereavement, and high school outcomes in a large urban high school.* Presented at the University of Minnesota for Walden University's summer doctoral residency program.

Teaching Assistant

Summer 2007 Walden University, Minneapolis, MN
Course: Cognitive Assessment

Publications

Amar. S. (2007). *The bedside dream dictionary.* New York, NY: Skyhorse.

Professional Organizations

Member: New Jersey Psychological Association
American Psychological Association
National Association of School Psychologists