PERCEPTIONS OF CHILDHOOD AS INDICATORS
OF EARLY ATTACHMENT DEFICITS
AMONG INDIVIDUALS WITH A HISTORY OF VIOLENT CRIME

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by
ANITA KIESLING-CAVER
Dr. Dale Fitch, Dissertation Supervisor
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The undersigned, appointed by the dean of the Graduate School of the University of Missouri–Columbia, have examined the dissertation entitled:

PERCEPTIONS OF CHILDHOOD AS INDICATORS OF EARLY ATTACHMENT DEFICITS AMONG INDIVIDUALS WITH A HISTORY OF VIOLENT CRIME

presented by Anita R. Kiessling-Caver, a candidate for the degree of doctor of philosophy, and hereby certify that, in their opinion, it is worthy of acceptance.

______________________________
Professor Dale Fitch

______________________________
Professor Wilson Watt

______________________________
Professor Michael Kelly

______________________________
Professor Antonio Castro
DEDICATION

This work is dedicated to my father, Charles Kiessling, who told me that I could accomplish anything, and to my mother Helena Kiessling and my cousin, Becky Case, who both in their own ways, showed me how.
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CHAPTER I

The relationship between parents and children, broadly conceptualized under attachment theory, has been examined by social scientists for many years and widely accepted as a factor affecting how a child behaves and adapts socially and psychologically (Ainsworth, 1969; Bowlby, 1969; Freud, 1921). The focus of attachment research has been primarily on the effects of neglectful and/or abusive parenting. This research has identified adverse effects including externalizing behaviors and aspects of internal psychological functioning of the child (Branigan, Gemmell, Prevalin & Wade, 2002; Campbell, 1995; Hoeve, Smeenk, & Loeber, 2007). There has been less scholarly focus regarding the longer-term psychological, emotional and behavioral outcomes that persist into adulthood from early attachment deficits (Fossati, Feeney, Grazioli, Caretta, Milesi, Leonardi, & Maffei, 2005; Hazan & Shaver, 1987; Skolnick, 1986). This chapter discusses early work in the area of attachment and the definition and importance of the internal working model [IWM] in personality development. In addition, it introduces the issue of violence and its impact on society in relation to insecure attachment and the IWM. It concludes with a description of the purpose of this study and a brief overview of the intended methodology.

Attachment Theory

Via the work of Bowlby and Ainsworth (1991), attachment theory changed the way scientists think about the importance of a child’s connection to a primary caregiver. Bowlby (1969) posits the disruption of the critical attachment bond adversely affects all aspects of a child’s social, emotional and psychological development into adulthood.
Bowlby’s theory is influenced heavily by concepts in psychoanalytic theory and ethological theory. He initially studied psychoanalysis at the London Child Guidance Clinic under the supervision of Melanie Klein co-founder of the concept of object-relations (1932). In encountering Lorenz’s (1935) ethological study of imprinting in ducklings, which showed that attachment was innate and therefore is valuable for species survival, Bowlby (1956) became convinced that attachment behaviors are instinctive and will be activated by any conditions that seem to threaten the achievement of proximity, such as separation, insecurity and fear.

Bowlby eventually rejected Klein’s (1931) belief that children’s emotional problems were due to internal conflicts between aggressive and libidinal drives. Bowlby saw children’s emotional problems as connected to continuous adverse events from the external environment (Bowlby, 1940). Interestingly, while Bowlby was at the London Child Guidance Center the influence of two psychoanalytically trained social workers led him to the belief that actual family experiences were much more important, if not the basic cause of emotional disturbance (Bretherton, 1992) which reinforced his adoption of a more ethological view of early childhood development. Thereafter, much of Bowlby’s research in these early years was driven by his efforts to counter Klein’s claims about the genesis of emotional disturbance in children.

Making such a significant break from the accepted psychodynamic model current in developmental psychology and research at the time risked rejection from the field of child psychology and psychiatry. Bowlby contended that a parent’s behaviors and relationship with a child is critical in determining the child’s psychological health. These ideas were being reinforced through his observations and research at the Tavistock Clinic.
in London. However, the clinical climate at the time was still oriented to the psychoanalytic, or Kleinian model, which largely dismissed the impact of parent and family interaction on the emotional or psychological development of a child.

Early Research

Bowlby’s 1944 study examining aspects of disruption of the attachment process, which he termed “maternal deprivation”, provided early insight into the potential long term effects of such disruptions. Bowlby compared a group of forty-four juvenile thieves from the Tavistock Clinic in London to a control group of forty-four adolescents who did not have a history of stealing but were classified by the clinic as emotionally disturbed. He found that fourteen of the thieves were classified as "affectionless", while no one in the control group had that classification. Seventeen of the thieves had been separated from their mother for more than six months before they were aged five. Only two of the adolescents in the control group had experienced such separation before the age of five. Bowlby concluded that there is a correlation between maternal deprivation in infancy and subsequent criminal behavior in adolescence. This study is of particular interest as the first suggesting a link between antisocial behaviors and maternal deprivation.

Mary Ainsworth and Attachment Styles

In 1953, after having worked alongside Bowlby at the Tavistock Clinic for two years, Mary Ainsworth decided to examine the process of mother-infant attachment by studying infants and their mothers in Ganda over a nine month period. In 1967, Bowlby and Ainsworth began a more formal collaboration. Bowlby encouraged Ainsworth to re-examine the results of the Ganda study so as to examine individual differences among the
infants’ reactions to separation from their mothers. It was at this point she developed the first ratings scales for evaluating maternal sensitivity to their infants (Ainsworth, 1979). Now commonly used in attachment research, these scales were developed to classify types of attachment demonstrated individually by each infant.

The method of observation of the mother-infant dyad, known as the strange situation test, was developed by Ainsworth and Wittig in 1969. In the strange situation test, the mother and her one-year-old infant are in a room together; the mother then leaves the room for less than three minutes. When the mother returns, the interactions and behaviors of the mothers and infants are observed. Based on observations from the strange situation test the attachment classification system is applied. From these first tests using the strange situation, Ainsworth found that infants consistently responded in one of three ways. Group One became angry when the mother returned. They cried and wanted contact with the mother, but could not accept the mother’s attempts at comfort. They demonstrated ambivalence by kicking or hitting the mother. Group Two avoided contact with the mother when she returned even though they seemed to look for her when she was gone. Group Three, which was the largest one, sought out the mother when she returned and shared a responsive interaction.

During the original study (Ainsworth, 1979), additional analysis of observations made in the home of the parent-infant interaction prior to the test confirmed that those infants who were ambivalent or avoidant of the mother had a less than optimal relationship with her at home. Based on the conclusions from the strange situation test, Bowlby and Ainsworth later expanded the defining of the three attachment styles: 1)
Secure Attachment, 2) Anxious-Avoidant Attachment, and 3) Anxious-Ambivalent Attachment.

1) Secure Attachment exists when a child exhibits a healthy attachment to a parent. This child is likely to possess a representational model of an attachment figure(s) as being available, responsive, and helpful. These children, in the strange situation test, became briefly upset when the mother left the room but quickly recovered and went on to explore their surroundings. When the mothers returned, these infants responded with a happy and positive interaction with them.

2) Anxious/Avoidant attachment. Such children are likely to have a caregiver who is insensitive and rejecting of their needs. The child does not seek out the parent when distressed. These children, in the strange situation test, avoid the mother when she returns, but have clearly been anxious, and look for her when she is gone.

3) Anxious/Ambivalent attachment. These children are inconsistent in seeking out the mother when she leaves, and experience inconsistent responses to the emotional distress. These are the children in the strange situation test who appear anxious when the mother leaves, but are hesitant to reciprocate the response of the mother when she returns, or also may lash out at the mother when she attempts to respond to the infant.

Internal Working Models

As a result of his move away from psychoanalytic theory and his collaborative work with Ainsworth, Bowlby began refining his position on how maternal deprivation affects psychological development. Essentially, he theorized that the infant’s early experiences with the primary caregiver are aggregated into enduring images of the self and others (Bowlby, 1973). These images serve as internal working models, or sets of
expectations about the availability of the caregiver and the likelihood of receiving support and comfort through those maternal interactions. Based on the quality of interaction and responsiveness of the caregiver, children will develop either a healthy or unhealthy internal working model of the self and of others. Specifically, a securely attached infant will develop an internal working model of the self as valuable and others as responsive and supportive. The infant has a sense of security based on the proximity and availability of the caregiver. If the caregiver rejects the infant consistently and is unreliable in caregiving, the infant will construct an internal working model of the self as unworthy and others as hostile. Because the infant does not experience a basic sense of security, he or she does not develop the expectation of self-care and nurturing.

The concept of internal working models is supported by more recent research demonstrating that representations of early experiences with primary caregivers have a profound impact on the quality of interpersonal or attachment relationships (Fonagy, 1994; Genter & Stevens, 1983; Johnson, Dweck & Chen, 2007; Kobac & Seery, 1988; Patrick, Hobson, Castle, Howard & Maughan, 1994; Shaw & Dallos, 2005). Even so, the long-term impact of this early attachment relationship remains relatively unexplored. Although some research suggests the internal working model can remain relatively stable into adulthood (Bowlby, 1980; Sroufe & Fleeson, 1986), there is a need for a deeper understanding of how it relates to adult emotional and psychological stability.

**Mentalization**

Mentalization, also known as reflective functioning (Borelli, Compare, Decio, & Snavely, 2015; Taubner, White, Zimmerman, Fonagy, & Nolte, 2013) is defined as the
ability to understand one’s own mental states and the mental states of others (Fonagy, 2004). Mentalization is an important emerging idea that is consistent with the concept of internal working models (Bowlby, 1973). This idea expands our understanding of the potential scope of the effects of insecure attachment as well as intentional violence. Fossati et al. (2005) examined the relationship between attachment, mentalization and impulsive aggressiveness in a sample of 466 outpatient clients at a clinic specializing in personality disorders in Italy. The clients were both male and female, with a mean age of 32. The findings supported a significant association between insecure attachments, deficits in mentalization and impulsive aggression leading to violence. According to the best fitting model, there was a significant negative relationship between the level of attachment security (i.e., confidence score) and levels of aggression. In addition, being rated as preoccupied with relationships, which is a construct of anxious/ambivalent attachment style, was the best predictor of aggressive personality features. Levinson and Fonagy (2004) examined attachment and mentalization in a relatively small group of twenty-two violent offenders and a non-violent offender control group. The offenders who were violent demonstrated decreased capacity to mentalize in comparison to their non-violent counterparts. Attachment was measured utilizing the Adult Attachment Interview (Kaplan & Main, 1985). The violent offenders were categorized as insecurely attached significantly more often than the non-violent control group members. This progression of violence into adulthood fits with Weiler and Widom’s (1996) study in which children who had been maltreated had more incidents of violent and aggressive behaviors than children who had not been maltreated.
The Psychopathy Checklist-Revised (PCL-R) is a current measure for assessing both a propensity for violence and other personality traits related to pathological functioning. The original measure was created by Hare (1980) for use with criminal populations; the second revised version (Hare, 2003) is designed to rate the presence and degree of psychopathy in a standardized and reliable way and is in current use. It measures two stable domains: a) interpersonal/affective characteristics such as lack of empathy and egocentricity and b) characteristics that reflect an unstable lifestyle such as impulsivity and antisocial behaviors.

A recent Italian study with violent offenders focusing on attachment security and psychopathic traits (Schimmenti, Passanisi, Pace, Manzell, Di Caro, & Caretti, 2014) helps to demonstrate how the inability to understand another’s intentions or thinking grossly limits the social competence of an adult. This study is unusual in being the only study thus far that identifies specific items on the PCL-R (Hare, 2003) as denoting disrupted or dysfunctional attachment bonds (promiscuous sexual behaviors and multiple romantic relationships). The subjects were 139 men who were convicted of violent crimes against another person. Utilizing the PCL-R, they found that the highest PCL-R scores correlated with the highest indicators for insecure attachment, specifically disorganized type. These items showed a high correlation with the interpersonal and affective traits measured on the PCL-R, lack of empathy, which is also linked to insecure attachment (Cassidy, 1994). The findings suggest a relationship between a disorganized attachment style and violent crimes, which opens a new dimension that needs to be explored. Questions remain unanswered as to the bridge between insecure attachment and violence.
Adult Attachment

As the importance of adult attachment emerged through this early research, concerns for measures of adult attachment correlating with childhood attachment became a focus of theory and research. Ainsworth’s identification of infant attachment patterns was translated and adapted in 1985 in order to identify adult attachment patterns corollary to Ainsworth’s original attachment classifications. This original instrument was termed the Adult Attachment Interview (Main & Kaplan, 1985). This scale and more recent adaptations (Collins & Read, 1990; Hazan & Shazer, 1987) are used to measure adult attachment by asking questions that focus on attachment relationships in childhood, perceptions of those early attachment influences, quality of current relationships, and emotional regulations processes in current situations. These methods of adult attachment measurement have begun to shed light on the longitudinal effect and connection between early childhood attachment insecurity and psychological and emotional problems in the adult including relationship problems and antisocial behaviors.

Adult Attachment Measures

As research within the last few decades concurs with Bowlby’s belief that attachment style continues throughout the life span and in large part determines the quality of adult relationships, additional measures for adult attachment have been developed. For example, Hazan and Shaver (1987) converted Ainsworth’s attachment style typology (Ainsworth, 1978) into terms that fit with adult attachment relationships. Respondents were asked to choose attachment descriptions that best fit themselves and their relationships, thus categorizing themselves as secure, avoidant or anxious. This
scale also related adult attachment to reports of early child-parent relationships (Collin & Read, 1990). For example, secure adults reported that their parents had been accepting and respectful as opposed to reports of the avoidant or anxious adults

Not long after Hazan and Shaver introduced their adult attachment measure, Collins and Read, psychologists at the University of Southern California, determined that the scale should be modified in order to be more sensitive to mental models of self and others in accordance to Bowlby’s concept of internal working models. They also contended that if attachment styles have important implications for behavior in relationships, they should be important in how one chooses adult romantic relationships. Collins and Read modified the scale by adding additional questions based on more subtle characteristics of insecure attachment as described by Ainsworth (1982).

The scale consists of eighteen items scored on a 5 point Likert-type scale. It measures adult attachment styles named secure, fearful, dismissing, and preoccupied.

Secure = high scores on Close and Depend subscales, low score on Anxiety subscales
Fearful = high score on Anxiety subscale, low scores on Close and Depend subscales
Dismissing = low scores on Close, Depend, and Anxiety subscales
Preoccupied = low scores on Close Depend, high scores on anxiety subscales

**Statement of the Problem**

Insecure Attachment in early childhood can have long-term emotional, psychological and behavioral effects that may result in potential deficits in the capacity to form meaningful relationships and relate to others in effective ways. Insecure attachment may also result in distorted thinking patterns that could lead to harmful and potentially violent behaviors towards others in adulthood.
Scope of the Problem – Insecure Attachment

According to John Bowlby (1959), infant attachment serves an evolutionary purpose of ensuring proximity and security from a nurturing caregiver, thereby ensuring human survival. Beyond this biological survival, the attachment relationship has a critical impact on psychological development, personality and self-perception. The problems related to attachment insecurity can be far reaching as these self-concepts and beliefs about the world persist into adulthood (Critchfeld, Levy, Clarkson, & Kernberg, 2008; Rich, 2006; Taubner, 2013). As an insecurely attached child becomes an insecurely attached adult, they view the world as unsafe and unpredictable and the self as unworthy, setting the stage for choices and behaviors that can have adverse consequences for themselves and others.

Studies have linked insecure attachment with symptoms of anxiety, emotionality and problematic externalizing behaviors in children and adolescents as well as adults, along with the adult problems of unresponsive parenting, impulsivity and unsatisfactory relationships (Atkinson and Zucker, 1997; Cassidy & Appleyard, 2008; Cassidy, 1994). The inability to recognize and regulate one’s emotions effectively has also been found to be more prevalent in insecurely attached adults, resulting in poor decision making and impulsivity.

As attachment is examined more thoroughly with adults, there is evidence supporting Bowlby’s claim that the distorted internal working models that are created by early insecure attachment persist into adulthood. A longitudinal study that concluded in 2002 included 199 men that were initially interviewed between 1959 and 1963 when they were pre-teens. At the time of the initial interviews the experimental group was
consistently in trouble with the law for property crimes as well as violence and vandalism. They also had reported histories of abuse and/or neglect in their homes. There was also a similar sized control group of boys from the same area that were not involved in criminal activity, nor with a history of abuse or neglect. Follow up interviews took place when the men were between the ages of 32 and 40. The interviews with the men utilized the PCL-R, (Hare, 2003), measuring the presence and degree of psychopathy by rating interpersonal and affective characteristics along with antisocial behaviors and life style.

The results of the study showed that among those children who had been victims of abuse and/or neglect throughout their childhood, the scores on the PCL-R were much higher and specifically linked to extensive violence (Lang, Klinteberg, & Alm, 2002). Of particular interest in this study was the attention put on the comprehensive measures of neglect when the boys were first interviewed. Neglect was measured using a broad range of parental behaviors, including those linked with Bowlby’s emphasis on nonresponsiveness by the primary caregiver such as parental indifference, hostility and level of involvement with the child (1973). This study supports Bowlby’s emphasis on the development of internal working models being primarily influenced by not only the overall quality of early parenting but by the connectedness and responsiveness of the parent in particular. These findings reinforce the idea that beginning with very early parenting and on through adulthood, attachment plays a vital role in psychological well-being.
**Scope of the Problem - Violence against another Person**

Research demonstrates that the quality of early attachment is a well-established factor in the emotional and psychological development of a child. The link between early lack of attachment and early aggressive behaviors is relatively well-established (Cassidy & Berlin, 1994; Cassidy & Kobak, 1988; Erickson et al., 1985; Lyons, Bronfman, & Parsons, 1997; Matas et al., 1978). More recently, Cyr (2013) examined whether infant attachment security moderates the association between parenting in preschool and later aggressive behaviors. Eighty-two adolescent mothers and their one-year-old infants were measured using the strange situation assessment. At 4.5 years, the mothers reported on their parenting styles and their children’s aggressive behaviors while in-home observations were also conducted. It was found that mothers who had a more critical, non-responsive parenting style had children who were more aggressive.

Bowlby believed that the nature of this early development endures. He argued that the nature of early relationships becomes the model for later relationships, leading to expectations and beliefs about oneself and others that influence social competence and well-being throughout life (Skolnick, 1986). Social competence is a broad category that includes the ability to behave in a socially acceptable manner which can nourish and maintain relationships. Given research findings showing correlation between insecure attachment and poor ability to regulate emotions, make good decisions and feel secure about one’s environment (Atkinson and Zucker, 1997; Cassidy & Appleyard 2008; Collins & Read, 1990; Moutsiana & Fearon, 2013), intentional interpersonal violence may be a long-term result of insecure attachment.
Given research results related to an insecurely attached child’s expectations of the environment as insecure and unpredictable (Bowlby, 1973), there is little wonder that they respond to the world either by “shrinking from it or doing battle with it” (p.208). This view opposes the perspective of securely attached children who form an internal working model of their caregivers as trustworthy and dependable and themselves as worthy of care. In a study of 162 Washington school children with a median age of 10, Booth-Laforce et al. (2005) utilized a multiple regression model and found that self-worth was significant as a mediator between attachment and internalization of problems with peers. In other words, these children with a low sense of self-worth tended to blame themselves for problems with peers. Children who do not have an accurate perception of others’ intentions or perspectives due to a distorted view of the larger environment would easily misinterpret others intentions and see problematic behaviors on the part of their peers as their fault or have difficulty understanding or regulating their emotional responses to their peers.

DeKlyen & Speltz (2004) explain the concept of attachment and its relation to behavioral disorders well: “Secure parent-child attachment may enhance the child’s awareness of mental states and his reflective capacity” (p.327). This mentalizing (Schimmenti, 2014) facilitates relationship building and maintenance by improving the ability to understand and predict interpersonal behaviors. Thus, the inability to effectively interpret interpersonal behavior could lead to problematic social interactions and inappropriate behavioral reactions.

Other studies have linked deficits in mentalization to aggression. In a study with adolescents, Taubner et al. (2013) found that the lack of responsiveness to others’ mental
states correlates positively with increased interpersonal aggression. Behavioral aggression or violent behaviors occur more in adolescents who have difficulty interpreting others emotional states. Specifically, the ability to reflect or understand another’s intention or perspective was very poor among those teens who also had high incidents of violent aggression.

Shonk and Cichetti (2001) found that the association between childhood maltreatment and externalizing problems is mediated by inadequate interpersonal understanding of social competencies. The reduced ability to respond appropriately in a social context positively correlated to a history of childhood maltreatment. The ability to effectively interpret one’s social environment affects how a person responds in a particular situation. Much like the Taubner study (2013), this research provides further evidence that being able to adequately understand another’s intentions is critical in determining the quality and type of interaction a person can achieve. Being able to effectively regulate one’s emotions in order to respond appropriately in social exchanges is a social competence critical to maintaining relationships.

The question remains as to how the perceptions or understanding of a person with insecure attachment reflects the distortions of the internal working model that may then result in violent behaviors? That is, how do persons with insecure attachment, who become violent, make sense of their maladaptive thinking in relation to their experiences with their primary caregivers? Having insight in this area may help mental health professionals to better understand not only specific effects of child maltreatment and insecure attachment but also how the emotional and psychological impact of insecure attachment is recognized behaviorally and perceptually in this population.
Cost to Society

While a deficit in attachment security can have an adverse effect on the person who suffers from it, the cost to the larger society is also consequential, as noted below.

**Children with reported abuse and neglect.** As of September 2013, there were 11,818 children in the custody of Children’s Division, Department of Social Services, in the state of Missouri with an average age of just under 10 years. This is up from 10,174 children in January of 2011. (Missouri Department of Social Services, 2013). The nationwide average cost for children in foster care is roughly $29,000. (Department of Health and Human Services, 2011). The criteria for a child’s placement in the foster care system is primarily persistent abuse and/or neglect by the child’s parent or primary caregiver.

According to a 2013 report by the Children’s Trust Fund and the University of Missouri, Office of Social and Economic Data Analysis (OSEDA), there were over 6,000 children in Missouri who were substantiated victims of abuse and/or neglect. These offenses included sexual maltreatment, emotional maltreatment, and physical neglect and abuse. Such maltreatment often correlates with attachment deficits and long-term emotional problems and even violence (Atkinson & Zucker, 1997; Cassidy & Appleyard, 2008; Taubner, 2013).

**Cost to correctional institutions.** There is also the matter of the financial burden that must be borne by our society in order to manage the individuals who commit violent crimes. For example, in 2008, $74 billion was spent on corrections related costs in federal prisons (Center for Public Policy research, 2010). Approximately 54% of these prisoners have committed violent crimes (Bureau of Justice, 2010).
The Bureau of Justice reports that nationally, in 2009, 198 violent crimes were reported per 100,000 people. During this same year, 54% of prisoners in the nation had been convicted of violent crimes against others. Interestingly, the children who had once been in foster care due to removal from abusive homes make up about 70% of the prison population (Bureau of Justice, 2010). Of this 70%, 40% of those individuals have been diagnosed with attachment related disorders during their time in foster care (Barth, 2005; Lake, 2005; Zeenah, 2004).

**Lack of targeted intervention.** The cost to society continues when intervention is not effectively implemented to decrease the incidents of insecure attachment. Given the scope of the effects of insecure attachment on a child as well as the violent behaviors that can occur in adulthood, it would seem reasonable to turn attention to early recognition of families and children who are vulnerable to the factors that increase the potential for an insecurely attached child. In fact, little attention has been paid to recognizing behaviors demonstrated by a child or potential vulnerabilities within a family that could allow for early intervention to reduce the risk for the long term effects of insecure attachment.

Levy and Orlans (1999) suggest that interventions for helping families with children with attachment disorders be based on: (1) attachment focused assessment and diagnosis; (2) specialized training and education for caregivers; (3) treatment for children and caregivers which facilitates secure attachment; and (4) early intervention and prevention programs for high-risk families. While this research is certainly informative, it seems aimed primarily at adoptive parents, teachers or therapists (Barth, 2009; Thomas, 2014; Zilberstein & Messer, 2010). Thomas (2014) discusses a few intervention programs aimed at adoptive parents or teachers. These programs are very costly and, unlikely to be
accessible to low income and other families without the ability or resources to access this type of information. For example, in spite of existing research evidence for the efficacy of home based prevention programs for parents who are at risk for abuse and neglect (Jacobson & Frye, 2015; Lyons-Ruth, 1990), there are no documented evidence based in-home prevention programs that address the vulnerabilities for insecure attachment. Without such knowledge being included in these home-based interventions, it will be difficult to address generational continuance of insecure attachment by parents who have a history of insecure attachment themselves. There are also no documented programs that are available for lower risk groups such as first time parents, or parents who may have a mental illness to specifically address the risks for insecure attachment.

**Purpose of the Study**

The purpose of this research is to discover how adults with violent criminal histories perceive and understand the quality of attachment with their parent(s) during their childhood. Interviewing adult participants with criminal histories will prove helpful in highlighting the variation in how they account for or understand their behaviors (Worley, 2004). Another important factor in interviewing criminal adults is that their transparency on self-report measures may not be as reliable as one would hope (Schimmenti et al., 2014). These are important considerations that are relevant to this research study. Participants will be asked to recount memories of their childhood related to relationships with their primary caregivers and their families. They will also be asked to discuss current relationships in regard to trust and satisfaction in order to gauge possible effects of attachment security on relationship choices as an adult.
A qualitative research methodology will be used in this study. The data collected through face-to-face meeting with the participants utilizing a semi-structured interview will be analyzed using the grounded theory. Grounded theory will be used because there is a need to extend knowledge about attachment security in regards to its relationship to how insecurely attached adults understand their violent behaviors, especially their intentions to harm another person. While previously cited research is beginning to show evidence of the longitudinal psychological effects of insecure attachment, including violence, there are no known studies with a focus on how these individuals understand or perceive for themselves why or how they have come to make the decisions that they have in regards to social interaction and behavior as adults. A grounded theory approach is optimal to represent these understandings and perceptions of the participants.

Participants will also complete the Adult Attachment Scale (AAS; Collins & Read, 1990), which assesses level of adult attachment corollary to levels of childhood attachment created by Ainsworth (1978). It is important to assess how the participants rate on the AAS in order to gauge their level of attachment security. The AAS measures the participant’s perception of closeness, dependency and anxiety as it relates to adult relationships. These dimensions of closeness, dependency and anxiety correlate with Ainsworth’s dimensions of secure anxious and avoidant.

**Negative Case Analysis Questions**

Negative case analysis is an aspect of the constant comparative method used in grounded theory methodology (Charmaz, 2006). This type of analysis allows for the discovery of new variables or alternate explanations arising from the developing theory that do not fit the anticipated pattern. This discovery may indicate the need to refine the
emerging theory and to look for cases or conditions where the theory does and does not apply. The following questions were utilized with the comparative cases.

**No lack of attachment/no violence**

1) How does a person with no violent criminal history or lack of attachment perceive their childhood relationship with their parents?

2) How does this person view their abilities to manage emotionally difficult situations?

**Lack of attachment/No history of criminal violence**

1) What were the mediating factors that prevented a person with a lack of attachment from becoming violent?

**No lack of attachment/history of criminal violence**

1) How does this person understand their process of becoming violent?

2) What were the mediating factors that led to violent behaviors?

**Research Questions**

This study proposed to address the following questions;

1) How does a person with a violent criminal history perceive the quality of his/her attachment relationship with his/her parent while growing up?

2) What are the effects of an insecure attachment on adult development?

3) What are the effects of an insecure attachment on the process of becoming violent?
4) How have these participants compensated for the results of these deficits in attachment, such as emotional problems and violent behaviors?

**Importance of the Study’s Use of Qualitative Methodology**

Wertz et al. (2011, p. 83) claim that “the primary virtue of qualitative research is the commitment to persons over ideas, the response to concrete needs of human life outside the ivory tower.”

To understand the impact of perceptions of the past on current cognitions, beliefs and behaviors an approach must be utilized which accounts for the environmental context in which these perceptions developed. Being able to recognize the poignancy of human social interaction upon the creation of human thoughts and behaviors is necessary in order to understand how to recognize potential deficits within the environment that would be detrimental to healthy development. Quantitative methodologies are not designed to capture these deeper meanings.

The inductive nature of qualitative methodology allows for behaviors to be interpreted and understood within context of a person’s environment (Daly, 1992). It allows for a better understanding of the process, meanings and experiences as well as individual and family constructions of reality. Field settings and social service agencies provide unique opportunities for the qualitative study of social processes. This methodology is a natural fit for the field of social work research (Epstein, 1988; Taylor, 1977). The social–psychological bases of qualitative research suggest that it is compatible with the person-in-environment paradigm of social work practice. According to the NASW, the person-in-environment perspective views the client as part of the larger environmental system. It encompasses reciprocal relationships and other influences.
between an individual, relevant others, and the physical and social environment (Barker, 2003). The emphasis in social work on interactions among people fits very well with the qualitative research methodology. This study examined the experiences of people within their families and the larger environment that created the potential risk for the phenomenon of attachment and violence.

**Constructivist Grounded Theory**

The type of qualitative analysis utilized in this study is constructivist grounded theory. The original grounded theory was developed by Glaser and Strauss in 1967. It is succinctly, a “way of thinking about data processes of conceptualization, of theorizing from data so that the end result is a theory that the scientist produces from data collected by interviewing and observing everyday life. Data gathering and analysis are simultaneous” (Morse, 2009, p.18). This important progress in qualitative research allowed for analyzing data and developing theoretical statements.

Charmaz and Bryant (2006) expanded on grounded theory with constructivist grounded theory. This method moves the classic grounded theory into a social constructivist paradigm, which allows for a more flexible interpretation of the classic strategies. Charmaz and Bryant contended that grounded theory was too theoretically positivist in its assumptions and relied on an objective, authoritarian observer perspective of the researcher. In contrast, the constructivist approach (Anderson, 2013; Gibbs, 2013) emphasizes multiple realities and analysis that is based on an interpretive understanding given the interaction between the researcher and the participants. Thus, the researcher continually engages in reflexivity throughout the process, assuming the relativity of one’s
understanding and interpretation of the data, as the iterative process of constant interaction with and between the data and the existing literature progresses.

For social work, the philosophical view of the importance of the interaction between a person and their environment and the subsequent effect on human development is a natural fit for utilizing the constructivist grounded theory method. For this study, this method allowed me to effectively understand and analyze the variables that would potentially mediate between attachment security and later behaviors. In contrast to more traditional quantitative methods (Babbie, 1986), the qualitative approach allows for flexibility and in-depth analysis of a situation or phenomenon. For example, while conducting an interview the researcher can adjust to the participant’s responses accordingly in order gain a more in-depth understanding of participant’s beliefs, perceptions and attitudes, leading to insights and understanding of particular research questions that quantitative research could not provide.

During the course of an interview, a researcher is able to note changes in bodily expression, mood, voice intonation, and environmental factors that might influence responses (McRoy, 2013). Such observational data can be of particular value when a respondent’s body language runs counter to the verbal response given to an interview question. Beginning with the interview the researcher is able to utilize a relative stance and interpret the meanings of the responses of the participants. How the participants perceive their experiences with their caregivers is critical to the internal working models about themselves and their environments that create template for their behaviors and decisions as adults. Understanding the context, not just the content of the responses is
crucial in an accurate and meaningful analysis, which can lead to new information about the linkages between attachment security and criminally violent behaviors.

The constructivist grounded theory method is also the most effective method for gaining an understanding of what factors are the most relevant in developing prevention or intervention programs that would aid in early recognition of vulnerable characteristics of parents that may have attachment disorders themselves, and thereby may be putting their children at risk for insecure attachment. Capturing characteristics or factors that may be subtle is a unique possibility in constructivist grounded theory. For example, a Dutch study (Allen, 2010) of women who were victims of domestic violence was able to identify new methods of intervention by utilizing this approach. The women were interviewed with the purpose of gaining insight into the various ways that they moved through and away from abusive relationships. Although they all had different journeys, there were core patterns that emerged, enabling potentially more effective interventions for practice. The opportunity to gain understanding of the participant’s perceptions into their caregivers parenting and how it affected them and their self-perceptions could provide information that would allow for earlier recognition of not just behavioral, but emotional or psychological signs that may be connected with lack of attachment.

**Scope of the Study**

The participants in this research study were individuals who were classified as insecurely attached and have reported a violent criminal history. Analysis of the data examined the perceptions and working cognitive models consistent with insecure attachment that have resulted in their risk to become violent as adults. In addition to the focal individuals, three comparison groups were used: 1) individuals who have insecure
attachment issues but no history of being violent; 2) individuals with a history of violent behavior but no evidence of lack of attachment; and, 3) individuals who have neither a criminal history nor evidence of lack of attachment.

**Sample Description/Sampling Method**

The grounded theory sampling method of theoretical sampling was utilized in selecting participants for the study. Charmaz (2006) explains this method as “returning to the field setting to gain specific data to illuminate a category” (p.167). This method of sampling allows for the development of emerging themes or theory as the analysis progresses. As categories emerge, theoretical sampling is useful in expanding the category, as well as demonstrating connections between categories.

The initial expectation was that the sample would include 16 adults, aged 18-50. The actual final sample size was 17. This difference is explained in Chapter IV. Participants were males and females. All participants were administered the Adult Attachment Scale (AAS) which assessed their level of attachment security. Using the results on the AAS, participants were categorized into one of each of the four groups in the study: 1) self-reported criminal history with AAS scores indicating insecure attachment; 2) no self-reported criminal history with AAS scores indicating secure attachment; 3) self-reported criminal history with AAS scores indicating secure attachment; and 4) no self-reported criminal history with AAS scores indicating insecure attachment.

As expected, the utilization of comparative samples served to provide data for the creation of potentially emerging categories. As conceptual categories in the data emerged
through the comparative process, the data, including the literature were reviewed in order to identify any existing explanations for new emergent categories and themes.

**Definition of Terms**

The set of terms defined in this section provide relevant information about research instruments, psychiatric terminology, and organizational information to assist the reader in following the discussion of methodological specifics and the later analysis of data and interpretation of findings.

- **Adult Attachment Inventory Scale (AAS).** Developed in 1990, the scale consists of 18 items scored on a 5 point Likert-type scale. It measures adult attachment styles named secure, anxious and avoidant.

- **Adult Attachment Interview (AAI).** Attachment in adults is commonly measured using the Adult Attachment Interview. It is a self-report questionnaires assessing attachment style, a personality dimension that describes attitudes about relationships with romantic partners.

- **Psychopathy Checklist-Revised (PCL-R).** A psychological assessment tool most commonly used to assess the presence of psychopathy in individuals. It is a 20-item inventory of perceived personality traits and recorded behaviors, intended to be completed on the basis of a semi-structured interview along with a review of 'collateral information' such as official records.

- **Borderline Personality Disorder (BPD).** Referred to as emotionally unstable personality disorder, emotional intensity disorder, or borderline type in the International Statistical Classification of Diseases and Related Health Problems
ICD-10 is a cluster-B personality disorder, the essential feature of which is a pattern of marked impulsivity and instability of affects, interpersonal relationships and self-image.

- **Diagnostic and Statistical Manual (DSM-V), fifth edition.** The Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association, offers a common language and standard criteria for the classification of mental disorders. It is used, or relied upon, by clinicians, researchers, psychiatric drug regulation agencies, health insurance companies, pharmaceutical companies, the legal system, and policy makers together with alternatives such as the International Statistical Classification of Diseases and Related Health Problems (ICD), produced by the World Health Organization (WHO). The DSM is now in its fifth edition, DSM-5, published on May 18, 2013.

- **Missouri Department of Social Services (DSS).** The state agency of Missouri which oversees the operations of the state's social services.

- **Children’s Division (CD).** A division of the Department of Social Services focusing on service provision for children and families.

- **National Association of Social Workers (NASW).** A professional organization of social workers in the United States.

- **Office of Social and Economic Data Analysis (OSEDA).** A part of the University of Missouri Extension, which collaborates with partners in the analysis of social and economic data with the goal contributing to improvements in the well-being of people, enterprises and communities.

- **Parole.** Conditional supervised release of an offender from prison.
- **Index Crime.** A crime included in the yearly crime statistics of the Federal Bureau of Investigation. In order to be included in this category the crime would be one of the following: murder, non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny or motor vehicle theft.

**Delimitations of Study**

The delimitations of this research study included:

1) Confounding variables not considered, such as not being truthful on the part of the participant or other experienced trauma that may account for responses similar to those consistent with lack of attachment.

2) The study sample size of 17 was relatively small and therefore may have hindered the ability to comprehensively understand the various nuances of attachment disorder impacts and expressions.

3) The potential for researcher bias was ever-present, given the researcher’s broad experience with this population. However, given the value of reflexivity and interpretation through interaction within constructivist grounded theory, this knowledge served as effective tool in the interpretive process.

4) While the purpose of the study was to explore the areas of attachment and violence, other potential factors that affect psychological, behavioral and emotional development were not addressed, such as early neurological problems, in utero effects of drug and alcohol abuse and cognitive deficits.
CHAPTER II

Review of Literature

This chapter will present the literature on attachment security and violence that has served as the foundation for this study, beginning with a review of empirical studies regarding the foundation of attachment literature, including attachment theory. The next section will explore the studies examining the underpinnings of insecure attachment as it relates to human development, including risk factors for attachment insecurity as well as the developmental results of insecure attachment. The final section will explore the literature related to the emotional and psychological development of violent criminals as well as the linkages between the results of insecure attachment and violence.

Attachment Theory

When Bowlby (1969) introduced what he then called “instinct theory,” there was considerable negative reaction in the psychiatric community, which, at the time, placed strong faith in the validity of the tenets of psychoanalytic theory. It could be said that within Bowlby’s lifetime his colleagues never fully accepted his work on attachment as the major contributor to developmental psychology that it has become.

The basic thesis of Bowlby’s theory is that attachment behavior has a biological foundation which can only be understood in the context of evolution (1951). He believed that in order for the human species to survive, in spite of extreme vulnerabilities, especially for an infant, that the very young must be equipped with a stable behavioral system, which through sustaining parental care, serves to reduce risk throughout the long period of human immaturity (Bowlby, 1951). He believed that in addition to, or perhaps
in spite of individual learning and cultural influences, there remains the biological drive between an infant and the mother to behave reciprocally in order to ensure safety and survival (Bowlby, 1957). Bowlby initially drew this concept from ethological theory and the concept of imprinting (Lorenz, 1935). He also reviewed data at the time from Piaget’s findings on an infant’s cognitive and social development (Piaget, 1951, 1954), which influenced Bowlby’s ideas about how an infant gains knowledge through interaction with the environment utilizing the concepts of object permanence. It is through this constant reciprocal interaction between the mother or primary caregiver and the infant that the behavioral system is created and developed.

**Attachment Effects on Child Development**

The idea of the behavioral system that Bowlby refers to evolved as his theory developed. It is more commonly understood at this time in attachment related literature as the internal working model (Bowlby, 1973, 1980; Bretherton, 1985, 1987; Sroufe, 1988). The concept of the internal working model is at the core of Bowlby’s theory. He contends that infants internalize the early social experiences of their first year into internal working models which then facilitate the child’s understanding and predictions of how their world might unfold (Bowlby, 1973). More specifically, an internal working model is a cognitive framework that a child develops through continual interaction with the mother or primary caregiver. Through this interaction, children develop an “internal working model” or set of beliefs and expectations about whether their caregivers, and thereby themselves, are worthy of care and attention. Working models of self-in-relationship develop as well (Bretherton, 1992). Specifically, if the primary caregiver has acknowledged the child’s need for comfort as well as autonomy, the child develops a perception of him or herself
as self-reliant and valuable, and the caregiver as trustworthy and supportive. The results are a cognitive working model that is carried forward that primarily influences the individual’s expectations of others, perceptions of oneself and others as well as behaviors based on those beliefs (Bowlby, 1973).

Bowlby believed that insecure attachment is a result of the impact of a distorted internal working model and that this type of attachment has a pervasive and negative effect on all domains of development. The breadth of influence that insecure attachment has subsequently been found to have on early development is well established (Ainsworth, Blehar, Waters, & Wall, 1978; Johnson, Cweck, Chen, Stern, Ok, & Barth, 2010; Londerville & Main, 1981; Main, Kaplan, & Cassidy, 1985; Matas, Arend, & Sroufe, 1985).

The adverse development of an infant due to a disruption or deficit in the interactions between the mother and infant, thus resulting in a distorted internal working model, have consistently been noted in the developmental literature as influencing a child’s social and emotional development (Liam et al., 1999; Londerville & Main, 1981; Matas & Sroufe, 1978). Kestenbaum, Farber, and Stroufe (1989) studied 12 male and 12 female preschoolers who were grouped according to attachment classification. Experiments focused on reactions to the distress of others, with responses rated for the degree of empathic responding. Also measured were inappropriate affective responding and occurrences of blurring the boundaries between what is happening to another and what is happening to the self. Findings suggest that the quality of attachment security affects critical aspects of children’s development, such as a later capacity for empathy,
emotional regulation, and cognitive development as well as the ability to control or manage one’s behavior.

Matas et al. (1978) found that toddlers who display secure attachment behaviors as infants are rated more highly on a variety of indicators of both autonomy and cooperation. This study included 2 groups of 2 year olds who were classified as either securely or insecurely attached. Each group was given a series of puzzles to put together. Toddlers with histories of secure attachment had expectable normative behaviors in regards to compliance with parental requests. They were more successful in completing the puzzles and showed more enthusiasm about their task. The securely attached toddlers also tended to be more persistent in their efforts than those classified as insecurely attached. This study would indicate that developmentally these securely attached toddlers were possessed of a reasonably normal and healthy level of social and emotional development in order to respond and interact in the ways they did.

In regards specifically to social development, it has been found that securely attached toddlers tend to have better social competence than those who have been classified as insecurely attached (Elicker, Englund, & Sroufe, 1992; Fagot, 1997). At 18 to 24 months, securely attached toddlers have more positive interactions with peers, and their overtures are more likely to be returned. From the ages of 3 to 5, when social interaction is more inclusive of peers due to preschool or day care attendance, the differences between securely and insecurely attached children becomes even more evident (Lyons-Ruth et al., 1997; Moss et al., 1999; Weinfield, Sroufe, Egeland, & Carlson, 1999; Wood, Emmerson, & Cowan, 2004).
In general, research finds that securely attached children are more likely to exhibit curiosity, as evidenced by exploring confidently away from the primary caregiver, as well social competence, meaning age appropriate social exchange based on verbal and non-verbal cues. They are also more likely to form close friendships than are their insecurely attached peers (Arendt, Grove, & Sroufe, 1979; Elicker et al., 1992; Jacobson & Wille, 1986; Youngblade & Belsky, 1992). Securely attached children are able to demonstrate empathy for others, shown by responding in ways to peers that would indicate a matching affective response to another child’s being hurt or sad (Dubois-Comtois & Moss, 2004; Moss, St-Laurent, Cyr, & Humber, 2003). They also demonstrate resiliency in stressful situations, meaning that they are able to reasonably regulate their emotions and cope with difficult situations effectively. They consistently demonstrate confidence in themselves and tend to have a more positive self-image (Verschueren, Marcoen, & Schoef, 1996).

Same age peers (preschool and early school age) who are classified as insecurely attached are much less likely to demonstrate these developmental markers. They tend to be more dependent for their own emotional regulation on adults. They also experience more negative emotions, such as anger and sadness, as well as displaying more aggressive and socially incompetent behaviors (Cicchetti, 1989; Cicchetti & Rizley, 1981; Speltz et al., 1990; Thompson, 1999; Weinfeld et al., 1999).

The importance of social competence as an individual progresses through childhood and into adulthood cannot be overstated. The ability to form and maintain healthy relationships is a primary factor in measuring the overall satisfaction we have throughout our lives. As research continues on attachment in older children, it has become evident that as children progress to school age, the same social problems tend to
persist (Aber & Allen, 1987; Bowlby, 1980; Main & Westen, 1982; Sroufe & Fleeson, 1986).

Findings seem to be consistent throughout childhood (Calkins & Fox, 1992; Greenberg et al., 1997; Lyons-Ruth et al., 1993; Sroufe, Carlson, & Shulman, 1993). For example, it has been found that there is a significant association between insecure infant attachment and teacher’s ratings of lower peer social competence, as well as high anxiety in the third grade (Sroufe, 1988; Sroufe & Egeland, 1989). In one particular study that included a relatively broad age span, children classified as having secure attachment at age 7, were rated again at ages 9, 12 and 15. They were rated as being more participatory, socially competent and feeling better about themselves than the comparative group of children who had been classified as insecurely attached at the age of 7 and rated again by teachers at the same junctures (Jacobsen & Hofmann, 1997).

Similar problems with social competence have continued to be found later into adolescence. Peer connectedness and acceptance during this time is a critical developmental step (Armsden & Greenberg, 1987; Laible et al., 2000; Waters & Cummings, 2000). During adolescence, attachment is important for managing new and stressful situations as well as building confidence or trust in oneself. In the case of an insecurely attached adolescent, the ability to manage emotions and sustain meaningful friendships is at risk (Mullis, Hill, & Readdick, 1999; Torquati & Vazonyi, 1999). An adolescent that struggles with the ability to risk new relationships due to an undeveloped sense of autonomy and confidence would likely struggle socially during this developmental period (Aber & Allen, 1987).
Risk Factors for Insecure Attachment

The variables associated with attachment disruption are complex. The inability to form a strong attachment derives from the early experiences of neglect, physical and sexual abuse, deprivation, and inconsistent responsiveness by the primary caregiver (Akhtar, 1992; Alexander, 1992; Bird, 2001; Bowlby, 1969; Liem, James, O’Toole, & Boudewyn, 1998). Maternal mental health will also be examined as a risk for attachment insecurity. Given the common understanding that abused children likely experience multiple types of abuse, either in the past or co-occurring (Boudewyn & Leim, 1995; Browne & Findelhor, 1986; Rosenberg, 1987), it is difficult to point at one particular form of abuse as specifically linked to insecure attachment.

Neglect/Lack of Responsiveness

Neglect of the physical and emotional needs of a child has been shown to be a common factor related to insecure attachment (Atkinson, Paglia, Coolbear, Niccols, Parker, & Guger, 2000; Gauthier & Levendosky, 1996). The emotional relationship between the child and the caregiver is very important in allowing the child to effectively understand social interactions with others (Dunn, Brown, & Beardsall, 1991). Denham, Workman, Cole, Weissbrod, Kendziora, and Zahn-Waxler (2000), made observations of both mothers and fathers interacting with their preschool aged children and child-rearing styles were reported by the observers. Follow up was done at two and four years after the original observations in order to rate occurrences of any antisocial or oppositional behaviors. In self-report measures completed by the children’s teachers, mothers, and the children themselves, externalizing behaviors showed strong continuity both 2 and 4 years later. Proactive parenting, such as limit setting and a supportive presence, as measured in
the original observations, predicted fewer behavior problems over time, after controlling for initial problems; the converse was true for parental anger. Parental anger with both mothers and fathers predicted a continuation of externalizing behaviors over time (2000). The interaction between the caregiver and the infant is a subtle and complex process. Awareness and appropriate regulation of emotions is learned through the initial primary relationship.

From infancy, the mother’s “mirroring,” or immediate reflection of the child’s emotions, organizes the child’s experience and he comes to learn what he is feeling. The mother’s representation of the infant’s affect is represented by the child and becomes part of his emerging self (Fonagy & Target, 1997). The interactions between the caregiver and infant that involve emotional attunement are initial mechanisms by which the infant learns to understand and regulate their emotions. When the mother is not emotionally attuned to her infant, there can be a rupture in the attachment bond (Poland & Hofer, 1999; Schore, 2001). If the caregiver does not regulate her own affect effectively, both positively and negatively, the infant does not learn how to regulate his or her own affect.

Caregivers engage in a variety of behaviors and interactions that result in the regulation of a child’s emotions (Cole, 1985; Lewis & Saarni, 1985; Miller & Sperry, 1987; Thompson, 1990). These findings regarding emotion regulation as it relates to insecure attachment are consistent with other findings regarding the socialization of emotions (Lewis & Saari, 1985; Thompson, 1990). In Berlin and Cassidy’s (2003) longitudinal study, the associations between mothers' self-reported control of their preschoolers' emotional expressiveness and the quality of the infant-mother attachment, as well as children's emotion regulation, was examined. The study included seventy-six
white preschool-aged children along with their mothers. A game called “Beat the Bell” was created by these researchers in order to elicit children's emotional expression, sharing, and suppression while with their mothers. The findings showed that mothers of children who had been classified as insecure-avoidant reported greater control of their children's negative expressiveness than other mothers. This would reinforce the idea that children who avoid their mothers have some fear regarding her responses, hence the tendency to avoid her and the mothers’ perception of control over their children’s emotions. It was also found that mothers who reported greater control of their children's expressiveness had children who were less likely to express and share their feelings and more likely to suppress their anger in the “Beat the Bell” emotion regulation assessment.

Consistent attempts to control a child’s emotions, as well as persistent rejection of a child’s attempts to gain attention on the part of the caregiver, results in the infant’s inability to regulate its own emotions. In studying infants who have experienced rejection and neglect, their reactions appear to be consistent with the development of an internal working model that reflects continual rejection. Infants whose mothers have been unavailable or inconsistently available tend to either minimize negative affect in order to avoid the risk of further rejection or to increase negative affect in order to increase the likelihood of gaining the attention of the non-responsive caregiver (Cassidy, 1994). For example, in the London Parent-Child project (1991), 100 first time mothers were administered the AAI before the birth of their child. The children were observed at ages 12 and 18 months and classified as either securely or insecurely attached. It was found that mothers who rated higher on a reflective functioning scale or ability to predict or respond accurately to their child’s emotions had children who were securely attached, as
opposed to mothers’ with insecurely attached children who scored lower on reflective functioning (Fonagy, 1991). This would indicate that a child who has known the mother to be non-responsive, even in the first 12 to 18 months of life, has developed an attachment style that anticipates rejection or continued lack of response from the mother.

Infants who experience this emotional rejection may also learn to display emotions that are not always congruent with what they actually feel. For example, if the infant is distressed or sad and the mother does not respond to these signals, the infant will emotionally escalate, increasing the feelings of anger and distress. The infant eventually learns that this extreme level of emotion is required for minimal attention or response. Thus, from very early in their development children perceive, at least on an intuitive level, that their primary caregiver is not reliable or trustworthy and that in order to elicit any response they must manage their behaviors in certain ways. Thus, the environmental input into the developing working model evolves.

As a child consistently receives information about the environment, which early on is the relationship between the child and the attachment figure, the working model of how to experience their emotions and behaviors develops. In the long term, the ability to manage emotions is critical in both maintenance of relationships and management of impulses (Schore, 2001). Overall, the choices that people make based on their emotions greatly affect their ability to function in a manner that is acceptable to the larger society. Emotion regulation is an ability that is particularly important in regards to successful interactions with others, as well as adaptation to changes in the external environment and coping with stressors (Kestenbaum, Farber, & Sroufe, 1989; Schore, 2001).
Maternal Mental Health

In regards to the mental and emotional health of a mother, most research has focused on maternal mood disorders (Cummings & Cicchetti, 1990; Cummings & Davies, 1994). It has been found that the presence of depression may inhibit the emotional and, at times, physical availability of the mother. Cummings and Cicchetti rated mothers of preschoolers on a continuous rating scale measuring depression, finding that those mothers rating higher on depressive mood had children that demonstrated more developmental problems than children of mothers who showed no symptoms of depression. This would include the ability to be sensitive or responsive to the infant, which is linked with attachment in other studies (Zeigenhain, 1990). Infants of affectively disturbed (depressed or bi-polar) parents are more likely to have episodes of sadness, irritability, helplessness, and confusion (Radke-Yarrow et al., 1985). A meta-analysis of 35 studies (Atkinson et al., 2000) found a moderate link between depression and attachment security. However, the strength of the association between the depression variables and attachment varies somewhat according to context, such as utilization of self-report measures, clinic or community sampling, or the inclusion of situational types of depression.

There is only recent evidence suggesting that insecurely attached infants may likely have insecurely attached mothers. Hautamaki’s (2010) research utilizing the classifications of mothers on the AAI, in correlation with attachment type of her child, shows a significant relationship between insecure/avoidant dismissing mothers and their insecure/avoidant children. This cross generational study was conducted on 34 mothers, grandmothers, and infants, with assessments of the mother’s and grandmother’s
attachment security before the birth of the child, with the child’s attachment classification then measured at 1 and 3 years of age. At 1 year of age, 71% of the children were classified as insecure/avoidant if the mothers were so classified at the beginning of the study, with a base or expected rate of 41%. At the 3 year assessments, the corollary attachment types between grandmother, mother, and infant were 86%, with a base rate of 51%. These findings suggest that not only is attachment style transgenerational, but that a mother’s ability to respond to her child in a meaningful or effective way is at risk when her own internal working model has been shaped by insecurity and mistrust.

Jacobsen, Hibbs, and Ziegenhain (2000) also used a longitudinal design to examine the relationship between expressed emotion and mother-child attachment. Their sample included 33 children aged 12 and 18 months. The same group was observed again at the age of 6 years. Expressed emotion was measured by a speech sample. Maternal depression was also assessed. The findings show evidence for a relationship between the quality of parental attachment representations as classified by the AAI and quality of infant's attachment representations as classified by the Strange Situation (Ainsworth & Wittig, 1969). High levels of emotional expression were closely linked to an insecure disorganized attachment style at age 6, which is an attachment style that has been associated with intrusive and hostile maternal behavior.

This study would indicate that parental sensitivity is one of the main variables connecting the parents' internal attachment representations with the quality of their infants' attachment. Sensitivity is not only operationalized on the behavioral as well as on the representational level, but is particularly operationalized as perspective-taking behavior and reflection (Zeigenhain, 1999). Perspective taking and reflection are abilities
present very early in the cognitive development of the infant that are related to internal working models.

Lyons-Ruth et al. (1990) study reinforces the idea that maternal mental health has an impact on the relationship with her infant. The study included 62 low-income families where the mother had some history of mental health problems, including depression and a history of childhood maltreatment. At 18 months, infancy measures were used to assess the relationship between the child and mother. The infancy measures included assessment of mother/infant interaction, maternal psychosocial problems, infant cognitive development, and infant attachment security. Subsequently, child behavior problems were assessed at age 5 by the child’s teachers. It was found that maternal psychosocial problems, including a history of psychiatric hospitalization in combination with insecure attachment of the infant, is significant in predicting hostile aggression in preschool. Attachment security and maternal problems together accounted for 18% of between-group variance (r=.43) and correctly classified 76% of cases as to deviant levels of hostile behaviors (1993).

**Sexual Abuse**

The sexual abuse of a child has been linked to the anxious and avoidant types of insecure attachment in adults. Utilizing the Experience of Close Relationships scale (Brennan, 1998), Minzenberg, Poole, and Vinogradov (2006) found that high anxiety and avoidance were found in adults that had experienced sexual abuse as a child. This particular type of insecure attachment—insecure/anxious—refers to states of negative affect experienced in the context of relationships, particularly fear of being abandoned or rejected. Insecure attachment of the avoidant type refers to a person’s attempts to create
interpersonal distance by using negative emotional and behavioral strategies (Brennan et al., 1998; Fraley & Waller, 1998; Minzenberg et al., 2006). These strategies may include emotional manipulation, passive-aggressive strategies, or physical aggression, all of which could be reflective of a person’s internal working model of the self and others.

Liem and Boudewyn (1999) retrospective study of 687 college students examined the long-term consequences of childhood sexual abuse, as well as other forms of childhood maltreatment and loss, in the context of attachment theory. The researchers utilized between-group and within-group comparisons of individuals with and without child sexual abuse histories. Utilizing path analysis models, the researchers found that the effects of childhood maltreatment and loss experiences on self and social functioning to be consistent with the concept of internal working models derived from attachment theory. Specific to child sexual abuse, the study viewed sexual abuse in the context of broader child maltreatment and found that other corollary abuse or childhood stressors made the child more vulnerable to sexual abuse. This maltreatment in childhood, inclusive of sexual abuse, correlated with higher levels of adult depression and self-destructive behaviors, along with a lower sense of self-esteem.

This study is a powerful indicator that the security or insecurity of attachment is to some degree stable across time (Sroufe, 1988). It is important for this point to remember that early perceptions and expectations regarding the self as worthy, valued, and competent that are formed in infancy affect the view of oneself in future relationships (Bretherton, 1992; Crittendon, 1990). If this view of oneself and others is relatively unchanging, the relationships that one has as an adult will reflect that (Alexander, 1992). The researchers in this study found that the adults who had been victims of childhood
sexual abuse (as well as other maltreatment) exhibited personality traits of self-blame, anxiety, and a limited use of social support.

**Environmental Factors**

Although factors such as poverty, teenage parents, or lack of parental support in themselves do not directly relate to insecure attachment, the effects of these problems on the primary caregiver can be significant in the context of caring effectively for an infant (Flaherty & Sadler, 2011). For example, mothers who have a child before the age of 20 have been found to have an increased potential for insensitive parenting as well as abuse or neglect of their child. Lounds, Borkowski, & Whitman (2006), used data collected from 100 adolescent girls in the third trimester of pregnancy. Data was collected repeatedly until the children born to them were 10 years of age. Mothers who had histories of maternal neglect themselves showed neglect of their own children in early and into middle childhood. Mothers who were more neglectful had children who exhibited more externalizing problems and fewer socially adaptive behaviors. While this study is notable, it is also important to consider factors such as the increased potential for adolescent mothers to live in poverty, show symptoms of depression, have a history of abuse and neglect themselves, and have less social support than older mothers (Al-Sahab, Heifeta, Tamim, Bohr, & Connolly, 2012; Reid & Meadows-Oliver, 2007).

It is understandable that when a parent is overwhelmed by these stressors it can be difficult to attend fully and effectively to an infant. Financial stress is an issue that can be all encompassing. In one large sample of low SES children, infant attachment security was predictive of psychopathology at age 10-1 (Urban, Carlson, Egeland, & Sroufe, 1991), and had similar results in finding more dependence on others, less ego resilience,
and less social competence at later follow up among infants who had been classified as insecurely attached.

Owens and Shaw (2001) followed 310 low-income, male subjects from infancy until age 6 years and their mothers from birth until 6 years of age. At the beginning of the project, two-thirds of the families were living in poverty, and at the age of 6 about half of the families were still under the poverty threshold. Attachment was classified according to the Strange Situation test (Ainsworth & Wittig, 1969) at 1.5 years. Positive adjustment was also measured using the Child Behavior Checklist (CBCL; Achenbach, 1991) as well as the Social Skills rating system (SSRS; Gresham & Elliot, 1989), which was completed by the teacher. These were administered at the end of the study at age 8. Video tapes of parent-child interactions as well as parent interviews were utilized at intervals throughout the study.

Using a step wise logistical regression model, it was determined that among children who lived under the poverty threshold at some point between the ages 1.5 and 5 years, those with secure attachments at 18 months were 2.5 times more likely than others to show positive adjustment 5.5 years later. Similarly, the average mother-child relationship quality score at age 5 to 6 was twice as large, and the early-measured maternal aggressive/hostile personality score was half as large for children who were positively adjusted at age 8 compared to those who were not. These studies indicate that the problems that come with poverty have a substantial impact on the relationship between the primary caregiver and a child, and that early secure attachments increase a child’s ability to cope with stressors, in this case those related to poverty.
Another environmental factor known to contribute to insecurity in the attachment relationship is a lack of support for the mother or primary caregiver. Insecure attachment, primarily the disorganized type, increases in frequency as the severity of social risk factors increases and social support decreases. These risk factors include low income and maternal depression. Twenty-eight percent of infants from families with these problems that received supportive services were classified as having insecure attachment as opposed to 54% of infants of families with similar problems that did not receive services (Lyons-Ruth, Connell, & Grunebaum, 1990).

Other studies related to the impact of social support on the development of attachment have found social support to be a significant indicator for secure infant attachment (Belsky & Isabella, 1988; Crockenberg, 1981; Levitt, Weber, & Clark, 1986). Jacobson and Frye (1991) used a sample of 46 low income women who were randomly assigned to an experimental group that received in-home parenting information and support compared to a control group that did not receive those support services. There were no significant differences between the two groups in terms of demographics, IQ, or social support. The volunteers providing support met with the experimental group prenatally and during the first year. At 13 months, infant attachment was measured using the Home Observation for Measurement of the Environment (Caldwell & Bradley, 1979). This measure was used because it was determined by the researchers to be more sensitive to maternal affect and perceived support. At 14 months, security of infant attachment was assessed using Water and Deane’s (1985) Q-sort procedure during home observations.

Findings showed the mothers that received support had infants who were rated as more securely attached than the control group after a year of supportive services. Of
particular interest is the discovery that according to a multiple regression analysis, the provision of social support had an effect on the affective development of the infant, but did not have an effect on cognitive development. This suggests that a lack of maternal support impacts affective or emotional development. The researchers attributed the impact on affective development to the increased maternal warmth and the ability to respond to the infant’s affective needs in a sensitive manner (Jacobsen & Frye, 1991). Perhaps the lessening of stress and anxiety on the mother due to a sense of being supported and valued allows the mother to put more emotional energy into positive interactions with her child.

**Negative Parenting**

Although the idea of negative parenting is inclusive of the early caregiver-child interactions that have been previously addressed in this review in regards to the increased likelihood of insecure attachment, continued negative parenting is an obvious factor that warrants mention. There is evidence of the effects of this consistent style of parenting on the quality of the attachment relationship. In accordance with the quality of parent-child interaction necessary to stimulate healthy attachment, parents who consistently engage in interactions with their child in aggressive, hostile, insensitive, and criticizing ways decrease the chances of healthy attachment (Boeldt, Rhee, DiLalla, Mullineaux, Schulz-Heik, Corley, Young, & Hewitt, 2012; Brannigan, Gemmel, Pealin, & Wade, 2002; Campbell, 1995; Denham et al., 2000; Dodge, Pettit, & Bates, 1994; Hoeve, Dubas, Echelsheim, vanderLaan, Smeenk, & Gerris, 2009).

Negative or abusive parenting tends to continue with those children classified as insecurely attached as infants or preschool aged children that are later diagnosed with
conduct problems and antisocial behaviors (Deater-Deckard, Ivy, & Petrill, 2006; Denham et al., 2000; McKee, Roland, Coffelt, Olson, Forehand, Massari, Jones, Gaffney, & Zens, 2007; McLoyd & Smith, 2002). In a study that is unusual for its inclusion of young adults’ perceptions of their childhoods along with the parents’ reports, Roberto, Carlyle, Goodal, and Castle (2009) examined the effects of perceived and self-report verbal aggression and responsiveness on 205 undergraduates’ attachment style and relational satisfaction with their parents. They defined verbal aggression as “attacking the self-concept of another person” (Infante & Wigley, 1986). Responsiveness was defined as an individual’s ability to understand the needs of others and to effectively communicate that understanding (Aylor & Oppliger, 2003). The measure utilized to assess attachment style was the Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998) and the Relationship Questionnaire (Bartholomew & Horowitz, 1991). They hypothesized that there would be a positive relationship between parent verbal aggression and the variables of anxiety and avoidance. The findings were as follows: perceived mother and father verbal aggression were positively related to both anxiety and avoidance traits in the adult child. Also, perceived mother and father responsiveness were negatively related to both anxiety and avoidance characteristics with the adult child. The adult children who scored high in the attachment domains of anxiety and avoidance perceived their parents as verbally aggressive and non-responsive. Conversely, the adult children with a secure attachment style perceived their parents as less verbally aggressive and more responsive than did the adult children with insecure attachment styles.
Brennan and Shaver (1998) examined 1407 undergraduate psychology students (587 males and 820 females) at the University of Texas at Austin. One part of the larger study examined the participants’ perception of their childhood relationships with their parents. Participants rated themselves on an adult attachment measure as well as completing a questionnaire measuring the perceived quality of treatment by their mother, father, and peers while growing up. The results of a MANOVA conducted on the mother-father scales as a function of attachment-style category was significant. For example, relative to insecure groups, securely attached people recalled more accepting relationships with mothers and fathers. Insecure groups appeared to perceive their relationships with fathers as equally negative, but fearful individuals described their mothers as even more rejecting. However, it is noteworthy that the effect size overall was small.

In terms of attachment styles continuing into adulthood (Bartholomew & Horowitz, 1991; Hazen & Shaver, 1987), studies that involve adults broaden an understanding of the scope of attachment in adult relationships. It is also important to note that purely quantitative studies are limited in terms of capturing the complexities of attachment relationships between parents and children. Even though perceptions were reported in this study, perception or understanding is a difficult if not impossible construct to quantify. In terms of initial classification of attachment styles, quantitative measures continue to be used to classify child as well as adult attachment and must be used with any empirical study, whether quantitative or qualitative, that examines attachment security. Newer measures have been developed to include perceptions of childhood attachment through the lens of the internal working model in the study of
attachment in adulthood, thereby allowing a more comprehensive assessment of the attachment classification.

**Adult Attachment Measures**

The original Adult Attachment Interview, developed by George, Kaplan, and Main (1985), is used widely to assess current mental representation by adults of their childhood attachment experiences. This current scale began as the creation of Mary Main in 1982 when working with Susan Ainsworth and the Strange Situation test classifying infant attachment. Main saw the need for a way to document the behaviors of parents, hoping to gain understanding into the attachment relationship. The AAI was designed to document the level of secure attachment the parents had during their own childhoods in order to assess the influence of these experiences on their own development and current functioning. This method accesses the adult representation of attachment, or the internal working model of the parents, by assessing specific recollections from their childhood. The interviews are coded based on quality of discourse as well as content. Classification of attachment status based on the AAI are:

**Autonomous:** They value attachment relationships, describe them in a balanced way and as influential. Their discourse is coherent, internally consistent, and non-defensive in nature. This would also be considered a secure attachment.

**Dismissing:** They show memory lapses. Minimize negative aspects and deny personal impact on relationships. Their positive descriptions are often contradicted or unsupported. The discourse is defensive.

**Preoccupied:** Experience continuing preoccupation with their own parents. Incoherent discourse. Have angry or ambivalent representations of the past.
**Unresolved/Disorganized**: Show trauma resulting from unresolved loss or abuse.

The AAI also has been shown to have some overlap with attachment constructs measured by the measures of peer/romantic attachment (Hazan & Shaver, 1987), as reported by Shaver, Belsky, and Brennan (2000). However, there are important differences in what is measured by the AAI. The AAI evaluates a person's state of mind regarding their attachment in their own childhoods, as opposed to measuring adult romantic attachment relationships. In this regard, Hazan and Shaver (1987) translated Ainsworth’s attachment style typology (Ainsworth, 1978) much as Main had, but into terms that fit with adult attachment or romantic relationships. On their attachment scale, respondents are asked to choose attachment descriptions that best fit themselves and their relationships, thus categorizing themselves as secure, avoidant, or anxious. The questionnaire consists of three sets of statements, each set of statements describing an attachment style:

**Secure** - I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.

**Avoidant** - I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

**Anxious/Ambivalent** - I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I
want to merge completely with another person, and this desire sometimes scares people away.

Not long after Hazan and Shaver introduced their adult attachment measure, Collins and Read (1990) determined that the scale should be modified in order to be more sensitive to mental models of self and others in accordance to Bowlby’s concept of internal working models. They also contended that if attachment styles have important implications for behavior in relationships, they should be important in how one chooses adult romantic relationships. Collins and Read modified the scale by adding additional questions based on more subtle characteristics of insecure attachment as described by Ainsworth (1982). The scale consists of eighteen items scored on a 5 point Likert-type scale. It measures adult attachment styles named in addition to “Secure,” “Fearful,” “Dismissing,” and “Preoccupied.” The designated attachment styles are based on scores in the following domains: Secure, Anxious, and Avoidant. The resulting styles are designated as follows:

**Secure** - high scores on Close and Depend subscales, low score on Anxiety subscale

**Fearful** - high scores on Anxiety subscale, low scores on Close and Depend subscales.

**Dismissing** - low scores on Close, Depend, and Anxiety subscales

**Preoccupied** - low scores on Close, Depend, high scores on Anxiety subscales.

The new scale, called the Adult Attachment Scale (AAS) was administered to 406 UCLA undergraduate psychology students with a mean age of 18.9. A subset (n=101) of the sample completed the attachment scale again two months later. Collins and Read (1990) reported Cronbach's alpha coefficients of .69 for Close, .75 for Depend, and .72
for Anxiety. Test-retest correlations for a 2-month period were .68 for Close, .71 for Depend, and .52 for Anxiety. The scores were fairly stable over the two month period. The AAS was chosen as the measure for my research study due to the sensitivity to internal working models as they relate to choices in adult attachment relationships. The AAS is included as Appendix 4.

**Mentalization/Reflective Functioning and Stability across Development**

While the evidence related to the impact of insecure attachment is well established, the complexities of the impaired internal working model related to insecure attachment and how it evolves over the lifespan are less well established. Empirical research related to this area is sparse (Fossati et al., 2005, 2009; Moffit, 2006; Moutsiana et al., 2013). Over time, the idea of Bowlby’s internal working model has begun to be understood in relation to other similar ideas of mental representation across disciplines. Despite this advancing knowledge, these relative comparisons remain fragmented in terms of a comprehensive link to severely aggressive behaviors. According to Mandler (1985), the mental processes or functions which are foundational for creating representations of the self-involved interpretation of experience, creates a sense of freedom or initiative, and generates the experiences leading to the distinctness of oneself as a person.

Developmental psychologists use the term “reflective functioning or mentalizing” (Fonagy et al., 1991) to describe the developmental acquisition that permits the child to respond not only to other people’s behavior, but to the child’s interpretation of other people’s behaviors, feelings, expectations, and pretense (Baron-Cohen et al., 1993; Morton & Firth, 1995). These terms are indicative of the evolution that has been made by
scientists, primarily developmental psychologists, of the pervasive developmental impact of a cognitive model on one’s personality and long-term psychological stability. Hofer (2003) describes the function of early relationships as “not simply to protect the vulnerable human infant but to organize the functioning of the brain and to create the environment in which a capacity for self-mastery can be achieved by creating representational structure for mental states” (p. 192). Fonagy, et al. (2007) describes mentalizing as “the capacity to relate to others (especially attachment figures) by grasping their behaviors as the product of mental states, while bearing in mind the necessarily inferential nature of this process” (p. 289-290). This ability to detect another’s distress is a critical aspect of mentalization and is believed to develop, at least in part through the verbal and nonverbal interactions inherent in the early attachment relationship (Gergely & Unoka, 2008).

These more recent works have brought Bowlby’s internal working models concept into the current realm of long-term psychological development. These more recent studies suggest that aggression and violence are logical behavioral progressions of the disrupted attachment and subsequent impaired internal working model that has remained unchanged throughout a child’s development and into adulthood (Cassidy & Shaver, 1999; Fonagy, 1993; Rutter et al., 2001). It is noteworthy that any research by social workers in this area remains unknown. Although this recent research has not included social work, given the person-in-environment conceptual framework it provides, it is a logical next step for social work research.

Even though the strategies used by an adult to maintain attachments will change (Cassidy & Shaver, 1999), the interpersonal style of the adult and their corresponding
attachment strategies will continue to be influenced by the internal working models developed in childhood. The securely attached adult will regard themselves as deserving of attachment and trust that others are able to meet their needs. The insecurely attached adult will believe the opposite, that they are not worthy of attachment and see others as unreliable in their abilities to meet their needs (Ma, 2006). The positive or negative information that make up one’s self-concept and beliefs about others develops in correlation with the capacity for emotional, or affect regulation and emotional functioning (Mikulincer, Shaver, & Pereg, 2003). The resulting consequences for adult social interactions are of course impacted by one’s ability to recognize and regulate emotions (Shaw & Dallas, 2005). These social deficits that accompany insecure attachment are likely to put an individual at risk for potential problems related to social interactions.

**Criminal Violence**

Seen through the lens of social constructionism, the phenomenon of attachment provides a multifaceted and complex basis for an individual’s self-perception. The internal working model structures the individual’s self-concept and perception of trustworthiness in regards to the self and the world. For the insecurely attached individual, the process of the developing internal working model becomes a self-reinforcing circular. The insecure attachment leads to negative social interactions reinforcing a negative sense of self resulting in continued negative social interactions, stabilizing the adverse perceptions of the self and the world. Thus, the reality is created by a person who has a negative attachment has a high likelihood of being one of mistrust and a low self-regard. It is not surprising then that as this cycle continues for some people
behavioral extremes are likely to occur. Lang, Klinteberg, and Alm (2002) conducted a longitudinal study of 199 men from a low income neighborhood who had been subjected to abuse and neglect as children. Using a combined dimensional and categorical analysis, they found that maltreatment in childhood positively correlates with high incidents of violence as an adult. While this study is certainly notable in its sample size and linkage of maltreatment with violence, it represents the gap in research that may answer the questions regarding other causal factors that emerge during the developmental evolution of a person’s thinking between childhood and adulthood.

Bowlby contended from the beginning of his work that attachment is a construct of importance across the lifespan (Marvin, 1977). He proposed that the nature of the internal representations of attachment experience, whether based on secure or insecure bonds, would lead to individual differences in personality development as well as varying behavioral and emotional responses in the context of the interactions with the attachment figure (Bowlby, 1973). In spite of these early contentions, it was not until the mid-1980’s that empirical work began to emerge focusing on adulthood and the long-term effects of insecure attachment (Armsden & Greenberg, 1987; Cassidy, 1988; Cicchetti, Cummings, Greenberg, & Marvin, 1990; Kobak & Seery, 1988; Kola, Malcolm, Attard, Arenovich, Blackwood, & Hodgins, 2013; Main, Kaplan, & Cassidy, 1985; Taubner, White, Zimmerman, Fonagy, & Nolte, 2013). Sundin, Wiberg, and Eklof (2002) studied thirty-four middle-class 3 year old children and their mothers in Sweden through observations of them playing and interacting together. At 23 years of age, the same participants were interviewed using an attachment interview. A relatively strong continuity was found between attachment behaviors at 3 years of age and representations at 23 years of age.
Stability of secure and insecure attachment was 74%. A study by Hamilton (2000) found similar results, with continuity of attachment from infancy to adolescence at 77%.

While the research in the areas of adolescent and even adult attachment is growing, research into the connections between attachment insecurity and criminally violent behavior in adults is surprisingly small (Baker & Beech, 2004; Bartholomew & Shaver, 1998; Collins & Read, 1990; Critchfield, Levy, Clarkson, & Kernberg, 2008; Fonagy, 2003; Fonagy, Goldstein, & Higgins, 2001; Fossati, Acquarini, Feeney, Borroni, Grazioli, Giarolli, Franciosi, & Maffei, 2009; Gergley & Fonagy, 2004; Jurist & Target, 2002; Ogilvie, Newman, Todd, & Peck, 2014; Schimmenti & Bifulco, 2013). As research begins to explore the specific area of adult attachment and violence, it becomes clear that the pervasiveness of influence that an insecure attachment and the resulting cognitive working model has on an adult’s social relationships and life satisfaction in general is remarkable. In regards specifically to adult criminal violence, the importance of examining the internal working model is needed.

As previously discussed, the development of a healthy internal working model is, simply put, based on a trusting and reliable attachment relationship between a mother and infant. Given this understanding, it is safe to make an educated supposition about an unhealthy internal working model reflecting a lack of ability to perceive or reflect accurately the intentions, perceptions, or emotions of another person. Therefore, a deficiency in the awareness of mental states (or a deficit in reflective functioning) leaves a person less able to recognize and put into perspective personal emotions and this leads to greater likelihood for the violation of the rights of others due to the consequent lack of empathy for others (DeKlyen & Speltz, 2004; Landy & Peters, 2007). It is important to
remember the connection between a responsive parent and the ability for a child to perceive themselves as valuable and worthy of attachment (Aber & Allen, 1987; Bowlby, 1980; Bretherton, 1992). If this healthy self-perception is lacking, as would be the case for an adult with insecure attachment, it would follow that the ability to empathize with another person would be lacking within the context of the impaired internal working model. The concept of mentalizing and reflective functioning are well understood in relation to a person’s ability to empathize with another (Fonagy et al., 1997).

In regards to the capacity for the commission of crime as adults, Fonagy (1997) suggests that crimes against people are normally inhibited by the painful psychic consequences of identifying with the victim’s mental state and the equally uncomfortable awareness of the beliefs and feeling of others. The ability to empathize, or feel others distress as one’s own, also forms a crucial aspect of mentalization and is thought to develop in part within the early attachment relationship through verbal and non-verbal channels in interactions with caregivers in infancy and childhood (Gergely & Unoka, 2008; Sharp & Venta, 2012).

Saltaris (2002) compared attachment representations of adolescent offenders who had committed nonviolent crimes, such as property crimes, and those who had committed violent crimes, such as rape and murder. The violent group reported attachment representations that were “extremely disturbed,” with a history of abuse also reported. These same offenders also failed to demonstrate the ability to reflect on and take into consideration the mental states and emotions of others.

There are a few more positivist oriented studies that find individuals with poor mentalization or reflection capacity are unable to recognize facial expressions, vocal
intonation, and other social cues that one would normally interpret in order to appropriately respond to another (Blair, 2008; Blair, Mitchell, & Blair, 2005). Jones (2009), utilizing a functional MRI, evaluated differences in neural response to emotional stimuli among 17 boys with conduct problems and elevated levels of callous-unemotional traits. There was a control group of 13 boys. All the boys viewed presentations of faces with neutral and fearful expressions. In relation to the comparison group, the boys with conduct problems and elevated levels of callous-unemotional traits manifested lesser right amygdala activity to fearful faces. While this study shows empirical evidence of a neurological connection to reflective capacity or at least the ability to show socially appropriate affect, it does not add to knowledge regarding the developmental origins of the incapacity to perceive or experience emotions.

This concept of social competence initially developed through nurturing responses and interactions with the primary caregiver (Gergely & Watson, 1999) is exhibited in this regard as the inability, stemming from the lack of reliable early parenting, to “connect” to another appropriately resulting in the misperceptions noted. One may conclude that the social cues that most people who have the benefit of secure attachment and normal development are able to unconsciously detect are limited in many individuals who are insecurely attached.

In normal or healthy development of an internal working model, the ability to mentalize or reflect accurately on another person’s thinking comes as a matter of course. Through the experience of having our own internal states understood by another person through a stable attachment relationship, we are able to effectively take the perspective of another (Blair, 2001; Shaw & Dallos, 2005). Again, their perceptions of themselves are
based on and reinforced by relatively positive interactions with the larger environment. Conversely, the person who experienced the caregiver as extremely anxious and avoidant regarding the tolerance of emotional states has a limited capacity to think about or be aware of the subjective experience or emotions of another (Mikulincer & Shaver, 2011; Thompson, 2008). Dodge (2006) advances the idea that secure attachment may be a protective factor against the violence-causing process. He suggests that hostile attribution biases are critical in the development of violent or aggressive behavior with benign attributional bias possible because of a secure attachment, meaning that a securely attached person will not misperceive or misinterpret another’s intentions as hostile when they are not. Hostile attribution bias refers to the attribution of hostile or aggressive behavioral intentions to another person based on a biased or skewed perception. In other words, when persons can accurately reflect or perceive other’s mental state, emotions, or intentions, it is less likely that they will react aggressively or violently based on their misperception that the other person has hostile or aggressive intentions towards them.

It has been found that insecurely attached children as well as adults are more prone to negative emotions, such as anger, sadness, fear, and anxiety, as well as an increased intensity of those emotions (DeKlyen & Greenberg, 2008; DeKlyen & Speltz, 2004; Sroufe et al., 2005). It would follow that the ability of an insecurely attached adult with a deficit in reflective functioning and a tendency towards hostile attributional bias and negative emotionality, such as fear of abandonment (Savage, 2014), would have difficulty regulating his or her emotions effectively. According to DeKlyen and Greenberg (2008), the regulation of emotions, particularly negative emotions such as
anxiety, anger and sadness, is a major component of many psychopathologies (Landy & Peters, 2007).

According to Taubner et al. (2013), the lack of affective responsiveness to others’ mental states, one of the hallmarks of psychopathy, is thought to give rise to increased interpersonal aggression. This research assesses whether mentalization linked to attachment relationships would serve as a moderator for the relationship between interpersonal aggression and psychopathic traits. The participants were 104 males and females with a mean age of 16.4. Reflective functioning was measured using the related scale on the PCL-R. Psychopathic traits and aggression was measured via self-report. Utilizing a hierarchical regression analysis, deficits in mentalization, or reflective capacity, were significantly associated with both psychopathic traits and proactive or intentional aggression. Although this study was with adolescents, it is relevant in terms of the results of insecure attachment addressed in this review, as well as its generalizability in terms of sample size (n=104) and inclusion of both genders.

Mentalization was measured by the reflective functioning scale on the Adult Attachment Interview (Main, 1982). Psychopathic traits and aggressive behavior were measured via self-report. Proactive aggression is defined as interpersonal, premeditated aggression, as “the means to obtain one’s goal at the expense of other’s well-being” (Blair et al., 2005). They found that deficits in mentalization were significantly associated with both psychopathic traits and proactive aggression. Interestingly, mentalization did play a moderating role in that the individuals with increased psychopathic tendencies did not display increased proactive aggression when they had higher mentalization, or
reflective capacities. In other words, the ability to empathize with another person influences one’s choice in regards to behaving aggressively towards another.

**Summary**

A meaningful understanding of how adults perceive their childhoods in the context of insecure attachment and its effect on their lives is necessary to extend knowledge about the long term impact of attachment security in adulthood. The research that has been reviewed here shows that there is interest in studying the longitudinal psychological effects of insecure attachment in relation to violent behaviors. However, there is no known research with a focus on how, as adults, these individuals make meaning of the process of how they have come to make the decisions that they have in regards to relationships and behaviors. There is also minimal research connecting the cognitive working model that is developed through insecure attachment and the complex deficits inherent in the internal working model that result in pervasive and long term impairment in interpersonal and psychological functioning. The empirical research that does exist is by and large quantitative in nature. While this knowledge is valuable, it does not address the developmental gap that we can only bridge by gaining knowledge related to a person’s experience over the course of individual development. What mediating factors make a difference in regards to a shift in thinking about oneself and others? What experiences had the most impact on the internal working model as a child? What could have or would now make a difference in self-perception? These questions cannot be answered with the knowledge that we currently have nor will they be answered by purely quantitative research methodologies. The need for a qualitative study in this area is timely. Only by understanding the perceptions of the adults that have suffered the
complex and multiple impacts of insecure attachment can we increase the likelihood of building understanding and knowledge of these influences, and thereby be armed with the knowledge to effectively make a difference in their lives.
CHAPTER III

The purpose of this chapter is to present the research methodology for this research study. This methodology has been both guided and informed by the literature, and strives, by design, to create a more in depth understanding and meaning to the experiences of those individuals classified with an insecure attachment and violent behaviors in adulthood. With this purpose in mind, I will discuss the qualitative nature of this study and the value that this approach brings. I will also present the research questions, the theoretical framework and discuss the specific methodology of constructivist grounded theory. I will describe the process of data collection and analysis as well as the Adult Attachment Scale (AAS) used to establish attachment security classification. I will conclude with explaining the measures utilized to insure trustworthiness of the findings.

Qualitative Paradigm

Although the paths taken for data collection and analysis may be different, both the quantitative and qualitative paradigms are more broadly accepted as equally valuable to the field of social work (Padgett, 2004). The acceptance of other ways of knowing, through the interpretation of meanings and intuitive reasoning, has been historically and currently challenged in the scientific community among those who adopt a more positivist, objective view of research (Charmaz, 2006). Especially for the field of social work, the flexibility of qualitative methods allow for a deeper understanding of the process, meanings, and experiences as well as individual and family constructions of reality (Daly, 1992) as opposed to the more linear, theory driven practice of quantitative
methods, especially when new constructs need to be identified to augment existing theories.

The social-psychological basis of qualitative research also suggests that it is compatible with the person-in-environment paradigm of social work practice (Epstein, 1988; Taylor, 1977). The inductive nature of qualitative methodology allows for behaviors to be interpreted and understood within the context of a person’s environment and experience. A qualitative researcher can follow paths as they emerge from the process of the data collection itself. This type of flexible creativity is an advantage when interacting with people in their own environments. In the qualitative method, knowledge as well as theory are built on the examination of lived experiences, which is vastly different from hypothesis testing based on existing theory, as is the realm of quantitative research (Creswell, 2007; Glaser & Strauss, 1967; Lincoln & Guba, 1985; Padgett, 2004; Strauss & Corbin, 1990).

Research Questions

My research questions were intended to result in the most in depth understanding possible of insecure attachment in relation to violent behaviors by examining the lived experiences of the participants. Consistent with Blumer’s (1969) idea of sensitizing concepts, my research questions emerged from my conceptual interest in the effects of insecure attachment across the lifespan. These questions framed my data collection and analysis, and focused on discovering the effects of an early insecure attachment on violent adult behaviors. The research questions are as follows:

1) How does a person with a violent criminal history perceive the quality of his/her attachment relationship with his/her parent while growing up?
2) What are the effects of an insecure attachment on adult development?

3) What are the effects of an insecure attachment on the process of becoming violent?

4) How have these participants compensated for the results of these deficits in attachment, such as emotional problems and violent behaviors?

As the research process progressed, a few of the original research questions required modification as I became more sensitized to the concepts of attachment and violence. For example, on question number one, I realized that violent and non-violent participants, regardless of attachment status, had very different ideas regarding their relationships with attachment figures growing up. Therefore, it was necessary to modify this research question as follows: Original question one: How does a person with a violent criminal history perceive the quality of his/her attachment relationship with his/her parent while growing up? Reworded question one: How does perception regarding attachment relationships differ in relation to the presence of adult violence?

Regarding question number three, the process of becoming violent includes critical factors other than an insecure attachment, primarily those of cognition stemming from possible distortions in the internal working model. I realized it was necessary to change the question as follows: Original question three: What are the effects of an insecure attachment on the process of becoming violent? Reworded question three: How does an insecure attachment affect one’s thinking, specifically the internal working model in regards to violent or non-violent behaviors?
Negative Case Analysis

Negative case analysis is an aspect of the constant comparative method used in grounded theory methodology (Charmaz, 2006). This type of analysis allows for the discovery of new variables or alternate explanations arising from the developing theory, which do not fit the anticipated pattern. This discovery may indicate the need to refine the emerging theory and to look for cases or conditions where the theory does and does not apply. For this reason, the grounded theory approach of theoretical sampling was used as themes and patterns emerged. Over the course of 10 months, participants were sought out that could possibly provide alternate explanations for an emerging theme or provide data that would strengthen the emerging theme. The following questions were considered in regard to the comparative cases.

In the case of participants classified as securely attached and with no history of violence, the following questions were considered:

5) How does a person with no violent criminal history or lack of attachment perceive their childhood relationship with their parents?

6) How does this person view their abilities to manage emotionally difficult situations?

In the case of participants classified as insecurely attached but with no history of violent behaviors the following questions were considered:

7) What were the mediating factors that prevented a person with a lack of attachment from becoming violent?

In the case of participants classified as securely attached but with a history of violence, the following questions were considered:
8) How does this person understand their process of becoming violent?

9) What were the mediating factors that led to violent behaviors?

Research question two, as well as questions four through nine, were not modified throughout the research process.

**Methodology: Constructivist Grounded Theory**

The qualitative method of grounded theory has evolved from Glaser and Strauss’ (1967) proposal that theories be developed from research grounded in data, as opposed to the traditional quantitative methods of deducing testable hypotheses from existing theories (Charmaz, 2006). Charmaz, who is responsible for the expansion of Glaser and Strauss’ traditional method, summarizes the grounded theory method of research as utilizing inductive strategies for collecting data and analyzing qualitative data for the purpose of developing middle range theories. This method allows us to rethink ways of bringing *why* questions to qualitative research (Charmaz, 2008).

In 2006, Charmaz and Bryant expanded on grounded theory by moving it into the social constructivist paradigm. By doing so, grounded theory became more subjective in its assumptions and allowed the researcher to be involved with the research not as an authoritarian observer but as a subjective participant. Charmaz’s expansion of the classic grounded theory places it somewhere between positivism and postmodernism as it emphasizes multiple realities and the analysis itself is based on an interpretive understanding given the interaction between the researcher and the participants. Constructivist grounded theory is inspired by an interpretive tradition as opposed to what Charmaz saw as the positivist tradition of classic grounded theory (Charmaz & Mitchell, 1996; Charmaz, 2000, 2001). Constructivists study *how* and sometimes *why* participants
construct meanings and actions in specific situations. The theory is dependent upon the researcher’s view and recognizes that any resulting theory is an interpretation by the participant as well as the researcher (Bryant, 2002). As the researcher continually engages in reflexivity, the iterative process of constant interaction with and between the data and the existing literature progresses (Anderson, 2013; Gibbs, 2013).

Given the relevance of the researcher’s background and disciplinary perspective in the process of the constructivist grounded theory method, it is especially fitting as my choice of methodology in this research study. Specifically, as a social worker and clinician, I have a discernable viewpoint that will guide my interpretations and understanding of the data. This can also be understood through the usage of reflexivity, to be addressed later in this chapter. However, in regards to my particular perspective as it relates to my utilization of constructivist grounded theory, it is important to recognize the epistemological perspective that guides my decision. Charmaz describes social constructionism as a theoretical perspective that assumes that people create social reality through individual and collective action. Instead of assuming realities in an external world, they study what people at a particular time and place take as real (Charmaz, 2006). Grounded theory becomes necessary in order to capture the “social reality” that has been the result of an insecurely attached person’s experience of their initial interactions with their parents, as well as the larger environment along with their evolving social interactions across the span of their development. The effects of an insecure attachment and subsequent distorted cognitive model are the results of a disrupted or negative primary interaction, that of a mother and infant. As the infant increases interaction with a larger social environment, those initial impressions and beliefs are either reinforced or
disputed. A child’s perception of social interactions through adulthood then is viewed or captured through the initial lens based on the primary attachment.

**Participant Selection**

Participants or this research study were selected utilizing the constructivist grounded theory methodology. As such, purposive sampling was conducted in order to maximize the variation in the sample. In order to most effectively implement the full research study, a pilot study was conducted after IRB approval was obtained in November of 2014. The approval letter from the University of Missouri IRB is attached as Appendix 3. The pilot study was completed in March of 2015. These three clients were included in the full study. Potential participants for both the pilot and the full study were recruited through informational flyers placed in the offices of therapists in Columbia, Missouri. Recruitment flyers were also placed in probation and parole offices in Boone and Randolph counties as well as correctional facilities in the mid-Missouri area. As of June, 2015 there had been no response to flyers. At this time I began to call contacts in the Mid-Missouri area and asked them to allow me to speak to therapists working in those agencies. These agencies included Fulton State Hospital and Family Counseling Center. In the case of the participants at Fulton State Hospital, I applied through their own Internal Review Board in June of 2015. The application process included submission of my intended methodology, interview questions, screening tool, and method of measurement (AAS), inclusions and exclusions for participation as well as documentation of IRB approval from the University of Missouri. In September of 2015, I received questions regarding the process from the Internal Review Committee at the Department of Mental Health. Following my response, the project was approved in late
September 2015. From this point I coordinated with the facilities manager to visit the facility and conduct interviews. Interviews were conducted over the course of one day, October 5, 2015.

Documentation of current diagnosis and index crime was made available to me by Fulton State Hospital. Diagnostic information and criminal history of the other participants in the study was obtained through self-report at the time of the screening interviews.

In the case of Family Counseling Center, information about the study, including interview questions and documentation of IRB approval and my contact information was given to potential participants. When potential participants called me, I clarified the study and conducted the initial screening questions to determine if they were appropriate for inclusion in the study. If they were appropriate and agreed to participate an appointment was scheduled in my office. These interviews were conducted in October and November of 2015.

At the initial contact with potential participants, the initial screening questions were asked. I explained at that time that I was a doctoral student at the University of Missouri conducting a research study and explained the purpose of the study and process of data collection. If they agreed to participate, a time and date were scheduled for the interviews to take place. At this time, participants read and signed the informed consent to participate in the study. The Informed consent form is included as Appendix 1.

**Setting**

The interviews of participants were conducted with individuals in a private office setting. Participants that were hospitalized in a long term forensic facility, Fulton State
Hospital, were interviewed on that site in a private office. These particular participants had a security guard present during the interview per the policy of the facility.

Participants completed the AAS prior to the interview, taking approximately one half-hour. The interview typically took approximately one hour to complete, and was recorded on my phone.

**Reflexivity in Research Approach**

As part of the chosen methodology, beginning with the first interactions with the clients, reflexivity must be in the researcher’s awareness. As part of the interpretive tradition (Ritzer & Goodman, 2004), constructivist grounded theory (Charmaz, 2006) involves not only examining how individuals perceive their circumstances but also encompasses the researcher’s view of the information. As Charmaz, (2006) states, “Neither observer nor observed come to a scene untouched by the world” (Charmaz, p.15). Accordingly, my world-view and values impacted my perception of all parts of the research process. The emergent theory that has resulted from my interpretation of the findings is a construction based on my own beliefs, and the perceptions, or beliefs of the participants.

In accordance with the role of the researcher using a constructivist grounded theory approach, it is understood that theory is produced through a co-construction of the researcher and the participants, dependent on time, place, and circumstance (Rodwell, 1998), thus including the researcher in the multiple realities or perspectives to be considered. The worldview and background of the researcher affects the way in which they construct the world, use language, pose questions, and choose the lens for filtering
the information gathered from participants and making meaning of it, thus helping to shape the findings and conclusions (Kacen & Chaitin, 2006).

Reflexivity of the researcher creates a transparency that allows the researcher’s constructions about reality to become visible and recognizable as a component of the research process as well as the theory construction. Knowledge is created as a subjective process involving both the researcher and the participants, utilizing a variety of existing constructs and ideas. Charmaz describes reflexivity as central to the constructivist revision and renewal of grounded theory. The constructivist approach assumes a subjective, not objective observer or researcher so that the reflexive stance of the researcher is just as valuable as the context and the data. Neither the data nor the subsequent analysis is neutral (Charmaz, 2006).

DeTona (2006) suggests that the positions of the researcher impact the research in three major ways. Each is addressed below as they pertained to my own positionality as the primary researcher.

1) Accessibility to the field can be affected by respondent’s willingness to share experiences with a researcher whom they perceive to be sympathetic to their situation and who is knowledgeable about resources or helpful information.

In this regard, the practice skills I have developed over time allow my interactions with clients to be empathic, as well as strategic, in terms of gathering pertinent information. It is important as a researcher utilizing a social constructionist approach to consistently be aware of all facets of the interaction between participant and researcher in order to establish an initial rapport. DeTona (2006) refers to the importance of presenting oneself as sympathetic and knowledgeable in order to establish trust with that person.
Paying attention to tone, non-verbal communication and genuinely listening to the client creates an atmosphere in which they are likely to feel secure and more comfortable in disclosing difficult or painful information. The participant’s awareness of my life experience in general likely built confidence, especially when they were in the position of being asked to share experiences that may be difficult or painful.

It is also important to be aware of coming from a background of privilege, such as being white and middle-classed. Understanding that my constructs of society and my place in it have been shaped by this privilege may make me more prone to make judgments about the quality of choices others have made, certainly as adults. A researcher using a social constructionist frame must be aware of these ideas, or constructs that many of us carry, in order to genuinely connect with a client. In this regard, it is also helpful to utilize one’s intuitive sense to understand when to reach out to another in a position of helper.

In the constructivist grounded theory method, the interpretations of the researcher are just as vital to findings as those of the participant. The results are understood to be the construct of both the perception and interpretation of the participant in conjunction with those of the researcher (Charmaz, 2006). However, even in the case of a researcher’s keen awareness of privilege and bias, utilization of peers is also useful in order to recognize any undue bias and to increase reliability and validity. I had samples of my coding work reviewed by a peer at two points during the coding process. Codes were also reviewed by my dissertation supervisor.

2) A researcher’s positionality may shape the nature of researcher-researched relationship, which, in turn, affects the information that participants are willing to share.
Given the inherent bias that we all possess, it is at times difficult to establish a relationship with a respondent as an equal participant. Although intellectually a stance that I and many other social workers would completely agree with is a difficult task, it is a likely limitation of any study, even one in a social constructionist frame, that positionality and unintended effects of that could adversely affect the interaction with the participant and the interpretation of data. However, in order to decrease this possibility, I made every effort to stay attuned to physical stance, voice tone, and the ways in which I framed questions.

3) The world view and background of the researcher affects the way in which he or she constructs the world, uses language, poses questions, and chooses the lens for filtering information and making meaning of it, and thus may have shaped the findings and conclusions of the study (Kacen & Chaitin, 2006).

My background as a social work clinician has taught me to be not just aware, but to utilize my social constructs as well as my emotions to guide my reactions and responses to a client in a way that is therapeutic. Although I have not personally experienced the neglect and trauma that many of my participants have, I have worked as a clinician with people who have suffered horrible abuse and neglect as well as violence. I have also worked with and strongly advocated for those who have committed violent acts. I realize that my experience can have an adverse or helpful effect when generating questions, interpreting responses, analyzing data, and deciding what categories are relevant. Being aware of and utilizing these constructs, certainly within the social constructionist approach is what it valuable. An emotional reaction on the part of the researcher can be a tool to question that very response. Meaning can be made of why a
particular response on the part of the client would elicit a particular response on the part of the interviewer.

Emotions are useful in that they are telling. In the course of interviewing participants for this study, some of the experiences they relayed both in childhood and adulthood were shocking and traumatic. However, I believe that I was effectively able to monitor these emotional responses and use them as tools to prompt follow up questions or to recognize a particularly relevant response.

Constant reflection about my opinions regarding what is salient in the data was crucial to the process. In order to enhance the rigor of the study I took measures to monitor any effects my biases and reactions may have on the study. These measures included writing memos and frequent discussions with my dissertation supervisor. I attempted to conduct follow-up interviews with the participants, but was only able to accomplish that with three of the participants. I was unable to contact the other participants, or was bound by constraints of the psychiatric facility in which four of the participants were housed. I also kept a research journal to record my thoughts and feelings regarding the interactions with the participants and to monitor any reactions or triggers experienced that would adversely affect the process. My dissertation supervisor also provided guidance and feedback throughout the entire process, to ensure an unbiased interpretation of the data.

Data Collection

Data was collected by using the Adult Attachment Scale and through semi-structured interviews written by the researcher. The AAS, described below, was administered before the interview. It was scored and the resulting classification
determined the category or comparative group to which the participant was assigned. Each participant was interviewed by myself, using the interview questions written by me, which were approved by the Internal Review Board (IRB) process. The original interview questions were as follows:

- Describe the relationship you had with your mother or father growing up?
- Describe to me how your mother/father showed affection?
- Are there memories about your growing up years that stand out for you?
- Describe a time when you were happy or sad as a child?
- How can you tell if you can or can’t trust another person?
- How did you know if you were in trouble in your house?
- If I were looking in your window at your house, how would I know what you were feeling?
- If I were looking in the window at your house, how would I know what people were thinking?
- How do you remember the first time you were violent with another person?
- What are you thinking when you are beginning to get angry?
- Has there ever been a person in your life that you thought you could trust or go to with problems?

Based on the iterative process of grounded theory, as data was reviewed and ideas emerged, or the need for clarification arose, additional, probing questions were asked of participants.

Depending on the group that a participant is assigned to, negative case questions were designed in order to gather information that is pertinent to that particular group. For
example, a participant that has a secure attachment but has a violent criminal history was asked what factor he/she believes contributed to or reinforced violent behaviors. A participant that has an insecure attachment but does not have a violent criminal history was asked what factor(s), environmentally or through relationships, may have mediated violent behaviors.

The interview questions posed focus primarily on the role of violence in the adult life of a person with an insecure attachment. These questions were designed to elicit responses that would likely aid in uncovering any connections between insecure attachment and violence. For example, identifying thoughts that are present when one begins to be aware of anger led to information regarding one’s distortions in cognitions, or in accordance with attachment theory, the internal working model. The question regarding knowing how to trust another person reflects the decision process involved in trustworthiness, as well as whether this decision is made based on emotional dependency or from a more rational standpoint. An emotional decision about trust may reflect an over dependency or feelings of being unworthy of another’s affection or trust. A rational, more intellectual decision could be reflective of a deficit in emotional connection. The questions regarding seeing into your house and knowing how people were feeling/thinking served to provide information regarding one’s capacity to reflect others emotions, but also how safe a person felt as a child along with the dynamics and roles of the family. These questions also yielded information on behaviors of the participant and others along with information about the environment.

Following the transcription of the interviews, in accordance with grounded theory methodology, member checking was utilized to ensure that the transcripts accurately
reflected the participant’s responses. This practice increases internal validity, in that it increases the likelihood of accuracy of responses and thereby interpretation. Only three of the participants were available to review the transcripts. Questions from participants were also addressed at this time regarding the results of their AAS.

In the case of the three follow-up interviews that were conducted, they occurred within a few weeks of the initial interview and resulted in additional data. All interviews with participants were recorded with the permission of the participant. Data was collected and transcribed solely by me. In order to ensure confidentiality and privacy of all documents, all data was entered into a password protected database. All participants have been assigned aliases in the reporting of results and excerpts will be anonymous. All participants were advised of the potential risks and benefits of the study as they were asked to sign an informed consent document after being given thorough information on the study.

**Adult Attachment Scale**

Participants selected for the study were administered the Adult Attachment Scale (AAS; Collins & Read, 1990) the purpose of which was to assess their level of attachment security. The Adult Attachment Scale was developed because the current measures at the time failed to take into account the extent to which a child’s early attachment relationships shape beliefs about the self and the social world and how these beliefs guide relationships into adulthood. Collins and Read expanded on the work of Hazan and Shaver’s (1987) discrete categorical measure of adult attachment which used infant attachment theory (Ainsworth et al., 1978; Bowlby, 1982, 1973, 1980) as a guide to how adult relationships relate to early parent-child interactions. Their study with 406
undergraduate students sought to examine the correlates of adult attachment with Ainsworth’s (1978) child attachment styles. The final scale has 18 items. To measure internal consistency, a Cronbach’s alpha was performed and found to be reasonable for all 3 factors of Depend, Anxiety, and Close (.75, .72, and .69, respectively).

The three dimensions underlying adult attachment styles are as follows: close, the extent to which an individual is comfortable with closeness; depend, the extent to which one feels that he/she can depend on others when needed; and anxiety, the extent to which one feels anxious or fearful about the possibility of being abandoned or unloved. Especially noteworthy in my opinion and a critical factor in my choice for this scale, is that it also identifies a relationship between the above 3 dimensions and cognitive working models of self and others, first identified by Bowlby as internal working models (Bowlby, 1973). For example, both the depend and the anxiety scales measure aspects of availability and dependability expectations for adults, or being able to trust that the object of the attachment relationship is dependable, available, and emotionally responsive when needed. This is a core theme underlying infant-caregiver attachment in Ainsworth’s classifications (Ainsworth et al., 1978), as well as a core component of the internal working model that is vulnerable to the quality of the primary attachment. Collins and Read (1990) find as a result of their original study that the dimensions measured by the AAS capture much of the core structure that are thought to underlie attachment styles.

The scale consists of eighteen items scored on a 5 point Likert-type scale. It measures adult attachment styles labeled as "Secure," “Preoccupied,” “Dismissing,” and "Fearful." These styles are determined by:

Secure = high scores on Close and Depend subscales, low score on Anxiety subscale
Preoccupied = high score on Anxiety subscale, high scores on Close and Depend subscales

Dismissing = low scores on Close, Depend subscales and low scores on Anxiety subscale

Fearful = low scores on Close and Depend subscales, high scores on Anxiety subscale.

The AAS is included as Appendix 4.

The scales were scored by me after each of the interviews were completed. As a result of their scores on the AAS, the participants were classified as follows: Four of the participants had a violent criminal history per self-report, as well as a history of insecure attachment, and scores on the AAS that correspond with a level of insecure attachment. Three participants had no criminal history and scored as securely attached on the AAS. Four participants had a criminal history per self-report, and scored as securely attached on the AAS. Six participants had no report of criminal history and scored as insecurely attached on the AAS. This is demonstrated in Table 2.

Following the scoring and attachment classification of each participant’s AAS scores, I recorded memos in a journal that I kept throughout the research process. This journal enabled me to not only view the data reflexively but to debrief from each interview. By organizing my thoughts about the interview and scoring process each time, I was better able to move on to the next participant with a clear frame of reference and be consistent in interviewing process.

Following administration of the AAS, the participants were interviewed by me utilizing the approved interview questions. The interviews were all electronically recorded. Recorded interviews were transcribed by me. Following transcription of the
interviews, member checking was employed with three of the 17 participants. One of these follow-ups was conducted in an office setting, the other two were done by phone. The other participants had either moved, did not respond to messages, or were unavailable due to the policies in place at the Fulton State Hospital.

**Data Analysis**

In accordance with constructivist grounded theory (Charmaz, 2006) data was analyzed and interpreted through a social constructionist frame. In this regard, data is not seen as factual or true, but the results of the participants’ perception. That perception is molded throughout years of experience along with the constructions that person has made of these experiences. What others may interpret as reality regarding this person’s perceptions would likely be different.

In order to maintain a consistent interpretation across the data, I utilized journaling, as described earlier, in order to debrief from interviews that may have evoked emotional reactions that clouded my interpretation of the participants meaning. I also used memo-writing throughout the process. This process not only helps to identify evolving categories, but also aids in the discovery of potentially reactive patterns on the part of the researcher. For example, I noticed that memos I had recorded regarding links with domestic violence began to appear regularly. In becoming aware of this pattern I realized that I was straying from the research questions and responding to my own experience in a way that was not relevant to this study.

I also consulted regularly with my dissertation supervisor to review codes and coding patterns. Codes were reviewed twice by a peer reviewer. The first review conducted during the open coding phase, the next was during theoretical coding.
The meaning that is made by a person of their experiences is the crucial construct in the context of attachment. The very nature of attachment itself is a construct resulting from the meaningful interaction between two people, traditionally, a mother and child. Constructivist grounded theory requires analysis of the participant’s perception, or their own understanding of their lives, about how this initial and primary attachment relationship has evolved throughout their lives and affected their development and impacted their perceptions about themselves and others. In this same vein, the researchers perception is also seen as just as critical to the analysis. Based on my own experiences, knowledge and background as described earlier, I joined my own perceptions with those of the participants as I interacted with them personally during the interviews and throughout the process of interacting with the data.

Intensive interviewing (Charmaz, 2006) was employed during the interview sessions with participants. This form of interviewing is described as “an in-depth exploration of a particular topic or experience and, thus, is a useful method for interpretive inquiry” (Charmaz, p. 25, 2006). The participants were asked to reflect upon their past experiences in relation to their experiences growing up and on into adulthood. As participants responded to the interview questions, they were encouraged to stay with the topic, as probing questions were asked. The flexibility to explore of certain responses allows for a better understanding of the participant’s construction of their experience and how their perceptions about their growing up and relationships with their parents were formed. Other intensive interviewing strategies used included restating the participant’s point to check for accuracy, requesting more detail and validating the participant’s perspective. This particular method of interviewing fit well with grounded theory, as it
allowed for exploration of emergent patterns during the interview, which added to the creation of a rich data set.

**Coding**

In grounded theory, coding is the “pivotal link between collecting data and developing an emergent theory to explain the data” (Charmaz, p. 46, 2006). During the entire process of coding, the research questions framed my analysis. These questions constructed the frame for capturing emerging themes.

During the initial coding of the interviews, in accordance with grounded theory, I coded with gerunds, or action focused words. According to Glaser (1979), this type of coding helps to detect processes and provides a broader view of a potential category, instead of narrowing down too early. This technique focuses on the data itself and helps to resist drawing premature conceptual conclusions. For example, an early code of “Protecting self” represented incidents of participants exhibiting behaviors such as isolating, hiding, or reactive aggression. As coding progressed, I realized that these behaviors fit into separate categories. Coding in broad behavioral terms encouraged me to look at the data within the broad category in a more detailed way in the next phase instead of assuming a category was formed prematurely. Initial coding was conducted until data was saturated and I determined that no new codes would emerge. Other codes that emerged during this phase centered on the idea of “being fearful of the environment” and “being alone.” A complete list of initial codes is included as Appendix 2.

During this initial phase, particularly with those participants who were both violent and insecurely attached, codes focused on “rationalizing violence” and “being emotionally neglected.” Several codes were generated during this process that enabled
me to have new ideas about potential categories. In vivo codes were identified during this phase of coding that helped to shape the analytic direction of the rest of the coding process. For example, codes regarding “insight and awareness of environment” began to emerge. An in vivo code that represents this trend is from an insecurely attached and non-violent participant; “She has a pathological way of manipulation, she has a lot of guilt around her that just radiates.”

Previous literature also informed the creation of initial codes. There is evidence, for example, based on the existing literature that adults who exhibit proactive aggression have higher incidents of physical abuse as children (Kolla, Aterd, & Blackwood, 2013). This knowledge informed my choice of initial codes such as “physical abuse,” “aggressive environment,” and “childhood aggression.”

After initial coding was complete, I moved into the next phase of coding, referred to as focused coding. I reviewed all existing codes to determine the most frequently occurring and what I determined to be most significant in terms the formation of possible categories. During focused coding, the constant comparative method (Glaser & Strauss, 1967) was utilized in order to begin comparisons within and across data. For example, several codes were present pertaining to emotional neglect and invalidating environments. These codes seemed to appear primarily with those who had insecure attachment, both with and without violent behaviors, which may begin to shed light on the question of the effects of insecure attachment on development. I then went back and compared the data, as well as existing literature in order to see where else these ideas may be present (Sampson, Andrews, Barkley, Gerrard, & Gibbons, 2015; Worley, Walsh, & Lewis, 2003).
In the 2003 study by Worley, Walsh, and Lewis, it was found that adult men with a history of violence reported their childhood as unloving and rejecting. They were in environments in which their physical and emotional well-being was threatened and had parents who were lacking in responsiveness to emotional distress. The existing literature supports that an emotionally invalidating environment can have negative effects into adulthood.

Gaps in the existing literature also informed the coding process and decisions regarding substantive data and subsequent category formation. Literature regarding the effects of the internal working model (Bowlby, 1969) on emotional and psychological stability into adulthood, including reflective functioning and subsequent violence is scarce. This knowledge led to the formation of codes such as “antisocial personality indicators,” “rationalizations for violence,” and “stability of attachment classification.”

Keeping this in mind, I reviewed the data to discover any other possible analytic direction that had not been previously captured. In keeping with the iterative process, I reviewed the data again, comparing codes to data in order to determine if there were original codes that would fit into potential categories.

I utilized theoretical sampling in this process in order to discover data that would elaborate and clarify categories that would become emergent theory. The aim of theoretical sampling is to develop emerging categories by continually revisiting the data as well as the participants and the literature in order to further illuminate and define relevance and boundaries of the categories. By using sampling that provides four distinct groups, the likelihood was increased that rich data fitting with emergent categories was attained. By using the process of constant comparison between data and analysis of data,
I continually developed properties of the categories as well as the scope of variation (Charmaz, 2006), thus enabling me to examine the data with evolving emerging analytic directions in mind.

For example, through the analysis process, the category of “aggressive home environment” began to clearly emerge as I continued interpreting the data I revisited the data including the literature with this new potential direction in mind in order to determine if this potential emergent theme was present within the variant categories. Theoretical sampling allowed categories to emerge that warranted further exploration that had not been apparent during early coding.

I frequently reviewed the literature during this phase for ideas that either fit with emerging categories or raised questions about them. It is noteworthy that the areas of maternal mental health and sexual abuse that I earlier anticipated to be important as potential emerging themes, did not appear with any regularity during the coding process.

During the continuing iterative process of review, I realized that corollary psychological issues existed amongst all quadrants with the exception of those who were securely attached and with no history of violence. The majority of the participants classified as securely attached but with violent history had been previously diagnosed with Bipolar disorder. The quadrant of participants classified as insecurely attached and with no violent behavior had been previously diagnosed with Borderline personality disorder. In a similar vein, all participants with a violent history as well as insecure attachment had been previously diagnosed with an antisocial personality disorder. This realization was the impetus for an additional category of mental illness.
At this point I again reviewed existing literature for information that would fit with any aspect of this category. I found, for example, that the connection of antisocial personality traits and violence is supported by the literature (Taubner et al., 2013), as is the connection between borderline personality and insecure attachment (Critchfield et al., 2008). However, borderline personality as a possible mediator between insecure attachment and violence is not addressed in existing literature. The existing literature also supports increased violence among those with Bipolar disorder. For example, Volavka (2012) found that incidents of violence were significantly higher for those diagnosed with Bipolar disorder than for those in the general population.

At the point I determined that all categories were saturated with data, and that no new factors would emerge, the following categories resulted: Distorted Thinking, Invalidating Environment, Non-Responsive Environment, Mental Illness, Physical Abuse, Awareness of Unhealthy Environment, and Support from Parents.

The next and final phase of coding, theoretical coding, determines how the substantive codes and categories identified in focused coding relate in order to be integrated into theory. By iteratively comparing the categories mentioned above with the literature and data, I was able to refine and synthesize the existing categories into a developing theory.

It became clear at this point that there were distinctions in the way that insecurely attached and securely attached individuals see themselves and the world around them. Many codes were focused upon distortions in thinking, regarding experiences in childhood as well as about current relationships. The distortions, or misperceptions, occurred primarily among those individuals who had violent histories and those who
were classified as insecurely attached. However, those without violent histories seemed to have intact reflective functioning, as did a few participants with violent histories but secure attachment. This realization raised the conceptual question yet unanswered by existing literature regarding the long term effects, of the distorted internal working model.

Concurrently, I also realized what may be the converse of a distorted working model, an awareness or accuracy in perception, existed amongst those participants who were insecurely attached, but had not become violent. Even though all insecurely attached participants, regardless of violent behaviors, had described emotionally neglectful environments, only those who were not violent had no idealizing statements about their parents or environments. The more realistic perceptions of the non-violent, insecurely attached participants were that they had grown up in emotionally unhealthy settings.

As an end result of theoretical coding, the categories were further and finally defined into the following: Awareness of Unhealthy Environment, Distorted Internal Working Model, Mental Illness, Support from Parents, and Emotionally Neglectful Environment.

Trustworthiness

Qualitative research establishes best practices and rigor through adhering to criteria generally known as Trustworthiness. In addition to explaining those here, I will reference their application during the collection and analysis processes. In order to best ensure that best practices are adhered to, I utilized the following strategies:
**Credibility.** Credibility, confidence in the data, was established through several methods. Journaling and memoing were utilized in order to ensure that any biases on my part were decreased, and that the data was a clear reflection of what the participant had communicated. I also utilized member checking to the extent possible, to check accuracy of the data with the participant. A second coder was used at various points in the coding process in order to decrease undue bias and to more accurately reflect the intent of the data.

**Transferability.** Transferability refers to the applicability of the findings to other similar situations. I utilized the method of thick description, or detailed description emanating from a rich data set to increase applicability. Intensive interviewing was also used in this regard in order to obtain the most richness in the data collected, thus allowing for the most effective interpretation. Purposive sampling, in which participants are chosen with the likelihood of providing relevant and rich data in relation to attachment security and violence, was also utilized.
CHAPTER IV

This chapter presents the findings of this qualitative research study in which constructivist grounded theory was the utilized methodology. Findings are derived from the data collected with the purpose of gaining understanding into the perception of childhood attachment relationships among individuals with a history of violent crimes. The categories and themes resulting from the analysis will be described and presented in relation to the research questions. The sample size for this study was 17. The nominal descriptive variables are presented below in Table 1.

Table 1: Race and Gender of Participants

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<thead>
<tr>
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<th>African American</th>
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<td>female</td>
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<td>male</td>
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The findings of this study indicate three general categories: Secure vs. Insecure Attachment, Potential Pathways to Violence, and Potential Pathways to Non-Violence. Themes rising from the data revolved around the differences between participants who were classified as having a secure attachment and those who were classified as having an insecure attachment. Themes also arose from the data suggesting notable differences in pathways leading either to violence or non-violence. Results also suggested that there are variables, apart from attachment security that impact pathways to violence or non-violence. They include parental support, mental illness and perceptual awareness.
Secure vs. Insecure Attachment

Secure attachment is described as a relationship between a child and a parent that provides a sense of security to the child. The child possesses a representational model of the parent or attachment figure as being available, supportive and responsive (Ainsworth, 1979). Insecure attachment occurs when the child consistently experiences the parent as not available, non-responsive and non-nurturing. This creates an internal working model of the self as unworthy and the environment as unsafe due to that lack of essential security.

Participants in this study were classified as either securely attached or insecurely attached based upon the results of the AAS. Insecure attachment, as explained earlier in Chapter III, is defined by four distinct style: fearful, dismissing and preoccupied. Each style is characterized by distinct behavioral patterns and cognitions. Out of 17 participants in the study, seven were classified as securely attached. Ten participants were classified as insecurely attached. The participants, with identifiers, were also categorized in accordance to presence of violent behavior. These classifications are demonstrated below in Table 2.

Table 2: Participant Classification of Attachment Security and Presence of Violence

<table>
<thead>
<tr>
<th></th>
<th>Securely Attached (7)</th>
<th>Insecurely Attached (10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent (8)</td>
<td>P-12N-Female</td>
<td>P-10R-Male, fearful</td>
</tr>
<tr>
<td></td>
<td>P-16C-Female</td>
<td>P-8G-Male, fearful</td>
</tr>
<tr>
<td></td>
<td>P-17B-Male</td>
<td>P-1J-Female, fearful</td>
</tr>
<tr>
<td></td>
<td>P-15N-Male</td>
<td>P-7R-Male, dismissing</td>
</tr>
<tr>
<td>Non-Violent (9)</td>
<td>P-11A-Male</td>
<td>P-9O-Female, fearful</td>
</tr>
<tr>
<td></td>
<td>P-13L-Female</td>
<td>P-2M-Female, dismissing</td>
</tr>
<tr>
<td></td>
<td>P-14L-Female</td>
<td>P-3K-Female, fearful</td>
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<td></td>
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<td>P-4K-Female, dismissing</td>
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<td></td>
<td></td>
<td>P-5G-Male, preoccupied</td>
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<td></td>
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<td>P-6K-Female, fearful</td>
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Table 2 demonstrates the relationships between violence and attachment security. Type of insecure attachment is also listed.

The findings in this study suggest that the key difference between those individuals who were either securely or insecurely attached is related to the presence of parental support during childhood, or growing up in an environment that was consistently emotionally non-responsive. Those individuals who perceived experience was that of supportive parents were also classified as securely attached. Those individuals who’s perceived experience was that of growing up in an environment which was emotionally non-responsive were all classified as insecurely attached. Both of these categories will be discussed.

**Parental Support**

Parental support, for the purpose of this study is defined as a parent responding to the child in a consistently supportive and caring manner. A supportive parent consistently shows interest in the child and participates actively in the child’s life. Among the participants in this study, seven out of seven securely attached participants, whether violent or not had several codes reflecting parental support. Two out of ten of the insecurely attached participants had codes that reflected parental support in childhood.

Generally, the data indicates that the presence of parental support provided participants with two important components: a feeling of security and comfort, as well as effective coping skills.

Participants who reported parental support often reported feelings of security and comfort in relation to their families. For example, participant 14L stated, “They hugged us a lot, kisses, got tucked into bed every night, told us they were proud of us, and just
going to all of our stuff.” A sense of trust and security is also present in this statement from participant 11A: “She made me feel safe, from a lot of stuff that made me feel uncomfortable.” Understanding that there is a secure base, or a person that will consistently provide comfort and emotional safety often reflects a secure attachment. This same participant stated, “The way my dad would express affection was through acts, like always going to my concerts and all that stuff.” Participant 13L expresses a sense of security when she states, “I remember thinking that there was nothing bad that could happen to us that my mother couldn’t fix.”

Secondly, participants who cited a sense of security also identified several instances of utilizing coping skills that as children, and now as adults, enable them to effectively manage difficult situations or painful events in their lives. Those participants with insecure attachment did not describe these skills with any frequency. Participant 14L demonstrates an ability to manage difficulties in the following statement: “I know that I have anxiety but I can talk myself through that.” This same participant stated, “If people are arguing and I know it’s not about me, I don’t take it personally.” Participant 11A discussed continued parental support in managing problems: “When I start to get angry, feeling my anxiety beginning to spike, I go to my dad for guidance.” Participant 13La states, “My mom would always try to make things better, she would talk to us if we were fighting, try to get us to see each other’s sides.” These statements all reflect an awareness and ability on the part of the participant to manage a situation that may cause anxiety or concern. They demonstrate a specific skill that enables them to manage difficult emotions.
Research question number five: How does a person with no violent criminal history or lack of attachment perceive their childhood relationship with their parents, is also addressed in this category. The above statements reflect the perceptions of the participants that their parents were supportive and caring. They seem to have an understanding of their parents as stable and loving figures in their lives that would be available even if situations arose that were negative or difficult. The consistency of the nurturing behaviors, “got tucked into bed every night,” suggests predictability and security. “Going to all our stuff,” suggests that this participant recalls her parents as participating in activities and encouraging a sense of pride within herself.

Research question number six, how does a person with secure attachment and no history of violence view their abilities to manage emotionally difficult situations, is also addressed in this category. Skills that enable the participants to cope effectively with difficult life events appear to be directly associated, in these cases, to a secure relationship with at least one of their parents.

These findings would suggest that due to a secure attachment relationship, resulting in a basic sense of security and trust in oneself and the expectation of trust in another (Bowlby, 1969). Due to the security of attachment, there exists a sense of security in the stability of relationships, knowing that conflict can happen and be managed without an ending to the relationship.

**Emotionally Non-Responsive Environment**

In seemingly direct opposition to a nurturing and supportive environment, other participants in this study reported very different perceptions of their growing up environments. For the purpose of this study, an emotionally non-responsive environment
is defined as one that is emotionally neglectful or harmful in some way. For example, participants coded heavily in this category described their perceptions of instances including invalidation by caregivers, rejection, emotional abuse and behaviors by their parents that were non-responsive to basic needs. Ten out of 10 insecurely attached participants, whether violent or not had multiple codes in this category. Zero out of seven of the securely attached participants, whether violent or not were coded in this category. The data suggests that this type of environment is potentially impactful with those who have an insecure attachment.

First, a primary theme within this category, reflected by any of the excerpts in this category is that of a strong sense of parental rejection on the part of the participant. The following excerpts represent responses that reflect the power of these perceptions:

- Participant 2M reported, “We talked to the police a lot of times, but my mom didn’t want to leave him. She put him before all of us. Finally my mom went to a shelter, but at the end she went back to him.”

- Participant 4Ka described an experience in her environment in this way: “He did this kind of stuff all the time. He was like I’m gonna stay today with your other family instead, I’m taking them too you know. So I won’t be able to come get you. That was my 6th birthday.”

- Participant 7R reported this incident with his mother when he asked about his father. He was 8 years old at the time. “And she said, ‘Why are you asking about that no good bastard, that son of a bitch?’ I just looked at her. She sat me down and said, ‘You won’t ever grow up like your dad.’ It’s like, but she told me I was like him, but I knew wow, she really does hate my dad.”
An example from participant 6K: “I remember I was 12, and I told my mother I wanted to kill myself, and she said she had thought of a different way to kill herself every day when she was a kid, so to get over it.”

Rejection by their parents especially at times when the participant had the perception of being vulnerable would likely affect a child’s sense of worthiness. These findings are in line with the contention that persistent non-responsiveness on the part of the parent to a child’s emotional distress creates a sense of being unloved by the child. In combination with an already insecure attachment, this uninterrupted emotional maltreatment strengthens a poor self-concept and perception of being unlovable (Bowlby, 1973). These statements suggest that the participants have the perception of being unimportant and even un-loveable.

In response to research question number two, the effects of an insecure attachment on development, these reflections suggest that one of those effects is the sense of rejection a child may experience growing up in an environment in which generally non-responsive and invalidating parenting is consistent. The perception of rejection, at the very least, seems to have a powerful impact on a child, well into adulthood. The sense of emotional rejection, feeling unvalued and unworthy is in line with the noted effects of an insecure attachment (Bowlby, 1973).

The second primary theme in this category was found to be that of the presence of fear. This feeling was typically reported in situations where the participant was experiencing feeling physically unsafe or being left alone and unprotected. For example, Participant 9O described her feelings about her mother: “Just fear, I was terrified of her, I would come home from school and go to the basement, and just hide there.” Participant
3Ka describes what she remembered about her mother being angry: “We would all kind of scatter and close off, all trying to protect ourselves in a different way.”

A sense of fear also was represented in instances not only where there was risk of overt violence, but also in situations where the participant perceived being unprotected and at risk emotionally or physically. Participant 3M reported remembering a sense of being unprotected, represented in the following excerpt: “Multiple nights I woke up ’cause they were fighting, my mom would come in our room for protection.” The same participant describes an incident in which she perceives being unprotected: “He choked my brother out, then he came and choked me out, and I yelled for my mom to come help me, but she didn’t, she just sat there.”

Participants who were classified as insecurely attached also had perceptions of their environments as emotionally non-responsive, most commonly reporting the experience of rejection and fear. In further response to research question two pertaining to understanding the effects of an insecure attachment on development, this finding suggests that the effects of insecure attachment may often appear in conjunction with other factors in addition to the parent/child relationship. These factors include general deficits in parenting, and living in an environment in which safety and protection are not predictable.

**Potential Pathways to Violence**

An intention of this study was to identify potential pathways to violent behaviors. The findings of this study suggest that among those classified as insecurely attached as well as securely attached, persistently violent behaviors are present. The findings suggest that the presence of a distorted internal working model, thought to linked to an insecure
attachment (Bowlby, 1969), may also lead to violent behaviors in adulthood. The findings also suggest that there exists a potentially mediating variable, that of mental illness, that likely influences the effects of secure attachment and increases the risk for violent behaviors. Both of these pathways will be discussed. Table 3 demonstrates the categorization of mental illness in relation to violent or non-violent behaviors and attachment security.

Table 3: Categories of Mental Illness in Conjunction with Violence and Attachment Security

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<tr>
<th>Securely Attached (7)</th>
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<tbody>
<tr>
<td><strong>Violent (8)</strong></td>
<td></td>
</tr>
<tr>
<td>P-12N - Female, Bipolar disorder</td>
<td>P-7R - Male, fearful, Antisocial Personality Disorder</td>
</tr>
<tr>
<td>P-16C - Female, Bipolar disorder</td>
<td>P-8G - Male, fearful, Antisocial personality disorder</td>
</tr>
<tr>
<td>P-17B - Male, Bipolar disorder</td>
<td>P-1J - Female, fearful, Antisocial personality disorder</td>
</tr>
<tr>
<td>P-15N - Male, Bipolar disorder</td>
<td>P-10R - Male, dismissing, Antisocial personality disorder</td>
</tr>
<tr>
<td><strong>Non-Violent (9)</strong></td>
<td></td>
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<tr>
<td>P-11A - Male</td>
<td>P-9O - Female, fearful</td>
</tr>
<tr>
<td>P-13L - Female</td>
<td>P-2M - Female, dismissing</td>
</tr>
<tr>
<td>P-14L - Female</td>
<td>P-3K - Female, fearful type</td>
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<td>P-4K - Female, dismissing</td>
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<td>P-5G - Male, preoccupied</td>
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<td>P-6K - Female, fearful</td>
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Table 3 demonstrates the relationships between securely and non-securely attached participants along with the presence of Bipolar disorder and Anti-social personality disorder. Style of insecure attachment is also noted.

**Distorted Internal Working Model**

The internal working model is described as enduring images of the self and others that function as sets of expectations about the availability and expectation of support and comfort from an attachment figure. These images become distorted when the primary
attachment relationship is one of non-responsiveness and rejection. The child comes to view themselves as unworthy and of others as uncaring and hostile (Bowlby, 1973).

This study found that among those four participants classified as insecurely attached as well as violent, all four had multiple codes reflecting distortions in the internal working model. None of the securely attached participants made statements that reflected these distortions. These same individuals had been previously diagnosed with Antisocial Personality Disorder, formerly referenced as psychopathy or sociopathy. This disorder is marked by narcissistic and self-centered thinking, illegal behaviors, high risk taking behaviors, lack of empathy towards others, and general disregard for others intentions or desires (DSM-V, 2013). Many of these characteristics are demonstrated below in this group’s responses. The potential effects of the distorted internal working model on the presence of violent behavior will be discussed below.

First, a primary theme within this group is a seeming lack of the ability to mentalize, or to accurately reflect the intentions or needs of others, or effectively connect with another person (Fonagy, 2004). This can lead to the appearance of lack of empathy, selfishness, and lack of understanding regarding another person’s reactions. The following statements suggest the lack of mentalization capacity. Participant 4R described his feelings about murdering someone: “Revenge is a powerful thing, if you have never killed anybody I suggest you don’t try it. It’s a traumatic thing you go through, a heavy pain in your heart, but I had to do it.” Participant 1J, after discussing violently attacking her husband, states, “I don’t think he is always thinking of what is best for me, he needs to understand what skills to use when I get mad.” Participant 7R expresses concern about becoming violent in the future: “What if I got super mad and out of control and killed
somebody, then what would happen to me?” These statements demonstrate a disconnection with doing great harm to another person. Quite the opposite, these excerpts suggest that the participant is more concerned for their own well-being despite clear intention to harm another.

Findings in this category help to address research question number one: How does perception regarding attachment relationships differ in relation to the presence of adult violence? These statements all reflect a deficit in the ability to connect with others or to have an understanding of another person’s feelings and possible reactions to situations that the participants themselves may not see as problematic, or worthy of a reaction.

These characteristics also fall within the diagnostic criteria for Antisocial Personality Disorder, which was likely a factor in their diagnoses. The ability to maintain healthy adult relationships is likely impaired given these characteristics. When asked about the quality of relationships with others as an adult, Participant 7R explains, “I feel better if I help people, I have more power, more control.” This statement seems to suggest that helping others is not a genuine act, but one that gives the participant a sense of power for themselves. Research question number three, regarding how an insecure attachment affects one’s thinking in regards to violent behaviors, is also addressed in this category. The behaviors that result from the above-mentioned seeming distortions in the internal working model, which Bowlby has linked with insecure attachment, is demonstrated in the cognitive distortions of the participants.

Second, the other clear theme within this category is the tendency of this violent, insecurely attached group to idealize their environment or rationalize their violent behaviors, when they have also reported events and situations that would contradict this.
The following excerpts reflect this tendency. Participant 7R, who had expressed several instances of violence and aggression in the home stated, “You are more apt to commit violence if you seen it growing up, but I didn’t really see that.” Participant 10R, who had previously reported several perceived instances of neglect by his mother, often being left alone and without basic needs being met, stated, “It was amazing, teaching us the golden rules of life, she had a good heart, she made sure she did what she had to do to make sure we was okay.”

These statements were made by participants who had described previous situations in which they had perceived situations in their households that would generally be considered to be traumatic or neglectful. These statements suggest a response to research question number four, pertaining to methods of compensation for deficits in attachment. These participants with an insecure attachment and a history of violence, may well compensate for these deficits in attachment through compartmentalizing any traumatic or painful events, thereby being able to “shut out” empathic or sympathetic responses. Their previous diagnoses of Anti-social personality disorder would suggest that there have been similar behaviors in the past that also reflect this lack of connection with others.

**Mental Illness**

The findings of this study suggest another potential pathway to violence may be linked to mental illness. This category emerged as a pattern in the data became clear in relation to those participants categorized as securely attached and yet had a history of extremely violent behaviors. Four out of Four of the participants in this category had all...
been diagnosed with Bipolar disorder. Bipolar disorder is a mood disorder characterized by mood swings, depression, impulsive behaviors and irritability (DSM-5, 2013).

Although two out of four of these participants made a few statements that could be said to reflect a distorted internal working model, it is more likely that these distortions were due to the mental illness, especially in light of the fact that none of the other securely attached participants expressed any cognitive distortions.

The primary theme in this category was the presence among the participants of an unrealistic, even seemingly irrational view of their violent behaviors. There is one participant in particular that captures the essence of this category and well represents the other individuals in this group. Participant 16C, is a Caucasian female in her mid-30s. She is incarcerated at Fulton State hospital indefinitely. The index crime, which is a federally recognized felony, was murder in the first degree. Four years prior to this interview she had murdered her father in their shared home by shooting him with a shotgun. She had been treated for many years prior to this interview for bipolar disorder. Her life, as she reported it to me, had been marked by several failed relationships as well as consistently risky and impulsive behaviors since adolescence. However, during the interview she also made statements reflecting contradictory and irrational thinking. Reflecting on her father’s death, she stated, “It’s almost like his death was so that I could live. His death was a sacrifice to make mine better.”

Even though she had earlier described several incidents of destructive and unhealthy relationships as well as a suicide attempt, she stated, “I have bipolar disorder, but until my late 20’s, I was doing fine.” She also expressed the belief that “Bipolar is made worse by medications,” and that “I didn’t shoot my father on purpose.” When asked about
her view of how she deals with being angry, she stated, “I can get sarcastic, and stuff like that, but I never get violent.” Her memory of the actual crime also reflects irrational thinking at that time: “I went in and shot my father, and I remember thinking with the gunshot, seeing VHS tapes, and thinking who buys VHS tapes? Yeah, that’s what I did.” Even though she was classified with a secure attachment, these findings suggest that the effects of attachment security were mediated by the presence and symptoms of her mental illness.

Research question number eight regarding how a person with a secure attachment and history of violence understand the process of becoming violent, is also addressed with this category. These findings suggest that Bipolar disorder, as a mediator may disrupt the positive effects of a secure attachment, at least in regard to the capacity to be aware of and regulate thoughts that lead to a dysregulation in emotions.

In the same vein, the question of mediating factors that lead to violent behaviors among the securely attached participants, research question number nine, is also addressed in this category. The presence of mental illness would likely affect decision making and cognition that may concurrently appear as a distortion of the internal working model. This is an important distinction not suggested by Fonagy’s extensive research into mentalization capacity and violence.

**Potential Pathways to Non-Violence**

An increased understanding of the potential mediators of the effects of insecure attachment has resulted from this study. The findings suggest that among those who were classified as insecurely attached there is at least one particular factor that may serve to decrease the likelihood of committing violent behaviors in adulthood. This factor, in
accordance to the suggested findings in this study, is an awareness by the participant that the environment in which they grew up was problematic and unhealthy. This awareness was not reported in the other participants who were insecurely attached.

**Awareness of Unhealthy Environment**

Among the six participants classified with a type of insecure attachment, but without violent behaviors, all six were heavily coded in the area of awareness that their environments during their childhood were not healthy in terms of emotional or physical well-being. This awareness was demonstrated through the participants’ reporting of behaviors by caregivers that they understood to be neglectful or abusive, or by expressing opinions about parents’ behaviors that were negative. This is reflected in the following excerpts. When asked about her relationship with her mother at present, participant 9O stated that “She is still living alone and refuses to acknowledge anything she did to me as a child. She just denies it, completely refuses to acknowledge it at all.” Participant 4K expresses early awareness of problems in her home: “I knew back then that everything was wrong, everything was miserable.” The same participant expressed understanding that not all parents were like hers: “I had a friend, she was poor too but her Mom made a game of it, we were made to feel every bit of that.” Participant 4K describes her relationship as a child with her mother: “My mother was crappy; it was very abusive, not only emotionally but verbally as well.” The same participant describes what she recalls of the atmosphere in her home: “It was constant, constant yelling, people throwing shit and it sucked, I hated it. I’m glad my little brother was little so that he doesn’t remember any of it.” Participant 6K describes her perception of her relationship with her mother as she was growing up: “From a very early age, I was aware that my mom treated me more like
a friend than a daughter, an overdependence sort of. She has a pathological way of manipulation.” These excerpts suggest that these participants had some understanding of their parents’ behaviors as problematic, and that the effects of their parents’ behaviors could possibly have a negative impact on themselves. They seemed to be able to reflect on their parent’s behaviors and understand that they were problematic.

This category addresses research question number seven: What prevents a person with an insecure attachment from becoming violent? The findings from this study suggest that these participants had developed a different perception of their growing up than did the insecurely attached participants who became violent. Their capacity for mentalization seemed to be more intact, at least functionally, than in the participants who were insecurely attached and went on to become violent. They did not express rationalizations for the behaviors of their parents, as some of the violent participants did. They expressed ideas that reflected a view in which accountability for the seemingly unhealthy environments fell to the caregivers, not the participants themselves. They did not rationalize their parent’s behaviors or their own, as the insecurely attached, violent participants tended to do. They expressed a seemingly more realistic view of what they perceived to be negative and abusive homes. This question warrants more investigation as to how this awareness, or ability to mentalize at least to some functional degree, may come about in light of the fact that their attachments were insecure.

Summary

After analysis of the all data in accordance with the constant comparative process, three distinct main categories emerged. The distinction between secure and insecure attachment appear to be linked to the factors of the presence of parental support, or
conversely, the lack of parental support as part of a larger non-responsive environment. What appear to be two distinct pathways to violence suggest that the presence of a distorted internal working model may lead to violent behavior, whereas an awareness of growing up in what is perceived to be an abusive and neglectful environment may mediate the effects of an insecure attachment. Moreover, the presence of mental illness, in the case of this study bipolar disorder, may mediate the positive effects of a secure attachment and in some way increase the possibility of violence.

The findings from this qualitative analysis support existing research in the area of attachment as well as suggest new findings. In particular, the findings regarding the impact of perception, or interpretation of one’s behaviors and their influence on other people is enlightening in regards to the linkage of insecure attachment and violence. Findings suggest that distortions in the internal working model are often present in those with an insecure attachment and violent behavior. These participants in particular, have contradictory thoughts about their parents and their experiences of growing up, which may reflect an attempt to compartmentalize any trauma they experienced as part of the non-responsive environments they also report having experienced. Moreover, it seems likely that some difference may exist within the capacity of mentalization in those with an insecure attachment who become violent, and those who do not.
CHAPTER V

This study has addressed the research questions regarding the perceptions of those individuals with insecure attachment and subsequent violent behavior in adulthood. It has also examined the variables that mediate violent behaviors among those with an insecure attachment. In addition to the expansion of existing theory, this study has identified emergent theory, in the social constructivist tradition, regarding linkages between degrees of distortion within the internal working model (Bowlby, 1969) and the pathways to violent behaviors. This chapter will examine, in detail, the findings of the study, its limitations and implications for future study as well as social work practice. Findings will be discussed in relation to the theoretical categories of potential pathways to violence and potential pathways away from violence. Figure 1, shown below, visually demonstrates these pathways along with the factors that impact them.
Figure 1: Proposed model showing pathways from attachment security to violence or non-violence including intervening and coexisting factors.
Potential Pathways to Violence

The findings of this study suggest that there are distinct pathways towards violent or non-violent behaviors among individuals with both secure and insecure attachment styles. The data suggests a model of those pathways that warrants further examination and exploration. As can be seen in figure one, when an individual has a secure attachment, they are often non-violent as adults, as the data in this study suggests. The model shows that parental support is a reported factor among securely attached participants only, and may have an impact on their non-violent choices. However, the pathway from secure attachment shifts when that securely attached participant carries the diagnosis of Bipolar disorder. This suggests that the pathway is in some way mediated by that mental illness and violent behavior becomes a greater possibility.

Among those participants with a type of insecure attachment, the pathway is also complex. As the model suggests, when an individual has indicators of a distorted internal working model, the possibilities of violent behavior are greater. The model also demonstrates that Anti-social personality disorder may exist corollary to a distorted internal working model. When this is the case, the pathway may lead to violent behaviors. Much as parental support seems to be found among those with a secure attachment, a non-responsive environment is often found among those participants who are classified with an insecure attachment style. The model also suggests that among those with an insecure attachment, there is a seemingly important factor that may divert the pathway to violence for many. The model suggests that none of the insecurely attached participants who reported a perceived realistic awareness of their unhealthy environments had violent behaviors as adults.
Theoretical Implications

Charmaz (p. 189, 2006) defines theory as “theoretical interpretation or explanation of a delimited problem in a particular area”. Although the scope of this study was limited, in accordance with the interpretive stance within social constructionist grounded theory, findings from the data suggest a move towards theoretical relevance. With the understanding that the delimitations of the study restrict the transferability of findings, the emergent categories that presented themselves, at the very least, provide information that was otherwise lacking in the literature.

As such, emergent categories were analyzed within the framework of understanding patterns and connections rather than explanation and prediction (Ritzer & Goodman, 2004). Within this process of analysis and interpretation, findings emerged that suggest new information that may begin to increase understanding for future research regarding potential connecting pathways between attachment security and violence.

As explained in Chapter I, according to attachment theory (Bowlby, 1973), an infant’s interactive relationship with the primary caregiver results in enduring images of self and others. These fundamental constructs, known as the internal working model, serve as expectations about the availability of the caregiver and the likelihood of receiving support and comfort. In the case of an unhealthy or distorted working model, the infant lacks a sense of security and does not develop the expectation of relationships that are mutually responsive and caring. As the findings in this study suggest, the impact and results of attachment, whether secure or insecure does not always progress in a linear way.
Again, in a delimited study such as this, it is important to realize the specificity of the population studied as well as consider the multitude of other variables that influence mental constructs. Given this, the findings suggest that, at least within this group of insecurely attached, criminally violent participants, their distortions of the constructs that make up the internal working model are powerful enough to lead to thoughts that may lead to the commission of violent crimes against others.

**Addressing the Main Research Questions**

Research questions created using constructivist grounded theory are designed to capture not only the content but also the context of a person’s lived experience, thereby allowing interpretation of the resulting data in a way not possible otherwise. The following sections will focus on the main four research questions of the study in order to demonstrate how the proposed model responds to these questions. This will help to identify both strengths and weaknesses of the model and guide any future research related to these questions. Theoretical implications related to the research questions will also be discussed.

Research question one: How does a perception regarding attachment relationships differ in relation to the presence of adult violence? The capacity to mentalize, or effectively take the perspective of another, has been found to be diminished in individuals who are classified as insecurely attached and with severely aggressive violent behaviors (Cassidy, 1994). The proposed model resulting from this study suggests similar findings. These insecure participants who became violent seemed to have variations in their perceptions of their relationships with parents and their environments. This group had perceptions of their attachment relationships in childhood as harsh and at
times abusive or neglectful. However, they had contradictory perceptions as well. As the proposed model suggests, the presence of distortions in the internal working model of these participants was also present. They made clear statements suggestive of these distortions, including those reflecting an idealization of parents who had abused or neglected them.

In qualitative work conducted by Worley (2004), it was found that insecurely attached, violent participants who reported experiencing their parents as unloving or rejecting were also exposed to situations that threatened their emotional well-being. Among these participants, their narratives were often contradictory. At times, they would positively describe the relationship with a parent with whom they had also recounted incidents of trauma and neglect. She found that they also minimized their own violence.

The findings in my study were very similar. Those participants who were insecurely attached, and had described abusive or non-responsive environments, also made statements reflecting an idealized view of their parents. They were also the participants who had histories of violence. However, the findings from my study raise additional questions. Theoretically, distinctions in the constructs of the internal working model may in some way influence a perceived awareness or lack of effective insight. Is this tendency to compartmentalize reportedly traumatic experiences a defense against difficult emotions? Or, does it represent an incapacity to mentalize? A question to be pursued through research in this regard is: What function does idealizing an abusive environment serve among those who are violent and with an insecure attachment?

As discussed earlier, these idealizations may be related to deficits in mentalization, or a tendency to protect oneself through compartmentalization. Given that
in this research study, all the participants with insecure attachment, violence and distorted internal working models were also antisocial, the answer to these questions may be best captured through modification or addition to the PCL-R. A question could be added to the semi-structured interview with the response indicative of contradictory thoughts, not accounted for by simple mistake or suggestive of lying; a question such as: How do you wish your childhood could have been different? This may capture clear contradictions if the participant made little or no reference to trauma or abuse. The PCL-R assessment also includes case study review and corroborating data review, so that an abusive or traumatic background could be verified. This type of data could be used to strengthen known indicators of psychopathy.

Research question two: What are the effects of insecure attachment on adult development? As the proposed model suggests, the perception of growing up in a non-responsive environment can have effects on development into adulthood, as reflected in the violent behaviors of those who reported spending their childhoods in such an environment. Only those participants who were classified as insecurely attached made statements in which they described experiences suggestive of a non-responsive environment. This supports findings in current literature. Lang (2002) found that children living in homes where parents were abusive as well as impulsive, and had low tolerance to frustration, were at higher risk for becoming violent. This would suggest that both these variables, a non-responsive environment as well as an insecure attachment may be indicative of a pathway to violence in adulthood.

Also, as the model suggests, the presence of a distorted internal working model seems to be present more often in those with an insecure attachment. Only those
participants who were classified as insecurely attached and violent, made statements reflecting distortions in their thinking, or internal working model. Carrying this working model into adulthood, could certainly have negative effects on the quality of relationships, and impair perceptions which may lead to violence.

However, as the model also suggests, insecure attachment does not always lead to violent behaviors. The presence of an awareness of one’s non-responsive environment may serve as an intervening variable. Among those insecurely attached participants who were not violent as adults, only those who reported such an awareness, or insight into the unhealthy nature of their environments did not have any violent behaviors as adults. Even though they had an insecure attachment and perceived non-responsive environments in common with the violent participants, they were able to manage any adverse effects in a seemingly more effective manner than their counterparts. This finding needs to be explored further with additional research. A more in depth approach, such as a case study, may uncover more or the nuances of how these insights were gained over time and what factors were involved. A mixed methods survey approach may also yield information if critical questions were asked, aimed at pinpointing the process of how insight may have been developed, such as: “When, and how, do you first remember understanding that your family was not like others?” “What traits make you different from your family?” “How would your life be different if you were more like your parents, as a parent?” These responses could be analyzed in combination with the scores from the PCL-R, which would allow for information regarding any actual psychopathic or antisocial traits to be compared and measured against the qualitative data. The results from this type of study may help to reveal how mentalization capacity may be learned at
some point in those with an insecure attachment, as opposed to being inherently obtained as a part of a secure attachment.

Research question three: What are the effects of an insecure attachment on the process of becoming violent? As the proposed model suggests, the process in which one becomes violent is not in any way predictable. In the case of participants who were insecurely attached and violent, violence seems at times to be linked to distortions in the internal working model. Misunderstanding another’s intention or desires can lead to reactive responses on the part of the insecurely attached person that leads to aggression. The data often reflects, as discussed previously, a sense of disconnection between the violent participant and the victim of violence. When reporting incidents of aggression against themselves in childhood, this same disconnect was present, as they rationalized their own abuse by parents or compartmentalized it by idealizing the situation. This ability to disconnect, and not empathize with another person, may well make aggressive behaviors easier to carry out.

It follows, that these participants, when examining indicators of Psychopathology on the Psychopathy Checklist, Revised, or PCL-R (Hare, 1980), expressed thoughts and beliefs consistent with several markers, including severe childhood aggression and lack of empathy, indicative of their diagnosis of Antisocial personality disorder. As the data suggests, violence in the cases of these participants often seemed to be the result of misperceptions regarding relationships or an overreaction to a perceived threat.

While the findings of the current research study are admittedly limited in scope, they nonetheless suggest that there may be other pathways to violence that do not begin with an insecure attachment and distortions in the internal working model as Fonagy has
suggested. In previous work by Fonagy et al. (1998, 2005), it has been found that among those who exhibit antisocial behaviors including severe violence, there is a lack of mentalization capacity. These studies utilized hierarchical regression models to determine the most predictive variables leading to violence, finding that reflective functioning, or mentalization, negatively correlates with violent behaviors. However, in the current research study, perhaps due to the capacity for more in depth understanding within the chosen methodology, it is suggested that severe violence can be present even in the presence of a secure attachment and as the capacity to mentalize is at least somewhat intact. The effects of a secure attachment may at times be mediated by the presence of Bipolar disorder, thus leading to maladaptive thinking that is unrelated to lack of mentalization capacity, but still resulting in violence.

Through the interpretive process of grounded theory, it was determined that the thoughts of those who were securely attached yet violent, though at times seemingly unrealistic, proved to be very different than the thoughts that reflected distorted constructs among those who were violent but not mentally ill. The thoughts of those with mental illness were of a more irrational nature, not reflective of a lack of mentalization! This group, although extremely violent, seemingly had the capacity to mentalize, suggesting that the pathway to violence is not always through the effects of an insecure attachment. These findings will serve to inform our theoretical understanding of attachment disorders as they relate to violent behaviors into adulthood, and thereby increasing the opportunities for more effective therapeutic intervention.

In addition to potentially impacting Fonagy’s theory, these findings extend Volavka’s (2012) study that found incidents of violence to be significantly higher for
those diagnosed with Bipolar disorder than for those in the general population. Volavka conducted a comparative analysis using data gathered in psychiatric hospitals over the course of two years in order to determine higher incidents of aggression amongst those with Bipolar disorder. The constructivist grounded theory methodology utilized in the current study extends those findings as it has suggested the actual thoughts of those with bipolar disorder that may have led to their violent behaviors. This type of understanding would not likely be possible in a comparative analysis or survey-based approach.

In order to better capture the potential for violence in a person who also has Bipolar disorder, additional questions on the AAS, or AAI, referencing trust of others and comfort in depending on others could be correlated with diagnostic criteria from the DSM-V for Bipolar disorder. This type of quantitative analysis may yield results that answer what particular beliefs and thoughts of a person in this group correlate with thoughts and beliefs that are consistent with particular symptoms of Bipolar disorder.

Research question four: How have these participants compensated for the results of these deficits in attachment, such as emotional problems and violent behaviors?

As the proposed model suggests, in regards to those who are insecurely attached and have violent adult behaviors, there appears to be a lack of compensation for the effects of insecure attachment. Further interpretation in accordance to a social constructivist grounded theory methodology, may suggest that the strategy of compartmentalization, or psychologically separating what they perceive to be abusive environments from their own current perception of reality may well indicate a compensatory response. This strategy would perhaps provide emotional and
psychological protection, or a barrier against a perceptually painful past by way of idealizing or rationalizing the experiences.

The model proposed in this section has served to shed light upon the possible pathways that lead from attachment security to violent or non-violent behaviors. While it has suggested the influence of distortions in the internal working model and its impact on violent behavior to be impactful, it has also suggested that there are potential mediators, such as mental illness and a realistic awareness of the environment, or perhaps some mentalization capacity that may intervene in both pathways.

**Limitations**

**Threats to External Validity**

In grounded theory, generality arises from the rigor of the analytic process. By allowing generality to emerge from the process of the analysis, it is much less likely that data will be forced into a preferred direction (Charmaz, 2006). The theory is grounded in the data. The sample size of 17 was relatively small compared to an expected sample size in a quantitative study, thereby limiting transferability. However, in grounded theory, the use of theoretical sampling increases effectiveness and relevance of the categories that emerge and thereby the emergent theory. The threat of researcher bias is always a concern. In this case verbal tone or reactive expressions on my part could have influenced the responses on the part of the participants.

**Threats to Internal Validity**

The inference in this study that deviations in the internal working model cause a progression to violent behaviors are not proven in this study in any causal sense. It can,
however, be said to be an interpretive understanding based on an abductive reasoning process. An issue that did raise a threat to internal validity was the inability to have all of the participants participate in member checking, due to the inability to contact them, or policies of the psychiatric facility in which the participants were housed. Another potential threat would include the setting for some of the data collection. The setting for four of the interviews was in a psychiatric hospital setting. This required the presence of an attendant throughout the duration of the interview. The presence of a person with authority could well have affected the answers given by participants.

A primary limitation of this study is that all data gathered in the interviews are retrospective, based on the memories of adults about their childhoods. Memory cannot be taken as completely accurate due to many factors such as the amount of time passed, the context surrounding reported events and any existing neurological or mental health issues. In order to decrease the likelihood of memory being misreported or faulty, future research in this area should be longitudinal, beginning as early in childhood as possible, with data about the parent(s) attachment security as well as the corollary information for the infant. Following this group well into adulthood, past the early 20’s, the age at which previous research has tended to end data gathering, into middle-age. This type of design may better capture the evolution of the internal working model and the development of any distortions in thinking that may or may not lead to violence.

Further understanding is needed in regards to adult violent behaviors and any relationship with particular styles of insecure attachment. Utilizing a larger sample size would provide broader knowledge on whether or not any particular attachment style, such as dismissing or fearful appears with high frequency among those individuals who
become consistently violent. No one insecure was consistently connected with violence. Because all of the attachment styles were not adequately represented, due to the small sample size, for example the preoccupied style occurred with only 1 participant, I was unable to draw any inferences regarding particular experiences or adult behaviors.

Implications for Social Work Research: Practice, Program, and Policy Potentials

Given the broad potentials for further research based on the findings of this project, it is likely that further research in this area could lead to implications for social work in the areas of clinical practice, agency program development, and social policy. I will briefly examine what some of those implications might be.

Clinical Practice

Among the limitations in this study, as identified earlier, is the reliance on retrospective data. This concern may be addressed by conducting an observational study in which parent and child interactions are observed at multiple points in time, but also inclusive of corroborating data from teachers or other professionals. Attachment classification status from the parent as well as the child may help to paint a more complete picture as to the effects of having an insecurely attached parent in relation to the child’s attachment status and behaviors. For clinical practice, this information would enhance interventions with parents who may be at risk for practices that would result an insecure attachment with their child, by helping them to understand the importance of supportive and responsive interactions with their child in order for the child to develop optimally. By increasing this understanding, education about insecure attachment would be of higher quality and perhaps more effective.
A primary question that remains unanswered is: What are the differences, among those with an insecure attachment in the internal working models that allows some to become violent and not others? There needs to be increased understanding of the specific mechanisms that allow the capacity for mentalization, or reflective functioning to seemingly remain intact in some individuals with an insecure attachment and not others. Clinical practice as well as program development could be enhanced with a better understanding of this phenomenon. What the factors are that intervene, causing some individuals to be capable of better perspective taking and having a genuine connection to another person than others, given the commonality of an insecure attachment?

Also, questions are still unanswered in regards to how particular styles of insecure attachment may affect behaviors and cognitions. And, are particular styles and traits within those styles more likely to be influenced by intervention than others, perhaps disrupting the process of the development of cognitive distortions. Information about these processes would enable Social Workers, particularly in the areas of child and adolescent work to create interventions tailored to the particular symptoms and developmental deficits of each attachment style.

The findings in this study suggest that there may be some common ground between insecure attachment and antisocial personality disorder (APD), and that distortions in the internal working model are at times present in those with this disorder. The presence of personality disorders among the insecurely attached violent participant raises the question of the relationship between insecure attachment and particularly antisocial personality disorder. Does a distorted internal working model create this personality disorder, or is there another factor, or variable that is involved? Along the
same lines, why is violence present in relationship to the Antisocial Personality disorder? Again, is this due to distortions of the internal working model or something else? Further examination of the environmental and psychological underpinnings of personality disorders is needed may help to answer these questions.

In regards to the question of the effects of mental illness, particularly Bipolar disorder (BPD) on violence that this study raises, the implications for practice are very broad. It would be useful for future research to focus on how biologically based mental illnesses such as mood disorders, could potentially impact parenting practices and subsequent attachment styles. Practice would be enhanced with a better understanding of how BPD functions to increase the likelihood of violent behaviors, in those with seemingly non-traumatic childhoods. Is there a biological or neurological factor that affects impulsive behavior or irrational thinking? If so, there would be implications for medical intervention, but also for Social Workers to create interventions in their practices that may intervene or disrupt the emotional reactivity or cognitive rationales that may lead to impulsive and violent acts.

Further research into mood disorders should also examine how parents with BPD may affect their children through parenting practices that may be lacking, due to the parent’s impulsivity or irrational thinking. Do other mood disorders or biologically based mental illnesses have any significant link to violent behaviors? If not, what are the factors that distinguish it in terms of any linkage to violence? At its worst, BPD, especially if untreated, may lead to parenting that increases the chance of insecure attachment for their child, due to neglect or poor decision making regarding the child’s care.
Another implication for research and thereby practice would be exploring what other variables, whether environmental, psychological or biological may impact BPD and increase the chances for violence? Information resulting from research of this sort would enhance practice with these clients by creating the ability to increase the quality of early intervention with parents diagnosed with BPD, focusing on the management of regulating emotions and behaviors that would affect the quality of the relationship with their child, and of course their own functioning and well-being.

Also, within the diagnostic realm, the diagnostic criteria for Bipolar disorder could be expanded or enhanced by the addition of criteria related to cognitions or behaviors that have been shown to lead to violence among this group. This would increase the diagnostic sensitivity and may lead to more timely intervention with this particular group. This would best be accomplished through quantitative measures utilizing a multivariate analysis in order to examining what factors significantly interact to increase the likelihood of violence in those with bipolar disorders. Those significant variables could then be included in an expanded diagnostic criteria. It would also be useful and expand the ability to intervene earlier, if such a broadened measure could be modified and used with children who had been previously diagnosed with bipolar disorder. Among those children whose parents were also diagnosed and had been violent in some capacity, it would be particularly helpful information that may lead to earlier treatment, and the discovery of other issues that would respond to intervention.

During the scoring of the AAS, I found that there were instances where participants, particularly those of lower education, or socioeconomic status asked for clarifications on a few of the questions, more precisely in relation to the Likert scale for
scoring purposes. It appeared to be somewhat confusing to some in trying to understand at which end of the scale there response was best represented. This may be improved by additional testing with lower socioeconomic groups, resulting in a modified response method, which may increase the reliability of the scale.

I initially chose the scale due the claim that it would be more sensitive to constructs of the internal working model. While this may well be true, I believe that there are questions that may better capture those constructs, given the populations that I studied. The AAS was tested initially on 19 year old college students, whose stage of cognitive or emotional development may affect their answers on several questions, but particularly those meant to capture instability in adult relationships. The majority of the sample in the current research study were well into adulthood and many had experienced multiple relationships. Rewording of the questions to reflect a more mature or experienced group may better capture the intent of those questions. This “norming” of responses could be done across ages, in order to increase the likelihood of valid responses. The result could well be a measure for adolescents and one for adults.

**Program Development**

In agencies where programs exist that focus on children and adolescents diagnosed with attachment disorders, research that provides more in depth understanding of the factors that increase or decrease the likelihood of insecure attachment could only aid in the enhancement of those programs. Also, research that allows Social Workers to understand intervening factors that encourage or disrupt the development of violent behaviors would allow agencies to tailor existing programs to incorporate the findings regarding particular attachment styles, and misperceptions linked to distorted thinking.
Programming that included strategically focused attachment parenting would allow agencies increase the quality of their work, provide better outcomes and thereby increase the chances of continued, or perhaps additional funding.

Pursuing additional funding for a small pilot project to implement in an agency interested in attachment disorders and their implications for families would be a positive start to larger program in the future. A pilot of this sort would include education and intervention specifically targeted to families who may have a parent with an insecure attachment and is therefore at risk for parenting her child in a non-responsive way. Successful outcomes with such a program, such as improved parenting practices and more responsive interactions between parent and child may lead to additional funding opportunities in the future.

Also, as social workers, we should also strive to ensure that attachment related research is included in fields beyond social science. Given the advances in affective neuroscience research (Schore, 2003) suggesting that the devaluation of attachment bonds and the negative effect on the attachment system derives from traumatic experiences during childhood, this area could advance understanding of the neurological and physiological underpinnings of attachment. This knowledge would allow social workers to further tailor programs and interventions with both adults and children, to meet the unique needs of this group.

Findings of this study may also be extended by the implementation of longitudinal studies that would follow the child and parent dyad and then continue on well into adulthood with the child. Utilizing mixed method approaches would capture the correlations between early attachment classification and any violent behaviors, as well as
other intervening variables of which we are now still unaware. The utilization of structured interviewing in correlation with the quantitative data would help to explain how the individual changed, if at all, their mental constructs over time and what that looked like.

**Social Policy**

Given the empirical evidence regarding the fate of children who have been neglected or abused and removed from their homes, it is surprising to know, that currently, there is no legislation that dictates the creation of policy related to attachment focused programming. According to federal statistics on child placement, children who had once been in foster care due to removal from abusive homes make up about 70% of the prison population (Bureau of Justice, 2010). Of this 70%, 40% of those individuals have been diagnosed with attachment related disorders during their time in foster care (Barth, 2005; Lake, 2005; Zeenah, 2004). Would there perhaps have been a different outcome for even a few of these children if early intervention could have occurred; keeping children in their homes and increasing the chances of the children as well as their parents being healthier people and better able to function in society?

This question may well be answered by examining the occurrence of insecure attachment in those children who experience multiple out of home placements. Following these children over time, as they move across placements, may be effective in discovering what factors may intervene in the lives of these children that may result in a more positive and healthy path. It may also uncover how some of these children develop resiliency that keeps them from becoming violence, or the relevant variables that intervene that serve to promote violent behaviors. If information from studies such as
these were well known, via education and advocacy efforts, the path may be made clearer for intervention and treatment funding, given that the cost is less to intervene with a child than to house a prisoner.

**Conclusion**

The findings resulting from this research study have provided additional knowledge regarding the pathways between attachment and violence. The findings and proposed model suggest that distorted cognitions that result in lowered capacities of mentalization, or reflective functioning, may be linked in some capacity to violent behaviors. Other variables were suggested to mediate those distorted cognitions even in individuals with insecure attachment, specifically the capacity for an insightful awareness of the unhealthy atmospheres in which they grew up. Several questions are raised by the proposed model and its limitations, including how the mediating variables function to affect attachment security and what other factors, may impact the pathways to violent or non-violent behaviors.

During the process of this research study, from the beginning of recruiting clients and throughout the analysis and interpretation, my own ideas about how families construct growing children has evolved. Although we often are reminded of the characteristic resiliency of children, even when experiencing seemingly horrendous circumstances, it was difficult for me to remember that at times when interacting with the participants in this study. Being immersed in their experiences, of not only what they endured, but then what they in turn did to others, reminded me that in order to develop resiliency, one must first have some fundamental sense of self-worth. Not what we think of as a healthy self-concept, or even self-esteem, but just a glimmer of being worthy of
being cared for by another person. When that connection is not established very early in a child’s life, the foundational mechanisms for resiliency and healthy functioning are threatened, thus leaving a child, and eventually an adult vulnerable to an environment in which they may have limited capacity to effectively maneuver.
REFERENCES


Chronis, A. M., Lahey, B. B., Pelham, W. E., Williams, S. H., Baumann, B. L., Kipp, H.,
parenting predict future conduct problems in young children with attention-
deficit/hyperactivity disorder. *Developmental Psychology, 4*, 70–82.

Cicchetti, D., Cummings, E. M., Greenberg, M. T., & Marvin, R. S. (1990). An
organizational perspective on attachment beyond infancy: Implications for theory,
measurement, and research. In M. Greenberg, D. Cicchetti, & E. Cummings
(Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp.

663.

Critchfield, K., Levy, K., Clarkson, J., & Kernberg, O. (2008). The relational context of
aggression in borderline personality disorder: Using adult attachment style to
predict forms of hostility. *Journal of Clinical Psychology, 64*(1), 67-82.


between attachment and depression. In M. T. Greenberg, D. Cicchetti, & E. M.
Cummings (Eds.), *Attachment in the preschool years: Theory, research, and


Goodyer (Eds.), *Social cognition and developmental psychopathology*. New York: Oxford University Press.


APPENDIX 1: Informed Consent Form and Research Study
Information Sheet
The Experience of Early Attachment among Individuals with a History of Violent Crime

Primary Investigator: Anita Kiessling-Caver
University: University of Missouri - Columbia
Research Title: The Experience of Early Attachment among Individuals with a History of Violent Crime

Purpose of this Study: As part of the requirements for a Ph.D. in Social work, I must conduct a research study. This study is concerned with examining the perceptions of men and women with a criminal conviction and/or a difficult relationship with their parents or primary caregivers as a Child, of their relationships with their caregivers when they were children.

What will the study involve? Besides the initial screening interview, which should take about 10 minutes, the study will involve the participant meeting twice over the next several weeks with me, as the researcher. The participant will also be asked to complete an assessment questionnaire, the Adult Attachment Inventory (AAI) prior to the first interview. This assessment can be done by the participant on their own. This should take about a half hour. Total time spent participating in this research study should be about 2 hours and 10 minutes. During the 2 subsequent interviews, the participant will answer questions about their relationships with adults growing up. The first interview will take about an hour. The second interview will take about a half hour. Each of the 2 interviews will be audio recorded.

Why have you been asked to take part in this study? You were chosen for this study due to either a history of violent crime or your acknowledgment of a difficult relationship with caregivers as a child.

Will your participation in the study be kept confidential? Yes. All participants will be given aliases in the research write up so as to protect identity. I will ensure that no clues to your identify appear in the final write up. Any extracts from your interview will be kept entirely anonymous.

What will happen to the information that you provide? The information from the interviews will be transcribed and analyzed by the researcher. My advisor at the University will also have access to the data. This information will be entered into a password protected database.

What will happen to the results? The results will be presented in my dissertation. They will be seen by my University advisor and my doctoral committee. The study may be read by future University students. The study may be published in a research journal.

What are the risks and benefits to taking part in this study? This study is considered to be a greater than minimal risk study. The potential risk of participating in this study is that you could possibly experience some emotional discomfort when discussing certain events in your history. Also, any breach of confidentiality would be a potential risk to a participant in this study. The benefits to participating include providing information and
insight into the importance of early relationships in childhood. This information will contribute to the knowledge necessary in developing strategies to help individuals with insecure early attachments.

**What are the possible disadvantages of taking part?** All participant information will be protected, so there is no disadvantage in terms of any other person gaining information about you. However, as stated previously, a breach of confidentiality is a risk and would be a Dis-advantage. A possible disadvantage is experiencing uncomfortable emotions during the interviews. The researcher is not able to provide therapeutic services to any participant and will refer therapeutic concerns back to the primary therapist or provide appropriate resources.

**Concerns with interview content:** I am seeking honest answers from all interviewees, both in the adult attachment index assessment and during the interviews. It is paramount that interviewees feel comfortable and open in their ability to give honest answers to questions. All questions will be viewed objectively by the researcher. It is important that you understand that as a licensed mental health provider I am a mandated reporter. If you disclose information to me that causes concern regarding an intent to hurt yourself or another person, I am legally obligated to report this concern to an authority authorized by the state of Missouri.

**What if I am Injured?** It is not the policy of the University of Missouri to compensate human subjects in the event the research results in injury. The University of Missouri, in fulfilling its public responsibility, has provided medical, professional and general liability insurance coverage for any injury in the event such injury is caused by the negligence of the University of Missouri, its faculty and staff. The University of Missouri also provides, within the limitations of the laws of the State of Missouri, facilities and medical attention to subjects who suffer injuries while participating in the research projects of the University of Missouri. In the event you have suffered injury as the result of participation in this research program, you are to contact the Risk Management Officer, telephone number (573) 882-1181, at the Health Sciences Center, who can review the matter and provide further information. This statement is not to be construed as an admission of liability.

**What if there is a problem?** At the end of the interview, you will be asked if I may use your interview responses for my research study; feel free to decline if you feel it is necessary. You may also contact my advisor, Dale Fitch, if you have any concerns regarding the process.

The University of Missouri – Columbia requires all research studies be approved by the Institutional Review Board (IRB).

**Any further queries?** If you need any further information, you can contact me at Anita Kiessling-Caver 573-289-7590 or my email kiesslingcaver@mail.missouri.edu. My advisor is Dr. Dale Fitch, University of Missouri School of social work. His email is fitchd@missouri.edu

If you agree to take part in this study, please sign the consent form below.
APPENDIX 2: Research Study Informed Consent Form

I, ________________________________, agree to participate in Anita Kiessling-Caver’s research study. The purpose and nature of the study have been explained to me in writing and I have been provided a copy of the Research Study Information Sheet.

- I am participating voluntarily.
- I give permission for my interview to be recorded.
- I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.
- I understand that I can withdraw permission at any time to use the data, in which case the material will be deleted permanently.
- I understand that if I disclose information regarding the intent to harm myself or someone else, this information will be reported by the researcher.
- I understand that the researcher is not able to provide therapeutic services for any participant.
- I understand I will be given the chance to view the transcribed interview and discuss concerns with the interviewer.
- I understand that open, honest answers are being sought.
- I understand that anonymity will be ensured in the write-up by disguising my identity.
- I understand that disguised extracts from my interview may be quoted in the final write up and any subsequent publications if I give permission below.
- I understand that information gathered on the Adult Attachment Index (AAI) will be examined by the researcher and used in the final write up.

Please place a check next to one of the following statements:

_____ I agree to participate in this study and allow quotation/publication of extracts from my interview.

_____ I DO NOT agree to participate in this study and allow quotation/publication of extracts from my interview.

Signature ___________________________ Date ______________
APPENDIX 3: IRB Approval Letter

Institutional Review Board
University of Missouri-Columbia

190 Galena Hall; De074.00
Columbia, MO 65212
573-882-3181
irb@missouri.edu

January 29, 2015

Principal Investigator: Anita Kiessling-Caver, MSW
Department: Social Work

Your Amendment Form to project entitled The experience of early attachment among individuals with a history of violent crime was reviewed and approved by the MU Institutional Review Board according to terms and conditions described below:

IRB Project Number 1213390
Initial Application Approval Date November 19, 2014
Approval Date January 28, 2015
IRB Expiration Date November 19, 2015
Level of Review Expedited
Project Status Active - Open to Enrollment
Risk Level Greater Than Minimal Risk
Type of Consent Written Consent

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems, adverse events, and deviations must be reported to the IRB within 5 days.
3. All changes must be IRB approved prior to implementation unless they are intended to reduce immediate risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Continuing Review Report (CRR) must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date. If the study is complete, the Completion/Withdrawal Form may be submitted in lieu of the CRR.
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize the IRB stamped consent documents and other approved research documents located within the document storage section of eIRB. These documents are highlighted green.

If you have any questions, please contact the IRB at 573-882-3181 or irb@missouri.edu.
APPENDIX 4: Adult Attachment Scale

Adult Attachment Scale (Collins & Read, 1990)

Please read each of the following statements and rate the extent to which it describes your feelings about romantic relationships. Please think about all your relationships (past and present) and respond in terms of how you generally feel in these relationships. If you have never been involved in a romantic relationship, answer in terms of how you think you would feel.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Not at all characteristic of me</td>
<td>Very characteristic of me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I find it relatively easy to get close to others.</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>I do not worry about being abandoned.</td>
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<tr>
<td>3</td>
<td>I find it difficult to allow myself to depend on others.</td>
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<tr>
<td>4</td>
<td>In relationships, I often worry that my partner does not really love me.</td>
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<tr>
<td>5</td>
<td>I find that others are reluctant to get as close as I would like.</td>
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<tr>
<td>6</td>
<td>I am comfortable depending on others.</td>
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<td>7</td>
<td>I do not worry about someone getting too close to me.</td>
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<td>8</td>
<td>I find that people are never there when you need them.</td>
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<td>9</td>
<td>I am somewhat uncomfortable being close to others.</td>
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<td>10</td>
<td>In relationships, I often worry that my partner will not want to stay with me.</td>
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<td>11</td>
<td>I want to merge completely with another person.</td>
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<td>12</td>
<td>My desire to merge sometimes scares people away.</td>
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<td>13</td>
<td>I am comfortable having others depend on me.</td>
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<td>14</td>
<td>I know that people will be there when I need them.</td>
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<td>15</td>
<td>I am nervous when anyone gets too close.</td>
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<td>16</td>
<td>I find it difficult to trust others completely.</td>
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<td>17</td>
<td>Often, partners want me to be closer than I feel comfortable being.</td>
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<td>18</td>
<td>I am not sure that I can always depend on others to be there when I need them.</td>
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APPENDIX 5: Interview Questions

- Can you describe the relationship you had with your mother or father growing up?
- How did your mother/father show affection?
- Are there memories about your growing up years that stand out for you?
- Can you describe a time when you were happy or sad as a child?
- How can you tell if you can or can’t trust another person?
- How did you know if you were in trouble in your house?
- If I were looking in your window at your house, how would I know what you were feeling?
- If I were looking in the window at your house how would I know what people were thinking?
- How do you remember the first time you were violent with another person?
- What are you thinking when you are beginning to get angry?
- Has there ever been a person in your life that you thought you could trust or go to with problems?
VITA

Anita Kiessling-Caver grew up in a small rural community in Missouri. She graduated from Southern Boone High School and went on to study English literature at the University of Missouri. After graduation she married her college sweetheart and they settled in Columbia, Missouri. Soon after her first child, Medea, was born, Anita realized that her interest in social justice and mental health care for those who were underserved needed a direction. It was at this point she enrolled in the Masters of Social Work program at the University of Missouri. It was during her graduate studies that her second child, Cramer, was born. Soon after graduation she took her first job as a therapist and moved into administration and program development from there. Her interest in clinical administration grew, and she eventually spent several years creating and implementing clinical intervention programs for individuals with trauma, mental illness, and personality disorders. It was after several years in clinical administration that she realized further study and knowledge was necessary to further her career and better help individuals and families who are marginalized and underserved. It was at this point that she entered the doctoral program at the University of Missouri-Columbia.