

THE ASSOCIATION OF CAREGIVER STRESS AND
VIOLENCE EXPOSURE TO ATTACHMENT ORGANIZATION AND
SCHEMA DEVELOPMENT DURING MIDDLE CHILDHOOD:
AN URBAN PERSPECTIVE

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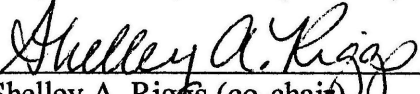
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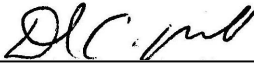
To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Jody Anne Popple entitled "The Association of Caregiver Stress and Violence Exposure to Attachment Organization and Schema Development during Middle Childhood: An Urban Perspective." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor in Psychology and Philosophy, with a major in Counseling Psychology.


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We have read this dissertation and
recommend its acceptance:


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Accepted:


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To my husband, Dave,
Who shares my dreams and encourages each quest.
By introducing levity, you help to maintain my sanity.
You inspire me to be a person of integrity.
You are my colleague, my admirer,
My hero, my friend.
Thank you for believing in me.

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ABSTRACT

JODY ANNE POPPLE

THE ASSOCIATION OF CAREGIVER STRESS AND VIOLENCE EXPOSURE TO ATTACHMENT ORGANIZATION AND SCHEMA DEVELOPMENT DURING MIDDLE CHILDHOOD: AN URBAN PERSPECTIVE

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This study investigated caregiver ($N=48$) stress and exposure to violence in relation to children's (ages 8 to 12 years, $N=50$) attachment representations and views of self, world, and future. Life stress was measured using the Life Experience Survey (LES; Sarason, Johnson & Siegel, 1978). Attachment organizations were assessed using the Separation Anxiety Test (SAT; Slough & Greenberg, 1990) and the Security Scale (Kerns, Klepac & Cole, 1996). The Cognitive Triad Inventory for Children (CTI-C; Kaslow, Stark, Printz, Livingston, & Tsai, 1992) assessed children's view of self, world, and future. Level of violence exposure in children was measured by the Things I Have Seen and Heard survey (Richters & Martinez, 1990). Using an alpha of .05, a series of Pearson r correlations were performed to test the relationships among caregivers' life stressors and perception of their impact, children's attachment classifications, children's level of violence exposure and children's view of self, world and future. Predictions were partially supported. A significant association was found between increased caregivers' stressors on the LES and their children's less secure attachment status, as measured by the Security Scale. Contrary to predictions, caregivers' perception of life stressors as negatively impacting correlated with children's increased self-reliance. Children's reports of greater

violence exposure in association with lower scores on the Security Scale scores implied less secure attachment organization. Data supported the prediction that children's exposure to violence negatively correlated with views of self, world and future. A stepwise multiple regression, performed at $\alpha = .05$, revealed the only attachment measure related to a CTI-C scale was between SAT self-reliant and CTI-C worldview. Preliminary analyses indicated a gender differences among child participants. Hence, attachment data for boys and girls were analyzed together and separately (boys, $n = 19$; girls, $n = 31$) which revealed additional information that both supported and countered predictions. Further exploration of attachment measures tailored for African-American school-aged children is needed. Clinical and research implications were discussed.

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CHAPTER 1: INTRODUCTION

Attachment research is based on the extensive theoretical work of Bowlby (1969/82; 1973). Attachment was initially defined by Bowlby as a strong affectional bond that initially develops between the primary caregiver and infant to promote physical and emotional security during times of stress. Bowlby contended that attachment quality is related to social and emotional adjustment and that relational patterns are internalized as “working models” of what is expected in relationships. Working models developed in earlier years serve to guide close relationships across the lifespan. How sociological and emotional factors affect the relationship between a caregiver and child is a fundamental component to attachment theory. The present study examined the associations between environmental stressors in an urban context, children’s attachment representations and their views of self, world and future. There is a significant body of empirical research focusing on attachment in infants and early childhood and increasing attention has been given to adolescent attachment to parents and peers. However, there is a gap in the literature regarding attachment in middle childhood. In addition, very little attachment research has focused specifically on African-Americans. To address these limitations in the literature, the present research examined attachment organization among African-American children between the ages of 8 and 12.

Effects of socioeconomic struggles on emotional, psychological and physical well being are increasingly represented in developmental research because childhood poverty is alarmingly high in the United States, especially in minority groups. As of 1999, 16.9%

children under the age of 18 years lived in families with incomes below the poverty threshold (U.S. Bureau of the Census, 2002). In addition, ethnic and racial minority groups are more economically disadvantaged than their counterparts in other Western industrialized countries. Although there has been a decrease in the last few years, U.S. children are still in a worse position than their U.S. counterparts three decades prior.

During the past couple of decades, poverty has become more geographically concentrated in inner-city neighborhoods among poor African Americans, though not among poor Anglo Americans (McLoyd, 1998). Individuals living in high-poverty communities are disadvantaged by several factors: reduced accessibility to jobs, reduced accessibility to health care, lower-quality public and private services (e.g., child care, schools, parks, community centers), and lack of social support. Poorer health is another factor related to poverty, although chronic stress is the likely mediating factor that links SES to health (Baum, Garofalo, & Yali, 1999). Inner city children are more likely to be exposed to stressful and dangerous conditions such as urban crowding, crime, drugs, gangs, and violence than in suburban or rural contexts (Attar, Guerra, & Tolan, 1994). In comparison to children in higher SES families, children reared in poverty are more likely to have lower birth weights, increased susceptibility to disease, increased probability of death due to disease, poor prenatal care, decreased gestational spacing, and more births to younger single mothers (Sameroff & Chandler, 1987). While there is extensive research on how poverty affects child development, less is known about how poverty specifically affects the attachment relationship between caregivers and their children in the context of socioeconomic challenges.

Community violence is a common aspect of inner-city neighborhoods that is likely to threaten attachment security. Violence occurs disproportionately among the young and in public places in inner-city neighborhoods (Bell & Jenkins, 1993). For example, in Chicago in 1990, the homicide rate ranged from 106 per 100,000 in the most violent police district to 2.1 murders per 100,000 in the least violent district (Chicago Police Department, 1990, as cited in Bell & Jenkins). Further analysis of 1990 Chicago murders revealed that 538 of the 851 total murders were committed outdoors, with 432 occurring in a “public way” (i.e., street, alley, park). With these statistics, it seems inevitable that a large portion of children in these communities will witness violence in varying degrees. High rates of exposure to violence for children growing up in some inner-city neighborhoods are documented. Marans and Cohen (1993) found 40% of 6th, 8th, and 10th graders in New Haven, Connecticut witnessed at least one violent crime within a year prior to their study. In fact, most of these inner-city children were unable to avoid exposure to violence and almost all of the 8th graders knew someone who had been killed. African American children living in a southside Chicago neighborhood reported high levels of exposure to violence (Bell & Jenkins, 1993). One in four children (26%) within the age range of 7 to 15 years of age reported that they had seen someone getting shot and 30% reported witnessing a stabbing.

Frequent exposure to violence can serve as a chronic stressor for some children and may predispose them to emotional distress (Rutter, 1987). Child-rearing practices may involve teaching children to watch television lying down or to sleep beneath the windowsills to avoid random bullets from outside (Osofsky, 1995), or not permitting

children out of sight for too long, thus discouraging exploratory behaviors. In addition, a significant relationship has been found between children's exposure to community violence and intrafamilial conflict, implying increased family violence (Richters & Martinez, 1993). It is therefore important to include measures of domestic violence to examine the collective impact on children being raised in violent homes and in violent neighborhoods.

How children learn to view themselves and others is largely based on the stability of their environment (Bowlby, 1988). If the caregiver is responsive and sensitive to the child's needs, the child will develop an internal mental model of the self as worthy of being loved and of others as available and trustworthy. Conversely, if the caregiver is insensitive and unavailable, the child may develop a low sense of self-worth and view others as untrustworthy. If children perceive the world as a safe and good place, then generally they view others as caring and trustworthy and see themselves as worthy of love. If children perceive the world as unsafe and violent, then they may perceive others as undependable and even harmful and view themselves as not worthy of being loved. Working models, or cognitive schemas, develop to represent the caregiver, the self and the environment. Working models are internalized during early development and influence individuals' emotional regulation and behavior. They also color perceptions of self, others, and relationships later in life in schema-consistent ways. Kaslow, Stark, Printz, Livingston and Tsai (1992) proposed that early in life, children might develop negative cognitive schemas that are reactivated at later times in response to real or perceived stress. Once these negative schemas are activated, all experiences are

interpreted in a way that is consistent with already existing schemas, which may not be a true representation of the experience.

Garbarino (1995) discussed a concept similar to working models termed “social maps,” which represent a worldview. In an unsafe or aggressive environment, which is frequently the case in low SES inner-city neighborhoods, members may learn to adapt by adopting a worldview in order to survive, but their view may appear dysfunctional in middle- or upper-class neighborhoods. For instance, hyperaggressive behavior may be adaptive in order to survive in an inner-city neighborhood, but it may result in rejection and punishment at school. Caregivers may adapt by overprotecting their children. Although not allowing children to roam far out of fear for their safety (which is a reasonable fear in a high-violence community), this behavior can impede children’s normal development. Exploration is essential for normal development.

Security is extremely important to children’s well being and is a central component in the attachment system. Bowlby (1969/82; 1973) first contended that when children feel safe, they explore their environment. Parents or other caregivers ideally meet children’s security needs during early development. When the children experience fear, they rely on their caregivers to protect them. How caregivers interact with their children (e.g., availability, protectiveness) influences children’s interactions with others. Therefore, if a caregiver is less available or less reliable due to their own experience of multiple stressors, children might learn that they cannot count on others. An inability to rely on others may affect how children perceive themselves (e.g., not worthy of being protected); the world (e.g., undependable); and the future (e.g., unpredictable). This study

considered the potential relationship that exists between chronically stressful or unsafe environments and children's security. Attachment was measured directly by assessing children's beliefs about separation from their caregivers and stress was measured via the children's reports of exposure to violence. Stress was also measured indirectly through assessment of the caregivers' stressful life events. This secondary stress was predicted to affect the attachment relationship between caregiver and child.

Guided by the theoretical and empirical literature reviewed in the next chapter, the present study examined the relations between stress, attachment and schemas of self, world and future among children living in an inner-city environment. Chronic stress in this study included changes and stressful events that occur in the lives of caregivers and the types of violence that children have been exposed to in their neighborhood. The study extended the modest body of literature on attachment in middle childhood and confronted some challenges of assessing an age group that has received little empirical attention.

The challenge in assessing attachment in children ages 8 to 12 is that valid instrumentation is scarce. While the Security Scale (Kerns, Klepac & Cole, 1996) used in the study has been previously adapted for this age group, the semi-projective Separation Anxiety Test (SAT; Klagsbrun & Bowlby, 1976; Slough & Greenberg, 1990) had to be modified in both the pictures and scenarios. Another challenge to this study was finding valid measures for the culture represented in the sample. The SAT pictures were adapted to fit the ethnicity of the families in the sample. A more difficult issue involved how to give the measures in a culturally sensitive manner. This study attempted to employ an "emic" (Berry, 1969; as cited in Jackson, 1993) approach to assessing families. Both

attachment measures identify parents as the caregivers to the children. However, research indicates that African American families may often have multiple caregivers (Jackson, 1993); hence the conceptualization of a “primary” caregiver as a parent is not useful for this study. Measures were adapted to allow the children to respond according to whom they perceived as their primary caregiver(s), which may have been a grandmother, aunt, stepfather, etc.

This study explored five research postulates. One basic premise of this study was that the attachment relationship between caregivers and their children is modified by interactions with stressful conditions. The first hypothesis investigated the types of attachment common in children whose families have experienced different types of stressors. It was predicted that the caregivers who had experienced more stressors in the past year would have a higher proportion of children with insecure attachment organizations. The second hypothesis explored the relationship between caregivers’ perception of life changes and attachment organizations in their children. It was predicted that caregivers who perceived stressors as negatively impacting their lives would have a higher proportion of insecurely attached children. Third, it was predicted that children who reported greater exposure to violence would be more likely to demonstrate insecure attachment organizations than children who had less exposure. The fourth hypothesis stated that children who reported greater exposure to violence would reveal more negative views of self, world, and future than children with less exposure. Finally, it was predicted that children with insecure attachment organizations would show more negative schemas about themselves, the world, and the future than secure children.

CHAPTER 2: REVIEW OF THE LITERATURE

The current chapter provides an overview of Bowlby's theory of attachment with emphasis on attachment during middle childhood (age ranging from 8-12 years). Next, a review of literature regarding the impact of stressors on children during their middle school age years is provided, focusing on how residing in an urban community affects their socio-emotional development. Finally, the relationship between caregivers' stressors, exposure to violence, attachment and schema development is examined. Issues concerning assessment of this population on the above variables are also discussed.

Attachment Theory

The function of attachment in human development has been the focus of extensive research. There is much evidence suggesting that a secure relationship early in life between a child and a parent is related to healthy psychosocial development in later years (Bowlby, 1969/1982; Bretherton, 1990). Early interpersonal relationships help shape later interpersonal styles. The theory of attachment proposes that the bond that develops between the infant and primary caregiver serves to provide the infant physical and emotional security in times of stress or fear (Ainsworth, 1979; Bowlby, 1973, 1969/1982). The concept of attachment includes three basic assumptions: (1) comfort is provided by the presence of an attachment figure, (2) attempts are made by the infant to remain in close proximity to the attachment figure, and (3) the infant becomes distressed if accessibility to the attachment figure is threatened (Bowlby, 1969/1982).

The way children cope with distress and relate to their caregivers during times of stress provides important information regarding their fundamental adjustment (Ainsworth, 1979; Bowlby, 1973). Securely attached children are more able to effectively seek out their caregiver and use their caregiver as a secure base to relieve their distress than insecurely attached children. Secure children have likely experienced their caregiver(s) as responsive, available, and helpful (Ainsworth, Blehar, Waters, & Walls 1978). Securely attached children acquire favorable and competent relational skills that transfer to other relationships and are carried forward into adulthood. In contrast, children who are unable to effectively use their caregiver(s) to calm themselves in times of stress are considered insecurely attached. Having experienced their caregiver(s) as unresponsive and unavailable, insecure children are likely to view the world as unpredictable and undependable in the future.

Infant attachment behaviors are considered functional because they are guided by a goal-directed behavioral system (Bowlby, 1969/1982). Children have an initial and essential goal to maintain proximity with a nurturing caregiver. Infant behaviors such as crying, smiling, searching, grasping and clinging function to maintain proximity to the caregiver. Proximity maintaining behavior serves a protective biological function that promotes the child's security and survival. Bowlby suggested that relational patterns guided by goal-directed behavior are learned and internalized in childhood and manifest in intimate relationships across the lifespan.

Relational patterns that have been internalized become organized into what Bowlby referred to as "working models" or schemas that represent the caregiver, the self

and the environment (Bowlby, 1988). Working models organize appraisals of others and interpersonal behaviors along pathways that are adaptive in the child's early developmental context and thereby shape later social experiences in schema-consistent ways. These dynamic mental processes influence an individual's affect, behavior, and perceptions of the self, others, and relationships. The view of self as worthy of being loved, and the perception of others as trustworthy and caring, influence relationship development. If primary caregivers are responsive and sensitive to their children's needs, the children will develop internal mental models of the self as worthy of being loved and of others as available and trustworthy. Conversely, if caregivers are insensitive and unavailable, children may develop a low sense of self-worth and a view of others as untrustworthy.

These working models manifest in three distinct types of attachment organizations. Ainsworth and her colleagues (Ainsworth et al., 1978) provided empirical support for Bowlby's theory through studies that identified attachment styles in infants as secure, anxious-ambivalent, and avoidant. Ainsworth et al. developed a structured laboratory procedure called the "Strange Situation" in order to assess attachment patterns on the basis of infants' responses to separation from and reunion with caregivers.

In the Strange Situation, children classified as securely attached welcome their caregivers' return after separation and seek proximity if distressed (Ainsworth et al., 1978). Caregivers readily comfort their infants in this type of interaction. Securely attached children utilize their caregivers as a secure base, maintaining appropriate proximity while independently exploring their environment. In contrast, infants classified

as anxious-ambivalent typically cling to their caregivers when they attempt to leave, and demonstrate ambivalent behavior toward caregivers upon their return (e.g., seeking contact while simultaneously resisting by kicking or squirming). These infants are unable to be comforted when their caregivers return. Infants classified as avoidant explore their environment autonomously, usually with little reference to their caregivers. These children rarely cry when their caregivers leave and avoid proximity or interaction with their caregivers upon reunion. While environmental factors may contribute to attachment patterns (see later discussion), there is strong evidence that infants whose relationships with their parents can be characterized as secure using the Strange Situation generally appear more competent as toddlers, preschoolers, and children beginning school (Bretherton & Waters, 1985). Main and Cassidy (1988) also found that similar measures in infancy indicated a consistency in attachment security at age six.

Intergenerational Transmission

Parental responsiveness fosters a secure parent-child attachment relationship. Hence, responsiveness tends to be a mediating factor in the relationship between parents' attachment representations and their children's attachment working models (van IJzendoorn & Bakermans-Kranenburg, 1997). Caregiver attachment representations determine the way parents communicate their emotions in relationships. For instance, caregivers who dismiss their negative feelings about their early childhood experiences tend to be less open to their children's feelings of anxiety and distress. Caregivers' current attachment experiences are filtered through present mental representations of attachment in influencing parenting behavior and the construction of new attachment

relationships. Current attachment representation is formed not only on the basis of early attachment experiences but is also influenced by later relationships and social context. Therefore, van IJzendoorn and Bakermans-Kranenburg suggested that a good friend or partner may provide a secure base for exploring and working through adverse childhood experiences.

While attachment theory assumes securely attached caregivers are likely to have secure children, this is not always the case. A meta-analysis was performed on 18 studies that examined correspondence between parent and child attachment (van IJzendoorn, 1995). Studies with mothers indicated a stronger correlation between parent and child secure attachment than did studies with fathers with combined effect sizes of $r = .50$ and $r = .37$, respectively. A correlation between parents' dismissing attachment representations and children's avoidant attachments was also stronger for mothers than fathers ($r = .50$ and $r = .32$ respectively). Finally, the relationship between the preoccupied Adult Attachment Interview (George, Kaplan, & Main, 1985) classification of parents' and children's ambivalent classification yielded a combined effect size of $d = .42$ for fathers as well as for mothers. Implicit in these findings is that some autonomous parents had insecure children and that the children of some insecure parents were securely attached.

Attachment in Middle Childhood

Even though attachment relationships are thought to endure and to influence adjustment throughout development (Bowlby, 1973), research on attachment organization in children during the middle school-age years is scarce. There is a need for multiple assessments of attachment beyond infancy and the preschool years in order to acquire an

accurate understanding of how attachment is organized and relationships are conceptualized during this developmental period. The paucity of information on this age group results from behavioral classification systems that tend to be more difficult and time-consuming at later ages.

Assessing attachment relationships based on developmental levels provokes questions regarding how middle school-aged children conceptualize relationships. As children grow, their perceptions and feelings about their attachment relationships become more complex. In order to investigate the quality of relational representations, ways of accessing the contents of children's minds have been developed to get a sense of their "felt security" (eg., Kerns, Klepac, & Cole, 1996), versus observing behaviors reflective of attachment representations (e.g., Strange Situation). During the past decade, researchers have begun to develop ways to assess internal representations and children's understanding of relationships (Slough & Greenberg, 1990). Assessing the "internal working models" of self and parents by measuring the quality of the attachment relationship appears promising. The most popular representational measure for adults is the Adult Attachment interview (AAI; George, Kaplan & Main, 1985) and for children, the Separation Anxiety Test (SAT; Hansburg, 1972; Klagsbrun & Bowlby, 1976; Slough & Greenberg, 1990).

Insecure styles of coping in the attachment relationship have been identified as ambivalent or preoccupied, and avoidant. In middle childhood, preoccupied coping has been associated mainly with internalizing difficulties, while avoidant coping has mainly been related to externalizing behaviors (Finnegan, Hodges, & Perry, 1996). According to

Finnegan et al., preoccupied coping tends to inhibit exploration and achieved mastery of the environment, which may impede the development of age-appropriate strategies for regulating affect during even minor life stressors. Preoccupied children become reliant on fear responses and vulnerable to self-perceptions of weakness and helplessness.

Internalizing symptoms, such as depression and anxiety, might result. In contrast, avoidant coping is more likely to interfere with the development of feelings of emotional connectedness, like empathy and dependency, and instead fosters a self-promoting and aggrandizing self-concept. Individuals with this coping style are more focused on self-gratification with little regard for others. Furthermore, this coping style is more likely to lead to externalizing behaviors such as exploitation and aggression. Conceptualizing insecure classifications in this way, Finnegan et al. developed a measure to assess preoccupied and avoidant coping styles in middle childhood.

Attachment theory suggests that by middle childhood, internal working models relate to the coping strategies that are evoked when security distress is high. Attachment behaviors continue to appear throughout life during stressful times (Bowlby, 1969/1982). Bowlby assumed that this response would occur even when the attachment figure was not present. Other researchers have suggested that children's overall mode of regulating their thoughts and feelings when talking about potential separation experiences is a valid way of classifying their attachment representations (Klagsbrun & Bowlby, 1976; Slough & Greenberg, 1990).

Cross-Cultural Research on Attachment

An empirical concern in the attachment literature is cultural specificity of children's attachment strategies. Cross-cultural samples clearly deviated from the original distributions presented by Ainsworth et al. (1978). Using the Strange Situation, Ainsworth et al. determined a "normative" U.S. pattern of approximately 20% anxious-avoidant (type A), 70% secure (type B), and 10% anxious-resistant or ambivalent (type C). Japanese and Israeli kibbutzim samples have shown a higher proportion of type C patterns (Sagi, 1990; van IJzendoorn & Kroonenberg, 1988), while a North German sample indicated a higher proportion of type A patterns (Grossmann & Grossmann, 1990). However, both the Japanese/Israeli study and the German study found 70% or more of the children in their samples were type B, which is consistent to Ainsworth et al.'s (1978) secure category. van IJzendoorn and Kroonenberg (1988) suggested that "distal" forms of attachment (i.e., avoidant) are more typical of Western European countries, whereas "proximal" forms of attachment (i.e., ambivalent or preoccupied) characterize Japanese and Israelis.

Sagi (1990) examined various data sets that suggest communication patterns between adults and infants are universal, irrespective of culture, and result in predictable attachment styles. However, Sagi noted that comparison of parent-child relationships in other cultures revealed type A relationships in Germany and type C relationships in Japan and Israel. When parents in these cultures present type A or C communication patterns, children are more likely to display corresponding attachment behavior. Regardless of these attachment pattern variances, the type B classification is still considered the modal

classification across countries and is therefore considered normative by attachment theorists (Sagi, 1990; van IJzendoorn & Kroonenberg, 1988).

van IJzendoorn (1990) proposed two explanations as to why cross-cultural debate on attachment may be obsolete. First, a meta-analysis of attachment research using the Strange Situation showed that intracultural differences in attachment classification distributions were much larger than the intercultural differences (van IJzendoorn & Kroonenberg, 1988). Variations of distributions found within the United States were as large, if not larger, than differences found in other countries. Second, researchers can modify the Strange Situation procedure to control the amount of stress participants experience. The Strange Situation procedure presumes a similar experience of stress in all cultures, and favors cultures in which children are familiar with daily separations from their main caregivers as well as regular contact with strangers. A curtailed version of the procedure can be scored in a reliable and valid way in order to prevent infants from becoming too distressed. Researchers in Japan successfully used the modified test (Oppenheim, Sagi, & Lamb, 1988). van IJzendoorn (1990) proposed that researchers consider different contexts and apply the Strange Situation procedure with greater flexibility to increase the accuracy attachment research across cultures.

In their analysis and integration of cross-cultural attachment research, van IJzendoorn and Sagi (1999) suggested a balance between universal trends and contextual determinants. Universally, the majority of children develop secure attachment to their parents. Contextually, researchers found that cross-cultural studies on attachment repeatedly demonstrate the importance of considering wider social networks in which

attachment develops (e.g., Harkness & Supper, 1996; as cited in van IJzendoorn & Sagi, 1999). Because most children communicate with several attachment figures, considering a network approach to attachment research is no longer unique to non-Western cultures.

Considering the vast number of different cultures in the world, cross-cultural data on attachment continues to be relatively quite small (van IJzendoorn & Sagi, 1999). A central issue in cross-cultural research is whether attachment theory is a middle-class Western invention or if it applies to non-Western cultures. In their examination of the literature, van IJzendoorn and Sagi found that cross-cultural studies are remarkably consistent with attachment theory, which suggest validity across cultures.

Attachment in African American Families

Cross-cultural research has supported the validity of attachment theory with evidence showing similar associations between the attachment status of parents and their children from diverse cultural and economic backgrounds in different countries (van IJzendoorn & Kroonenberg, 1988; IJzendoorn & Sagi, 1999). In 1993, Jackson indicated that attachment patterns of African American children had not received the same attention from attachment researchers as other cultures. The truth of this statement changed little since then.

Jackson (1993) indicated that African Americans have distinct cultural practices that differ markedly from that of white middle-class Americans. The most important difference is African-American children's exposure to multiple caregivers. Jackson argued that attachment theory presupposes that children are naturally inclined to form a single attachment that is more significant and influential than all other attachments.

Ainsworth et al. (1978) found a higher percentage of African-American infants than white middle-class infants as insecurely attached to their mothers. She suggested that poor living conditions and mothers' extended absences for extended periods of time contribute to African-American children's insecure attachment infants. Ainsworth noted the involvement of multiple caregivers who filled in when mothers were unavailable. Jackson's position differed from Bowlby's (1969/1982) and Ainsworth et al. (1978) idea that a soul caregiver is the most significant attachment relationship with children.

Jackson (1993) criticized Ainsworth's and Bowlby's conclusions as less relevant for understanding the social and emotional development of African-American children. Jackson explained that African American children are in part socialized to form multiple attachments that are more equal in importance. Furthermore, she argued that reports of cross-national and cross-cultural studies continue to evaluate other cultures attachment behaviors based on the behavior patterns of white middle-class U.S. infants with nonworking mothers. Jackson suggested that an "emic" approach is needed for valid characterization of African-American infant attachment so that what is adaptive, competent and normative for African Americans not be judged by what is adaptive, competent and normative for white middle-class U.S. citizens. Berry (1969; as cited in Jackson, 1993) used the suffixes "emic" and "etic" to describe the approaches of cross-cultural research. According to Jackson, an emic approach regarding attachment relationships considers the sociocultural structure as it pertains to childcare, how this structure relates to group subsistence resources and constraints, and what African Americans value in relationships. While an emic approach focuses on one culture in order

to discover unique conceptions and classifications of that culture and tailor research accordingly, an etic approach assumes a fixed analytic framework, which is applied universally. More recently, in their review of the literature, van IJzendoorn and Sagi (1999) indicated that cross-cultural attachment research contains elements of emic approach in addition to etic approach, and the two approaches appear more and more to be compatible.

According to Jackson (1993), the greatest challenge to adaptation for African Americans throughout their history in the United States has been the challenge of striving for economic self-sufficiency and self-control. A greater portion of high school and college educated African-American females are part of the labor force than their white counterparts (Meisenheimer, 1990). Melinda Green from the National Black Child Development Institute chronicled on ebony.com that sixty-five percent of African-American mothers with children under the age of five are working (www.ebony.com, 1999). Therefore, African-American mothers are forced to rely on relatives in order to care for their children while they work.

In contrast to Jackson's (1993) position, Barnett, Kidwell, and Leung (1998) investigated the validity of the attachment construct among African American preschoolers and their primary caregivers (rather than biological mothers) and found that shared caregiving was not directly related to attachment security. Consistent with prior research, this finding indicates additional caregivers and other forms of family social support influence children's development indirectly by enhancing caregivers' well-being. However, this finding does not support the notion that caregivers other than the primary

figure in a multiple caregiving system could potentially have a greater impact on attachment security.

The inclusion of multiple caregivers in the study of attachment seems to be an obvious aspect of attachment research because most infants in the United States will have multiple caregivers (Howes, 1999). Consequently, attachment researchers need to focus on alternative attachment figures. Howes addressed fundamental issues within attachment theory when considering additional attachment figures including the nature of emotional care, their consistency and continuity, and the interaction of development and caregiving. While much remains unknown about the long-term affects of alternative attachment relationships on children's development, particularly for children with difficult life circumstances, Howes suggest that alternative attachment figures may provide children with a "safety net" for their future development.

To date, Bowlby's (1969/1982) clinical and theoretical insights regarding attachment seem to hold true. Grossmann and Grossmann (1990) made some broad assertions regarding attachment across cultures. Grossmann and Grossmann contended:

Sensitive parenting and experienced security of the child are the foundations for healthy mental functioning. People who cannot constructively cope with socioemotional challenges are perhaps more likely to become victims of their frustrations, aggressions, defenses or other socially less desirable alternatives, than will others (p. 45).

The idea that the attachment relationship occurs with only with a primary caregiver, typically a parent, is questionable. Based on cross-cultural research, attachment styles within the African American population are not expected to differ significantly from Ainsworth et al.'s (1978) attachment categories. Although such research (e.g., van

IJzendoorn & Kroonenberg, 1988) indicated similar attachment patterns across cultures, there is still a dearth of information regarding attachment relationships of African-American children that reside in urban neighborhoods, and the influence of multiple caregiving. The current study considered these factors.

Factors that Influence Development of Attachment

Bowlby (1973) contended that organization of attachment becomes more stable and increasingly resistant to change after the first few years of life. However, Bowlby also considered attachment during the early years of life as “environmentally labile,” which suggested that environmental factors can positively or negatively affect the attachment between caregivers and their children. Bowlby argued that at any stage during childhood, changes in child-rearing arrangements and life events could provoke a change in the course of attachment development. A changing environment can potentially alter the qualities of children’s adaptations. Sroufe and Waters (1977) further argued that the critical period in early development is a misconception and contended that early life experiences are not necessarily more important than later life experiences. This view of development is congruent with the more recent assumption that human beings are malleable. Instead of critical periods during life, sensitive periods are believed to exist during which organisms are more susceptible to certain kinds of stimuli in their environments (Feldman, 2000). Unlike a critical period, the absence of certain stimuli does not always produce irreversible consequences. Therefore, it can be assumed that children are not permanently scarred by early experiences nor permanently protected

from environmental assaults. Life changes require ongoing adjustment throughout the life span.

Adjustments in family systems begin at the birth of infants, at which time members develop new patterns of relating to one another. The relationship that exists between caregivers and their infants is reciprocal in nature. Infant temperaments, patterns, and rhythms affect how the family adjusts and the quality of that adjustment, in turn, affects the infant development. An example is the impact that premature birth has on the development of the infant in the family. Macey, Harmon, and Easterbrooks (1987) found preterm infants explored less, stayed closer to their mothers, and had mothers who initiated more interactions than full-term infants. These researchers suggest that characteristics of the preterm infant, such as neurological immaturity, may make the preterm infant more difficult to interact with, which may have negative consequences for the parent-child relationship.

Another experience in early childhood that poses a threat to developing children is maltreatment. The maltreatment of children can result in extreme relational dysfunction in families (Cicchetti & Toth, 1995). Cicchetti and Toth suggested that attachment dysfunction contributes substantially to the development of psychopathological disorders and symptoms associated with maltreatment of children. Other factors that contribute to developing children's attachment organizations include maternal stress and depression, teenage pregnancy, single parenthood, parental substance abuse, exposure to domestic or neighborhood violence, and living in an unsafe neighborhood (Garbarino, 1995; Garbarino, 1997; Garbarino & Sherman 1980; Goodman, Aber, & Brooks-Gunn, 1998;

Martinez & Richters, 1993; Rutter, 1987). Competence, which is defined as a pattern of effective adaptation in the environment, results from complex interactions between children and their environments and is expected to change as children develop and change or when the context changes (Masten & Coatsworth, 1998).

Schema Development

It is through the natural formation of internal working models that children learn to interpret their world (Bowlby, 1969/1982). While attachment theory conceptualizes cognitive construction of relationships as working models, Piaget (1952) asserted that mental structures called schemas begin in infancy through organized patterns of sensorimotor functioning, which changes with mental development. Schemas are individual structures that produce changes in cognitive development. Piaget contended that two complementary processes underlie the growth in children's schemas: assimilation and accommodation. Assimilation is the process of taking in information and experiences and fitting them into schemas or concepts that are already mastered. Accommodation is the process whereby existing cognitive structures are modified to take into account new information and experiences.

It is crucial that early development involve stimulation from the environment in order to promote infants' cognitive development and positive schemas. By the age of seven (concrete operations stage), a child's thought processes become more systematic and concrete problem-solving skills are developing. By eleven years of age (formal operations stage), children can construct theories and make logical deductions without having had direct experience with the concept. The assimilation and accommodation

processes mediate external experiences with internal reality in order to make beliefs and perceptions congruent. This process, referred to as equilibration, facilitates transition across stages. Piaget (1952) suggested that the multiple experiences of cognitive disequilibrium in the course of meaningful encounters with the environment facilitate children's accommodation to that environment.

Experiences of early relationships are assimilated and accommodated into cognitive models of relationships with others (Baldwin, 1993; Bowlby, 1969/1982). These representations of relationships carry forth into new interactions and the knowledge acquired through previous experiences are used to anticipate and plan. Emotion schemas develop from these interactions with others and guide children's goal orientations toward others (Jenkins & Oatley, 1998). Children typically form their models of what to expect in close relationships based on how parents have responded to their distress. Jenkins and Oatley proposed that various kinds of affective experiences in the home influence what children expect from themselves and others in the affective domain. For instance, if children witness parents screaming or hitting each other in frustration, they learn about affect from this interaction. Hence, the goal structure of individuals is partly constructed as an emotional response (e.g., anger, fear, depression) to an early environment. Subsequently, this recurring response might fuel other experiences that maintain the response. For example, goals based on schemas of anger or anxiety becomes established through experiences that occur over and over again. The emotion schema of anger may be useful to survive in a violent society because it provides children with readily available responses to deal with their environment (e.g., retaliating with violence

to protect self). However, once established, these schemas become entrenched and elaborated and angry individuals attend to threats in the world. The constant vigilance that results maintains these emotional responses.

Beck (1967) introduced the idea of negative cognitive schemas, which develop early in life and are reactivated throughout life in response to stress, real or perceived. He further contended that once activated, experiences are filtered through a set of schemas that may distort reality in a negative manner. He referred to these schemas in adults as the “cognitive triad” which consists of one’s view of self, view of the world and view of the future. It would be expected that children who hold a negative view of themselves, the world and the future (negative cognitive triad) would have a much more difficult time accommodating new information and adapting to life challenges.

Kaslow et al. (1992) proposed that a similar cognitive triad could be assessed in children. They predicted that cognitive patterns of depressed children were similar to those of depressed adults as evidenced by their reports of lower self-esteem, feelings of hopelessness about their future, and perceived lack of competence. As predicted, Kaslow et al. found that depression in school-aged children was related to their negative cognitive triad as assessed by the Cognitive Triad Inventory for Children (CTI-C). This negative cognitive schema is likely to affect the child’s competence.

Determining whether children are competent can be difficult when they live in a cultural or community context that differs markedly from the dominant society (Masten & Coatsworth, 1997). Coll et al. (1996) discussed how children living in a dangerous inner-city neighborhood might behave in a way that is viewed as inappropriate in

mainstream society, but is necessary to survive in their environment. For example, illegal activities and gangs are alternative economic and social structures through which underprivileged youth seek achievement. Similarly, Garbarino (1995) suggested that children in these environments cope by adopting a worldview that appears dysfunctional under more common and less stressful conditions. How children get along with other children can be an effective indicator of current and future competence. Aggressive behavior necessary to survive in a dangerous neighborhood may stimulate rejection and punishment in a school setting. Children who act aggressively are more likely to be rejected by their peers. Rejected children appear to process social information in maladaptive ways. For example, they might make attributions of hostile intent that lead to negative defensive behaviors or pre-emptive attacks against peers (Dodge, 1986). While this kind of misinterpretation and misguided behavior may be more prominent in chaotic environments, it is important to maintain an awareness of resiliency in inner-city minority youth. Several youth raised in unfavorable environments (e.g., poverty, exposure to violence and crime, etc.) manage to develop competence in a variety of life domains (Masten & Coatsworth, 1998).

Chronic Stress

Children's competence is largely relationally bound, causing them to be only as competent as their context allows them to be (Pianta & Nimetz, 1992). Younger children have not completely internalized the psychological structures necessary for functioning autonomously from their context. This immature internalization leaves them more vulnerable to contextual stresses and strains. A developmental perspective suggests that

periods of heightened sensitivity to certain environmental stressors may occur. Bowlby (1969/1982) also proposed that there is a sensitive period during which attachment develops between caregivers and children. The preschool period is one of increased sensitivity relative to other developmental phases. During this time, children's development and competence are closely linked to the extent to which their context provides them with support for the developmental tasks of attachment, autonomy, mastery, communication, and self-control (Sroufe & Rutter, 1984). Environments that are structured, sensitive to children's cues and provide positive cognitive and emotional stimulation facilitate positive adaptation in the preschool years and beyond. Despite the myriad of possible stressors that impact younger children and affect them later in their development, the mediating factors, such as interpersonal and social relationships, largely determine the salience of these later stressors. When the caregivers themselves are experiencing multiple stressors, children's attachment security may be further compromised.

Stress of Poverty

Parents living below the poverty level rear children under particularly stressful conditions. Researchers agree that poverty represents the single most negative stressor to which children are exposed (e.g., Sameroff & Chandler, 1987). Children reared in poverty tend to have lower birth weights, increased susceptibility to disease agents, increased probability of death due to disease, poor prenatal care, decreased gestational spacing, and younger mothers. Poverty also impacts interpersonal functioning and how caregivers relate to their children. Parents of low income and poverty-level families tend

to exhibit a more restrictive, punitive disciplinarian style, and may perceive their children as a stressful burden (Egeland & Sroufe, 1981). Low income is also associated with a host of other difficulties, including the following: child abuse and neglect; social deprivation and general environmental inadequacy; maternal unresponsivity and passivity; and child characteristics of negative mood, greater intensity, clinginess, lower cognitive functioning; and higher scores on behavior problems scales (Egeland & Sroufe, 1981; Pianta & Nimetz 1992).

Stress of Ethnic Minority Status

Poverty is the greatest predictor of mental health for children of all ages, not race or ethnicity (Gonzales & Kim, 1997). However, poverty is closely related to race and ethnicity in the United States. Ethnic minority children are disproportionately exposed to stressful life conditions such as poverty, diminished community resources, and racial discrimination. In fact, Gonzales and Kim suggested that ethnic group differences in mental health status would be eliminated if the effects of socioeconomic status were empirically controlled in studies that compare majority and minority youths. Individuals of minority status are more frequently exposed to life stressors including prejudice, racism, discrimination, unemployment, low income, underemployment, and environments marked by higher crime rates, residential crowding, and poorer living conditions. Because these socioecological stressors appear to correlate strongly with many health outcomes, it is assumed that as characteristics of individuals' environments worsen, so does their health (Baum, Garofalo, & Yali, 1999).

According to McLoyd (1998), poor families of ethnic minority status are more likely than poor white families to experience persistent poverty and live in the most disadvantaged inner-city communities. For these youths and families, the stress they experience is a result of the lack of resources that go along with poverty, and also the prejudice toward being poor and of minority status. While families living in various contexts experience daily stressors, research suggests that children and families that live in the most disadvantaged urban communities experience significantly higher levels of adversity, more simultaneous stressors, increased negative consequences, and more constraints in coping than do families in other residential contexts (Tolan & Gorman-Smith, 1997).

Increased stress is experienced disproportionately in ethnic minority groups and minority children, as a group, are at greater risk for experiencing emotional distress as well as behavioral and social difficulties (Baum et al., 1999). Along with comprising a large proportion of the low SES population, ethnic minority families are also more likely to reside in the most disadvantaged and extraordinarily high stress neighborhoods where there are inadequate schools, deteriorated housing, and insufficient youth programs. These deficient resources negatively impact the social, economic and educational development of the children that reside in the neighborhoods. Poor African American children experience a host of problems including aggression, impulsivity, attention deficits and hyperactivity, substance abuse, teenage pregnancy, and problems related to diffuse racial identity, self-esteem, and low academic achievement (Slaughter, 1988).

For children who are old enough to go to school, their experience at school could also be a potential stressor that negatively affects their well being. The problems that poor African American children face in schools include instability of staff, low teacher morale, ineffective instructional programs, problems of discipline, order and direction, weak or distrustful relations between school and families, and limited caretaker involvement in the child's academic experience (Barbarin, 1993). The social context in which these children grow represents a combination of oppression, community breakdown, family instability, and personal characteristics and attributes (e.g., interpretation of social cues leading to aggression or vice versa) that may also contribute to adverse outcomes.

Stress in an Inner-City Context

Living in a particular neighborhood can also affect youth. However, there is little empirical research on the impact this environmental context may have on children's development. Garbarino and Sherman (1980) were among the first researchers that documented the effects of neighborhood characteristics on children. In comparison to neighborhoods defined as "dangerous", they found neighborhoods that were considered "safe" by their residents had reduced rates of child maltreatment, had increased resources available (e.g., a recreational center), and were comprised of caregivers who had regular contact and could depend on one another for support. Almost a decade later, the theory of Social Disorganization (Bursick, 1988) proposed that higher rates of delinquency occur in neighborhoods characterized by economic deprivation, residential mobility, and general lack of social control mechanisms.

Inner-city neighborhoods are a contextually difficult subset of impoverished neighborhoods. In an urban context, children are more likely to be exposed to stressful and dangerous conditions, such as urban crowding, crime, drugs, gangs, and violence that are much less apparent in suburban or rural contexts (Attar, Guerra, & Tolan, 1994). Neighborhood crime and delinquent youth groups (i.e., gangs) threaten the personal safety of other neighborhood members and strongly influence children's behaviors and attitudes. Exposure to community violence is another aspect of an inner-city neighborhood that could potentially threaten attachment security. Rutter (1987) suggested that frequent exposure to violence might serve as a chronic stressor for some urban children and may predispose them to emotional distress. Additionally, Rutter found a negative correlation between frequency of stressors and children's level of functioning. Martinez and Richters (1993) found exposure to violence in the home and in the community to be associated with distress symptoms in both older and younger children. However, White, Bruce, Farrell, and Kliever (1998) examined the relationship between exposure to community violence and anxiety and determined that there is not a clear relationship between higher levels of distress and exposure to high degrees of violence. These researchers suggested that the children could have become desensitized to the pervasive violence they witnessed.

Stern, Smith and Jang (1999) investigated the effect of multiple adversities on urban youths and families and found that stressed parents and disrupted family processes were linked to poor adolescent adjustment. These researchers suggested that parents' distress disrupted the control they exercise over their children, which resulted in

adolescents' internalizing and externalizing problems. Dalgard and Tambs (1997) found changes in the social environment parallel changes in the mental health of residents.

These researchers determined an association between improvement in quality of neighborhood and improvement in mental health (as indicated by decreased symptoms) among those living in the neighborhood.

Witnessing violence and homicide is likely to be common experiences in an inner-city neighborhood. Research indicated that the proportions of children who witness violence or are themselves victims of violence are higher in these communities (Shakoor & Chalmers, 1991). In fact, nearly three fourths of a sample of 1,000 African American elementary and high school students reported witnessing at least one robbery, stabbing, shooting, or murder. Garbarino (1997) discussed how a 6-year-old girl once told him that it was her job to find her 2-year-old sister and take her to the safest place in their apartment whenever the shooting began. Dubrow and Garbarino (1989; as cited in Garbino, 1997) determined through interviews with families living in public housing projects in Chicago that virtually all the children had first-hand experiences of shooting by the time they were five years old. Drugs, guns, and gangs conspire to create extremely dangerous environments for youth in urban neighborhoods as well as this particular neighborhood.

According to Garbarino (1995), violent external threats compounded by stressors common to inner-city families (i.e., poverty, parental substance abuse, absent fathers, and maternal incapacity) add to the risk of violence within the family. Combined, these risk factors produce a "socially toxic" environment for children. Horn and Trickett (1998)

found percentages of children who reported witnessing violence increased with the average age of the children. In addition, the incidence of violence in such neighborhoods also tends to increase with the age of the children. Hence, the longer children live and grow in such neighborhoods, the more likely it is that they will witness violence.

Summary of Chronic Stress

There are several toxic ingredients of living in a lower socioeconomic status (SES) neighborhood as presented above. There are some obvious health-modulating effects of SES as higher social status affords protective health benefits that are unavailable to families of lower status. Another factor that links SES to health is chronic stress (Baum et al., 1999). Chronic stress generally refers to stress that persists for a long period of time (Herman, 1997). It can occur episodically or continuously and it frequently poses severe threats that are not easily adapted or overcome. Lower SES is likely to be correlated with settings that have higher population density, crime, noise, pollution, discrimination, poor access to resources, danger, and hardship.

Baum et al., (1999) explained that from a systemic viewpoint, SES exerts some of its effects by increasing the likelihood of exposure to stressors of living in more dangerous environments or being of minority status, which in turn affects health. This model suggests that SES effects on health are mediated by stress. However, these researchers pose the question whether or not there is evidence of a direct link between low SES and increased stress and high SES and decreased stress or fewer burdens. There is no data that definitively support these direct relationships. However, the characteristics of lower SES (e.g., income, education, occupation, etc.) are widely understood to be

associated with more stress, as are corresponding behaviors (e.g., tobacco, alcohol, and drug use, poorer diet, less exercise, etc.). Baum et al., proposed that the sum total of stressors experienced contribute to persistent, surrounding stress that characterize individuals' daily lives and affect how individuals respond to new stressors or how easily they cope. These stressors form the context for experiencing and responding to less common life events or changes and many of the conditions associated with lower SES, which suggests that low SES is associated with greater chronic stress.

The Relationship of Chronic Stress to Attachment and Schema Development

Security is extremely important to a child's well being and is a central component to attachment (Bowlby, 1969/1982, 1988). When infants feel safe, they begin to explore their environment. Parents or other caregivers meet the security needs during infancy. When the child becomes frightened or feels unsafe, the child quickly retreats to the familiar person. Security is still an important component as children get older. This study considered what happens to children's security when they are raised in a chronically unsafe or "socially toxic" environment.

Children are dependent on their environment and on others to survive. Hence, it is likely that the stress they experience will be mainly a product of the stress experienced by persons on whom they depend, especially during their earliest years. Social support in fostering the attachment between caregiver and child is an important component of Bowlby's (1969/1982) attachment theory. Conversely, lack of social support may impede the attachment between caregiver and child. It is therefore important to consider how environmental stressors affect attachment relationships.

Maternal stressful life events can potentially change the quality of children's representation of the attachment relationship, as shown by Altman, Marcus, Abrams, and Ward (1991; as cited in Goodman, Aber & Brooks-Gunn, 1998) in their work with a low-income sample. Mothers' experiences of increased stressful life events predicted change in children's attachment classification from secure, as measured in the Strange Situation at 12 months, to insecure, as assessed in a story-completion assessment of attachment representations at 48 months.

Depression can be considered an index of stressful life events, and for mothers especially, may be a predictor of children's attachment security. Depression can interfere with mothers' availability to their children and hence, can affect children's development of a secure attachment representation. Spieker and Booth (1988) found a relationship in a low-income sample between high levels of maternal depression and insecure (disorganized/disoriented) attachment in children in the Strange Situation. Maternal sensitivity to infant cues has been considered a key component in the development of secure infant attachment behavior (Ainsworth et al., 1978). It can be expected that maternal depression, which may be a manifestation of life stressors, would at some level affect mothers' sensitivity to their children, and consequently impact the parent-child attachment relationship.

Goodman et al., (1998) found that women in an urban sample who became pregnant as teenagers, reported higher levels of depression than the general population. These women experience multiple stresses including single parenthood and extremely low income. Non-depressed mothers in this sample perceived themselves as having fewer

everyday stresses, which may indicate that the perception of stress is more important than actual stress. While stress is a key component to how individuals function in life, more important is the appraisal of the stressful event and the coping strategies individuals choose that ultimately affects their daily functioning. The majority of children in Goodman et al.'s sample were rated as anxious or disorganized. These researchers contended that the mothers' circumstances (i.e., teenage motherhood, poverty, welfare status, urban context), contributed to their quality of attachment with their children. Additionally, these researchers found mothers' sensitivity observed during play directly predicted the security of children's representational world of attachment relationships. Conversely, insensitive and unresponsive mothers tended to elicit anxiety in their children in attachment-relevant situations during play.

As mentioned previously, Garbarino (1995) discussed a concept he refers to as "social maps," which are representations of the world that reflect the cognitive competence of the child. Such representations may include "adults are to be trusted", "strangers are dangerous", or "school is a safe place." Children, as well as parents, may cope within a toxic environment by adopting a worldview that appears dysfunctional in more typical situations. Parental maladaptation can potentially produce childrearing strategies that impede normal development. An example that Garbarino provided involved parents who prohibited their children from playing outside for fear of shooting incidents or gang activity that would result in their children being severely injured. These parents may be denying the child the opportunity to engage in exploratory play, which may affect attachment security. Similarly, these parents tend to have a restrictive and

punitive style of discipline, including physical punishment, which may be an effort to protect the child from falling victim to negative forces in the neighborhood (i.e., gangs). However, this parenting practice is more likely to result in heightening aggression in the child. (Bursick, 1988; Feigelman, Howard, Li, & Cross, 2000; Coplan, Hastings, Lagace-Seguin & Moulton, 2002).

Structural and cultural dimensions of a residential community have been found to be relevant to child development and family functioning (Brooks-Gunn, Duncan, Kato, & Sealand, 1993). Based on Bronfenbrenner's (1979) ecological model, the dynamics of children and their families' functioning affect and are affected by the multiple systems in which they are embedded. Griffen, Scheier, Botvin, Diaz, and Miller (1999) examined perceived neighborhood, peer and parental influences in association with interpersonal aggression in urban minority youth. They found that strong parental monitoring practices perceived by youth were associated with less aggression. They suggested that when youth perceived their parents to be closely monitoring their behavior, they indirectly learned self-restraint and other impulse control skills. In addition, this research found an association between perceived friends' delinquency and elevated aggression in adolescents. Positive attitudes toward delinquent behaviors in peers could be a result of peer modeling of interpersonal aggression or typical adolescent maladaptive views of others and the world.

Finally, environmental factors such as neighborhood risks are also associated with increased aggression. Griffen et al. (1999) suggested that children learn risk-taking and aggression through the modeling of these behaviors and the lack of models that use

nonviolent conflict resolution strategies. Through observing peers and adults engaging in these harmful behaviors, children in an inner-city context may come to see such behaviors (i.e., aggression) as normative and adaptive. Furthermore, perception of aggression appears to differ as a function of neighborhood context (Hudley, Wakefield, Britsch, Cho, Smith, & DeMorat, 2001). Peer perceptions of aggression have been shown to be more broadly distributed across all students in a community experiencing higher rates of violent crimes when compared to a community experiencing less violence. Hudley et al. suggested that the meaning of aggressive acts might be more salient to children's ecosystems while living in communities that do not experience the daily burden of violence. He noted that interpersonal aggression among peers is less acceptable in these less violent communities. Under such conditions, aggressive acts may be perceived as more personally threatening and could lead to more harmful, long-term consequences.

Measurement and Conceptual Issues

Measure of Attachment Security

Ainsworth et al.'s (1978) measure of attachment organizations examined infants' patterns of proximity-seeking behavior toward their primary caregiver. Implicit in attachment theory is that the attachment behaviors are guided by infant's cognitions and emotions. These intrapersonal processes work to regulate interpersonal representations between children and others. Research beyond infancy and into early childhood focuses on actual separation and reunion procedures and projective measures to assess children's state of mind with regard to attachment (Solomon & George, 1999). For adolescence and

adulthood, investigators have relied on self-reports (e.g., Armsden & Greenberg, 1987; Hazan & Shaver, 1987) or interview measures that tap individuals' state of mind (e.g., Main, Kaplan & Cassidy, 1985). Although the frequency and intensity of attachment behavior decline from early to middle childhood, children retain a need for a parental attachment figure in middle childhood and adolescence, and will continue to demonstrate attachment behavior in times of stress (Bowlby, 1988). During middle childhood, children continue to rely on attachment figures as a secure base from which to explore and as a source of comfort in times of stress. The set goal of the attachment system in older children and adults becomes availability of, rather than proximity to the attachment figure. In older children, availability is a function of the degree to which there is open communication between the children and attachment figures, as well as the accessibility and responsiveness of attachment figures. By middle childhood, children also have formed more general representations of self, others, and relationships that are based on experiences in multiple attachment relationships (Bowlby, 1973).

Kerns, Klepac, and Cole (1996) developed the Security Scale to assess children's perceptions of security in parent-child relationships in middle childhood and early adolescence. Because frequency and intensity of attachment behaviors decline across childhood, it is difficult to assess separation and reunion responses. Self-report was considered the best method to assess attachment in this age group. This scale assesses the security of specific attachment relationships rather than a general judgment about parents, as assessed by the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987).

While there are measures to determine the level of security during middle childhood (e.g., Security Scale: Kerns et al., 1996), measures of children's preoccupied and avoidant coping styles (i.e., insecure attachment styles) are scarce. In middle childhood, attachment is assessed according to children's perceptions of the availability and responsiveness of the caregiver, or "felt security". However, avoidant and preoccupied coping styles are not specifically assessed. Finnegan, Hodges, and Perry (1996) developed measures to assess preoccupied and avoidant coping during middle childhood. The two scales were intended to measure behaviors identified as central features of resistant-preoccupied and avoidant-dismissing attachments at younger and older ages. These researchers developed self-report scales designed to measure the degree to which preadolescents perceive themselves to relate to their mother in preoccupied or avoidant ways. Children who received high scores on the Preoccupied Scale experienced a great need to seek out their mothers in novel and stressful situations. These children also experienced difficulty separating from the mother, expressed great concern regarding their mother's location, displayed difficulty exploring, and demonstrated prolonged distress upon reunion with the mother. On the other hand, children who received high scores on the Avoidant Scale denied experiencing distress relating to the mother's absence, failed to seek out the mother when distressed, neglected to use the mother as a task-relevant resource, and avoided the mother during exploration and upon reunion.

Finnegan et al. (1996) found girls reported more preoccupied coping and less avoidant coping than boys, which underscores the need to examine coping style development in middle childhood. While high internal reliabilities of the scales indicate

success in capturing the preoccupied and avoidant relationship stances, which are closely linked to insecure attachment organizations, Finnegan et al., cautioned readers that it is premature to regard the scales as direct measures of insecure attachment styles as the scales do not measure children's representations of the attachment figure. Hence, there is no solid basis for inferring that high scores on the scales reflect underlying insecurity or lack of caregiver availability.

Cook, Greenberg, and Kusche (1995) developed a self-report measure of attachment to parents, peers, school, and neighborhood for children in middle childhood. The People in My Life measure was determined to be a reliable measure of attachment relationship for school-aged children. These researchers suggested the importance of assessing children's attachment to persons in multiple settings in their lives, as well as the importance of multiple informants. Using the IPPA to assess adolescents' perceptions of their attachment relationship with their parents and close friends, Armsden and Greenberg (1987) found the quality of parent and peer attachments in late adolescence to be highly related to well-being, particularly to self-esteem and life satisfaction. Adolescents with attachment marked by high security to their parents appeared very well adjusted as evidenced by a higher than average self-esteem, and enjoyment of frequent and satisfactory communication with their families. In contrast, adolescents comprising the low security parent attachment group described feelings of resentment and alienation, as well as a more emotionally and verbally detached quality to their relationships with their parents.

In addition to the self-report measures mentioned above, projective and semi-projective tests have been used to assess attachment, self-reliant, and avoidant thought patterns in children. The Separation Anxiety Test (SAT; Klagsbrun & Bowlby, 1976) has been repeatedly used to assess internal representations of attachment security in early childhood and adolescence. The SAT is a semi-projective test that was adapted from Hansburg's (1972) original measure designed to assess the way in which adolescents ages 11 to 17 years responded to separations from, or loss of, their parents. Klagsbrun and Bowlby (1976) modified Hansburg's test so that it could be used with younger children from 4 to 7 years of age. Klagsbrun and Bowlby's version involved six photographs made from movies depicting situations in which parents are leaving the child.

Klagsbrun and Bowlby's (1976) modified version of the original SAT appears to be a promising tool for measuring internal representations of attachment security in middle childhood. During early childhood, it is easier to observe attachment behaviors between caregiver and child (i.e., via Strange Situation). Through adolescence, relationships with peers become more important than relationships with parents, hence potentially influencing attachment representations differently than in early childhood. During middle childhood, parents are still the primary source for attachment, though measures must be adjusted to account for how attachment is represented at this stage of life (e.g., a young child may cry when distressed versus an older child may express anger).

Slough and Greenberg (1990) further revised the SAT with alternate probes in order to see whether children at the age of 5 years provided different answers when asked

how they would feel (as opposed to how the child felt) in the situation presented by the photographs. By asking questions about the self and a peer, it gave the children an opportunity to present the self as more self-reliant or more emotionally vulnerable than the peer and provided further insight about the structure of the children's working models. In this sense, Slough and Greenberg made an important distinction in assessing the child's representations of "self" versus "other" children. These researchers determined that children were able to express themselves more easily under the guise of the children in the pictures.

Kaplan (1987; as cited in Slough & Greenberg, 1990) developed a scoring system for the SAT to classify the attachment representations of children based on their responses to a set of pictures portraying various parent-child separation experiences. In another investigation, Jacobsen, Eldelstein and Hofmann (1994) adjusted Kaplan's system in order to reliably distinguish four major attachment groups among 7-year-old Icelandic children. These groups were secure, insecure-avoidant, insecure-ambivalent and insecure-disorganized. Kaplan's method for classifying attachment representations is based on ratings of the general style of children's responses regarding their thoughts, feelings, and behaviors when processing attachment-related information elicited by the SAT pictures as opposed to their individual responses to specific separation pictures. This approach considers attachment as an organizational construct, a view first introduced by Sroufe and Waters (1977).

Assessments based on Kaplan's (1987; as cited in Slough & Greenberg, 1990) system correlate strongly with attachment classifications made in the Strange Situation at

12 months and 6 years (Main, Kaplan & Cassidy, 1985). Significant relationships were found between 6-year-olds' overall ability to be emotionally open in discussions of parent-child separation on the SAT and their secure classification upon reunion with parents. Assessments made using this system and the actual reunion behavior following a short separation from the parents in a sample of 5-year-olds revealed a significant correlation (Slough & Greenberg). Shouldice and Stevenson-Hinde (1992) found that children classified as secure upon reunion with a caregiver, compared to those classified as insecure, were more emotionally open to appropriate negative feelings without being overwhelmed and showed a greater ability to tolerate distress aroused by separation pictures on the SAT without defensiveness. In addition, children who were classified as avoidant, ambivalent, and controlling showed these corresponding response patterns in reunion pictures on the SAT. While the SAT has been primarily used to assess attachment organizations in young children, it appears to also be a valid instrument for middle childhood. Wright, Binney and Smith (1995) examined the psychometric properties of the SAT with children ages 8-12 years and determined test-retest reliability and internal consistency.

Other semi-projective tests include the Attachment Story-Completion Task (Bretherton, Ridgeway, & Cassidy, 1990), Openheim's Attachment Doll-play Interview (1997), and the Manchester Child Attachment Story Task (Green, Stanley, Smith, & Goldwyn, 2000). These different measures function in a similar way to the SAT in that they are based on a narrative representation of internal working models of attachment

relationships. However, these measures have only been utilized with young school-aged children.

For the purpose of this study, two types of security assessments were utilized: a semi-projective test and a self-report scale. The projective test has less face validity, which reduces the likelihood of the children from attempting to please or impress the researcher by guessing at a desired response. Items on the self-report measure are easier to deduce; however, the problems with inter-rater reliability are not a factor in this measure. By having both measures, significant results with one measure may be supported by significant results in the other. This redundancy makes it more likely that other researchers may replicate the results and reduces the chance of a Type II error.

Measuring Chronic Stress

While there is increased awareness that structural and cultural dimensions of community social organization impact child development and family functioning (Brooks-Gunn et al., 1993), there are few methods by which to measure these dimensions. Many aspects of the community have been determined to affect the well being and emotional safety of its residents, though assessing such community characteristics vary both theoretically and conceptually. Community violence and chaos have been shown to impact families and in particular, the children (Attar et al., 1994; Garbarino & Sherman, 1980; Rutter, 1987). Though there are a number of stressful conditions that children are exposed to in lower SES, urban contexts (i.e., crowding, crime, drugs and gangs), exposure to violence seems especially salient to children's well being. A measure used to examine the effects of witnessing violence among elementary

school children living in low-income neighborhoods is the Things I Have Seen and Heard Scale (Richters & Martinez, 1990). This structured interview probes young children's exposure to violence and violent-related themes in an age-appropriate format.

Assessing environmental and community factors is much easier with adults, although measuring social disorganization is still difficult. Few measures exist that tap into the more toxic elements of a disadvantaged inner-city community. One such measure, the Block Environment Inventory (Taylor, Shumaker, & Gottfredson, 1985), has been used to assess community members' fear of crime and perceptions of social disorder in their neighborhood. The Neighborhood Questionnaire (Simcha-Fagan & Schwartz, 1986) is another measure that was originally created for a study of crime and delinquency. This questionnaire examines community characteristics such as neighborhood attachment, social disorder, and conflict subculture. McGuire (1997), who modified this questionnaire with particular attention to the concerns of parents with children up to 18 years of age, suggested that neighborhood perceptions could potentially have an impact on parental well being and family life. The Neighborhood Context is a family interview developed by Coulton, Korbin, and Su (1996). The neighborhood variables measured include information about residents' perceptions of the negative aspects of the community including litter, crime, building decay, or socially disruptive behavior as well as their perceptions of relationships with neighbors and sense of belonging.

In the current study, parents or legal guardians of the participants completed the Life Experience Survey (LES; Sarason, Johnson & Siegel, 1978). This self-report

measure assesses various life events or changes that have occurred in the last 12 months and the degree to which each event positively or negatively impacted the individual. This measure is useful to this study in that it considers various life events and also evaluates how individuals perceive these events as impacting their lives. Reported positive or negative impact provides some insight on how the caregiver copes with life stressors.

Measuring Child Schemas

Measurement issues also need to be considered with respect to the assessment of working models. Measures of attachment take into consideration mental representation or schematic organization of interpersonal relationships. Relational patterns of attachment, initially between caregiver and child, become organized into what Bowlby (1988) referred to as “working models” or schemas, which represent the caregiver, the self, and the environment. According to the attachment literature, it is assumed that these working models are manifested into the following three attachment behavior styles: secure, anxious-ambivalent, and avoidant (Ainsworth et al., 1978). By measuring the quality of the attachment relationship to the caregiver, the internal working models can be assessed. In middle childhood, the internal working models relate to the coping strategies that are evoked when security distress is high, this model is useful even when the attachment figure is not actually present but instead imagined, as in the semi-projective SAT (Klagsbrun & Bowlby, 1976).

The Cognitive Triad Inventory for Children (CTI-C; Kaslow et al., 1992) systematically measures three aspects of the cognitive functioning in children: view of self, view of world, and view of future. This measure was originally developed to assess

maladaptive schemas in children. This instrument was useful to this research in determining the types of schemas that exist (i.e., positive or negative) in children and how these schemas related to stress and attachment organizations.

Goals of this Study

The purpose of this study was to examine the association between the chronic stress that exists in low SES, urban communities and the attachment representations of middle school-aged children. The study considered how living in a stressful context is related to children's view of self, world, and future. Attachment relationships between caregivers and their children were expected to be modified by interactions with stressor conditions. More specifically, the first hypothesis predicted that caregivers who have experienced more stressors in the past year would have a higher proportion of children with insecure attachment organizations. Second, it was predicted that caregivers who perceive stressors as negatively impacting their coping strategies would have a higher proportion of insecurely attached children. The third hypothesis stated that children who report greater exposure to violence would be more likely to demonstrate insecure attachment organizations than children who have less exposure. Fourth, children who report greater exposure to violence were expected to exhibit more negative views of self, world, and future. Finally, it was predicted that children with insecure attachment organizations would be more likely to reveal more negative schemas about themselves, the world, and the future than children with secure attachment organizations.

Hypotheses and Analyses

Hypothesis 1: The attachment relationship between caregivers and their children is modified by interactions with stressor conditions.

1. Caregivers' scores on the Life Experience Survey will inversely correlate with children's scores on the Security Scale. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
2. Caregivers' scores on the Life Experience Survey will inversely correlate with children's scores on the Attachment scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
3. Caregivers' scores on the Life Experience Survey will inversely correlate with children's scores on the Self-Reliant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
4. Caregivers' scores on the Life Experience Survey will positively correlate with children's scores on the Avoidant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.

Hypothesis 2: Caregivers who report more negative impacts of life stressors will have children with more insecure attachment classifications.

1. Caregivers' total scores regarding perceived impact of events on the Life Experience Survey will positively correlate with their children's scores on the Security Scale. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
2. Caregivers' total scores regarding perceived impact of events on the Life Experience Survey will positively correlate with their children's scores on the Attachment scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
3. Caregivers' total scores regarding perceived impact of events on the Life Experience Survey will positively correlate with their children's scores on the Self-Reliant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
4. Caregivers' total scores regarding perceived impact of events on the Life Experience Survey will inversely correlate with their children's scores on the Avoidant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.

Hypothesis 3: Children who report greater exposure to violence will be more likely to demonstrate insecure attachment organizations than children who report less exposure.

1. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the Security Scale. Using an $\alpha = .05$, a Pearson

correlation was performed to test the level of significance and the strength of the relationship.

2. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the Attachment scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
3. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the Self-Reliant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
4. Children's scores on the Things I Have Seen and Heard Scale will positively correlate with their scores on the Avoidant scale of the SAT. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.

Hypothesis 4: Children who report greater exposure to violence will reveal more negative views of self, world, and future.

1. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the View-of-Self subscale of the CTI-C. Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.
2. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the View-of-World subscale of the CTI-C. Using

an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.

3. Children's scores on the Things I Have Seen and Heard Scale will inversely correlate with their scores on the View-of-Future subscale of the CTI-C.

Using an $\alpha = .05$, a Pearson correlation was performed to test the level of significance and the strength of the relationship.

Hypothesis 5: Children with insecure attachment organizations will show more negative schemas about themselves, the world and the future.

1. Children's scores on the Security Scale, Attachment scale on the SAT and Self-Reliant scale on the SAT will positively correlate with their scores on the View-of-Self subscale of the CTI-C whereas scores on the Avoidant scale of the SAT will inversely correlate with their scores on the View-of-Self subscale of the CTI-C. An exploratory stepwise multiple regression was performed at $\alpha = .05$ to determine which subscales explained significant portions of variance on the CTI-C.
2. Children's scores on the Security Scale, Attachment scale on the SAT and Self-Reliant scale on the SAT will positively correlate with their scores on the View-of-World subscale of the CTI-C whereas scores on the Avoidant scale of the SAT will inversely correlate with their scores on the View-of-World subscale of the CTI-C. An exploratory stepwise multiple regression was performed at $\alpha = .05$ to determine which subscales explained significant portions of variance on the CTI-C.

3. Children's scores on the Security Scale, Attachment scale on the SAT and Self-Reliant scale on the SAT will positively correlate with their scores on the View-of-Future subscale of the CTI-C whereas scores on the Avoidant scale of the SAT will inversely correlate with their scores on the View-of-Future subscale of the CTI-C. An exploratory stepwise multiple regression was performed at $\alpha = .05$ to determine which subscales explained significant portions of variance on the CTI-C.

CHAPTER 3: METHODOLOGY

The methodology of this correlative study will now be discussed. Methodological aspects of this study include population, procedures performed to sample the population, instruments used to measure the variables, strategies employed to collect the data, and descriptive and statistical techniques that were utilized to treat the data.

Participants

Participants for this study were 50 children and their caregivers. The sample was recruited from inner-city neighborhoods of south Dallas and Chicago. Thirty-eight caregiver-child dyads (76%) were recruited from south Chicago and 12 caregiver-dyads (24%) were recruited from south Dallas. The child participants were comprised of 31 females and 19 males. Child participants in Dallas were all female. Age ranged from 8 to 12 years with a mean of 9.85, and last grade completed ranged from first through seventh grade. Children were asked to identify their primary caregiver as the person who takes care of them most of the time. Thirty percent of the children identified someone other than their mother. Ten children (20%) identified their grandmother, four (8%) identified their “aunty” and one (2%) identified his/her grandfather as their primary caregiver. Demographic information for child participants is presented in Table 1.

Table 1

Child Demographic Data

Child Data	N	Minimum	Maximum	Mean	SD
Age (in years)	50	8	12	9.85	1.46
Grade	50	2	8	4.72	1.68
Number of people in home	50	2	11	6.46	2.13

The caregivers were comprised of 49 females and 1 male who filled out consent forms. Forty-five caregivers partially or completely filled out the demographic questionnaire. Forty-eight caregivers completed and returned the LES. Caregivers' ages ranged from 23 to 60 years ($M = 34.96$). Thirty-five caregivers indicated an income level that ranged from \$1,200 to \$60,000 per year with an average household income of \$25,789.19. The average was not significantly different than the median of \$25,000 annually. The mean household income in Chicago was \$21,435 and the household income for Dallas families was \$39,334. The reported number of total persons living within the household ranged from 2 to 11 with a mean of 6.46. All participants were African American. Demographic information for caregiver participants is presented in Table 2.

Table 2

Caregiver Demographic and Descriptive Data

Caregiver Data	n	Minimum	Maximum	Mean	SD
Caregivers' Age (years)	45	24	60	34.96	7.77
Caregivers Years of Education	45	5	18	12.60	2.60
Years in Relationship*	37	0	30	6.95	6.49
Number of offspring	43	1	6	3.65	1.66
Number of people in home	40	2	10	6.40	2.01
Annual Household Income	37	1,200	60,000	25,789.19	16,181.75

* Committed relationship or marriage of the participant

*Procedure**Recruitment of Participants*

Recruitment of children and their caregivers occurred mainly through a youth program called "Beyond Belief," which is held during the summers in south Dallas and Chicago. The director of the program provided written approval for recruitment. Recruitment also took place through a youth organization in Dallas called "Circle of Support." The director of this program provided verbal consent for the researcher to recruit. The principal investigator recruited participants and collected data in Chicago and another graduate student recruited and collected data in Dallas. A simple overview of tasks and intent of the study was provided to the children verbally. Children who were interested took home flyers that provided a brief explanation of the purpose of the study, tasks

involved, benefits and instructions for contacting the researchers. In addition, children's names, home addresses and phone numbers were taken to follow up on their potential participation. Researchers waited to be contacted by volunteer participants. In the flyer, a designated place at a local church or school was included so that individuals interested in participating, but who did not have a telephone or email account, were able to contact the researcher. One week after initial contact with the children and distribution of flyers, efforts were made by the researchers to contact the families by telephone or by mailing a letter to their home address to determine if they were interested in participating in the study.

Upon direct contact with the parents or legal guardians of the children, researchers explained the purpose of the study in greater detail and clarified any questions the participants presented. The purpose was stated as, "attempting to gain a better understanding of how stress affects children's relationship development and their views of themselves and others." Researchers discussed the procedure and the types of questions that were asked of the children with the caregivers. Participants were informed about the content of the measures and potential harms that could occur as a result of participation in the study (e.g., increased anxiety due to questions). Researchers went over the consent forms with the adult participants and verified the parents or legal guardians understood the forms (see Appendices A & B). All participants indicated they understood the procedure of the study before signing the consent forms. Children and their caregivers were assured that any information they provided would remain completely confidential. It was explained that all consent forms would be removed from the rest of the paper work before review of the data to ensure participant confidentiality. Participants were informed that their participation

was completely voluntary and that they were allowed to withdraw their participation at any time. A summary of the results of this study was offered to all interested participants. In addition, coupons in the amount of \$10 for food at McDonald's were provided for completed tasks to both child and adult participants to compensate for the family's time and willingness to participate. A procedure flow chart is provided for clarification of recruitment and data collection (see Appendix C).

Data Collection

Prior to data collection, the principal investigator trained the assistant researcher on recruiting and assessing participants using the research instruments. After direct contact was made (by phone or in person), and the parent/legal guardian agreed to participate, the researcher discussed with the participant where and when the research tasks were to take place. The time and place for the child's participation were also discussed at this time. Adult participants signed the consent forms at the initial meeting with the researcher and either filled out their measures simultaneously or at a later date. Administration of measures occurred in two phases: Phase 1 included obtaining consent and administering measures to the parents or legal guardians and Phase 2 involved assessment of their children.

Administration during the first phase took place at the family's residence or at the local church, as negotiated with the participant. Investigators in both cities were always escorted by either the director of the program or a fellow staff member of the program when going to the homes of the participants. Data were collected during the morning to mid-afternoon to reduce risks to the researchers. Personal and family information was

obtained and participants were given the Life Experience Survey (see “Instruments” section). Measures that were not obtained during the initial meeting (e.g., caregiver signed consent form but did not fill out questionnaires) were retrieved in person when caregivers dropped off or picked up their children or were obtained from the children (i.e., some sealed packets containing demographic and LES measures were returned by children).

During the second phase, measures were administered to the children. Measures were administered in private rooms at a church in Chicago (also the home base for the Beyond Belief Program) and a church in Dallas (the home base for the Circle of Support program during the summer). Oral consent was obtained from the pastor at the church in Chicago and the director of the youth program at the church in Dallas to use these rooms for the purpose of this study. Arrangements were made ahead of time for the children to be dropped off at the church. Child participants were given a short personal information sheet, a projective story task, and three additional questionnaires (see “Instruments” section). Average completion time including debriefing was 40 minutes. Refreshments and breaks were provided for the children as needed.

After completion of all tasks, the researcher and another adult escorted the children home or waited with the children for the parent or legal guardian to arrive. The McDonald's coupons were distributed to the parent or legal guardian at this time. In addition, a listing of counseling center names and phone numbers was provided in case any problems arose as a result of participation in the study. Only one child in the study reported feeling distressed after the Things I Have Seen and Heard measure was given. After talking with the child until s/he was calm, the present researcher discussed the child's response with the child's

parent who was encouraged to contact someone listed on the referral sheet if any symptoms of psychological distress were observed in the child (e.g., increased sadness, tearfulness, nightmares, increased anger, etc.). The child was observed by the present investigator several subsequent times in the context of the youth program and no apparent symptoms of psychological distress were noted.

Instruments

Demographic Information

The parents/legal guardians of the child participants provided information regarding age, sex, ethnicity, relationship status, education, annual income, and other family information (see Appendix D). The children reported their sex, age, grade level, ethnicity, and family composition at home (see Appendix E). In addition, children were asked to designate a primary caregiver. Specifically, the children were asked, “Who is(are) the person(s) that takes care of you most of the time?” This emic approach (Jackson, 1993) to assessing an attachment relationship does not assume a parent is the primary caregiver, and considers that the children might have more than one person that cares for them on a regular basis. If the children responded with more than one caregiver, for the purpose of assessing specific attachment relationships and to facilitate the use of the attachment instruments, they were asked to “identify the one person who acts most like a parent to you.” This informed the researchers of the kinds of questions or probes that were useful in obtaining more accurate information for the semi-projective task and attachment questionnaire.

Life Experience Survey

The Life Experience Survey (LES; Sarason, et al., 1978) is a 57-item self-report measure that assesses various life events or changes that have occurred in the last 12 months, and the degree to which each event positively or negatively impacted the individual (see Appendix F). The scale has two sections but only the first section was used for this study and is the only one discussed here. Section 1 contains a list of 47 specific events plus three blank spaces in which subjects can indicate other events that they may have experienced. Events listed in this section refer to life changes that are common to individuals in a wide variety of situations. The language of some of the items was changed to incorporate all kinds of relationships (i.e., change “spouse” to “mate” and “marriage” to “relationship”).

Participants separately rate the desirability and impact of events that they have experienced. As a result, individuals are able to indicate whether they view particular events as being positive or negative and the impact of the event on their life. Intensity of impact is rated on a 7-point scale that ranged from extremely negative (-3) to extremely positive (+3). Summing the impact of these ratings yields restricted negative, positive, and total change scores. Summing the impact ratings of the events designated as positive or negative by the participant provides a measure of positive or negative change. Adding these values yields a total change score, which represents the total amount of rated change as desirable or undesirable. For the purpose of this study, the number of items endorsed and the total change score were used for analyses.

The LES is a moderately reliable instrument through a 5- to 6-week time interval (Sarason, et al., 1978). Test-retest correlations in Sarason et al.'s, original work for the positive change score were .19 and .53 ($p < .001$) and .56 and .88 ($p < .001$) for the negative change score. Reliability coefficients were .61 ($p < .05$), .72 ($p < .01$), and .82 ($p < .001$) for positive, negative, and total change scores, respectively following an 8-week time interval. Construct validity of this measure appears as total and negative change scores, which correlate significantly and in a positive direction with state and trait anxiety. Conversely, the positive change score is not significantly related to either anxiety measure.

Separation Anxiety Test

The Separation Anxiety Test (SAT; Slough & Greenberg, 1990) is a semi-projective test to assess children's responses to representations of separations from their parents (see Appendix G). The original measure developed by Hansburg (1972) was designed to assess the way in which adolescents, aged eleven to seventeen, respond to separations from or loss of their parents. Klagsbrun and Bowlby (1976) modified the test to be used with younger children, ages four to seven. The number of pictures was reduced from twelve to six. Klagsbrun and Bowlby also substituted photographs (still shots from movies) for Hansburg's ink drawings. Each photograph included a caption that provided a clear situational context while maintaining ambiguity with respect to emotional expression. The six photographs originally depicted increasingly stressful separations from attachment figures.

Slough and Greenberg (1990) adapted the Klagsbrun and Bowlby's (1976) six separation scenarios to give the test a more rigid experimental design. Each separation scenario included a male in one picture and a female in another identical picture. Also, children's profiles or backs of their heads were shot in these photographs in order to maintain ambiguity in facial expressions. In the present study, the SAT consisted of the same six separation situations used by Klagsbrun and Bowlby and included three separation scenarios that were originally employed by Hansburg (1972) in the SAT. However, the pictures were hand-drawn, as opposed to using photographs, in order to avoid the complications inherent in using pictures of real children and their families (e.g., photograph reminding the children of someone they know, failure to use ethnically relevant stimuli). The pictures depicted male and female children around the age of nine years old. All human figures in the illustrations resembled persons of African American descent.

After establishing a comfortable rapport, the SAT is introduced as follows: "I have some pictures here and I want you to tell some stories about them. These are pictures about a girl/boy your age." The nine situations and the order in which they were presented to the children are as follows:

1. Caregivers go out for the evening, leaving the child at home
2. Caregivers go away for 2 weeks, leaving the child with aunt and uncle
3. Child's first day back at school
4. Caregivers leave for two weeks, giving the child a gift prior to their departure
5. Park scene; caregivers tell child to run off and play by self for a while, they want some time alone together to talk
6. Caregiver tucks child in bed and leaves room
7. Child will live permanently with grandparents and without parents
8. Family is moving to a new neighborhood
9. Child's caregiver is being taken to the hospital

Children are shown each picture, one at a time, and given a particular explanation. For example, children are told, "In this picture the people who take care of the child are going out for the evening leaving the girl (boy) at home." Children are asked to describe what the child in the picture is thinking and feeling during the separation experiences (valence), why he/she feels that way (justification), and what he/she plans to do (coping). These questions are then repeated in reference to the child's own feelings (i.e., "How would you feel if you were the girl (boy) in the picture?"). If the child is reluctant to answer, the examiner encourages the child with probes such as, "How do you think the child might feel?" or "Go ahead and guess."

The scoring indices for the SAT were created as a measure of children's working model of attachment to caregivers (Klagsbrun & Bowlby, 1976; Slough, Goyette & Greenberg, 1988). These indices assess children's thoughts regarding their ability to cope with mild and severe separations from their caregivers. If children have formed a working model of a responsive and accessible caregiver, it is expected that they would express confidence and feelings of well-being in the context of the milder separations. However, when confronted with a more difficult and anxiety provoking (severe) separation from the caregiver, securely attached children are expected to be able to openly express concerns, fears, anger or sadness about the separation. This is congruent with actual separation behavior of secure children in the Strange Situation procedure (Ainsworth et al., 1978). Insecure children may report an exaggerated dependence on oneself, demonstrate an unwillingness or inability to talk about the separations and/or explain the separations incoherently or with excessive opposition.

For the purposes of this study, responses were scored using the Scoring Indices for the Seattle version of the Separation Anxiety Test (Slough et al., 1988). In this scoring system, the separation pictures are considered either “mild” or “severe”. Pictures 1, 2 and 4 are considered severe situations, and pictures 3, 5, and 6 are considered mild situations. Three separation scenarios originally used by Hansburg (1972) were also used in the present study in order to assess potential stressors in a disadvantaged neighborhood and were classified by the current researcher as severe. Responses to severe separations are rated on a four-point attachment security dimension while responses to mild separations were rated on a four-point self-reliance dimension. All nine pictures are rated on a three-point avoidance dimension. Children’s responses were audio taped and later transcribed for scoring. In order to establish reliability for the present study, a second trained rater who was blind to the children’s sex and age rated all 50 transcripts. The inter-rater reliability was 87.3% with kappa = .75. However, a discrepancy emerged between inter-rater agreement among the first six cards and the last three cards. The raters agreed on 94% with kappa = .88 on the first six cards yet only 74% with kappa = .48 on the modified final three cards.

Children respond to the SAT twice for each card. The first response requires the child to identify the thoughts and feelings of the child pictured. The second response requires the children to identify their own thoughts and feelings if the scenario in the card was happening to them. Each response to a card is assigned to a category (1-21), which results in two scores for each card (see Appendix H). The first response is the “other” response and the second is the “self” response. Proper scoring requires the researcher to

consider the participant's valence (positive, negative or mixed), justification of valence, and source of the coping. This scoring stage includes 18 scenarios (cards 1 through 9 including "self" and "other" responses) that are assigned a qualitative category 1 through 21.

The researcher converts the qualitative categories to quantitative measures in the second scoring stage. Categories are assigned scores and then converted into three scoring indices, which represent three primary components of the children's responses: Attachment, Self-Reliant, and Avoidant or Avoidant Confused (Slough et al., 1988). The Attachment Scale reflects children's ability to express vulnerability, (e.g., sadness, regret) or need regarding the separation. The Self-Reliant Scale characterizes the children's ability to express self-confidence in handling the separation in an autonomous manner. Finally, the Avoidant Scale measures children's degree of avoidance in discussing the separations. Pictures 1, 2, and 4 are considered "severe" separation pictures and receive scores on the Attachment Scale. Pictures 3, 5, and 6 are considered "mild" separation pictures and receive scores on the Self-Reliant Scale. Finally, all of Slough et al.'s six pictures receive scores on the Avoidant Scale. Modifications in scoring were included to incorporate the additional three cards (7-9). Pictures 7 through 9 were considered "severe" separation pictures because of the nature of the scenarios and hence, were scored in the Attachment Scale. All nine cards (including the additional 3 introduced by the current investigator) were scored in the Avoidant Scale.

Higher numbers on the Attachment subscale indicate more secure attachment and increased comfort in expressing vulnerability, higher numbers on the Self-Reliant

subscale indicate more secure attachment and increased self-confidence in handling separation, and higher scores on the Avoidant subscale indicate less secure attachment and increased avoidance when discussing separation. In the present study, six cards were used to determine two (“self” and “other”) Attachment scores (ranging from 6-24), three cards were used to determine two (“self” and “other”) Self-Reliant scores (ranging from 3-12) and nine cards were used to determine two (“self” and “other”) Avoidant score (ranging from 9-27).

While the SAT was not created as a direct measure of attachment, it has been shown to correlate moderately well with attachment security ratings obtained from separation-reunion situations for 4- to 7-year-olds, measured both concurrently (Shouldice & Stevenson-Hinde, 1992) and longitudinally (Main et al., 1985). Wright, Binney and Smith (1995) used two summary scores for each of the Attachment, Self-Reliance, and Avoidance scales (one for the child’s own responses and one for the hypothetical child in the picture). Internal consistency was found between individual pictures as indicated by Cronbach’s alphas of attachment (self = .74, other = .60), self-reliance (self = .42, other = .58) and avoidance (self = .77, other = .56). Using a score of .70 as a cut-off for acceptable consistency, only two of the scales, attachment and avoidance for self suggested sufficient internal consistency. In addition, Wright et al. found positive correlations between two summary scores from a first and second administration of the SAT: attachment (self, $r = .23$, other, $r = .39$), self-reliance (self, $r = .21$, other, $r = .28$) and avoidance (self, $r = .17$, other, $r = .12$) though none of the

correlations reached statistical significance. These results were inconclusive due to a 40% attrition rate of the sample.

Examination of the relationship between the three “self” and three “other” SAT scales found a negative association between attachment and self-reliance ($r = -.09$ to $r = -.22$; Wright, Binney & Smith, 1995), which indicates that the scales measure relatively independent aspects of responses. Conversely, correlations between attachment and avoidance ($r = .12$ to $r = -.61$) and self-reliance and avoidance ($r = .22$ to $r = -.35$) suggest that avoidance is only partially independent of the other two scales. These findings support Slough and Greenberg’s (1990) description of the scale structure.

Security Scale

The Security Scale (Kerns, Klepac & Cole, 1996) is a self-report measure comprised of 15 questions that assess children’s “felt security” with caregivers (see Appendix I). The item content was intended to reflect those aspects of the attachment organization that are thought to reflect security of attachment in the middle childhood years. It considers the degree to which children believe an attachment figure is responsive and available, their reliance on attachment figures in times of stress, and their reported comfort and openness in communicating with the attachment figure. The scale is designed to tap children’s perception of a particular attachment relationship. In the current study, children completed the Security Scale for the person they identified as their primary caregiver.

Items on this scale were administered in a “Some kids...Other kids...” format established by Susan Harter (1982) in her Perceived Competence Scale for Children.

Children were presented information regarding two types of children. They were instructed to choose which type of child was most like them and then to indicate whether this statement was “really true” or “sort of true” for them. For example, for the item “Some kids find it easy to count on their mom (dad) for help BUT other kids think it’s hard to count on their mom (dad)”, children were told to decide which statement was more true of them. Then they rated whether the statement was really true or sort of true. Each item on the scale was scored 1 to 4 and averaged as a total score on a continuous dimension of security, with higher scores indicating a more secure parent-child attachment.

Construct validity has been established with peer ratings of acceptance, observer ratings of friendship quality, and mothers’ reports of acceptance of the children (Kerns, Klepac & Cole, 1996). In order to examine both convergent and discriminate validity of the Security Scale, Kerns et al. conducted a preliminary study that analyzed associations between children’s security scores and their self-perceptions in several domains. Scores on the Security Scale showed an adequate range (1.6 – 4) and internal consistency (Cronbach’s $\alpha = .93$). Security scores were significantly correlated with the following: self-esteem, $r(69) = .40$; peer acceptance, $r(69) = .30$; behavioral conduct, $r(69) = .36$; scholastic competence, $r(69) = .38$; and physical appearance, $r(69) = .36$, all p values < .01. Security scores were not significantly correlated with athletic competence, $r(69) = .19$, or GPA, $r(68) = .12$, providing some evidence of discriminate validity. In a more recent study, Kerns, Tomich, Aspelmeier, and Contreras (2000) determined alphas for

reports of security with mothers of third, fifth, and sixth graders at .64, .82, and .79 respectively. Alphas for security with father were .82, .88, and .87 respectively.

To establish test-retest reliability, a second study was conducted on the scale. Cronbach's alphas for scores regarding children's reports of their relationship with their mother obtained 14 days apart were .81 and .87 (Kerns et al., 1996). The test—retest correlation was $r(30) = .75$, indicating stability in children's perceptions of security over a short time interval. Kerns et al. also predicted moderate convergence between security scores and ratings of other positive qualities of the child-mother relationship. Security scores were significantly correlated with children's ratings of companionship, $r(73) = .65$; intimacy, $r(73) = .54$; affection, $r(73) = .46$; conflict, $r(73) = -.35$; and antagonism, $r(73) = -.26$. Thus, perceptions of security are related, though not identical to other perceived qualities of the child-mother relationship.

Cognitive Triad Inventory for Children

To assess children's more global representations of self and other while tapping into self-esteem and self-competence, this study included the Cognitive Triad Inventory for Children (CTI-C; Kaslow, Stark, Printz, Livingston, & Tsai, 1992, see Appendix J). The CTI-C is a downward revision of the Cognitive Triad Inventory (CTI; Watkins, Boyer, & Cook, 1986, as cited in Kaslow et al., 1992) for adults. This 36-item measure comprises three scales representing View of Self, View of World, and View of Future. Each scale consists of 12 items stating a specific thought about the self, the world, or the future. Half of the items are worded in a positive direction (e.g., "People like me") and half are worded in a negative direction (e.g., "I am a failure"). Children are instructed to

select the answer that best describes their current thoughts with a “Yes,” “Maybe” or “No”. Each subscale has a possible range of 0-36, with higher scores indicating more positive views about the self, world, and future.

The CTI-C showed internal consistency and reliability for each subscale as computed by a coefficient alpha, and item-to-total score correlations (Kaslow et al., 1992). Results indicated that the CTI-C Self ($r = .83$), World ($r = .69$), and Future ($r = .85$) subscales as well as the total scale ($r = .92$) achieve acceptable levels of internal consistency. With the exceptions of items 2 and 27 from the World subscale, the items that make up each subscale demonstrate acceptable levels of reliability. The CTI-C was also shown to have concurrent validity. View of the Self subscale scores on the CTI-C correlated strongly with the Coopersmith Self-Esteem Inventory (CSEI; Coopersmith, 1976, as cited in Kaslow et al., 1992) indicating they both measure self-esteem ($r = .69$, $p < .001$). Additionally, measuring future expectations, there was a strong negative correlation between the View of the Future subscale on the CTI-C and the Hopelessness Scale for Children (HSC; Kazdin et al., 1986, as cited in Kaslow et al., 1992; $r = -.68$, $p < .001$), indicating that the lower the level of hopelessness, the more positive view of the future. Finally, the View of the World subscale was strongly correlated with both the HSC ($r = .60$) and CSEI ($r = .62$), both with $p < .001$.

Things I Have Seen and Heard

The Things I Have Seen and Heard measure (Richters & Martinez, 1990) is a 20-item structured interview probing children’s exposure to violence and violence-related themes in an age-appropriate, simply worded format (see Appendix K). Each page of this

interview describes a different form of violence or violence theme. Participants were asked to rate how frequently each item had occurred in real life and to exclude events they might have seen or heard on television, radio, or in the movies. The rating scale is depicted as five columns of balls, each column of balls representing a different rating. Each column has a different number of balls representing the frequency of exposure, ranging from zero (indicating “never”) to five (indicating “many times”). Prior to administration, children were taught to circle the column to indicate frequency of exposure. Children were asked to circle the stack of balls indicating how often they have either witnessed or have been victimized by the form/theme of violence that was read aloud.

Test-retest reliability for the composite variable reflecting the sum of all instances of child-reported exposure after one week was $r = .81$ (Richters & Martinez, 1993). Internal consistency of the measure using an alpha coefficient was .76 and .80 for Time 1 and Time 2 respectively (White, Bruce, Farrell, & Klierer, 1998).

CHAPTER 4: RESULTS

The present study explored associations among caregiver stress and children's attachment organization, exposure to violence, and cognitive schemas. The alpha level for all statistical analyses was set at .05. In hypotheses one through three, Pearson correlations tested the hypothesized associations between attachment status and number of life stressors reported by caregivers, their perception of those stressors, and children's self-reported exposure to violence. The fourth hypothesis also used a Pearson correlation to explore the relationship between children's increased reports of exposure to violence and increased negative views of self, world, and future. Finally, a stepwise regression tested the prediction that children with less secure attachment organizations would show more negative schemas about themselves, the world and the future. An η^2 tested each of the associations between children's measures and gender, location or setting where data was collected, and designated primary caregiver.

Preliminary Analyses

Analyses were performed to determine if gender, setting (Dallas or Chicago) and designated primary caregiver related to children's scores on the Separation Anxiety Test (SAT), Security Scale, Cognitive Triad Inventory for Children (CTI-C) and Things I Have Seen and Heard (TIHSAH). A significant association was found between gender and the "self" responses ($\eta^2 = .12$, $p = .02$). The direction of the scores on this scale indicated that girls demonstrated a higher level of secure attachment than boys. Although similar "self" and "other" responses would be expected, the correlation between gender and

other responses on the Self-Reliant Scale of the SAT was not significant ($\eta^2 = .001$, $p = .80$). Children's gender was not significantly related to any other variables (see Table 3). Because preliminary analyses indicated that gender differences exist, attachment data for boys and girls were analyzed together ($n = 50$) and separately (boys, $n = 19$; girls, $n = 31$). The location where the measures were administered significantly related to violence exposure as measured by the TIHSAH and the Avoidant "self" Scale as measured by the SAT. Children recruited from Chicago reported greater exposure to violence ($\eta^2 = .10$, $p = .02$) and increased avoidant attachment ($\eta^2 = .12$, $p = .02$) than children who were recruited from Dallas. With respect to the different results for the two locations on the TIHSAH measure (see Table 3), it was assumed that the variance would be found in the TIHSAH measure and not in the location. To test this assumption, when TIHSAH and location were both significant, a stepwise regression was used to determine if location significantly explained additional variance after the variance attributed to the TIHSAH scale was partialled out. This procedure excluded the location variable in every case. Specifically, once the variance attributed to the TIHSAH variable was partialled out, the location variable did not significantly explain any additional variance.

An η^2 determined that the relation of the primary caregivers identified by the children did not significantly associate with any of the child measures. Based on these results, children who indicated caregivers other than their mothers were not analyzed separately.

Table 3

Gender and Location η^2 Associations Across Child Measures

	1	2	3	4	5	6	7	8	9	10	11
Child Participants ($n = 50$)											
Gender	.07	.001	.12*	.07	.01	.01	.00	.04	.00	.05	.04
Location	.02	.00	.02	.00	.12*	.03	.00	.03	.00	.01	.10*

Note. 1. *Self-Reliant Scale (self)*, 2. *Self-Reliant Scale (other)*, 3. *Attachment Scale (self)*, 4. *Attachment Scale (other)*, 5. *Avoidant Scale (self)*, 6. *Avoidant Scale (other)*, 7. *Security Scale*, 8. *CTI-C Self*, 9. *CTI-C World*, 10. *CTI-C Future*, 11. *TIHSAH*

* $p < .05$ level

Fifty children completed all of the tests. For each test and subscale, range, mean and standard deviation were calculated. All summary statistics were within one standard deviation of the normative group for each measure. The results of these calculations are displayed in Table 4.

The number of caregivers that completed and returned the LES was 48 with reported stressors ranging from 0 to 42 ($M = 11.54$, $SD = 7.93$). Two caregivers did not return the LES and four participant's LES measures were removed from relevant analyses because the number of items endorsed was extremely unlikely. After visually inspecting these measures, it was obvious by the direction of several impact items that the measure was filled out incorrectly possibly due to misinterpreting the instructions. A scatter plot of the LES raw score showed these four measures were clearly set apart from the other scores. An impact score of 100 (+/-) was determined to be an appropriate cutoff score. Refer to Table 5 for the summary of statistics on the Caregiver measure.

Table 4

Summary Statistics for Child Measures

Subscale	<u>n</u>	Minimum	Maximum	Mean	<u>SD</u>
SAT Self-Reliant Scale (self)	50	5	12	9.16	1.97
SAT Self-Reliant Scale (other)	50	4	12	8.02	1.78
SAT Attachment Scale (self)	50	10	24	19.32	2.83
SAT Attachment Scale (other)	50	10	24	19.36	2.97
SAT Avoidant Scale (self)	50	9	15	10.28	1.99
SAT Avoidant Scale (other)	50	9	17	10.56	2.19
Security Scale	50	40	60	51.80	5.33
CTI View of Self	50	24	36	31.50	3.27
CTI View of World	50	24	36	30.50	3.26
CTI View of Future	50	26	36	32.36	2.94
TIHSAH Total Score	50	0	43	19.02	9.23

Note: Scores on the SAT Self-Reliant Scale range from 2-12; Scores on the Attachment Scale range from 6-24; Scores on the SAT Avoidance Scale range from 9-27; Scores on the Security Scale range from 15-60; Scores on CTI subscales For Self, World and Future each range from 0-36; Scores on the TIHSAH measure range from 0-100

Table 5

Summary Statistics for Caregiver Measures

Caregiver Measure	<u>n</u>	Minimum	Maximum	Mean	SD
Numbers of Stressors reported					
on the LES (Excluding outliers)	44	0	42	11.54	7.93
Impact of Stressors *					
(Excluding outliers)	44	0	39	14.77	12.30

* *Absolute value of descriptive statistics is provided because the scores include negative and positive values.*

Note: Number of life experiences on the LES ranges from 0 to 63. Total impact scores on the LES range from - 189 to + 189.

*Data Analyses**Quantity of Caregiver Stressors and Child Attachment*

Four different analyses were conducted to test the first hypothesis, which predicted that higher scores on caregivers' LES would inversely correlate with children's attachment scores on the Security Scale and the Attachment and Self-Reliant Scales on the SAT. Additionally, it was predicted that higher scores on caregivers' LES would positively correlate with children's attachment scores on the Avoidant Scale of the SAT. In the first test, the number of life stressors indicated by caregivers on the LES was significantly negatively correlated with the total score on the Security Scale ($r = -.26$, $p = .04$). After splitting participants by gender, lower Security Scale scores for girls were significantly correlated with higher number of stressors on the LES for their caregivers ($r = -.37$, $p = .03$). However for boys, the correlation was not significant ($r = -.05$, $p = .42$).

Combined gender analyses revealed no significant correlation between number of stressors on the LES and the SAT Attachment Scale for both “self” and “other” responses. Similarly, boys’ “self” responses on the SAT Attachment Scale were not significantly correlated with caregiver scores on the LES. However the relationship between number of caregiver stressors on the LES and boys’ “other” responses on the SAT Attachment Scale was significant ($r = -.47, p = .02$) with higher number of stressors associated with lower attachment scores. No significant relationships were found between number of caregiver stressors and girls’ “self” or “other” responses on the SAT Attachment Scale

Correlations between the number of life stressors endorsed on the LES and the “self” and “other” SAT Self-Reliant scales were not significant when data were analyzed for the total sample of boys and girls. Similarly, no significant correlations were found between number of stressors and the SAT Self-Reliant Scale when data were analyzed separately for girls’ “self” and “other” responses and boys’ “self” responses. Although contrary to the predicted direction, a significant positive correlation was revealed between caregivers’ reports of stressors on the LES and boys’ “other” responses on the SAT Self-Reliant Scale ($r = .52, p = .01$).

Finally, for the total sample, no significant correlations were found between number of life stressors on the LES and scores on the “self” and “other” responses of the SAT Avoidant Scale. Additionally, no significant correlation was revealed between caregiver scores on the LES and girls/boys responses on the SAT Avoidant Scale when data for boys and girls were analyzed separately for either “self” or “other” responses.

Results for combined children's attachment scores in relation to number of caregiver LES scores are included in Table 6. Correlative scores on these variables are displayed in Tables 7 and 8 for girls and boys respectively.

Perceived Impact of Caregiver Stressors and Child Attachment

For hypothesis two, the set of data analyses included four tests examining the relationships between caregivers' perception of life stress as indicated by the impact scores on the LES and their children's attachment styles on the SAT and Security Scales. Results of Pearson correlations indicated no significant relationship between the LES impact score and Security Scale. Similarly, for both combined and separate gender analyses, correlations between impact scores on the LES and SAT scores on the "self" or "other" responses for the Attachment and Avoidant Scales and "other" responses for the Self-Reliant Scale were not significant.

When children responded to the "self" stem on the Self-Reliant Scale, a significant negative correlation between this stem and the LES impact score was revealed for total number of children that countered expectations ($r = -.40$, $p = .003$). Further data analyses revealed no significant correlation for girls' "self" or "other" responses on the SAT Self-Reliant Scale and LES impact score. For boys, however, the correlation between LES impact scores and "self" responses on the SAT Self-Reliant Scale was significant ($r = -.73$, $p < .001$). This result indicated children of caregivers with more negative perceptions of life events were more secure in their attachment as depicted by increased self-reliance. Refer to Table 6 for results between caregiver LES impact scores and attachment scores of all children. Results divided by gender are displayed in Table 9.

Table 6

Intercorrelations Among Number of Caregiver Stressors, Their Perceived Impact, and Attachment Scales for Child Participants

Subscales	1	2	3	4	5	6	7	8	9
Child Participants ($n = 50$)									
1. LES # of Stressors	—	-.15	-.05	.11	-.08	-.17	.10	.13	-.26*
2. LES Impact		—	-.40**	.04	-.12	-.02	.06	-.14	.17
3. SAT Self-Reliant (self)			—	.33**	-.12	-.08	-.23*	-.02	-.07
4. SAT Self-Reliant (other)				—	.22	.10	-.18	-.44***	-.03
5. SAT Attachment (self)					—	.82***	.20	-.32**	-.10
6. SAT Attachment (other)						—	-.09	-.31*	-.10
7. SAT Avoidant (self)							—	.68***	.12
8. SAT Avoidant (other)								—	.12
9. Security Scale									—

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 7

Intercorrelations Between Number of Stressors and Attachment Scales for Female Child Participants

Assessment Scales	1	2	3	4	5	6	7	8
Female Child Participants ($n = 31$)								
1. LES # of Stressors	—	-.05	-.14	.00	.03	-.03	.09	-.37*
2. SAT Self-Reliant (self)		—	.52***	.21	.26	-.41**	-.27	-.03
3. SAT Self-Reliant (other)			—	.39*	.37*	-.24**	-.51**	.01
4. SAT Attachment (self)				—	.81***	-.15	-.16	-.11
5. SAT Attachment (other)					—	-.08	-.21	-.07
6. SAT Avoidant (self)						—	.65***	.08
7. SAT Avoidant (other)							—	-.01
8. Security Scale								—

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 8

Intercorrelations Between Number of Stressors and Attachment Scales for Male Child Participants

Subscales	1	2	3	4	5	6	7	8
Male Child Participants (<u>n</u> = 19)								
1. LES # of Stressors	—	-.02	.52**	-.37	-.47*	.36	.21	-.05
2. SAT Self-Reliant (self)		—	.12	-.40*	-.32	.06	.26	-.14
3. SAT Self-Reliant (other)			—	-.003	-.21	-.07	-.34	-.11
4. SAT Attachment (self)				—	.82***	-.47*	-.63**	-.11
5. SAT Attachment (other)					—	-.19	-.43*	-.18
6. SAT Avoidant (self)						—	.78***	.22
7. SAT Avoidant (other)							—	.38*
8. Security Scale								—

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 9

Intercorrelations Between Perceived Impact of Caregiver Stressors and Attachment Scales of Child Participants by Gender

Scales	1	2	3	4	5	6	7
Sorted by Child's Gender (Girls $n = 31$, Boys $n = 19$)							
LES Impact with child							
Female participants	-.13	.07	-.30	-.17	-.04	-.25	.15
LES Impact with child							
Male participants	-.73***	-.21	-.04	.04	.19	.10	.22

Note. 1. *Self-Reliant Scale (self)*, 2. *Self-Reliant Scale (other)*, 3. *Attachment Scale (self)*, 4. *Attachment Scale (other)*, 5. *Avoidant Scale (self)*, 6. *Avoidant Scale (other)*, 7. *Security Scale*, * $p < .05$, ** $p < .01$, *** $p < .001$

Children's Exposure to Violence and Attachment Organizations

The third hypothesis examined the relationship between children's reported exposure to violence as indicated by scores on the Things I Have Seen and Heard Scale (TIHSAH) and their attachment organizations measured by the SAT and Security Scales. Looking at the combined gender data, results of Pearson correlative analysis indicated a significant negative correlation between scores on the TIHSAH with scores on the Security Scale ($r = -.29$, $p = .02$). Further analyses revealed a significant negative relationship between scores on the TIHSAH and Security Scale scores for girls ($r = -.35$, $p = .03$) though not for boys ($r = -.14$, $p = .28$).

The associations between scores on the TIHSAH and “self” and “other” responses on the SAT Attachment Scale were not significant for the combined sample of boys and girls. Yet, when data for girls were examined separately, significant correlations were found between TIHSAH scores and “self” ($r = .35, p = .03$) and “other” ($r = .38, p = .02$) responses on the SAT Attachment Scale, which were contrary to the predicted direction. In contrast, no significant correlations were observed between TIHSAH scores and “self” or “other” responses on the SAT Attachment Scale for boys. The results indicated non-significant correlations between scores on the TIHSAH and “self” and “other” responses on the Self-Reliant and Avoidant Scales of the SAT. These results are displayed in Table 10.

The results of the correlations, when controlled for location, revealed a significant relationship between scores on the TIHSAH scale and SAT Attachment Scale “self” responses (see Table 11). Controlling for location using partial correlations on the measures separated by gender was not useful because the Dallas location included only girls.

Table 10.

Intercorrelations Between Children's Exposure to Violence and Attachment Scales: Total Sample and divided by Gender

Scale	1	2	3	4	5	6	7	8
Child Participants ($n = 50$)								
1. TIHSAH	—	-.10	.13	.20	.20	-.10	-.08	-.29*
2. SAT Self-Reliant (self)		—	.33**	-.12	-.08	-.23*	-.02	-.07
3. SAT Self-Reliant (other)			—	.22	.10	-.18	-.44***	-.03
4. SAT Attachment (self)				—	.82***	-.20	-.32**	-.10
5. SAT Attachment (other)					—	-.09	-.31	-.10
6. SAT Avoidant (self)						—	.68***	.12
7. SAT Avoidant (other)							—	.12
8. Security Scale								—
Sorted by Child's Gender (Girls $n = 31$, Boys $n = 19$)								
TIHSAH (Girls)		-.04	.25	.35*	.38*	.01	-.04	-.35*
TIHSAH (Boys)		-.37	-.13	.13	.05	-.34	-.23	-.14

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 11.

Intercorrelations Between Witnessed Violence and Attachment Subscales when Controlling for Location

Scale	1	2	3	4	5	6	7	8
1. TIHSAH	—	-.06	.13	.27*	.22	-.24	-.14	-.30*
<u>n</u>		50	50	50	50	50	50	50

Note. 1. TIHSAH, 2. Self-Reliant Scale (self), 3. Self-Reliant Scale (other), 4. Attachment Scale (self), 5. Attachment Scale (other), 6. Avoidant Scale (self), 7. Avoidant Scale (other), 8. Security Scale, Note: Two Tailed Test; * $p < .05$ level

Children's Exposure to Violence and Cognitive Schemas

The fourth hypothesis, which focused on the relationship between exposure to violence and cognitive schemas, was supported by the data. Significant negative correlations were found between higher scores on the TIHSAH and lower CTI-C scores (indicating more negative schemas) on the View of Self subscale ($r = -.34$, $p = .01$), the View of World subscale ($r = -.28$, $p = .02$) and the View of Future subscale ($r = -.44$, $p = .001$). Results suggested that children's reports of increased exposure to violence are associated with more negative view of self and world and a less hopeful outlook of the future. The results are displayed in Table 12 and the results when controlling for location using partial correlations are displayed in Table 13.

Table 12.

Correlations Between Incidences of Violence Witnessed and CTI Subscales

Subscale	1	2	3	4
Child Participants ($n = 50$)				
1. TIHSAH	—	-.34**	-.28*	-.44***
2. CTI-C Self		—	-.53***	.54***
3. CTI-C World			—	.47***
4. CTI-C Future				—

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 13

*Correlations Between Incidences of Violence Witnessed and CTI Subscales
when Controlling for Location*

Subscale	1	2	3	4
Child Participants ($n=50$)				
1. TIHSAH	—	-.31**	-.29*	-.43***

Note: 1. TIHSAH, 2. CTI-C Self, 2. CTI-C World, 3. CTI-C Future

* $p < .05$, ** $p < .01$, *** $p < .001$

Children's Cognitive Schemas and Attachment Organizations

The fifth and final hypothesis explored the relationship between children's attachment organizations and their schemas about themselves, the world, and their future.

The model in which the View of Self and the View of Future subscales of the CTI-C were the dependent variables demonstrated no significant associations.

In the model in which relationships between the CTI-C and the SAT scales of attachment, self-reliance and avoidance were tested using a stepwise regression, only the Self-Reliant Scale of the SAT significantly explained variance in View of World subscale of the CTI-C. A closer consideration of the data revealed that the Self-Reliant Scale positively correlated with the View of World subscale on the CTI-C. ($r = .30$, $p = .04$), which implies that children who are less self-reliant tend to perceive the world more negatively. The results are displayed in Table 14. Non-significant results were revealed when the same variable (SAT Self-Reliant) was forced into a stepwise multiple regression for the view of self and view of future on the CTI-C (See Tables 15 and 16).

Table 14

Summary of Stepwise Regression Analysis for Variables Predicting Child's Schemas of the World

Variable	Unstandardized		Standardized	t
	Coefficients		Coefficients	
	Standard			
	Beta	Error	Beta	
Constant	25.99	2.13		12.19
SAT Self-Reliant Scale	.49	.24	.30	2.17*

* $p < .05$

Table 15

Summary of Stepwise Regression Analysis for Variables Predicting Child's Schemas of the Self

Variable	Unstandardized		Standardized	t
	Coefficients			
	Standard			
	Beta	Error	Beta	
Constant	29.48	2.22		13.30
SAT Self-Reliant Scale	.22	.24	.13	.93

Note: SAT Self-Reliant Scale was forced into the equation

Table 16

Summary of Stepwise Regression Analysis for Variable Predicting Child's Schemas of the Future

Variable	Unstandardized		Standardized	t
	Coefficients		Coefficients	
	<hr/>			
	Standard			
	Beta	Error	Beta	
Constant	30.77	2.00		15.38
SAT Self-Reliant Scale	.17	.21	.12	.81

Note: SAT Self-Reliant Scale was forced into the equation

CHAPTER 5: DISCUSSION

The purpose of this study was to examine the association between the chronic stress that exists in low SES, urban communities and attachment representations of middle school-aged children. The study also considered how living in a stressful context relates to children's view of self, world, and future. Although not every hypothesis was supported fully, this research reveals some important aspects of the relationships between children's external environments, their beliefs and the quality of their attachment to caregivers. In addition to reviewing the results and what they mean, the implications for theory, research and practice are considered. The discussion concludes with possible limitations of the study and recommendations for improvements.

Caregiver Stress and Child Attachment

This study was an attempt to identify the relationship of peripheral events to the attachment quality of inner-city children. Since the attachment bond involves two people, the present investigator looked first at the relationship between caregivers' stressors and children's quality of attachment. Hypotheses one and two focused on the relationships between caregiver stress and child's attachment. Stress was analyzed in two ways: 1) number of stressors identified and 2) subjective ratings of stressors' effects. The Security Scale and three scales of the SAT measured aspects of children's attachment organizations. As predicted, the Security Scale inversely related to number of caregiver stressors although this prediction was not supported when comparing caregivers' subjective ratings of their stress to the Security Scale. No relationships were discovered

when comparing children's ratings on the SAT scale (Attachment, Self-Reliant and Avoidant) to number of caregiver stressors or caregivers' perceived impact on the LES. However, when children responded to cards as if the event was happening to them on the SAT, increased self-reliance was significantly associated with increased number of caregiver life stressors.

Associations became clearer when data were divided by gender. Increased caregiver stressors did not relate to boys' attachment security but significantly related to girls' decreased attachment security as measured by the Security Scale. An increase in caregiver stressors was also associated with a decrease in attachment security in boys as measured by the SAT. However, this finding was only true when analyzing children's "other" responses, which were believed by Slough, Goyette and Greenberg (1988) to be a more accurate reflection of children's attachment quality than "self" responses because it is less face valid and therefore less open to deception. Contrary to prediction, an increase in caregiver stressors was positively associated with greater self-reliance on the SAT in boys but not in girls, with number of caregiver stressors correlating positively with "other" responses and impact of caregiver stressors correlating positively with "self" responses.

Caregiver Stress and Child Attachment: Implications for Theory

The results of hypotheses one and two for boys often differed from girls. Therefore, discussion of the results largely considers gender differences in attachment development. The importance of the gender findings lies in how boys' and girls' attachment development differs in response to stressed parents. Girls' decreased

attachment scores on the Security Scale in relation to increased caregiver stress suggest that their attachment security may more often be disrupted by their caregivers' problems than the security of boys. Bahadur's (1999) cross-sectional analyses on different age groups suggested that accumulation of stressors, which included caregiver stress, affected females' decreased attachment security more at age 30 than in early childhood. If Bahadur's speculation is correct, the current findings may suggest that the increased relationship of caregiver stress to girls' attachment becomes more salient at middle childhood than in earlier years. If this is the case, middle childhood may be a critical period during which caregiver stressors have a significant impact on attachment organization.

Findings that countered hypotheses one and two (increased self-reliance in association with increased caregiver stressors and their more negatively perceived impact) suggest that boys may respond to their caregivers' increased stress by overcompensating. For instance, boys may be more likely to develop compulsive self-reliance, a concept developed by Bowlby (1960) and more recently discussed in Lapsley, Varshney, and Aalsma's (2000) research. Compulsive self-reliance, a dysfunctional attachment style, refers to a failure to seek help from others when needed. Perhaps the SAT lacks the sensitivity to discriminate between compulsive and healthy self-reliance. If the results of this study reflect a propensity to compulsive self-reliance in boys when their caregivers' stress is high and perceived more negatively by the caregivers, results may support Surrey's (1991) notion that boys tend to experience mothers' feeling states or

needs as “invasive, engulfing, or threatening” (p. 55). To avoid these experiences, Surrey suggested that boys are likely to avoid connection and seek ways to care for themselves.

Results of other studies investigating differences between boys and girls in attachment to their parents have been inconclusive. Some researchers have found gender differences (Hovdestad, 2002; Kenny and Donaldson, 1991; Rice, 1990), while others have not (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Frank, 2001; Gnoulati & Heine, 2001; Lapsley, Rice, & FitzGerald, 1990; Raja, McGee & Stanton, 1992; Schneider, Atkinson, & Tardif, 2001). Research that found gender differences for attachment determined that females demonstrated more secure attachment to parents (both fathers and mothers) than males in every case. The present study supports a gender effect on children’s attachment organization. In general, a gender difference was indicated on the SAT Attachment Scale for the “self” responses and approached significance for the “other” responses, which suggests that girls demonstrated a more secure attachment to their parents when compared to boys. However, girls’ attachment styles seem to change more in relation to caregiver stress.

Caregiver Stress and Child Attachment: Implications for Practice

The results of this study reflect a possible link between caregiver stress and children’s security, and suggest that reducing stress in caregivers may promote children’s security of attachment, which in turn may contribute to mental health. In previous studies, secure attachment negatively correlated with personality pathology in adolescents (e.g., Nakash-Eisikovits, Dutra & Westin, 2002) and adults (e.g., Dickinson, 2002). Infant and childhood variables (up to the age of 10 years) related to attachment and pathology

include parental neglect, rejection, threats of abandonment and harm, physical and sexual abuse, and family instability (Genuis, 1995). Insecure attachment related to these variables predicts personality disorders (Bender, Farber & Geller, 2001; Mauricio, 2002), and chemical dependency (Flores, 2001). Flores characterized addiction as an attachment disorder induced by misguided attempts to repair deficits in self due to deficits in psychic structure. Addressing underlying issues of attachment could prevent psychopathology and/or lead to long-term positive change (Costello, 2001). Therapy can foster more secure attachment organizations as the therapeutic relationship may represent the search of a secure base and the therapist, responsive to the client's verbal and non-verbal attachment signals, can be viewed as a supplementary attachment figure (Giacomo, 2001).

Therapy with children is not pertinent to the effect of caregiver stress on their attachment. Prevention efforts to address the underlying causes of psychopathology require focus on the caregiver stress. For example, working with caregivers in therapy to improve coping skills would likely increase the quality of their relationship with their children and subsequently increase the children's attachment security. As the quality of the relationship improves between parent and child, the likelihood of child psychopathology decreases. Youth organizations similar to the program through which the child participants were recruited may also serve to promote higher quality of attachment in children. For example, caregivers may feel less anxious knowing that their children are involved in constructive and self-promoting activities while children likely

develop positive relationships with program leaders and improve their interactive skills with peers which in turn, reinforce more secure attachment to others.

Caregiver Stress and Child Attachment: Implications for Research

Research ideally lays the groundwork for change. Seccombe (2002) proposed that researchers are responsible in helping to alleviate urban stress by making known the consequences. By attending to the impact of socio-political structure and economic policies (or their absence) on the objective and subjective experience of impoverishment and working with journalists, Seccombe suggested that researchers could influence policy decisions. The public policy implications of the caregiver stress findings are important when policy makers consider the cost of inner city neglect and consider intervention programs. A major focus of the 2000 election was the betterment of children's lives through education. While this is true, research suggests that improving the quality of parents' lives would also improve children's likelihood of success.

Accurate measurements of attachment organization require culturally sensitive instruments and procedures, which are rare due to the limited research on African American school-aged, urban youth. The scarcity of measures forced the present investigator to adapt measures developed for the majority culture. Variance attributed to the modifications may have made relationships among variables more difficult to detect. With the advent of more culturally appropriate measures, psychologists may understand how attachment differs within non-majority cultures.

According to Jackson (1993), childcare of White middle-class Americans differs from African Americans because multiple caregivers are more common in African-

American families. The value of attachment to multiple caregivers may be realized if research incorporates an emic approach (Berry, 1969; as cited in Jackson, 1993). By focusing on aspects specific to a culture, research may provide a valid model of African-American child attachments that shows multiple attachments to be equally important as a single primary caregiver. In fact, researchers have reported that the combination of multiple attachment relationships considerably increases the power to predict children's later cognitive and emotional functioning (Main & Weston, 1981; Howes, Rodning, Galluzzo, & Myers, 1988; van IJzendoorn, Sagi, & Lambermon, 1992). However, the first obstacle to an emic approach is adjusting or developing attachment measures to include multiple caregivers, which may expand Bowlby's theory, yet decrease the measure's validity.

Caregiver stress may have had less of an impact on children in this study because African American extended families often interchange functions and frequently share responsibilities (Wilson, 1984). When African American caregivers are experiencing difficult times, they are more likely than their White counterparts to allow extended family members who have more resources to rear their children (Billingsley, 1992). Although, improved living conditions may improve children's quality of life, further research is recommended to determine whether these shifting caregivers enhance or diminish children's quality of attachment. Recent research suggests that secure attachments seem to depend on skilled and sensitive adult behaviors, regardless of caregiver status (Howes, 1999).

Earlier in the discussion, it was suggested that boy's increased self-reliant scores might be attributed to compulsive self-reliance. Compulsive self-reliance may be a compensatory reaction to parents who are emotionally unavailable (Bowlby, 1960; Lapsley, Varshney, & Aalsma, 2000). Future research is needed to verify if and why boys tend to overcompensate with self-reliant behaviors more than girls. In contrast, Weist, Freedman, Paskewitz, Proescher, and Flaherty (1995) hypothesized girls whose parents experience high degrees of stress are more often likely to turn their energy towards enmeshment and caregiving at the expense of their own well being. Future research may want to examine how boys and girls react to caregiver stress differently. For example, boys may react by turning inward and emotionally cutting off from others (possible dismissive style of attachment in adulthood) while girls may direct their focus on their relationships in an unhealthy way (possible preoccupied style of attachment in adulthood).

Children's Exposure to Violence and Attachment

In support of the third hypothesis, children's reported exposure to violence as indicated by higher scores on the TIHSAH significantly correlated with less secure attachment organization when measured by the Security Scale. However, no associations were found between children's increased exposure to violence and less secure attachment organizations when measured by the SAT Attachment, Self-Reliant or Avoidant Scales. When data were analyzed according to gender, girls' exposure to violence correlated with less secure attachment scores on the Security Scale but this relationship was not significant for boys. Further analysis of data according to gender found a significant correlation between girls' increased exposure to violence and increased attachment

quality as measured by the SAT Attachment Scale (“self” and “other” responses).

However, this relationship was contrary to the predicted direction. Again, there was no significant association indicated for boys.

Exposure to Violence and Attachment: Implications for Theory

The finding of less secure attachment for females in relation to increased exposure to violence is similar to previous research on distress symptoms, which suggests more frequent exposure to violence threatens emotional adjustment and may be associated with a less secure attachment style (Attar, Guerra, & Tolan, 1994; Bursick, 1988; Garbino, 1997; Martinez & Richters, 1993; Rutter, 1987). Another explanation of this particular result focuses on an indirect relationship that may exist between exposure to violence and attachment organization. For example, living in a more dangerous neighborhood may lead securely attachment caregivers to become more vigilant of, and perhaps more involved in their children’s activities. This would likely reinforce a more secure attachment style in children and may also involve increased protection from exposure to violence. In contrast, caregivers who have a less secure attachment with their children may not attend to their children’s whereabouts. As a result, these children may be more likely to spend time in dangerous situations unsupervised, which increases the likelihood of violence exposure. An explanation for the contrary finding in girls may be that females tend to seek comfort of a caregiver in response to their own stress. This explanation considers again how girls tend to turn their energies toward connecting with others while males may tend to rely more on themselves in the context of stress. These explanations

tap into how transgenerational patterns of attachment may be affected by the stress of community violence.

A possible explanation for some of the low correlations and inconclusive results for children's exposure to violence and SAT attachment organization is religious affiliation. All children were recruited through religion-based sources. Families involved in church often experience a complete support system (Hines & Boyd-Franklin, 1996). Poindexter (2002) found that spiritual and religious coping among adolescents in poverty predicts fewer psychological symptoms than adolescents who lack spiritual resources. The resiliency developed through an additional support network and spirituality may buffer the negative impact of environmental stress.

Exposure to Violence and Attachment: Implications for Practice

Children whose attachment organizations have been compromised by the trauma of violence exposure may benefit from individual and/or family therapy that focuses on strengthening attachment relationships and processing trauma-related experiences. The therapist should attend to the child's conflicting feelings, attachments, hatreds, and other issues of traumatic experience and response. Nader (2002) emphasized the importance of processing aspects of trauma in order to free children to grieve, which can be addressed through trauma/grief-focused therapy and directed play therapy. Through this process, children can learn to trust others and establish secure attachments in their relationships.

Often, the focus of youth based programs is on developing connections among children and adults. Specifically, the Beyond Belief Program used as a basis for recruitment in the present study emphasizes spirituality, inclusiveness, and equality and

instills tools to defuse potentially violent situations. Promoting increased attachment security and decreased violence in children can take place in a therapeutic relationship and in the context of connections made through outreach and social services.

Exposure to Violence and Attachment: Implications for Research

Seccombe (2002) believed family protective and recovery factors improved resiliency in the face of poverty. Protective and recovery characteristics of resilient families include warmth, affection, cohesion, commitment, and emotional support among members. By focusing research on resilience, the focus shifts from concern about the impact of violence to improving children's reactions to violence.

Very little is written about extrafamilial influences on attachment and even less is written on non-relational influences. Therefore, researchers interested in environmental stress, including exposure to violence, and attachment may be better served by investigating attachment bonds and their influence on resiliency. Oglesby-Pitts' (2000) qualitative research found resilient adults living in the inner city exhibited a pattern of bonding with parents, siblings, and extended family members. Although Oglesby-Pitts was not investigating attachment, her findings hint at the importance of multiple attachments to overcoming difficult environments. Emic research on multiple attachments would continue to normalize this practice among African Americans and support the importance of multiple caregivers.

Children's Exposure to Violence and Schemas

In support of the fourth hypothesis, results indicated that children exposed to greater amounts of violence, as measured by the TIHSAH, tended to hold maladaptive

views of themselves, the world and their future as measured by the CTI-C. These findings support the belief that children learn to view themselves and others based largely on the stability of their environment (Bowlby, 1988). For example, Bowlby states that children who perceive the world as unsafe and violent are more likely to view others as undependable and harmful and themselves as unworthy of love, both of which are characteristic of insecure attachment.

Exposure to Violence and Schemas: Implications for Theory

The results of this study support other findings on exposure to violence and schema development (e.g., Garbarino, 1995; Hudley et. al, 2001) and show that children in middle childhood develop similar negative schemas as adolescents and adults in response to violence exposure (Ehlers & Clark, 2000; Terr, 1991). Garbarino, Kostelny, and Dubruw (1991) identified similar schema responses among the children of Kurdish rebels who are exposed to violence daily. The similarities across age and culture suggest an etic approach to conceptualizing the effect of violence on all individuals. The consideration of cultural variables indicates that the etic approach to research on violence exposure and children compliments the emic approach encouraged by the current study. van IJzendoorn and Sagi (1999) indicated that these two approaches are compatible in attachment research.

Exposure to Violence and Schemas: Implications for Practice

Researchers associate maladaptive schemas with personality disorders (Young, 1999), mood disorders (Van Sickle, 1996), relationship dysfunction (Dattillio & Bevilacqua, 2000), dissociative disorders (Fine, 1996), and posttraumatic stress disorder

(Smucker & Dancu, 1999). Many patients with maladaptive schemas demonstrate comorbidity, receiving multiple or changing diagnoses (Ross, 2000). Violence exposure and associated schemas are clearly a pathway to psychopathology in children. Since the likelihood of exposure to violence increases among inner-city children, clinicians would expect this pathway to be more common in the inner-city children they serve.

When the genesis of maladaptive schemas is chronic exposure to violence, clinicians may struggle to restructure these schemas of the world and future because there is daily evidence that reinforces these beliefs. Instead, a clinician might focus on restructuring maladaptive schemas of the self. For adolescents and adults, maladaptive schemas of the self may be framed as a locus of control shift to ward off the anxiety of being helpless in a dangerous world (Ross, 2000), but for children clinicians can provide positive praise and mirror children's positive attributes. By helping children develop a positive view of self, they are more likely to develop healthy connections to others (King, Vidourek, Davis, & Mclelland, 2002). The connections that King et al. describe include characteristics identified earlier that correlated with resilience (i.e., warmth, cohesion, emotional support).

Factors in the community also affect resiliency and family functioning (Bowen, Richman, & Bowen, 2000). The results of the current study may inform the programming of organizations that reach inner-city children. If these organizations focused on improving schemas and understood the importance of non-familial attachment relationships, they could adapt their programming to better serve school-aged African American, urban youth. By promoting connections through teaching teamwork, group

pride, leadership, and skills, these programs may cultivate young people's sense of inner strength and self-esteem. The Beyond Belief and Circle of Support programs are examples of programs that understand the need of connection and provide a community service that likely fosters resiliency-enhancing skills in the child participants.

Exposure to Violence and Schemas: Implications for Research

The correlations between children's schemas and violent environments support other research, which identified the importance of external influences on schema development (Devlin, 1998). Like Devlin, the findings of the present research focused on violence exposure, the effects of which last long after the violence is over. Research shows that adolescents who experienced greater exposure to community violence were more likely to harbor negative schemas of personal safety and trust, (Devlin) negative attribution styles and hopelessness (McGauley, 1999) than adolescents who experienced less community violence. This association continues for college students whose exposure to violence predicted maladaptive worldview, self-view, and expectancy for future success (Memis, 1998). Memis's research suggests that children, who developed maladaptive schemas following exposure to violence, will likely hold those maladaptive schemas well into adulthood. Future longitudinal research is necessary to see how the schemas of children from violent environments evolve over time and may reveal a window of opportunity for schema change. Insight gained from such research could inform mental health providers of the sensitive periods in children's development to intervene in order to shift schemas and prevent their prolonged destructive existence.

Children's Attachment Organizations and Schemas

The last aspect of this study explored the relationships between the children's attachment organizations and their views of self, the world and the future. Specifically, the fifth hypothesis predicted that children with more insecure attachment organization, as indicated by lower scores on the Attachment and Self-Reliant Scales of the SAT, higher scores on the Avoidant Scale of the SAT, and lower scores on the Security Scale, would have more negative views (lower scores on the CTI-C) of themselves, the world and the future. No relationship between attachment organization on the SAT or Security Scale and view of self or the future was demonstrated. However, results did indicate that less self-reliant and more anxious-dependent children tend to perceive the world more negatively.

Attachment Organizations and Schemas: Implications for Theory

Bowlby's (1988) premise of "working models" assume that securely attached children would endorse schemas of the self as worthy of being loved and of others as available and trustworthy. Conversely, insecurely attached children would indicate a low sense of self-worth and view others as untrustworthy. Congruent with Bowlby's premise, less securely attached children who demonstrated decreased self-reliance and increased anxious-dependence with the caregiver revealed beliefs that the world is unreliable.

Attachment Organizations and Schemas: Implications for Practice

Lazarus (1989), in his training manual on multimodal therapy, stated that the first responsibility of a clinician is to instill hope. Hope (or hopelessness) is the core of a maladaptive future schema. Hopelessness is so crucial to mental health that it is a diagnostic criteria for depression (American Psychiatric Association, 1994). Clinicians who

identify poor quality of attachment among their clients may investigate the presence of hopelessness and include the instillation of hope in treatment plans. This may be particularly important for urban youth who have witnessed neighborhood violence and desperately need hope for the future to continue pursuing their educational training and become productive citizens of society.

Attachment Organizations and Schemas: Implications for Research

Researchers interested in this aspect of Bowlby's theory may consider a variety of measures in the event that the inconclusive results in this study reflect the inability of the instruments to adequately assess attachment organizations. In the case of this research, the limited scope of the project did not include validity testing on the SAT's modifications. Error rate attributed to validity may have allowed the present researcher to detect only the most salient aspects of Bowlby's theory. Significant findings for the Security Scale lend additional support to the idea that the SAT was less sensitive to attachment variances in middle school-aged children. Whether or not error rate is the culprit or that Bowlby's theory is less applicable to African American children will only be known through additional study.

Limitations

Reliability and validity are often a concern when using self-report data, especially when disclosures involve sensitive information such as personal stressors and violent events. However, the prevalence rates for victim and witness exposure to violence in the current sample seems consistent with urban youth reports from various areas in the

United States (Feigelman, Howard, Li & Cross, 2000). This consistency lends support to the validity of the Things I Have Seen and Heard measure in the present study.

Participants, particularly child participants, may have attempted to match their response to what they believed the researcher desired. The researcher's prior relationship with the Chicago sample may have increased children's approval-seeking in their responses. The cultural difference between the researchers and participants may have led children to try and impress or shock the researcher with their responses, a common practice of these children according to the founder of Beyond Belief and director of Circle of Support. Tailoring responses to influence the researcher may explain participants' social referencing (looking for the researcher's reaction) after providing a response. Efforts were made to minimize this inherent research flaw, referred to as the Hawthorne effect, by administering a semi-projective measure for attachment in addition to a more face valid self-report measure. Researchers reassured children there were no right or wrong answers when social referencing occurred. Regardless of the attempts to elicit accurate answers, participants' attempts to perform well or to please the investigators may increase the study's methodological error rate.

The SAT and its delivery were modified to make the instrument more culturally sensitive and age appropriate. The present investigator depicted African American children around the age of nine years old on the SAT pictures and added three pictures to assess stressors common in disadvantaged neighborhoods. Two of the additional three cards required the researcher to adapt the scoring after poor inter-rater agreement indicated Slough, Goyette and Greenberg's (1988) scoring method was not appropriate.

The present researcher felt confident in uniquely scoring separation from peers and non-primary caregivers in scenario eight in the same way that separation from primary caregivers was scored. This decision was supported by other researchers (e.g., Armsden & Greenberg, 1987; Bowlby, 1973; Cook, Greenberg & Kusche, 1995) whose findings suggested that by middle childhood, children have formed more general representations of self, others, and relationships based on experiences in multiple attachment relationships. Hence, it was assumed that attachment in peer relationships would be similar to parent relationships. Lastly, the conversion score was slightly modified for the seventh SAT scenario, a technique similar to Slough et al.'s scoring system. Although not tested for validity, these modifications are theoretically viable and post hoc exploratory analysis suggested that results did not differ significantly when the last three scenarios were removed from the scoring. Nevertheless, given the more frequent finding of significance using the Security Scale, current findings must be considered tentative.

Also related to instrumentation, the Life Experience Survey may not have accurately measured chronic stress in this study. The LES instructs participants to rate stressors over a one year span. The decision to use the LES measure was based on the rationale that a 12-month account of life experiences would represent an approximate average of stressful occurrences across the lifespan. It was clear after visually inspecting the measures and tracking the number of outliers that the LES did not accurately measure life stressors for every participant in this sample. Several measures contained an implausibly high numbers of endorsed items over the course of a single year. In addition to extreme scores, some participants reported questionable positive impacts (e.g., rating

“Being fired from a job”, or “Major personal illness or injury” as a positive impact).

These types of unlikely responses may be a result of misunderstood or poorly worded instructions, or careless and random responses.

Lastly, the caregivers identified by child participants differed than the person who filled out the LES in 30% of the sample. Of the children that identified other family members as their primary caregivers, ten children chose a grandmother, four chose an “aunt”, and one chose her grandfather. For these cases, no data was obtained from the caregiver identified by the child. Therefore, the individual who filled out the questionnaire may not be the child’s primary attachment object. All of these problems may decrease the LES’s ability to reflect the chronicity of stress shown by other researchers to correlate negatively with healthy adjustment in childhood and adolescence (Bursick, 1988; Garbarino & Sherman, 1980; Stern, Smith & Jang, 1999).

The original design of the study called for equal data collection in urban neighborhoods located in Dallas and Chicago to increase generalizability. However, this aspect of the design was not accomplished. The majority of the data (76%) was collected from a single neighborhood in an inner city of Chicago, which might have threatened the external validity of the study. The differences between the sites included an increased likelihood for Chicago children to witness violence ($\eta^2 = .10$, $p = .02$) and to live in poverty ($\eta^2 = .21$, $p = .01$). Specifically, 64% of the Chicago families versus 11% of the Dallas families reported an annual income that fell within the poverty range after taking into consideration number of individuals and children in the household. Additionally, the Dallas site consisted of all females while the Chicago site included an equal amount of

girls ($\underline{n} = 19$) and boys ($\underline{n} = 19$). The latter discrepancy between sites suggests that the relationship among variables that are unique to girls were over-represented in the study as a whole and especially in Dallas. This over-representation threatens external validity because the results of the current study assume that the combined data sample represents both genders equally. Therefore, the results of this study across genders should be interpreted with caution.

It is interesting to note the differences between the sites and the possible influences on attachment. The children recruited from the program in Dallas are in a program that meets all year with a dedicated staff. The Dallas staff also works at the school that most of the participants attend so they are in contact almost daily. The Chicago program operates only in the summer and all but four members of the staff change every week. After the summer, children and staff members keep in contact mainly through mail. Although inconclusive, possible explanations for some of the site differences may involve attachment to adult staff rather than the primary caregiver. The literature on multiple caregiving lends support to the claim that children's emotional connections to skilled and sensitive adults may increase their likelihood of developing secure attachments (Howes, 1999, Munoz, 2000).

To the present researcher, the lessons realized in researching ethnic minority populations in harsh urban environments were as important as the findings. The first lesson involved administration of measures. Researchers need to make an extra effort to ensure that measures are filled out uniformly and fit the culture of the sample. The second lesson included assumptions about the urban minority participants and their environment.

Assumptions common to researchers' own ethnicities should be evaluated before performing the study. For instance, including multiple caregivers in this study was important because some of the children indicated a person other than their mother as their primary caregiver and several indicated more than one person takes care of them much of the time. Had the present researcher considered resilience factors, the study would have been restructured to relate attachment to include protective and adaptation variables, which leads to the third lesson that encouraged consideration of the program's influence from which the children were recruited. Most inner-city outreach programs attempt to improve the situation of their participants. Failure to include their influence in the study assumes that these programs are not effective. Studies with children who do not have access to such programs will also be important.

Due to limitations related to instrumentation and sampling, findings should be interpreted with caution and further research is needed to confirm related findings. Recommendations to avoid instrumentation problems include careful consideration of tools that are chosen to measure particular variables. Future research may want to focus on investigating the reliability and validity between the SAT and Security Scale for assessing attachment classification. Other attachment measures need to be considered in working with school-aged children of African American descent (e.g., considering multiple attachments, being able to relate to the children depicted as on the SAT).

Conclusion

Understanding attachment is not as simple as observing a mother and child interact. Fifty years of attachment research has shown that attachment development is

influenced by multiple variables, only a few of which are reflected in this study. Many of the relationships among variables in this study were significant for girls but not boys or vice versa. However, several of the relationships may have been hard to detect due to the problems outlined in the limitations.

Although associations with attachment variables were often uncertain, the relationships between schemas and exposure to violence were clearly evident. The association between witnessing violence and children's beliefs about the world, their future, and themselves signified a pattern that exists across cultures. Hacker (1992) suggested that White Americans, or individuals of the dominant culture, are less concerned about the crimes African Americans commit against African Americans. According to Hacker, many White Americans believe that "black on black" crime is the responsibility of the African American community. The present research reveals how neighborhood violence, a major manifestation of "black on black" crime, is detrimental to children's self esteem, trust, and hope. A similar detriment would be expected to affect White children exposed to a similar magnitude of violence, either in an urban or suburban. This issue cannot be ignored when considering public policy.

Because there can be stable patterns of attachment and schema across time, urban violence and stress may create obstacles to success long after the stress has lessened and the violent event is over. For many psychologists there is a responsibility to make the personal political, to take what we have learned through research and encounters with clients and urge the societal change required for America's urban communities to interrupt current patterns of violence and related psychopathology.

Much remains unknown about attachment organization and schema development in urban African American school-aged children. Although the influence of stress and violence may be universal, the means to detect their influences are not. To close this knowledge gap, researchers must develop and/or modify instruments to appropriately assess individuals in these communities. These instruments should be valid and account for cultural differences (e.g. propensity for multiple caregivers and non-maternal attachment objects). Research should be respectful of neighborhood members by collaborating with the informal neighborhood hierarchy and eliciting their suggestions.

Urban populations use psychological services less often because psychology seems irrelevant to many living in violent and impoverished urban settings (McGoldrick & Giordano, 1996). This belief regarding psychology's relevance suggests that research projects should be designed to inform clinical practice so that interventions may be tailored to specific cultures. For example, this review of the literature encourages therapists to consider multiple caregivers in family therapy and the results suggest that highly self-reliant children may be overcompensating for a stressful environment.

The lessons regarding methodology should be tested and heeded by future studies in urban minority communities. For instance, other researchers can follow this study's example in developing a relationship with the communities they hope to study. Other researchers should also avoid the pitfalls encountered in this study, including need to carefully explain and possibly supervise the completion of all measures.

Alex Kotlowitz (1991), in his acclaimed documentary about two children of Chicago, Lafayette and Pharoah, paints a clear picture of the relationship between these

children, their mother, and the city in a way that quantitative research and this dissertation cannot.

Lafayette's summer opened the way it would close, with gunshots. For Lafayette and Pharoah, these few months would be a rickety bridge to adolescence. If the brothers had one guidepost, it was their mother, Lajoe. They depended on her; she depended on them. The boys would do anything for their mother.... But the neighborhood, which hungrily devoured its children, had taken its toll of Lajoe. In recent years she had become more tired as she questioned her ability to raise her children here. She no longer fixed her kid's breakfast everyday -- and there were times when the children had to wash their own clothes in the bathtub. Many of the adults had aged with the neighborhood, looking as worn and empty as the abandoned stores that lined the once thriving Madison Street. By their mid-thirties many women had become grandmothers; by their mid-forties, great-grandmothers. They nurtured and cared for their boyfriends and former boyfriends and sons and grandsons and great-grandsons. (pp. 9-10)

Three days after Lafayette's birthday, gunfire once again filled the air. It was two-thirty in the afternoon; school had just let out. As Lafayette and his mother hustled the triplets onto the floor of the apartment's narrow hallway, a drill they now followed almost instinctually, they caught glimpses through the windows of young gunmen waving their pistols about.... The police made no arrests. And when a reporter called the police department's central headquarters the next day, he was told that there was no record of the shoot-out. But Lafayette knew. So did Pharoah. (pp. 17-18)

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APPENDICES

Appendix A

Subject Consent to Participate:

Adult Caregiver

TEXAS WOMAN'S UNIVERSITY
SUBJECT CONSENT TO PARTICIPATE IN RESEARCH
ADULT CAREGIVER

Title: The Impact of Stress on Attachment Organization and Schema Development
During Middle Childhood: An Urban Perspective

Principal Investigator: Jody Scott.....(972) 998-5639 or email: jodyscott@aol.com
Assistant Investigator: Dana Harding.....(903) 453-5679 or email: yeedo@hpnc.com
Co-Chair Advisors: Sally Stabb, Ph.D.....(940) 898-2149 or email: sstabb@twu.edu
Shelley Riggs, Ph.D... (940) 898-2309 or email: sriggs@twu.edu

You are being asked to participate in a research study for Jody Scott's dissertation at Texas Woman's University. The purpose of this study is to examine the effects of urban stress and exposure to violence on family relationships and children's perceptions of themselves and others. You will be asked to provide some general information and information of your family. You will also be asked to fill out a questionnaire regarding your life experiences. You may complete the questionnaires at your home or at a private location at the church or school in your neighborhood. Arrangement for a time and place to fill out the questionnaires will occur after signing this consent form. Time required to complete the questionnaires is estimated to take no longer than 30 minutes. A break will be given if needed to reduce feeling tired.

The investigation involves the risks of the release of confidential information, improper release of data, discomfort, and fatigue. Confidentiality will be protected to the extent that is allowed by law. Numbers, rather than names will be used on all pages of the questionnaires. Your identity will only be able to be matched by the assigned number. The current consent form will be removed immediately from the rest of the research material to maintain confidentiality. You will be instructed not to include your name anywhere but on the consent form. Completed questionnaires will be kept in a locked filing cabinet, separate from the consent forms, for approximately 3 years until all of the data has been collected and analyzed (no later than August, 2004). After this date, all original materials will be shredded. It is anticipated that the information found through the current research will be published in a journal. However, names or other identifying information will not be included in any publication.

Questions in this study may cause emotional discomfort or trigger some uncomfortable memories. Investigators of this study have been trained to be aware of anxiety and distress in children and will allow for a break if needed in order to prevent anxiety from increasing to uncomfortable levels. You may discontinue with the study at any time with no penalty. You will be given a list of helpful names and phone numbers if you feel like discussing your discomfort with a counselor. Any costs acquired as a result of participation in this study will be your responsibility.

Initial here _____
Your participation in this study is extremely valuable and direct benefits for your participation include coupons from McDonald's and a summary of results upon research completion. A summary of the results will be mailed to you upon your request.

Investigators will try to prevent any problem that might occur because of this research. Please do not hesitate to let the investigators know immediately if there is any problem and they will help you. However, Texas Woman's University does not provide psychological services or financial assistance for harm that might occur because you are taking part in this study.

If you have any questions about the research study, you may contact the investigators by phone number or email listed at the top of this form. If you have questions about your rights as a participant in this research or the way this study is being conducted, you may contact Ms. Traci Lindsay in the Office of Research & Grants Administration at 940-898-3377 or email her at HSRC@TWU.EDU.

Your participation in this study is completely voluntary and you may withdraw at any time without penalty. If you have any questions, please contact the investigators listed at the top of this form. You will be given a copy of this dated and signed consent form to keep.

Signature of participant

Date

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing the consent form did so willingly and with full knowledge of its contents.

Signature of the Investigator

Date

_____ Check here if you would like to receive summary of the results of this study and list below the address where you would like the summary to be sent.

_____ Check here if you do not wish to receive a summary of the results of this study.

Appendix B

Subject Consent to Participate:

Parent or Legal Guardian

TEXAS WOMAN'S UNIVERSITY
SUBJECT CONSENT TO PARTICIPATE IN RESEARCH
PARENT OR LEGAL GUARDIAN OF THE CHILD

Title: The Association Between Stress, Attachment Organization, and Schema Development During Middle Childhood: An Urban Perspective

Principal Investigator: Jody Scott.....(972) 998-5639 or email: jodyscott@aol.com
Assistant Investigator: Dana Harding.....(903) 453-5679 or email: yeedo@hpnc.com
Co-Chair Advisors: Sally Stabb, Ph.D.,.....(940) 898-2149 or email: sstabb@twu.edu
Shelley Riggs, Ph.D....(940) 898-2309 or email: sriggs@twu.edu

Your child is being asked to participate in a research study for Jody Scott's dissertation at Texas Woman's University. The purpose of this study is to examine the effects of urban stress and exposure to violence on family relationships and children's perceptions of themselves and others. Your child will be asked to provide some general information (i.e., age, grade level) and information about the family. Your child will be shown pictures of families and encouraged to talk about the child in the pictures. Your child's responses will be audiotaped so their answers will be written word for word. Your child will be asked questions about their family, life experiences and beliefs. Tasks will be given in a private room at the local church or elementary school. It will take your child approximately an hour to 1 ½ hour to complete all tasks. A break will be given as needed to protect your child from getting tired.

The investigation involves the risks of the release of confidential information, improper release of data, discomfort, and fatigue. Confidentiality will be protected to the extent that is allowed by law. Numbers, rather than names will be used on all pages of the questionnaires and on the audiotapes. Both researchers and research advisors will have access to the audiotapes. Your child's identity will only be able to be matched up by the assigned number. The current consent form will be removed immediately from the rest of the research material. Your child will be carefully instructed to not include her/his name anywhere but on the consent form. If your child states a name on the audiotape, the name will not be written. Completed questionnaires and audiotapes will be kept in a locked filing cabinet for approximately 3 years until all of the data has been collected and analyzed (no later than August, 2004). After this date, all original materials will be shredded and all audiotapes will be erased. It is anticipated that the information found through the current research will be published in a journal. However, names or other identifying information of your child will not be included in any publication.

Questions in this study may cause emotional discomfort or trigger some uncomfortable memories. Investigators of this study have been trained to be aware of anxiety and distress in children and will allow your child breaks between measures in order to prevent anxiety from increasing to uncomfortable levels.

Initial here _____

Your child may discontinue with the study at any time with no penalty. You will be given a list of helpful names and phone numbers if your child feels like discussing his/her discomfort with a counselor. Any costs acquired as a result of participation in this study will be your responsibility.

Your child's participation in this study is extremely valuable and direct benefits for your child's participation include coupons from McDonald's and a summary of results upon research completion. A summary of the results will be mailed to you upon your request.

Investigators will try to prevent any problem that might occur because of this research. Please do not hesitate to let the investigators know immediately if there is any problem and they will help you or your child. However, Texas Woman's University does not provide psychological services or financial assistance for harm that might occur because your child is taking part in this study.

If you have any questions about the research study, you may contact the investigators by phone number or email listed at the top of this form. If you have questions about your child's rights as a participant in this research or the way this study is being conducted, you may contact Ms. Traci Lindsay in the Office of Research & Grants Administration at 940-898-3377 or email her at HSRC@ TWU.EDU.

Your child's participation in this study is completely voluntary and your child may withdraw at any time without penalty. If you have any questions, please contact the investigators listed at the top of this form. You will be given a copy of this dated and signed consent form to keep.

Signature of guardian of participant

Date

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing the consent form did so willingly and with full knowledge of its contents.

Signature of the Investigator

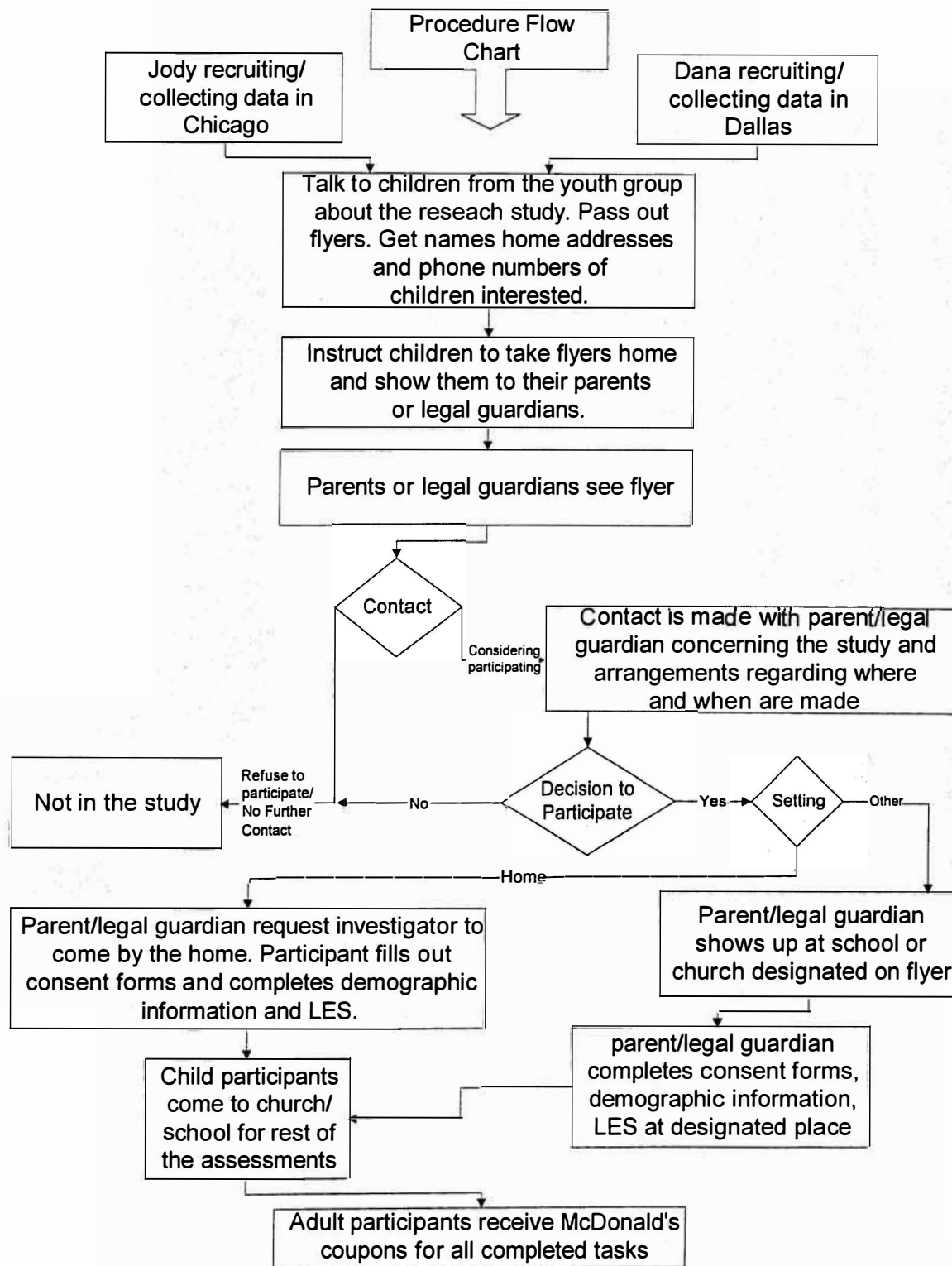
Date

_____ Check here if you would like to receive summary of the results of this study and list below the address where you would like the summary to be sent.

_____ Check here if you do not wish to receive a summary of the results of this study.

Appendix C

Procedure Flow Chart



Appendix D

Personal Information

Caregiver Form

Personal Information: Caregiver Form

The following information is necessary for the research we are conducting. Please respond to each item completely and in PLAIN PRINT.

AGE: _____ years

SEX: _____ Female

_____ Male

ETHNICITY _____

RELATIONSHIP STATUS (Check all that apply)

_____ Married

_____ Divorced

_____ Widowed

_____ Remarried

_____ Separated

_____ Never Married

_____ Live with Partner

YEARS/TIME IN CURRENT RELATIONSHIP _____

NUMBER OF CHILDREN _____

PLEASE INCLUDE THE NUMBER BY EACH LISTING OF PERSONS WHO LIVE IN YOUR HOME.

_____ Mother

_____ Brother

_____ Aunt

_____ Step-son

_____ Father

_____ Sister

_____ Uncle

_____ Stepdaughter

_____ Mother's partner

_____ Niece

_____ Son

_____ Cousin

_____ Father's partner

_____ Nephew

_____ Daughter

_____ Friend

Anyone else? _____

YEARS OF EDUCATION COMPLETED _____

ANNUAL HOUSEHOLD INCOME _____ Per year

Appendix E

Personal Information

Child Form

**Personal Information
Child Form**

1. HOW OLD ARE YOU? _____ Years
2. PLEASE CHECK ONE: _____ GIRL _____ BOY
3. WHAT GRADE ARE YOU IN AT SCHOOL? _____
4. WHAT IS YOUR ETHNICITY? _____
5. WHO LIVES WITH YOU AT HOME? INCLUDE THE NUMBER OF PERSONS BY EACH LISTING.

____ Mother	____ Brother	____ Stepmother	____ Aunt
____ Father	____ Sister	____ Stepfather	____ Uncle
____ Mother's partner	____ Grandmother	____ Stepbrother	____ Cousin
____ Father's partner	____ Grandfather	____ Stepsister	____ Friend

Anyone else? _____

4. WHO IS (ARE) THE PERSON(S) THAT TAKES CARE OF YOU MOST OF THE TIME? _____

Appendix F

Life Experience Survey

LIFE EXPERIENCE SURVEY

Listed on the next page are a number of events, which sometimes bring about change in the lives of those who experience them.

Please respond **ONLY** to those events, which you have experienced in your life over the last 12 months. **Leave blank those events you have NOT experienced.**

For each event that you have experienced, please indicate the extent to which you found the event either having a positive or negative impact on your life. For example, a rating of -3 indicates an extremely negative impact, a rating of zero indicates neither a positive nor a negative impact, and a rating of $+3$ indicates an extremely positive impact.

(TURN PAGE)

		Extremely negative	Moderately negative	Slightly negative	No impact	Slightly positive	Moderately positive	Extremely positive
1.	Marriage	-3	-2	-1	0	+1	+2	+3
2.	Detention in jail or comparable institution	-3	-2	-1	0	+1	+2	+3
3.	Death of spouse	-3	-2	-1	0	+1	+2	+3
4.	Major change in sleeping habits (much more or much less sleep)	-3	-2	-1	0	+1	+2	+3
5.	Death of a close family member:							
	a. Mother	-3	-2	-1	0	+1	+2	+3
	b. Father	-3	-2	-1	0	+1	+2	+3
	c. Brother	-3	-2	-1	0	+1	+2	+3
	d. Sister	-3	-2	-1	0	+1	+2	+3
	e. Grandmother	-3	-2	-1	0	+1	+2	+3
	f. Grandfather	-3	-2	-1	0	+1	+2	+3
	g. Other (specify)	-3	-2	-1	0	+1	+2	+3
6.	Major change in eating habits (much more or much less food intake)	-3	-2	-1	0	+1	+2	+3
7.	Foreclosure on mortgage or loan	-3	-2	-1	0	+1	+2	+3
8.	Death of a close friend	-3	-2	-1	0	+1	+2	+3
9.	Outstanding personal achievement	-3	-2	-1	0	+1	+2	+3
10.	Minor law violations (traffic tickets, disturbing the peace, etc.)	-3	-2	-1	0	+1	+2	+3
11.	Male: Wife/girlfriend's pregnancy	-3	-2	-1	0	+1	+2	+3
12.	Female: pregnancy	-3	-2	-1	0	+1	+2	+3
13.	Changed work situation (different work responsibility)	-3	-2	-1	0	+1	+2	+3
14.	New job	-3	-2	-1	0	+1	+2	+3

	Extremely negative	Moderately negative	Slightly negative	No impact	Slightly positive	Moderately positive	Extremely positive
15. Serious illness or injury of close family member:							
a. Father	-3	-2	-1	0	+1	+2	+3
b. Mother	-3	-2	-1	0	+1	+2	+3
c. Brother	-3	-2	-1	0	+1	+2	+3
d. Sister	-3	-2	-1	0	+1	+2	+3
e. Grandfather	-3	-2	-1	0	+1	+2	+3
f. Mate	-3	-2	-1	0	+1	+2	+3
g. Other (specify)	-3	-2	-1	0	+1	+2	+3
16. Sexual difficulties	-3	-2	-1	0	+1	+2	+3
17. Trouble with employer (danger of losing job, etc)	-3	-2	-1	0	+1	+2	+3
18. Trouble with in-laws	-3	-2	-1	0	+1	+2	+3
19. Major change in financial status (a lot better off or a lot worse off)	-3	-2	-1	0	+1	+2	+3
20. Major change in closeness of family members (increase or decrease closeness)	-3	-2	-1	0	+1	+2	+3
21. Gaining a new family member (through birth, adoption etc.)	-3	-2	-1	0	+1	+2	+3
22. Change in residence	-3	-2	-1	0	+1	+2	+3
23. Marital separation from mate	-3	-2	-1	0	+1	+2	+3
24. Major change in church activities (increased or decreased attendance)	-3	-2	-1	0	+1	+2	+3
25. Marital reconciliation with mate	-3	-2	-1	0	+1	+2	+3
26. Major change in number of arguments with mate	-3	-2	-1	0	+1	+2	+3

	Extremely negative	Moderately negative	Slightly negative	No impact	Slightly positive	Moderately positive	Extremely positive
27. Male: change in wife/girlfriend's work outside the home	-3	-2	-1	0	+1	+2	+3
28. Female: change in husband/ boyfriend's work	-3	-2	-1	0	+1	+2	+3
29. Major change in usual type and/or amount of recreation	-3	-2	-1	0	+1	+2	+3
30. Borrowing more than \$10,000 (buying home or business, etc.)	-3	-2	-1	0	+1	+2	+3
31. Borrowing less than \$10,000 (buying car, getting school loan, etc.)	-3	-2	-1	0	+1	+2	+3
32. Being fired from a job	-3	-2	-1	0	+1	+2	+3
33. Male: Wife/girlfriend having abortion	-3	-2	-1	0	+1	+2	+3
34. Female: having abortion	-3	-2	-1	0	+1	+2	+3
35. Major personal illness or injury	-3	-2	-1	0	+1	+2	+3
36. Major change in social activities, (increased or decreased participation)	-3	-2	-1	0	+1	+2	+3
37. Major change in living conditions of Family	-3	-2	-1	0	+1	+2	+3
38. Divorce	-3	-2	-1	0	+1	+2	+3
39. Serious injury or illness of close friend	-3	-2	-1	0	+1	+2	+3
40. Retirement from work	-3	-2	-1	0	+1	+2	+3
41. Son or daughter leaving home	-3	-2	-1	0	+1	+2	+3
42. Ending of formal schooling	-3	-2	-1	0	+1	+2	+3
43. Separation from spouse	-3	-2	-1	0	+1	+2	+3
44. Engagement	-3	-2	-1	0	+1	+2	+3
45. Breaking up with boyfriend/girlfriend	-3	-2	-1	0	+1	+2	+3
46. Leaving home for the first time	-3	-2	-1	0	+1	+2	+3

Extremely negative	Moderately negative	Slightly negative	No impact	Slightly positive	Moderately positive	Extremely positive
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47. Reconciliation with boyfriend/
Girlfriend

-3 -2 -1 0 +1 +2 +3

Other recent experiences which have had an
impact on you life: List and rate

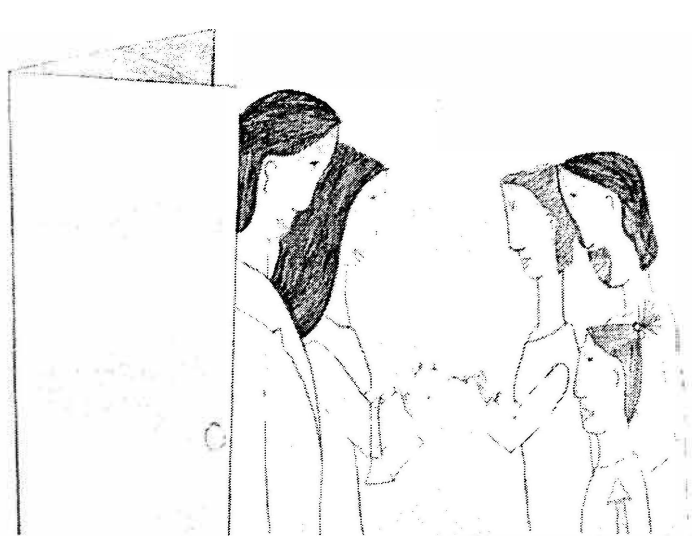
48. _____ -3 -2 -1 0 +1 +2 +3

49. _____ -3 -2 -1 0 +1 +2 +3

50. _____ -3 -2 -1 0 +1 +2 +3

Appendix G

Separation Anxiety Test: Pictures



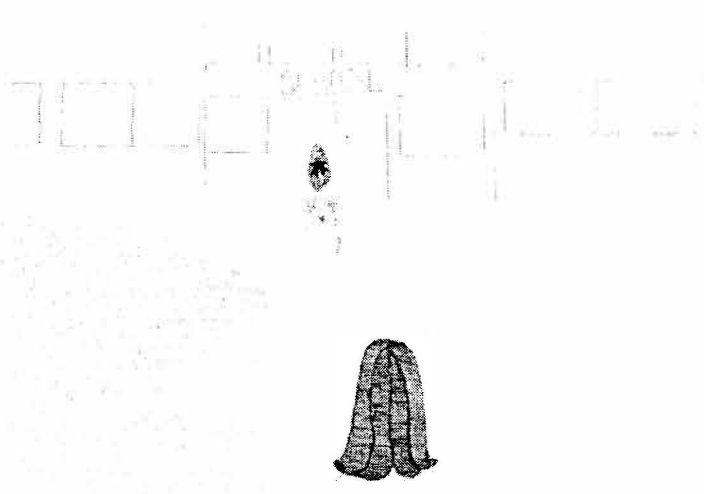
Caregivers go away for 2 weeks, leaving the child with aunt and uncle



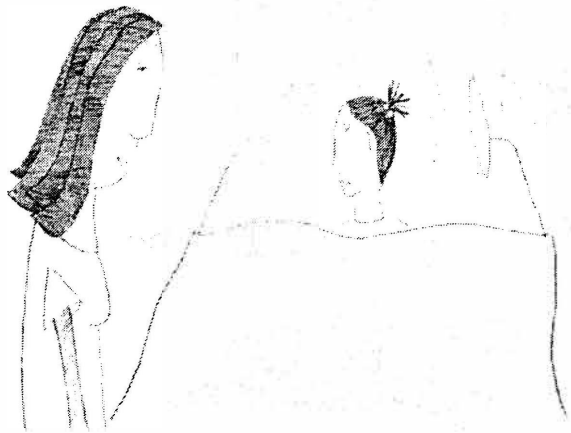
Caregivers are going away for two weeks; prior to their departure they give child a gift



Caregivers go out for the evening, leaving the child at home



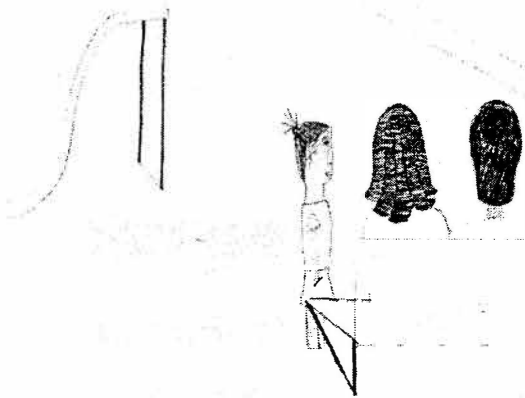
Child's first day back at school



Caregiver tucks child in bed and leaves room



Family is moving to a new neighborhood



Park scene; caregivers tell child to run off and play by self for a while, they want some time alone together to talk



Child will live permanently with grandparents and without parents



Child's caregiver is being taken to the hospital



Appendix H

Scoring Categories for the SAT

Attachment

1. TYPICAL ATTACHMENT responses are ones in which the child responds with a negative feeling, such as sad, and justifies this by noting the separation from the parents and copes by some appropriate activity, such as playing or expressing an emotion (e.g., “crying”). Justifications, which indicate that the child felt sad or bad about being alone or lonely, considered recognition of the separation, are also assigned a category of 1.
2. HI ATTACHMENT responses are like TYPICAL ATTACHMENT responses but include coping solutions in which support or company is sought from people in the scene (Picture 2), or from some other person (e.g., friend, relative, teacher).
3. LO ATTACHMENT responses were those with a negative feeling valence but the examiner was unable to elicit an adequate response for either the justification or coping. LO responses are considered somewhat AVOIDANT and include responses which explain the feeling as due to the separation but are missing an adequate way of coping or those which have an adequate coping strategy but lack a justification for the feeling. In some cases the child seemed only able to reiterate the emotions which were felt.
4. ATTACHMENT/RETRIBUTION responses are those in which the child gives a negative feeling (e.g., “sad”, “mad”) attributed to the separation but the coping response entails a form of retribution for the parents leaving. However, the act of retribution was not always directed at the parents, but was also aimed at teachers, siblings or pets. Typically the method of punishment described was disobeying, or getting into some mild form of trouble. Running away, if it results in reuniting the child with the parents or with the parents reaffirming their love for the child is also coded here.
5. ATTACHMENT/INCREASE ACCESS TO PARENTS are responses which have a negative feeling valence in regard to the parents leaving, while the coping response describes a way in which the child will physically try to get to the parents or try to get them not to leave.
6. ATYPICAL ATTACHMENT responses are unusual because the child gives a feeling with a positive valence (e.g., “happy”, “fine”) but justify it by depending on the parents in some way or by refusing to accept the separation. Although similar to category number 5, INCREASE ACCESS TO PARENTS, the responses in this category indicate that the child will not allow the separation to take place. Children whose answers fall in this category appear to feel that they have the control to prevent the separation and therefore do not need to feel upset about it.

Self-Reliant

7. TYPICAL SELF-RELIANT responses have a positive feeling valence and often focus on enjoying being alone or on a salient feature of the photograph other than the parents' leaving. Coping with the separation involves an appropriate activity, play, or expressing an emotion.
8. HI SELF-RELIANT responses also have a valence for the feeling but the feeling is most often justified by adding a person to the scene or relying on persons in the scene (Picture 2) while coping appropriately. Sometimes the child gives a positive feeling but attributes it to something other than having another person there but relies on another person to cope with the separation. These responses are also placed in this category.
9. LO SELF-RELIANT responses have a positive feeling but, like LO ATTACHMENT responses, the examiner was unable to elicit an adequate response for either the justification for the feeling or the coping question. Children who have the coping response e.g., "He'd do nothing" were also scored in this category. Responses which justified the positive feeling with "I like to feel that way" or a similar response were also placed here.
10. ATYPICAL SELF-RELIANT are responses in which the child gives a feeling with a negative valence (e.g., "sad") but attributes it to something other than the separation. The answer is complete (a feeling, logical justification for the feeling and appropriate coping) but the focus is on something other than the parents' leaving.

Attachment/ Self-Reliant

11. TYPICAL ATTACHMENT/ SELF-RELIANT responses have components of both ATTACHMENT and SELF-RELIANT responses. These include positive valence attachment responses (e.g., "happy") which acknowledge that the parents are not leaving or that the child gets to stay with them (pictures 5 and 6) and mixed valence feeling responses (e.g., "happy" and "sad"), with appropriate rationale for each, along with an appropriate coping solution. Sometimes the child's rationale for one of the two feelings wasn't expressed until the coping response, these answers were still scored in this category
12. HI ATTACHMENT/ SELF-RELIANT responses add a person to the scene to rely on a person(s) in the scene (Picture 2) while otherwise fulfilling the criteria under number 11 for an ATTACHMENT/ SELF-RELIANT response.
13. LO ATTACHMENT/ SELF-RELIANT responses are answers which are incomplete or inadequate. Answers coded here include those where the child gave

a mixed valence (positive and negative) feeling but could not justify the feelings but gave an adequate coping response. Also coded here the answers with a negative feeling valence (e.g., “sad”) with no justification but with a HI coping response (getting a person to rely on).

14. ATTACHMENT/ SELF-RELIANT/ IMAGE OF PARENTS categorizes responses in which children give components of either ATTACHMENT or SELF-RELIANT responses but retain an image of their parents some how to deal with the separation. Even though the child may also rely on other people if the parents are thought about or imagined, it should be categorized here. Answers in this category include “thinking” about the parents, dreaming about them, writing a letter to them or calling them on the telephone.
15. ATTACHMENT/ SELF-RELIANT/ INCREASE ACCESS TO PARENTS includes responses which fulfill the criteria for the TYPICAL ATTACHMENT/ SELF-RELIANT or HIGH ATTACHMENT/ SELF-RELIANT categories but the coping response describes a way in which the child will physically gain access to the parents.

Avoidant

16. AVOIDANT responses are really “non-responses”. The examiner can elicit very little or no information about the child’s feelings, why the child feels that way or what the child might do. If any two of the three parts of an answer are missing it is categorized here. AVOIDANT responses also include those which deny that a separation might occur.
17. AVOIDANT-CONFUSED responses are also avoidant, but are unlike answers placed in the AVOIDANT category where the child is passively silent. Children giving this type of answer seem “confused” because they talk about things unrelated to the picture being shown, focus on irrelevant features in the picture or give an illogical justification for the feeling. These responses are AVOIDANT as demonstrated by the inability to discuss the separation but the child self-distracts by discussing irrelevant issues.

Additional

18. ANXIOUS responses are those that reveal anxiety or fear in some component of the answer to the picture with a feeling, a justification for the feeling and an appropriate coping solution. Answers categorized here are not those of a child who shows an irrational fear or is overwhelmed by the separation. These answers are much like those categorized under the ATTACHMENT categories but rather than “sad” the children are generally scared or frightened because their parents are unavailable.

19. ANXIOUS/ INCREASE ACCESS TO PARENTS include responses which fulfill the criteria for ANXIOUS (# 16) but the child copes by trying to be with the parents.
20. ATYPICAL responses are those in which the child claims to feel “good” or “happy” (positive valence) about the separation and specifically attributes it to the parents’ leaving. These answers might be considered an extreme form of self-reliance.
21. BIZZARE responses are those which deal with hostility, hatred of mother or father, abandonment or death.

Appendix I
Security Scale

SECURITY SCALE

I am going to ask you some questions about you and your mom (dad). I am interested in what you are like. First let me explain how questions work. Each question talks about two kinds of kids, and I want to know which kids are most like YOU. Here is a sample question.

Really True for me	Sort of True for me	Some kids would rather play outdoors in their spare time.	BUT	Other kids would rather watch T.V.	Sort of True for me	Really True
_____	_____				_____	_____

What I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but decide which kid is most like you and go to that side of the sentence. Now, decide whether that is sort of true for you, or really true for you, and put an X on the line underneath.

For each sentence you will only put an X on ONE line, the one that goes with what is true for you, what you are most like.

Now I am going to ask you some questions about you and your mom (dad). Some kids don't live with their real mom (dad). If you are one of these kids, please answer the questions about the person you think of as a mother (father).

Security Scale

1.	Really True for me _____	Sort of True for me _____	Some kids find it easy to trust their mom (dad) BUT	Other kids are not sure if they can trust their mom (dad)	Sort of True for me _____	Really True _____
2.	Really True for me _____	Sort of True for me _____	Some kids feel like their mom (dad) BUT but in a lot when they are trying to do things	Other kids feel like their mom (dad) lets them do things on their own	Sort of True for me _____	Really True for me _____
3.	Really True for me _____	Sort of True for me _____	Some kids think it's easy to count on BUT their mom (dad) for help	Other kids think it's hard to count on their mom (dad) for help	Sort of True for me _____	Really True for me _____
4.	Really True for me _____	Sort of True for me _____	Some kids think their mom (dad) BUT spends enough time with them	Other kids think their mom (dad) does not spend enough time with them	Sort of True for me _____	Really True for me _____
5.	Really True for me _____	Sort of True for me _____	Some kids do not really like telling BUT their mom (dad) what they are thinking/feeling	Other kids like telling their mom (dad) what they are thinking and feeling	Sort of True for me _____	Really True for me _____
6.	Really True for me _____	Sort of True for me _____	Some kids do not really need their BUT mom (dad) for much	Other kids need their mom (dad) for lots of things	Sort of True for me _____	Really True for me _____
7.	Really True for me _____	Sort of True for me _____	Some kids wish they were closer BUT to their mom (dad)	Other kids are happy with how close they are with their mom (dad)	Sort of True for me _____	Really True for me _____
8.	Really True for me _____	Sort of True for me _____	Some kids worry that their mom BUT (dad) does not really love them	Other kids are really sure that their mom (dad) loves them	Sort of True for me _____	Really True for me _____

9.	Really True for me _____	Sort of True for me _____	Some kids feel like their mom (dad) BUT really understands them	Other kids feel like their mom (dad) does not really understand them	Sort of True for me _____	Really True for me _____
10.	Really True for me _____	Sort of True for me _____	Some kids are really sure their mom BUT (dad) would not leave them	Other kids sometimes wonder if their mom (dad) might leave them	Sort of True for me _____	Really True for me _____
11.	Really True for me _____	Sort of True for me _____	Some kids worry that their mom (dad) BUT might not be there when they need her (him)	Other kids are sure their mom (dad) will be there when they need her (him)	Sort of True for me _____	Really True for me _____
12.	Really True for me _____	Sort of True for me _____	Some kids think their mom (dad) does BUT not listens to them	Other kids do think their mom (dad) listens to them	Sort of True for me _____	Really True for me _____
13.	Really True for me _____	Sort of True for me _____	Some kids go to their mom (dad) when BUT they are upset	Other kids do not go to their mom (dad) when they are upset	Sort of True for me _____	Really True for me _____
14.	Really True for me _____	Sort of True for me _____	Some kids wish their mom (dad) BUT would help them more with their problems	Other kids think their mom (dad) helps them enough	Sort of True for me _____	Really True for me _____
15.	Really True for me _____	Sort of True for me _____	Some kids feel better when their mom BUT (dad) is around	Other kids do not feel better when their mom (dad) is around	Sort of True for me _____	Really True for me _____

Appendix J

Cognitive Triad Inventory for Children

COGNITIVE TRIAD INVENTORY (CTI) – CHILDREN

This form lists different ideas that children sometimes have. For each of these ideas, show how much it describes you by circling the answer, which describes your opinion. Be sure to choose only ONE answer for each idea. Answer the items for what you are thinking **Right Now**

Answering Codes:

Yes = True

Maybe = Sometimes true and sometimes not true

No = Not true

Example:

1. Life has good things and bad things. Yes Maybe No

In the example above, if you circle yes, you think that life has good and bad things. If you circle no, you do not think life has good and bad things. If you circle maybe, you think that sometimes life has good and bad things.

NOW TURN THE PAGE AND BEGIN

Subject# _____

Date _____

CTI – CHILDREN

Instructions: Circle the answer which best describes your opinion. Choose only one answer for each idea.

Answer the items for what you are thinking **RIGHT NOW**. Remember fill this out for how you feel today.

- | | | | |
|---|-----|-------|----|
| 1. I do well at many different things. | Yes | Maybe | No |
| 2. Schoolwork is no fun. | Yes | Maybe | No |
| 3. Most people are friendly and helpful. | Yes | Maybe | No |
| 4. Nothing is likely to work out for me. | Yes | Maybe | No |
| 5. I am a failure. | Yes | Maybe | No |
| 6. I like to think about the good things that will happen for me in the future. | Yes | Maybe | No |
| 7. I do my schoolwork okay. | Yes | Maybe | No |
| 8. The people I know help me when I need it. | Yes | Maybe | No |
| 9. I think that things will be going very well for me a few years from now. | Yes | Maybe | No |
| 10. I have messed up almost all the best friendships I have ever had. | Yes | Maybe | No |
| 11. Lots of fun things will happen for me in the future. | Yes | Maybe | No |
| 12. The things I do every day are fun. | Yes | Maybe | No |
| 13. I can't do anything right. | Yes | Maybe | No |
| 14. People like me. | Yes | Maybe | No |
| 15. There is nothing left in my life to look forward to. | Yes | Maybe | No |
| 16. My problems and worries will never go away. | Yes | Maybe | No |
| 17. I am as good as other people I know. | Yes | Maybe | No |

Subject# _____



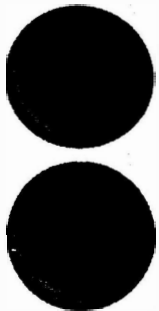
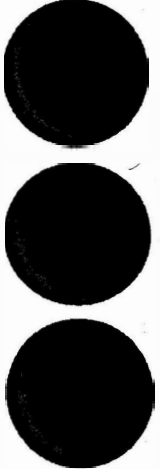
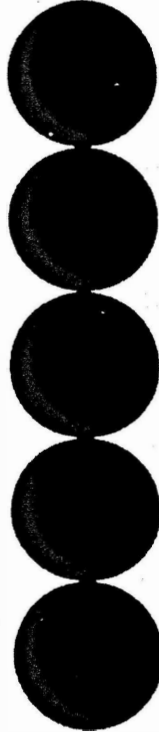
Date _____

- | | | | |
|---|-----|-------|----|
| 18. The world is a very mean place. | Yes | Maybe | No |
| 19. There is no reason for me to think that things will get better for me. | Yes | Maybe | No |
| 20. The important people in my life are helpful and nice to me. | Yes | Maybe | No |
| 21. I hate myself. | Yes | Maybe | No |
| 22. I will solve my problems. | Yes | Maybe | No |
| 23. Bad things happen to me often. | Yes | Maybe | No |
| 24. I have a friend who is nice and helpful to me. | Yes | Maybe | No |
| 25. I can do a lot of things well. | Yes | Maybe | No |
| 26. My future is too bad to think about. | Yes | Maybe | No |
| 27. My family doesn't care what happens to me. | Yes | Maybe | No |
| 28. Things will work out okay for me in the future. | Yes | Maybe | No |
| 29. I feel guilty for a lot of things. | Yes | Maybe | No |
| 30. No matter what I do, other people make it hard for me to get what I need. | Yes | Maybe | No |
| 31. I am a good person. | Yes | Maybe | No |
| 32. There is nothing to look forward to as I get older. | Yes | Maybe | No |
| 33. I like myself. | Yes | Maybe | No |
| 34. I am faced with many difficulties. | Yes | Maybe | No |
| 35. I have problems with my personality. | Yes | Maybe | No |
| 36. I think that I will be happy as I get older. | Yes | Maybe | No |

Appendix K

Things I Have Seen and Heard Survey

I Have Heard Guns Being Shot

				
<i>0</i> <i>TIMES</i>	<i>1</i> <i>TIME</i>	<i>2</i> <i>TIMES</i>	<i>3</i> <i>TIMES</i>	<i>MANY</i> <i>TIMES</i>

Scenarios on the TIHSAH

1. I have heard guns being shot
2. I have seen somebody arrested
3. I feel safe when I am at home
4. I have seen drug deals
5. I have seen somebody being beat up
6. I have been beat up
7. I have seen somebody get stabbed
8. I have seen somebody get shot
9. I have seen a gun in my home
10. I have seen drugs in my home
11. I feel safe when I am at school
12. Somebody threatened to kill me
13. I have seen a dead body outside
14. Somebody threatened to shoot me
15. Somebody threatened to stab me
16. Grown ups are nice to me
17. Grown ups in my home hit each other
18. Grown ups in my home stab or shoot each other
19. Grown ups in my home yell at each other
20. I have seen somebody in my home get shot or stabbed