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Running head: A SYSTEMIC INVESTIGATION OF SOCIAL BEHAVIORS

FAMILY DYNAMICS: A SYSTEMIC INVESTIGATION OF PARENTING STYLES, PARENT AND PEER ATTACHMENT, LOCUS OF CONTROL, AND SOCIAL BEHAVIORS

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Submitted in partial fulfillment of the requirements For the Doctor of Philosophy Seton Hall University 2010

SETON HALL UNIVERSITY COLLEGE OF EDUCATION AND HUMAN SERVICES OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Doctoral Candidate, **Reesa Weingold**, has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ph.D.** during this **Spring Semester 2011**.

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TITLE OF DISSERTATION:

Family Dynamics: Systemic Investigation of

Parenting Styles, Parent and Peer

Attachment, Locus of Control, and Social

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Abstract

FAMILY DYNAMICS: A SYSTEMIC INVESTIGATION OF PARENTING STYLES, PARENT AND PEER ATTACHMENT, LOCUS OF CONTROL, AND SOCIAL

The purpose of this study was to investigate the relationships between various family dynamics and the development of bully, victim, and pro-social behaviors in children. Specifically, it was postulated that perceived parenting styles, parent and peer-attachment styles, and locus of control would predict bullying behaviors in children. Many researchers have identified bullying-type behaviors, and have presented data on the various characteristics of bullying. However, this study was designed to bridge the gap in the current research available by exploring the relationships between parenting styles, attachment styles, and locus of control, and these variables' ultimate influences on predicting bullying behaviors. It was predicted that a more securely attached, emotionally available, parenting style would lead to more socially acceptable and cooperative peer relationships. Conversely, parents who may be rejecting and unavailable might lead to more socially uncooperative or bullying behaviors. The statistical measures utilized in the present study were in demographic form—the Peer Relationship Questionnaire for Children (PRQ) (Rigby & Slee, 1993), the Nowicki-Strickland Locus of Control (NSLOC) (Nowicki & Strickland, 1973), the Egna Minnen Bertraffende Uppffostran "My memories of upbringing" (EMBU-C) (Castro, Toro, Van der Ende & Arrindell, 1993; Markus, Lindhout, Boer, Hoogendijk & Arrindell, 2003), the Inventory of Parent and Peer Attachment—Revised for Children (IPPA-R) (Gullone & Robinson, 2005), and the Attachment Questionnaire for Children (AQ-C) (Muris, Meesters, van Melick & Zwambag, 2001). Multiple regression analyses were conducted to explore the relationship between the independent variables, parenting styles, parent and peer attachment styles and locus of control; and the

dependant variables, pro-social, victim and bullying behaviors. Results revealed a significant relationship between secure peer attachments and an internal locus of control, when exploring prosocial behaviors. Parenting styles characterized by emotional rejection were significantly associated with bullying behaviors in children. Parenting styles characterized by an external locus of control were significantly associated with victimization of adolescents. No other significant findings were discovered.

Family dynamics and bullying behaviors 4

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DEDICATION

I wish to dedicate all my years of hard work, classes, practicum, internship and my time working on this dissertation to Emily and Zachary, my E-Z twins. I began my doctoral pursuit at the same time I found out I was pregnant, and the both of you have literally been with me every step of the way. I thank you for allowing me to work late, get grumpy, and understand that some things are a once-in-a-lifetime endeavor. The both of you are my heart and I could not have done this without you both by my side. I love you both to the moon and back.

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CHAPTER I

INTRODUCTION

This study was designed to explore dynamic family factors that may influence and/or predict the development of bullying behavior in children. This study examined the voluminous research available, in order to investigate precursors of bullying. Although many investigators have studied bullying behaviors and provided significant baseline data, none has yet provided data investigating the relationships between parenting styles, attachment styles, and locus of control, and these variables' ultimate impacts on predicting bullying behaviors. Accordingly, I explored the dynamic factors that give rise to bullying behavior within the context of an attachment model.

According to Veenstra, Lindenberg, Oldehinkel, DeWinter, Verhulst, & Ormel (2005), bullying behaviors and victimization are common occurrences in elementary and secondary schools around the world. Bullying has increasingly become recognized as an important personal, social, and educational problem in U.S. society. Worldwide estimates for bullying and victimization among elementary and secondary schools range from 15% to 25% (Nansel, Overpeck, Pilla, Ruan, Simons-Morton & Scheidt, 2001). Olweus (1989) and Rigby and Slee (1993), researchers in the area of bullying, have identified that this kind of peer-relating (i.e., bully versus victim) to be most prevalent in school-aged children. They have also noted that children have the capacities to develop a more cooperative style of peer-relating that is often characterized by a high degree of constructiveness and sharing. Nevertheless, while researchers in this area have been able to label the characteristics of the bully, of the victim, and of pro-social behaviors, such research has provided little meaningful insight into the etiology of bullying.

A review of the literature has provided significant demographic data about bully, victim, and pro-social behavior, and has led to the conclusion that incidences of bullying, victimization,

and pro-social behaviors occur worldwide. To date, very few researchers have explored parenting, attachment, and locus of control as predictor variables with regard to bullying behaviors.

Theoretical Models

The main focus of the current research study was to investigate what family dynamics may have contributed to the development of bully, victim, and pro-social behaviors. The theoretical model for this study was Bowlby's (1988) theory of attachment. According to Bowlby's theory, proximity-seeking of the infant during times of stress or discomfort is instinctive, and how the primary caregiver responds to this proximity-seeking (i.e., warmth, rejection, overprotection) was the basis of Bowlby's attachment model. Using this paradigm, warmth, rejection, and overprotection were explored in this research. Similarly, secure, ambivalent and avoidant attachment styles (Bowlby, 1988; Ainsworth, 1989) seem to mirror, or parallel, parenting styles (Baumrind, 1966). Based on limited research with regard to how parenting, attachment and locus of control impact on bullying behaviors, the current study was designed to investigate how family dynamics—specifically, the child's perceptions or remembrances of a parenting style of emotional warmth; overprotection and anxious rearing or rejection, in conjunction with the attachment styles (secure, ambivalent, avoidant); and locus of control (internal, external) influence and/or predict bully, victim and pro-social behavioral outcomes.

Parenting styles

According to Diana Baumrind (1991), since the early 1920's developmental psychologists have been interested in how parents influence the development of children's successful social competence. One of the most compelling approaches to this area is the study of

what has been termed parenting style. Parenting is a complex activity, and includes many specific behaviors that, at various times, can work individually and together to influence a child's development. Although specific parenting behaviors, such as spanking or reading aloud, may influence a child's development, examination of specific behaviors in isolation can at times be misleading. Most researchers who have attempted to describe the broad parental environment relied on the research based on Baumrind's (1991) concept of parenting style. This construct is used to capture typical variations in the parent's attempts to engage, bond with, control, and socialize children. Two points are critical in understanding parenting styles. First, parenting style is meant to describe *normal* variations in parenting. In this regard, the parenting-style paradigm developed by Baumrind (1991) should not be understood to include deviant parenting, such as might be observed in abusive or neglectful homes. Second, Baumrind assumed that normal parenting revolves around issues of control. Although parents may differ in how they try to supervise or socialize their children and the extent to which they do so, it is assumed that the primary role of all parents is to influence, teach, and control their children.

Furthermore, parenting styles describe two important elements of parenting: parental responsiveness and parental demandingness (Maccoby & Martin, 1983). Parental responsiveness (also referred to as parental warmth or supportiveness) refers to "the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive, and acquiescent to children's special needs and demands" (Baumrind, 1991, p. 62). Parental demandingness (also referred to as behavioral control) refers to "the claims parents make on children to become integrated into the family whole, by their maturity demands, supervision, disciplinary efforts and willingness to confront the child who disobeys" (pp. 61-62). Categorizing parents according to whether they are high or low on parental demandingness and

responsiveness creates a typology of four parenting styles: indulgent, authoritarian, authoritative, and uninvolved (Maccoby & Martin, 1983). Each of these parenting styles reflects different naturally occurring patterns of parental values, practices, and behaviors (Baumrind, 1991), along with a distinct balance of responsiveness and demandingness.

Baumrind (1991); Weiss and Schwarz (1996); and Miller, Cowan, Cowan, and Hetherington (1993) have indicated that parenting styles have been predictive of a child's wellbeing in the domains of social competence, academic performance, psychosocial development, and problem behavior. These same authors reported that inquiries based on parent interviews, child reports, and parent observations consistently yielded results showing that children and adolescents whose parents are authoritative rate themselves as more socially and instrumentally competent than those whose parents are non-authoritative. Children and adolescents whose parents are uninvolved perform most poorly in all domains. In general, parental responsiveness predicts social competence and positive psychosocial functioning, while parental demandingness is associated with delayed or nonexistent social competence and poor behavioral control. These findings indicate that children and adolescents from authoritarian families (high in demandingness but low in responsiveness) tend to perform moderately well in school and be uninvolved in problem behaviors, but they have poorer social skills, lower self-esteem, and higher levels of depression. Children and adolescents from indulgent homes (high in responsiveness, low in demandingness) are more likely to be involved in problem behavior and perform less well in school, but they have higher self-esteem, better social skills, and lower levels of depression.

The choice of perceived parenting styles included in this study has been inspired by several studies (Markus, Lindhout, Boer, Hoogendijk & Arrindell, 2003; Myron-Wilson, 1999;

Roelofs, Meesters, Huurne, Bamelis & Muris, 2006) in establishing strong links between various parental approaches and a lack of socially acceptable behaviors. It has been determined that perceived parental rejection (characterized by hostility, punishment, derogation, and blaming of subject), and perceived parental overprotection (characterized by fearfulness and anxiety for the child's safety, guilt engendering, and intrusiveness), are both indicative of a lack of parental social responsiveness, which in some situations may lead to antisocial behavior in children. On the other hand, perceived *emotional warmth* (characterized by affection, attention, and support) has not been linked to antisocial behavior in children (Roelofs et al., 2006).

While attachment researchers have emphasized that disturbances in early parent-child interactions promote the development of ambivalent, avoidant, and disorganized attachment levels in children, others have stressed the importance of particular parental rearing styles. Support for this position comes from two sources. The first source is based on direct observation of current parent-child interactions. Following such an approach, Dadds, Barrett, Rapee and Ryan (1996) noted that parents of anxious children often encourage their children to rely on avoidant coping strategies. The second source consists of studies with questionnaires about children's perceptions of parental rearing behaviors. In two subsequent studies by Muris and colleagues (Muris, Bosma, Meesters & Schouten, 1998; Gruner, Muris & Merckelbach, 1999), school children completed a modified version of the Egna Minnen Betraffende Uppfostrand (EMBU) for children (EMBU-C), "My memories of upbringing"; and Castro, Toro, Van der Ende & Arrindel's, (1993) assessment of children's perceptions of parental rearing behaviors. The results of both studies revealed significant and positive relationships between anxious rearing behaviors, parental control and rejection, on the one hand; and anxiety disorders symptomatology, in particular symptoms of generalized anxiety disorder and separation anxiety

disorder, on the other hand. There were also significant associations between perceived parental rearing behaviors and attachment style. More specifically, emotional warmth was associated with secure attachment; and anxious rearing appeared to be related to ambivalent attachment, whereas rejection was connected to avoidant attachment. This might imply that anxious rearing results in an ambivalent attachment style, whereas rejection leads to an avoidant attachment style.

Attachment Theory

Discussing the concept of parenting without reference to Bowlby's (1979, 1982) theory of attachment, which has provided the framework for observing and conceptualizing the nature and importance of parent-child relationships, is futile. "Attachment" refers to a child's tie, or bond, with a specific caregiver, identified as the attachment figure. According to Bowlby (1982) attachments are affective, long-lasting bonds that can be inferred from the organization of a child's affect and behavior in relation to a specific figure. The child organizes his or her attachment behaviors (e.g., crying, smiling) with the goal of maintaining proximity of the attachment figure (Ainsworth, 1969; Bowlby, 1982). The establishment of attachment behavior has been noted to serve a biological function, in that it promotes the survival of the species. This occurs as a means of insuring that the child stays in close proximity to an adult caregiver who can attend to the child's safety. Accordingly, all children form attachments, regardless of the quality of care they experience. Once mobile, the secure child comes to use the attachment figure as a haven of safety when distressed, and as a secure base to support exploration when threats are not present (Ainsworth, Blehar, Waters & Wall, 1978).

Briefly, Ainsworth et al. (1978) and Main and Solomon (1990) found that there are four categories of attachment: secure, insecure/avoidant, insecure/resistant, and disorganized/

disoriented. Securely attached infants are able to depend on their caregivers as sources of comfort and protection when the need arises. Infants who are insecurely attached, however, are not confident in the responsiveness and sensitivity of their caregivers and, therefore, do not achieve the same levels of confidence in themselves or mastery of their environments as a securely attached infant (Ainsworth et al., 1978). Finally, the disorganized/disoriented classification is characterized by incomplete or contradictory attachment behaviors (Main & Solomon, 1990). Children with a disorganized/insecure attachment style show a lack of clear attachment behavior. The child's actions and responses to the caregivers are often a mix of behaviors, including avoidance and/or resistance. These children are described as displaying dazed behavior, sometimes seeming either confused or apprehensive in the presence of a caregiver. The attachment system includes, not only outward behaviors, but also an inner organization; and, as this inner organization changes in the course of development, so too do the observable attachment behaviors and situations in which they are evoked (Ainsworth, 1989). This occurs because attachment relationships are internalized in what Bowlby (1973) called "internal working models" (p. 204). An individual's early experiences and subsequent expectations are taken forward to serve later behavioral and emotional adaptation, and these models serve as a foundation of beliefs regarding the self, as well as relationships with both caregivers and noncaregivers (Bowlby, 1973).

Although a child's need for an attachment figure is most understandable in infancy and early childhood, children continue to need, and to rely on, their caregivers as attachment figures in middle childhood and beyond (Bowlby, 1979). Nevertheless, Bowlby (1982) posited that changes can occur in one's attachment during the preadolescent years. Reportedly, there may be a decline in the frequency and intensity of the individual's attachment behaviors with regard to

the attachment figure as the child matures and develops. This decline may be due to changes in the attachment system. It is thought that, as children grow older and the attachment system grows stronger, they develop an increased self-reliance and autonomy (Marvin & Britner, 1999). Marvin and Britner observed that older children are more equipped to deal with dangers and are less dependent on parents; and, therefore, may need to utilize or rely on parents less often. Availability of the attachment figure is reflected by open communication between parent and child, parent responsiveness to a child's needs, and the parent's physical accessibility to the child.

According to Siegel (1999), the most important features of a secure/insecure attachment style are the patterns of emotional communication between child and caregiver. Seigel has underscored the significance of parental patterns of communication as indicating how parental communication, either emotional communication (empathy and affective expression) or conflictual communication (come here and go away) often determine one's attachment experiences. Unlike Ainsworth's (1978) descriptions of attachment style (i.e., secure, ambivalent, avoidant), which are "organized" patterns of parental communication, the disorganized/disoriented attachment style is seemingly associated with considerable family dysfunction; such as, chronic severe maternal depression and harsh long-term child maltreatment that often leaves the child feeling hopeless, helpless and unable to develop a cohesive, organized pattern of relationships. This parental communication pattern, according to Siegel (1999), is often demonstrated via an adult attachment style based on the adult's unresolved, chaotic and disruptive attachment as a child. It should be noted that there is a strong relationship between child and adult attachment categories (Siegel 1999).

Bartholomew and Horowitz (1991), Hazan and Shaver (1987), and Main and Solomon (1986), as well as Siegel (1999), have all indicated that the way in which adults remember their childhood attachment narrative or autobiographical story may be the most robust predictor of the child's attachment, self-understanding and later adult attachment and parenting style. The adult who has what Siegel (1999) termed a coherence life narrative, has made sense of his or her own childhood experience and has insights into how that past has influenced his or her development as an adult and as a parent. This making of sense is revealed in a flexible and reflective narrative that is predictive of that adult's child developing a secure attachment. In contrast, a narrative without much access to autobiographical detail, or sense of how the past influences the present, is associated with the parent of a child with an avoidant attachment style. Parents with emotional themes that are *intrusive* as they attempt to tell the story of their lives typically have children who are ambivalently attached to them. Likewise, children with disorganized attachment have parents with unresolved trauma or loss experienced in their own families of origin.

Overview of an Attachment and Systemic Perspective

Bowlby, along with other theorists (Ainsworth, 1969, 1985; Main et al., 1985; Sroufe & Waters, 1977), argued that the way in which adults form close and intimate bonds with other individuals are influenced by the patterns of relationships with primary caregivers established in childhood. It is a fundamental tenet of attachment theory that security, or lack of it, experienced in the child-parent relationship forms a template for the pattern of interpersonal relationships the child experiences across the lifespan (Bowlby, 1977; Schneider, Atkinson & Tardif, 2001).

Attachment theory research during its inception and early years primarily focused on infant-parent relationships (Ainsworth, 1969). However, more current and contemporary

attachment research and literature have shown a movement toward considering attachment beyond infancy and beyond the parental relationship. For example, Hazan and Shaver (1987) and Bartholomew and Horowitz (1991) focused their research on predicating whether the classifications of attachment styles (secure, anxious, avoidant) would have the same utilitarian function in classifying adult romantic-attachment styles. Likewise, Armsden and Greenberg, (1987) studied attachment in adolescence beyond the parental relationship, generally focusing on the role of peer-bonding (attachment) relationships. In recent years, attachment has been reconceptualized to include all significant relationships across the life span, including those with peers and romantic partners (Armsden and Greenberg, 1987; Hazan and Shaver, 1987). A central idea of attachment theory is that children are developing representations of relationships through their interactions with attachment figures (Bowlby, 1980, 1982). These models include expectations about the attachment figure's responsiveness and accessibility (Ainsworth, 1989; Bowlby, 1980; Bretherton, 1990). Although internal working models are open to reformulation throughout the course of development, according to Bowlby (1980), they tend to persist across time and significantly influence the manner in which the child interprets him or herself and others within the context of interpersonal relationships.

Cassidy and Shaver (1999) reiterated that early attachments influence later relationships, so individuals who develop "early secure dyadic affectional bonds are more likely to have harmonious and supportive relationships with their siblings, friends, romantic partners and their own children" (p. 626). George, Kaplan, and Main (1986) concluded that attachment styles or attachment histories were transgenerational, and that the attachment styles of the mother predicted later attachment styles of the children. Bowlby's attachment (Bowlby, 1982, 1988) and Bowen's family-systems (Bowen, 1978; Kerr & Bowen, 1988) theories represent

frameworks for understanding how internalization of family-of-origin experiences facilitates the development of self-regulation.

Both Bowen (1978), in his systems theory about families of origin, and Bowlby (1977), in his attachment theory, have distinctive conceptual frameworks. Yet, Clauss (1995) noted that Bowlby became aware of systems dynamics in families, but chose to focus on the parent-child dyad in explaining attachment processes. Accordingly, Bowlby's (1982, 1988; Ainsworth, 1989) attachment theory and Bowen's (Bowen, 1978; Kerr & Bowen, 1988) family systems theory both provide perspectives that help in understanding how internalization of family-of-origin experiences facilitates the development of self-regulation.

Bowen (1978) reflected on levels of differentiation from one person to another, and how these are established early in life. A person with a differentiated self is interdependent upon the emotional processes associated with togetherness, and also develops individuality within a family system. Similarly, Bowlby (1988) observed that the availability, responsiveness, and sensitivity of the primary caregiver enabled the infant to become secure in his or herself. There are times, however, when stress, anxiety, and distress are prominent aspects of the family dyad or family system. It is this familial stress within dyads that, according to Bowen (1978), results in the triangulation of a third individual to lessen familial distress. Likewise, Bowlby (1988) established that the proximity-activating behaviors in attachment occur during times of anxiety, stress and distress.

According to Bowen (1978), those who tend to fuse with others become overwhelmed by real or perceived separations from significant others, while those who gravitate toward emotional cutoffs tend to become anxiously reactive when faced with emotional intimacy. An anxious/ambivalent attachment pattern occurs when an individual is uncertain about the

availability or responsiveness of the caregiver, and consequently may be prone to separation anxiety and tend to be become clingy and anxious about exploring his or her surroundings (Bowlby, 1988). Both Bowen (1978) and Bowlby (1988) noted that past relationships influence present ones. Bowen (1978) emphasized that emotional responses are passed down from generation to generation. Bowen suggested that a parent's fears and anxieties can be projected onto the infant. Bowlby (1988) posited that a parent's anxiety, avoidance, and ambivalence are also incorporated into the infant's development. As Bowen (1978) indicated, the child's development is shaped by the family's projections and other emotional processes in the nuclear family. This parallels Bowlby's (1988) proposals about a child's internal working model of self and other. Bowen (1978) inferred that emotional responses can continue over multiple generations, which is akin to Bowlby's (1988) view that attachment behavior "is a characteristic of human nature throughout our lives—from the cradle to grave" (p. 82). Attachment behaviors ultimately form the emotional bond and foundations of the relational patterns that are passed on from one generation to another.

Recently, Skowron and Dendy (2004) examined the utility of Bowen's (1978) family systems theory and Bowlby's (1982) attachment theory. Skowron & Dendy (2004), confirmed that "adults who reported less attachment anxiety and avoidance and were more differentiated that is, less emotionally reactive, cutoff from or fused with others, and better able to take IP [I position] in relationships—were most capable of achieving effortful attentional and behavioral control" (p.351). Moreover, the results provide the first established link between differentiation of self and self-regulatory control. Specifically, differentiation of self accounted for 19% of the variability in effortful control, over and above relationships with attachment anxiety and avoidance.

Locus of Control

Locus of control is a construct developed by Julian Rotter (1966) from his larger personality theory, referred to as social learning theory. The social learning theory states that one's personality is a result of the individual's interaction with his or her environment. Behavior cannot, and should not, be viewed as an automatic response to stimuli, but rather an interaction of the individual's own personal experiences and the environment.

Bowlby (1988) affirmed that a child who is securely attached to his or her parent would freely explore the environment based on an internal representation that the parent would be available to meet the child's needs in a responsive and appropriate manner. Gordon, Nowicki and Wichern (1981) noted that parents who encouraged age-appropriate independence helped their children develop internal representations of self that viewed their actions as making differences in their futures. This bolstered the child's sense of security, as well as trust in self and others. The ability to encourage a child's free exploration and autonomy resulted from the parents' own securely attached internal working models, and it is this trust in self that is associated with an internal locus of control. Austrin and Aubuchon (1979) reported that there is substantial evidence in the literature that trust and trustworthiness are often associated with individuals who have an internal locus of control. Accordingly, an internal locus of control in the child is based upon a parent-child relationship that is built from a parental foundation of acceptance, positive involvement, nurturance, approval, and protection. Conversely, parents who do not encourage age-appropriate independence may have children who develop a more external locus of control. Ultimately, children with an internal locus of control are inclined to take responsibility for their actions, are not easily influenced by the opinions of others, and tend to do better at tasks when they can work at a personal pace. In contrast, children with an external

locus of control tend to blame outside circumstances for their mistakes, and to attribute their successes to luck rather than to their own efforts (Gordon et al., 1981). While exploring locus of control in children, it is important to also note gender and cultural differences among this population. Schultz and Schultz (2005) reported that a significant difference in locus of control has not been found among male and female in the United States. However, these authors noted that there were specific gender-based differences, based upon certain items used to assess locus of control. For example, Shultz and Shultz (2005) cited evidence that males may have a greater internal locus for questions related to academic achievement. Similarly, the question of whether people from different cultures vary in locus of control has been an area researched by social psychologists. Japanese people tend to be more external in locus of control orientation than people in the U.S., whereas differences in locus of control between different countries within Europe, and between the U.S. and Europe, tend to be small (Berry, Poortinga, Segall & Dasen, 1992). Berry et al. (1992) reported that different ethnic groups within the United States have been compared with regard to locus of control, and found that African Americans in the U.S. are more external than Whites, even when socioeconomic status is controlled for.

Research suggests that the consequences of an external locus of control have been associated with childhood anxiety, childhood depression, and poor academic achievement. An external locus of control has also been found to be more prevalent among adolescent delinquent females and conduct-disordered adolescent males (Andreou 2002).

These individuals, according to Rotter's (1966) social learning theory, are easily influenced by the opinions of others, and are more likely to pay attention to the importance of the individual opinion-holder, while people with an internal locus of control pay more attention to the subject matter regardless of the presenter. There is also a relationship between a child's

locus of control and his or her ability to delay gratification. Children with an internal locus of control are relatively successful in the delay of gratification, while children with an external locus of control are likely to make less of an effort to exert self-control because they doubt their abilities to influence events.

According to Holt, Clark, Kreuter and Schar (2000), as stated in the social learning theory construct, locus of control of reinforcement refers to the extent to which individuals believe that the behaviors are causally related to the resulting outcomes (internal), or they believe that the outcomes are determined by external factors such as luck, powerful others or fate (external). Likewise, Holt et al. reported that having an internal locus of control has been associated with information seeking, autonomous decision making, and having a sense of well-being. Having an external locus of control has been linked to depression, anxiety and being less able to cope with life stressors.

The powerful ramifications associated with locus of control have prompted researchers to examine parenting styles, and how variations in parental responsiveness, rejection, intrusion, and overprotection may facilitate a child's development of either an internal or external locus of control. Several parenting factors have been associated with children's having an internal locus of control. These include consistency of parental discipline (Halpin, Halpin, & Whiddon, 1980) and parental warmth (Gordon et al., 1981). McClun and Merrell (1998) found that children of authoritative parents have a more internal locus of control, compared to children of parents with more extreme parenting styles (i.e., authoritarian and permissive).

The abundant research on parenting styles, attachment styles and locus of control all point to the same outcome—that these variables influence a child's behaviors. More

importantly, based on the interactions and dynamics of these various systems, an adolescent peer-relating style is developed.

Bullying Behaviors

One such adolescent peer-relating characteristic that has long been perceived as an inevitable part of growing up is bullying. In 1999, the U.S. Departments of Education and Justice estimated that almost 1 million students 12 to 18 years of age (4%) reported being afraid during the previous six months that they would be attacked or harmed in the school vicinity. Five percent reported avoiding one or more places in school, and 13% reported being targets of hate-related language (Kaufman 2001).

In 2001, the National Institute of Child Health and Human Development published the first nationally representative research on bullying (Nansel et al., 2001). Of the 15,686 public and private school students in grades 6 through 10 who were surveyed, 17% reported being bullied "sometimes" or more frequently during the school term, and 19% reported bullying others "sometimes" or more often. Six percent reported that they had both bullied others and been bullied themselves.

According to a nationally representative survey conducted by the National Institute of Child Health and Human Development (NICHD), as cited in Nansel et al. (2001), 13% of students in grades 6 through 10 engage in moderate to frequent bullying, and 11% of students report similar levels of victimization. The prevalence of bullying is highest among middle-school populations (National Center for Education Statistics, 1995; U.S. Department of Justice, Bureau of Justice Statistics, 1998, as cited in Haynie, Nansel, Eitel, Crump, Saylor, Yu & Simons-Morton (2001), and victimization rates are reported up to 30% in this age group. Both bullying and victimization are associated with long-term negative outcomes for children. Victims exhibit

low self-esteem, poor school performance, anxiety, and depression (Juvonen, Nishina & Graham, 2000; Slee, 1995). Bullies are at increased risk for additional behavioral problems (Bosworth, Espelage & Simon, 1999; Haynie, et al., 2001; Nansel et al., 2001), and are more likely to have criminal records as adults (Olweus, 1991). Identifying developmental influences on bullying behavior represents an important step in guiding intervention efforts with both bullies and victims.

Building on previously reported bullying information, Wang, Iannotti and Nansel (2009) conducted a study whereby data was obtained from the Health Behavior in School-Aged Children (HBSC) survey of 2005. This current survey was based upon a nationally representative sample of 6th- through 10th-grade students, culminating in a total totaling 7,182 students. The assessment tool used to conduct this survey was The Olweus Bully/Victim Questionnaire, which measures physical, verbal, and relational forms of bullying. Two additional items were added to this survey, in order to assess cyber-bulling. The overall results of this study indicated that the prevalence rates of having bullied others, or having been bullied, at school at least once in the last 12 months were 20.8% for physical bullying, 53.6% for verbal bullying, 51.4% for social bullying and 13.6% for cyber-bullying. Boys were more involved in physical or verbal bullying, whereas girls were more involved in relational bullying. Boys were more likely to be cyber-bullies, whereas girls were more likely to be cyber-victims.

Based on the foregoing review of the literature, one aspect of the present study included an examination of how an adolescent's attachment style or internal working model leads to involvement in bullying during the middle- and high-school years. Previous studies have identified elements of the parent-child relationship that predict bullying and victimization. These include discipline interactions involving escalating coercion (Reid, & Patterson, 1989), parental

responsiveness and intrusiveness (Ladd & Ladd, 1998), and child perceptions of parents' emotional expressiveness (Stevens, De Bourdeaudhuij & Van Oost, 2002). However, attachment theory provides a potentially useful conceptual framework for linking problematic parent-child relationships to peer bullying.

Attachment theorists have posited that healthy parent-child relationships serve as secure bases from which children can explore their environments (Bowlby, 1988). Children whose parents are sensitive and responsive can depend on a caregiver's availability and use consistent strategies to elicit nurturance. These children develop internal working models of themselves as worthy of love, and of others as willing to provide support (Mikulincer & Nachshon, 1991). Bowlby (1988) defined internal working models as a set of rules for processing social information. They emerge from early attachment experiences and guide subsequent interpersonal behaviors.

Children with appropriately sensitive and responsive parents develop a secure attachment with positive internal working models of themselves and others. Securely attached children are able to separate from attachment figures with confidence and elicit help and comfort from others when they feel threatened. Parent-child relationships that fail to provide security have a detrimental effect on the way children perceive themselves and respond to others. Ainsworth, Bell and Stayton (1971), Main (2000), and Main and Solomon (1986) have defined three commonly accepted subtypes of insecure attachment: Anxious-avoidant attachment characterizes children who expect that others will be unresponsive, and they typically avoid close relationships; anxious-ambivalent attachment describes children who expect that others will be unpredictable, and they fear abandonment while desiring heightened closeness. Based on Main and Solomon's (1990) observations, an additional insecure attachment-style classification was

introduced, as "disorganized/disoriented" (p. 121). Main and Solomon observed that individuals with a disorganized/disoriented attachment-style have a limited capacity to function in an organized, coherent manner. This disorganized form of attachment has been noted to occur in response to the caregiver's frightened, frightening, or disoriented behavior with the child (Main & Hesse, 1990). The parents of children classified as disorganized/disoriented often had a primary caregiver with "unresolved trauma or grief" which manifested itself as a disoriented narrative account childhood (Hesse, 1999). This disoriented narrative, or lack of resolution, with regard to trauma or loss can lead to parental behaviors that generate unsolvable and problematic situations for the child. The experiences of the child who develops a disorganized attachment are such that the caregiver is actually the source of alarm, fear, and terror, so the child cannot turn to the attachment figure to be soothed (Main & Hesse, 1990).

Early childhood attachment has been shown to influence many aspects of interpersonal behavior, including bullying during the preschool years (LaFreniere & Sroufe, 1985; Troy & Sroufe, 1987). Similarly, hostile attitudes are also related to aggressive behavior and bullying. Slaby and Guerra (1988) found that high school students who had favorable attitudes about using aggression behaved more aggressively with their peers. McConville and Cornell (2003) established that aggressive attitudes among middle school students predicted aggressive behavior and bullying. To this author's knowledge, the current study is the first to involve measuring the influence of the remembered parenting styles on bullying in middle school, a period when bullying is reported to be most prevalent.

Another area identified by researcher is how attachment styles or internal working models may lead to bullying during adolescence. Crittendon and Ainsworth (1989) hypothesized that, because insecurely attached children view the world as an unsafe place, they would

selectively attend to hostile social cues by their peers. Dodge, Bates and Pettit (2003) demonstrated that children with physically abusive parents, a parenting style strongly associated with a disorganized/disoriented insecure attachment (Main, 2000; Main & Goldwyn, 1985), tended to attribute hostile intent to benign peer interactions.

Following in this vein, and particularly pertinent to bullying, Athens (1997), a sociologist and researcher in the area of violent crimes, has questioned why some individuals become seriously aggressive and physically violent, while most individuals do not. A focused review of Athens' schema for developing violent behaviors has suggested that the social process by which the individual acquires a physically aggressive/violent behavior pattern follows a predicable course. Athens explained that individuals who ultimately commit brutal crimes may begin as relatively benign individuals, but who as children and adolescents underwent severe physical abuse by parents or other family members. This severe and long-term process has been identified by Athens as "violentization" and encompasses four stages: 1) brutalization, a stage that involves the teaching and demonstration of violent behavior, which includes threatening to use physical force, observing the use of physical force, and learning how to use physical force, 2) defiance, the stage in which the leaders of the genocide enforce and implement their belief system to justify the use of violence, 3) violent dominance engagements, the stage which focuses on threatening others and using violent behavior, and 4) virulency, the stage in which the genocide is in operation and the person or group has defined themselves as violent or dangerous. Athens utilized vivid personal accounts obtained from in-depth interviews with hardened violent criminals to support his theory. One may presume that the process of violentization may stem from an attachment style characterized as disorganized/disoriented.

Statement of Problem

Bullying behaviors represent a serious threat to healthy development during the adolescent years. Bullies are at increased risk of becoming involved in antisocial activities such as delinquency and crime, as well as abuse of alcohol and other substances (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Loeber & Dishion, 1983; Nansel et al., 2001, 2003; Olweus, 1993a, 1993b). Haynie, et al. (2001) concluded that "bullying might allow children to achieve their immediate goals without learning socially acceptable ways to negotiate with others, resulting in persistent maladaptive patterns" (p. 31). As a result of limited information with regard to pro-social/bullying behaviors and how these variables may be influenced by perceived parenting styles and locus of control, as well as parental- and peer-attachment, this study explored these relationships. Adolescent pro-social, bullying/victim behaviors are seemingly isomorphic, since they affect not only the individual child, but pro-social, bully/victim behaviors are also influenced by family, peers, school and community as well. Therefore, the goal of the present study was to investigate the relationships among perceived parenting styles, locus of control, parental- and peer-attachment styles, and bullying behavior.

Significance of Study

As a result of the paucity of research with respect to the relationship between family factors and the development of bullying behaviors, the current inquiry was conducted to explore the various influences of perceived parenting styles (emotional warmth, anxious rearing, overprotection, and rejection), parent- and peer-attachment styles, and locus of control on bullying behaviors. This study may help to determine if components of parenting styles specifically, emotional warmth, anxious rearing, overprotection and rejection, in addition to locus of control, secure/insecure parental attachment and peer-related attachment styles (secure, ambivalent, avoidant)—influence bullying behaviors in male and female adolescents.

According to DeVoe, Kaufman, Miller, Noonan, Snyder & Baum, (2004), students are victims of a spectrum of problem behaviors at school, ranging from minor disciplinary problems to criminal victimization. Bullying is just one form of the spectrum that concerns students, educators, and parents, because of its potential detriment to the students' well-being. According to some estimates, 160,000 children skip school each day because of intimidation by their peers (Nansel et al., 2001; Nansel et al., 2003; Haynie et al., 2001). The National Center for Educational Statistics (2007) reported that 77% of middle and high school students in small Midwestern towns have been bullied. Likewise, a study from the National Institutes of Health published in the Journal of the American Medical Association reveals that almost a third of 6thto-10th graders—5.7 million children nationwide—have have experienced some kind of bullying (Nansel et al., 2001). Both bullying and victimization are associated with long-term negative outcomes for children. Victims exhibit low self-esteem, poor school performance, anxiety, and depression (Juvonen et al., 2000; Slee, 1995). Bullies are at increased risk for additional behavioral problems (Bosworth et al., 1999; Haynie et al., 2001; Nansel et al., 2001), and are more likely to have criminal records as adults (Olweus, 1991). Identifying developmental influences on bullying behavior represents an important step in guiding intervention efforts with both bullies and victims.

Delimitations

Participants for this research were comprised of 11- to 14-year-old middle school male and female adolescents who were enrolled in a public charter school located in the urban/suburban area of New Jersey. Generalizations beyond the description provided for the population utilized in this study are not possible. Therefore, the results are restricted to this

population. Likewise, there are demographic variables in this sample population (socioeconomic status, cultural background, and family makeup) that again will limit the ability of the results from this study to be generalized to all populations. The study will also be circumscribed by the use of self-report measures. Such measures, by their very nature, represent the subjective views of the adolescent participants. Furthermore, the assessment measures utilized are based on the adolescents' perceptions of family dynamics and bullying behaviors. Therefore, only one member's view of family functioning and dynamics will be presented. Another identifiable limitation within this research study is the lack of adequate self-report, child-administered assessments that tap the child-caregiver attachment paradigm based on both Ainsworth's (1969) strange situation categories, and the addition of the fourth disorganized/disoriented classification by Main and Solomon (1990). Thus, this current research involved a self-report peer-related attachment scale in order to identify and classify secure, anxious/ambivalent and avoidant peer attachment styles, as well as a self-report parent-attachment inventory to assess secure and insecure attachment categories.

Because of the non-experimental nature of the research design, the exploration of additional variables, such as substance abuse and/or verbal/physical abuse in family dynamics or and pro-social/bullying behaviors may be considered confounding variables. Based on the foregoing investigation, however, analysis of these and possible other variables exceed the scope and nature of the current study; and, therefore, may be considered an additional limitation.

Summary

Negative family relationships and poor parenting styles have repeatedly been identified as risk factors for children and adolescents who display bullying behaviors, as well as for those who are victimized. Perry, Hodges, and Egan (2001) reviewed various determinants of peer

victimization, and reported that insecure attachment and/or overprotective parenting styles are frequently risk factors for peer victimization. Perry et al. further stated that bullying behavior is often associated with parents who use verbally demeaning language and/or physical discipline. Likewise, individuals who exhibit bullying behaviors are more likely to spend a great deal of time without adult supervision (Espelage, Bosworth, & Simon, 2001), and with poor family functioning (Rigby, 1994). Families of bullies are often described as lacking in warmth and closeness and as focused on power (Rigby, 1994). Victims, on the other hand, have reported more negative family functioning than pro-social children. In sum, inappropriate parenting styles may predispose children and adolescents towards bullying behaviors and victimization. In addition, low family support may be associated with victimization (Stevens et al., 2002).

Ultimately, this research study set out to understand the dynamic and/or significant relationships among peer- and parental-attachment styles, as well as the adolescent remembrances of parenting styles and locus of control, while addressing issues of pro-social, bullying and victimized behaviors which is the cornerstone in determining various treatment modalities and services for this pervasive and systemic problem.

CHAPTER II

LITERATURE REVIEW

Introduction

The early seeds of inspiration found in the study of parental rearing behavior (Bell and Chapman 1986), and the resulting memories of these behaviors (Main, Kaplan, & Cassidy, 1985), are found in Bowlby's (1969) conception of a "behavioral system," which arises from the child's instinctual need for proximity-seeking and the mothers' responses to such behaviors. It is not my intention to resolve the issues of temperament (Kagaen, 1989), or to become part of the nature/nurture debate (Harris, 1998), but I do aim to explore, in one place, the relationship between parenting styles, locus of control, parental-attachment and peer-attachment styles, and bullying behavior.

This chapter contains a review of literature pertaining to the current study. It includes information about family dynamics, parenting styles, secure and insecure attachments, locus of control, and their relationships to prosocial, bullying, and victim behaviors.

The Bowlby/Ainsworth Model of Attachment

To adequately understand Bowlby's attachment theory (1969, 1973, 1980) it is important to understand that Bowlby, a trained psychoanalyst (Cassidy & Shaver, 1999; Bowlby, 1988), sought to integrate the modern structural approach to cognitive development (Harlow, 1962) with the psychobiology theories of Adolf Meyer (1951-1952), the sociobiology theories of E. O. Wilson (1974), the control systems theory of Weiner (1948) and von Bertalanffy (1968), and the ethological studies of Lorenz (1952) and Tinbergin (1951). Sroufe and Waters (1977) explained that

Bowlby's (1969) conceptualization is the starting point for an organizational view of attachment and remains the definitive work on the topic. By casting attachment in systems theory terms of set goals, goal correction, and function, he removed the construct from encumbrance by drive reduction and causal trait concepts. Attachment refers to species general (and even crossspecies-mammalian) behavior systems, selected for their effect on the reproductive success of individuals in the environment in which they evolved. Viewing protection from predation as the biological function and proximity as the set goal of the attachment system, Bowlby argued that diverse behaviors such as smiling, clinging, and signaling could be seen as functionally related; all lead to the same predictable outcome, caregiverinfant proximity. Moreover, the set goal correction concept suggested that proximity promoting behaviors such as locomotion and crying would be automatically activated when information reached the infant that a (context influenced) proximity-distance threshold had been exceeded. In the manner of a feedback loop such behaviors would remain operative until (and only until) proximity was reestablished. In this way Bowlby sought to remove any drive considerations or any need for an attachment motive. Attachment behaviors could be activated without requiring an attachment drive and could be terminated without invoking concepts of expended or rechanneled energy. (p. 2)

In one of Bowlby's (1958) earliest monographs on attachment theory (The Nature of the Child's Tie to His Mother), he put the phenomenon of attachment into the Darwinian model of

survival. He argued that "the theory is so advanced that in man's environment of evolutionary adaptedness the function of attachment is protection from predators..." (Bowlby 1973, p. 143). As this idea matured, Bowlby (1986) expressed that he was "using attachment to mean a pattern of behaviour which is care seeking and care-eliciting from an individual who feels they [sic] are less capable of dealing with the world than the person to whom they are seeking care" (p. 11). This definition of attachment was clearly drawn from the accumulating evidence at that time indicating that "...human beings of all ages are happiest and able to deploy their talents to the best advantages when they are confident that, standing behind them, there are one or more trusted persons who will come to their aid should difficulties arise. The person trusted, also known as an attachment figure...can be considered as providing his (or her) companion with a secure base from which to operate...[T]his requirement of an attachment figure, a secure personal base, is by no means confined to children, though, because of its urgency during the early years, it is during those years that it is most evident and has been most studied" (Van Dijken 1998, p. 1).

The theory of attachment became Bowlby's secure base. He spent his entire career proving that this instinctual, evolutionary survival behavior, which he called "attachment", could cause serious and long-lasting harm to children when the attachment bond between mother and child was threatened by separation. Bowlby went on to caution that it was the mother's separating from the child that gave rise to fear and anxiety, and not the child's leaving the mother. Bowlby (1973) explained that it is the separation from the mother figure "unwillingly" (p. 30) that causes distress. However, before Bowlby could establish separation as a pathogenic phenomenon, he had to demonstrate that attachment bonds could be behaviorally demonstrated.

John Bowlby was a man who made waves. Those waves became currents, and those currents became great bodies of knowledge that influenced the education, psychological development, and treatment of children. Nevertheless, Bowlby clearly developed ideas that went against the tide of such seminal thinkers as Sigmund Freud, Melanie Klein, Sandor Ferenci, Anna Freud, and even Schmideberg, Klein's daughter (Van Dijken, 1998). Sir Cyril Burt, one of Bowlby's early mentors, was fond of telling his psychology students that "[t]o study a mind without knowing its milieu is like studying a fish without seeing water" (Woolridge, 1994, p. 88). His classroom lectures greatly influenced Bowlby, who by 1939 was impressed with the idea that separation from the mother in early childhood was a major feature in delinquency.

In the pre-World War II period, little was understood about the emotional bonds that developed between mother and child. The generally accepted theory in psychoanalytic thinking was called the "cupboard love theory... children learned to love their mother because they were fed by her" (Van Dijken, 1998, p. 5). In 1925, the work of John Watson and his Little Albert experiment influenced child rearing in United States and Europe (Cohen 1979). Leading physicians and psychologists of the time cautioned parents that too much handling or fondling of children could cause medical illness or the child being spoiled. Writing in his 1928 best seller, The Psychological Care of the Child and Infant, Watson claimed that "too much mother love" (p. 28) was dangerous and could lead to dire consequences, including "invalidism" (p. 28). The response to this book was overwhelming. It is not known whether the young Bowlby was exposed to this book, but other influential thinkers and popular publications received it this way: "Bertrand Russell proclaimed it the first child-rearing book of scientific merit. Watson, he said, triumphed by studying babies in the manner that men of science study the amoebae. The Atlantic Monthly called Watson's writings indispensable, and The New York Times said that

Watson had begun a new epoch in the intellectual history of man. Even Parents Magazine asserted that Watson's theories should be read by every enlightened parent (Blum, 2002, p. 39). Such was the wind of child care that John Bowlby and his attachment theory sailed against.

Separation

Bowlby (1973) spent the first three chapters of Volume 2 in his series on separation, establishing that attachment did exist. Based on Bowlby's paradigm, it was determined that an infant's distress during separation was an activating behavior that elicited proximity-seeking for the caregiver, and thus was a demonstration of attachment. In his early days, Bowlby used the work of Robertson to establish the fact that distress did result from the child's separation from the mother. The experimental work of Ainsworth was also very essential to Bowlby's establishing that attachment was a survival force that could not be tampered with by separation from the mother. To do this, he had to overcome the objections of some serious thinkers like Sigmund Freud (p. 28) and Melanie Klein (p. 28). This disagreement with the very influential Klein was not mentioned directly by Bowlby, but was clearly on his mind. Not only did he have to overcome the objections of his teachers, but he also had to overcome the prevailing ideas that children in hospitals or foundling homes needed no more than regular nourishment. In the 1973 monograph, Bowlby posed pointed questions to Klein's prevailing position that anxiety in young children is a function of "persecutory and depressive anxiety" (p. 31). Bowlby asserted that, if a conclusion such as Klein's is true, then "[w]hy should a child be distressed in his mother's absence? What is he afraid of? Why should he be anxious when she is missing and cannot be found? Why is he apprehensive lest she leave him again?" (p. 31).

Bowlby's questions demonstrated that he had finally become unequivocal in thinking that attachment theory was a stable and verifiable construct. Bowlby (1973) confidently presented the bond between mother and child as "essential for mental health" (p. xi), and that "the infant

and young child should experience a warm, intimate and continuous relationship with his mother" (p. xi). Bowlby (1973) set out to demonstrate that any disruption of this relationship between the critical ages of six months to five years could, and did, result in a phase that Bowlby called "protest" (p. 27). Here, the child "tries by all means available to him to recover his mother" (p. 26). The following phase, according to Bowlby, is a behavior called "despair" (p. 27). In this phase, Bowlby believed that the child still longs for the mother's return and despairs "of recovering her" (p.26). The final phase is called "detachment" (p. 27). According to Bowlby, while in the detachment phase, the child seemingly loses interest in the mother.

These three phases took Bowlby far on his path towards contradicting prevailing psychoanalytic theory. Bowlby was also not comfortable with the ubiquitous use of the word "anxiety", as it abounded in the psychoanalytic literature. He (1973) stated that "it gradually became apparent that each of the three main phases of the response of a young child to separation is related to one or another of the central issues of psychoanalytic theory" (p. 27). The traditional psychoanalytic paradigm after Freud (p. 29) was to think that a defense mechanism such as repression leads to anxiety. However, Bowlby determined that this schema of psychoanalytic theory was, in fact, backward. Bowlby's conceptual schema implied that anxiety resulting from the mother's unavailability to the child was a step in the schema sequence that led to the later defense of detachment. Bowlby stated that "the phase of protest is found to raise the problem of separation anxiety; despair that of grief and mourning; detachment that of defense" (p. 27).

Once Bowlby (1973) was certain that the progress and dynamics of separation involved anxiety, despair, and, finally, defense, he set about to dissect the various theories of the time. Melanie Klein (1945) refused to see that anxiety could arise from anything other than internal

struggles. In fact, she believed that the child's external reality had very little therapeutic significance. Bowlby, on the other hand, viewed anxiety as a reaction to external events regarding separation, rather than to any internal struggle. Psychoanalytic theorists, however, had to deal with Klein, who was a well-respected thinker on the problems of childhood. Nevertheless, because Bowlby concluded that anxiety arises from separation, all theories of anxiety were subject to challenge.

Having advanced his position that separation is the precursor of anxiety, Bowlby (1973) explored its impact on a number of clinical issues. The first was the "dependent and overdependent" (p. 212) child. He categorized the behavior of inconsolable crying or excessive clinging demonstrated by the overdependent child as "anxious attachment or insecure attachment" (p. 213). Bowlby conclusively connected actual separation to observed behavior.

Bowlby (1973) reviewed the work of Heincke and Westheimer, in which two groups of children were compared on the amount of play therapy aggression they demonstrated after being subjected to varying degrees of separation from their families. In this experiment, the control group was not separated from the family, while the experimental group spent "two or more weeks in a residential nursery" (p. 245). "Of the separated children, eight attacked a doll that had already been identified by the child as a mother or father doll; none of the children living at home did so" (p. 245). The results supported Bowlby's argument that separation was a factor in developing anxiety because the experimental group demonstrated more aggressive doll-play during the test period. To Bowlby, this was further evidence of the robustness of his model of separation. He ultimately used his attachment theories to explain phobias in children, including an analysis of agoraphobia.

The Bowlby-Harlow Connection

At the same time that John Bowlby, in England, was attempting to establish the paradigm of attachment and fear of separation (anxiety) as the primary feature in children's emotional life, Harry Harlow was trying to identify alternative concepts to drive theory (Blum, 2002). Harlow looked at the relationship between mother and child, and asked whether the mother was one great feeding machine, or whether something else involved. This concept led Harlow to investigate what he called "contact comfort", the results of which are the now famous wire mother/cloth mother experiments. Harlow's work with monkeys could not have been more timely for Bowlby (Blum 2002). Shortly after the cloth-mother, wire mother/cloth mother experiments began, Bowlby wrote to Harlow and sent him a draft copy of the Nature of the Child's Tie to His Mother, in which he described the ideas that were later to be called "attachment theory". Harlow wrote back, "It appears that your interests are closely akin to a research program I am developing on maternal responses in monkeys" (Blum, 2002, p. 169). In Harlow's 1958 APA presidential address, the Nature of Love, he quoted Bowlby's eloquent description of the mother-child relationship as a deep and abiding bond between mother and child. In the end, the contributions of two remarkable and wildly different men were to take the ideas of love and attachment center stage in the study of the mother-child relationship.

The Bowlby-Klein Controversy

John Bowlby wanted to distance himself from the ideas of Klein, which were diametrically opposed to his own. Did this separation from his colleague and teacher cause Bowlby anxiety? We can only speculate. However, it did set the young Bowlby sailing against the tides of the current psychoanalytic thinking. Klein, for one, "did not seek the cooperation of parents" (Van Dijken, 1998, p. 67) as did Bowlby, because "she thought their reports were likely to be distorted by their own unconscious conflicts" (Van Dijken, 1998, p. 67), and because she

had very little use for the outward reality of the child. This matter was further complicated for Bowlby by Klein's insistence that the only process that could be analyzed was the child's inner life. Bowlby, on the other hand, believed that environmental factors, in addition to instinctual drives, were pathogenic. While there was certainly an interplay of dependent/independent (mother/child) issues involved in their differences, Bowlby was Klein's student and her friend and colleague. The major problem for Bowlby was Klein's (1945) insistence that the infant's first relationship with the mother was through the breast. By this, she viewed the mother as either a "good breast" (p. 78) or a "bad breast" (p. 79) (Van Dijken, 1998). The British Psychoanalytical Society positively acknowledged Klein's ideas and views of the mother-infant relationship. However, Bowlby commented that separation and loss could account for the pathology noted by Klein. It was at this time that Bowlby realized that real-life experiences and situations were alien to Kleinian theory. By rejecting the Kleinian approach, Bowlby separated from his teacher and friend to become the author of attachment theory, a well-accepted construct in mainstream psychological thinking (Van Dijken, 1998).

John Bowlby and Systemic Models

The child's world, according to John Bowlby, was crystal clear. The interactive and systemic relationship between the mother and child in the context of the family was predictive of future well-being. Without the secure base provided by a mother, the child could not thrive and understand the subtle interactive "dance" that existed between mother and child that was necessary for the child to have friends, build relationships, and explore the world around. The concept of separation freed clinical thinking from the rigid adherence to a child's inner world that could neither be observed nor measured.

One of Bowlby's most significant contributions was his observation that it was impossible to understand the child's fantasy life without adequately studying the society that surrounded the child. These early understandings enabled him to study the family's impact on the presenting problem. Because of his careful observation, Bowlby is sometimes credited with the seminal ideas that led to the development of family therapy.

The work of Bowlby and Harlow may be considered synergistic; however, ultimately, Bowlby prevailed. Later work by Harlow revealed that his cloth mother monkeys did not develop normally. They could not mate or relate to their peers. While Harlow's work may have stimulated the scientific community to give Bowlby's work the recognition it deserved, it was the inability of Harlow's monkeys to be productive members of their respective families that demonstrated that the interactive bond developed between the mother and child was central to healthy development. The mother was not just a good breast or a bad breast, but part of a complex feedback system that was both instinctive and learned, and both were needed if human life was to continue. Bowlby (1973) stated, "The...anxiety to the inaccessibility of the mother can usefully be regarded as a basic adaptive response, namely a response that during the course of evaluation has become an intrinsic part of man's behavioral repertoire because of its contribution to species survival" (p. 178). Bowlby (1973) reasoned that the

family experience of those who grow up anxious and fearful is found to be characterized not only by uncertainty about parental support but often also by covert yet strongly distorting parental pressures: pressure on the child, for example, to act as caretaker for a parent; or to adopt and thereby confirm, a parent's false model—of self, of child, and of their relationship (p. 322).

According to Bowlby (1988), psychoanalysts were putting far too much emphasis on the child's fantasy world, and far too little on actual events that transpired in their lives. Bowlby (1940) expressed this view in a motivating paper, The Influence of Early Environment in the Development of Neurosis and Neurotic Character. This document contained many of the ideas that were later to become the central components of attachment theory. In emphasizing the influence of early family environment on the development of neurosis, Bowlby claimed that, "Psychoanalysts like the nurseryman should study intensively, rigorously, and at first hand, the nature of the organism, the properties of the soil and the interaction of the two" (Bowlby, 1940 p. 23).

Following his own directive to conduct more rigorous studies, Bowlby (1988) used case notes from his work at the Child Guidance Clinic to prepare his classic paper, Forty-four Juvenile Thieves, Their Characters and Home Lives. A significant number of the children turned out to have what Bowlby termed "affectionless characters" (Bowlby, 1944, p. 23), a phenomenon he linked to their histories of maternal deprivation, anxiety, and separation.

Bowlby (1988) returned from the Army in 1945. It was at this time that he became head of the Children's Department at the Tavistock Clinic. Wanting to highlight the importance of the parent-child relationship, Bowlby renamed his unit "The Department for Children and Parents." Unlike many of the psychoanalysts of his time, Bowlby was extremely interested in determining the actual patterns of family interaction involved in both healthy and unhealthy development.

Under Bowlby's direction, the Department for Children and Parents began running a clinic, conducting training, and embarking on research. Unfortunately, people with a Kleinian orientation, who viewed Bowlby's emphasis on family interactional patterns as irrelevant, did much of the clinical work within the department. Because of this, Bowlby founded his own

research unit, since he was unable use the department's clinical cases for the research he desired to conduct. His research focused on mother-child separation.

In 1948, after obtaining a research grant, Bowlby (1988) hired James Robertson to conduct observations of young children who were hospitalized, institutionalized, or otherwise separated from their parents, because separation is a precise event that either happens or does not. Moreover, he was able to observe the effects of the child-parent relationship and the more subtle influences of relational and familial interactions.

After two years of data collection in hospitals, Robertson could no longer continue as an uninvolved scientist. He was compelled to act on behalf of the children he had been observing, and this led to the deeply moving film "A Two-Year-Old Goes to Hospital" (Robertson, 1953, 1953b). In collaboration with Bowlby, the filming was carefully planned to ensure that no one could later claim that the film was biased. Bowlby and Robertson decided to use time sampling, a documentation process in which a clock is present in each scene of the film to prove that the segments were not specially selected. Not only did this film play a crucial role in the development of attachment theory, but it also helped improve the fate of children in hospitals in Britain and many other parts of the world.

Van Dijken (1998) reported that, in light of the research on separation that was going on at the Tavistock Centre, Bowlby received and accepted a request of the World Health Organization (WHO) to write a report on the fate of homeless children in postwar Europe. The WHO subsequently published the article in 1951 under the title "Maternal Care and Mental Health."

According to Van Dijken (1998), the task of writing the WHO report made Bowlby aware that the data he was gathering required a construct that could explain the profound effects of separation and deprivation experiences on young children. Bowlby then met Robert Hinde, under whose generous guidance he set out attempting to master the ideas and concepts of ethology. It was his hope that they might help him gain a deeper understanding of the nature of the child's tie to the mother. In 1954, Robert Hinde began attending seminars at the Tavistock Centre, and later drew Bowlby's attention to Harlow's work with rhesus monkeys.

Although Bowlby's attachment theory (1969, 1980) was originally designed to explain the emotional bond between infants and their caregivers, Bowlby (1979) believed that attachment is an important component of human experience "from the cradle to the grave" (p. 129). He viewed attachment relationships as playing a powerful role in adults' emotional lives. Bowlby (1988) asserted that many intense emotions arise during the formation, maintenance, disruption, and renewal of attachment relationships. The formation of a bond is described as falling in love, maintaining a bond as loving someone, and losing a partner as grieving over someone. Similarly, the threat of loss can arouse anxiety, and actual loss gives rise to sorrow, while each of these situations is also likely to arouse anger. The unchallenged maintenance of a bond is experienced as a source of security, and the renewal of a bond as a source of joy. Because such emotions are usually a reflection of the state of a person's bonds of affection, the psychology and psychopathology of emotion are found to be in large part the psychology and psychopathology of affectional bonds (Bowlby, 1980).

Ethology

According to Hinde and Spencer-Booth (1971), ethology is concerned with the adaptive and/or survival values of behavior and its evolutionary history. Reportedly, it was first applied to research on children in the 1960s, but has become more influential in recent years. The origins of ethology can be traced back to the work of Charles Darwin, but it was two European

zoologists, Lorenz and Tinbergen (as cited in Hinde and Spencer-Booth, 1971), who observed the behavioral patterns of animals in their natural habitats. From these observations, Lorenz and Tinbergen noted behavioral patterns that they believed promoted survival. The most well-known of these patterns is "imprinting." They observed that baby birds, in order to ensure that they stayed close to the mother, were fed and protected from danger by following the mother. These observations have led to the realization that several aspects of children's social behavior, including emotional expressions, cooperation, and social play, often resemble those of our primate ancestors (Bretherton, 1992). Since ethologists believe that children's behaviors can be best understood in terms of their adaptive value, they looked for a greater understanding of the entire context surrounding the organism including, but not limited to physical, social, and cultural aspects (Hinde & Spencer-Booth, 1971).

Bowlby and Attachment

Bowlby (1969), inspired by Lorenz's 1952 studies of imprinting in baby geese, was the first to apply this concept to the infant-caregiver bond. He believed that the human baby, like the young of most animals, is equipped with a set of built-in behaviors that help keep the parent nearby, increasing the chances that the infant will be protected. Contact with the parent also ensures that the baby will be fed, but Bowlby was careful to point out that feeding is not the basis of attachment.

According to Bowlby (1988), the infant's relationship to the parent begins as a set of innate signals that call the adult to the baby's side. As the infant matures, a real affectionate bond develops. This is supported by new cognitive and emotional capacities, as well as a history of consistent, sensitive, responsive caregiving by the parent. Out of these experiences, children formed what Bowlby termed "a long-lasting affectional bond" with their caregivers, and that

allowed them to use attachment figures as secure bases across time and distance. The inner representation, or internal working model, of this parent-child bond becomes an important part of the infant/child personality. It is the beginnings of this internal working model, or the expectations about the availability of the attachment figure, that enables the infant to understand the likelihood of receiving support from the attachment figure during times of stress. This internal working model becomes the basis for all future close relationships during infancy, childhood, adolescence and adult life.

The Beginning of Attachment Theory and Research

Bowlby (1988) suggested that the attachment behaviors of one- to two-month-old infants are made up of a number of instinctual responses that function to bind the infant to the mother and the mother to the infant. These responses (i.e., sucking, clinging, and following, as well as the signaling behaviors of smiling and crying) occur rather independently during the first year of life and become increasingly integrated and focused on a mother figure during the second six months. Bowlby believed that the infant's clinging to, and following of, the caretaker was more important for attachment than the responses or sensitivity of the infant's sucking and crying.

According to Bretherton (1992), after careful discussion of infant development, Bowlby introduced ethological concepts, such as sign stimuli or social releasers. These stimuli could, in Bowlby's terms, be external or intrapsychic, a point of view that was exceedingly important, as some psychoanalysts accused Bowlby of being a behaviorist because he supposedly ignored mental phenomena. However, Bowlby was very purposeful in his language, to ensure a clear distinction between the old social-learning theory concept of dependency and the new concept of attachment, noting that attachment is not indicative of regression, but rather performs a natural, healthy function, even into adulthood.

Bretherton (1992) further posited, in a seminal paper, that Bowlby utilized Robertson's observations, as well as Harlow's groundbreaking work in order to look at the effects of maternal deprivation in rhesus monkeys. "Traditional theory," Bowlby claimed, "can explain neither the intense attachment of infants and young children to a mother figure nor their dramatic responses to separation" (p. 763). Moreover, Bretherton reported that Robertson (Robertson & Bowlby, 1952) "had identified three phases of separation response—protest (related to separation anxiety), despair (related to grief and mourning), and denial or detachment (related to defense mechanisms, especially repression). Again drawing on ethological concepts regarding the control of behavior, Bowlby maintained that infants and children experience separation anxiety when a situation activates both escape and attachment behavior but an attachment figure is not available" (p. 763). Finally, Bowlby addressed Freud's claim that "maternal overgratification is a danger in infancy" (Bretherton, 1992, p. 763). Bowlby contended that Freud failed to realize that maternal pseudoaffection and overprotection might be derived from a mother's unconscious need for overcompensation. In Bowlby's (1988) view, excessive separation anxiety is due to adverse family experiences, such as repeated threats of abandonment or rejection by a parent or sibling via illness or death, for which the child feels responsible.

The second great pioneer of attachment theory, Mary Ainsworth (1969, 1985) developed the well-known laboratory-based procedure for observing infant's internal working models in an experimental paradigm called "the strange situation" (p. 32). In the strange-situation paradigm, infants are separated briefly from their primary caregivers in an environment that is unfamiliar to them. The observation of the separation and reunification of infant to the primary caregiver was the outcome objective of the strange-situation research, and ultimately the experiment resulted in one of four patterns of behavior. Infants classified as securely attached readily explored the

environment in the presence of their primary caregivers. However, when the caregiver left the environment and a stranger entered, the infant became anxious in the presence of the stranger and avoided the person. The infant became distressed by the caregiver's brief absence, but was slowly comforted and soothed by the return of the caregiver. The infant ultimately sought contact with the caregiver and was reassured by the return. When the infant was calm and reassured by the caregiver's presence, the infant returned to exploration of the environment. The observations further revealed that some infants, who appeared to be made less anxious by a caregiver's separation, might not seek proximity with the caregiver following separation, and might not prefer the caregiver to the stranger. These infants were designated anxious/avoidant. A third category of infants, classified anxious/resistant, showed limited exploration and play in the caretaker's presence, and they tended to be highly distressed by the caretaker's leaving the room. They also had great difficulty in settling afterwards, showing struggling, stiffness, continued crying, and/or fussiness. The caregiver's presence or attempts at comforting failed to reassure the infant. Subsequently, anxiety and anger appeared to prevent the infant from obtaining comfort even when reunited with the caregiver.

Sroufe (1985, 1988) observed that secure infants' behaviors are based on the experiences of well-coordinated, sensitive interactions in which the caregiver is rarely overarousing and is able to restabilize the children's disorganizing emotional responses. Therefore, they remain relatively organized in stressful situations. Negative emotions feel less threatening and can be experienced as meaningful and communicative.

According to Sroufe (1985), children who are designated anxious/avoidant are presumed to have had experiences in which emotional arousal was not stabilized by a caregiver, or whereby the infant may have experienced overarousal, possibly through intrusive parenting.

Therefore, they overregulate their affects and avoid situations that are likely to be distressing. Likewise, children who are designated anxious/resistant are children who underregulate, heightening their expressions of distress, possibly in an effort to elicit the expectable responses of caregivers. There is a low threshold for threat, and the child becomes preoccupied with having contact with the caregiver, but frustrated even when it is available.

A fourth group of infants exhibited seemingly undirected behavior, giving the impression of disorganization and disorientation (Main & Solomon, 1986). Infants who manifested freezing, hand clapping, head banging, and the wish to escape the situation even in the presence of the caregiver were referred to as disorganized/disoriented. It was generally held that, for such infants, a caregiver had served as a source of both fear and reassurance; thus, arousal of the attachment behavioral system produced strong conflicting motivations. Not surprisingly, a history of severe neglect or physical or sexual abuse is often associated with this pattern (Main & Hesse, 1990).

Researchers across the country spent hours testing the predictive validity of the strangesituation reunion classification assessment paradigm. Many researchers sought to train with Mary Ainsworth to learn the procedure and classification system. Hundreds of studies using the strange-situation paradigm appeared in print. It seemed as if attachment and testing children in the strange situation had become synonymous with the field of attachment theory.

A Brief Overview of Assessment and Research in Attachment Theory

Currently, attachment theory and research are moving forward along several different tracks, inspired by the second and third volumes of Bowlby's attachment trilogy and by the infusion of attachment theory into corresponding theoretical perspectives.

Bretherton (1992) reported that, as a result of Mary Main's Berkeley study, psychologists are now empirically exploring the different psychological, internal, and representational aspects of attachment. These aspects are inclusive of Bowlby's idea of the intergenerational transmission of attachment patterns that had been at the center of his interests since he began his career. Likewise, attempting to translate Ainsworth's infant-mother attachment patterns was an additional source of inspiration for the study of internal working models that led to articulating the corresponding adult patterns in the adult attachment interview (Bretherton, 1992, p. 769). Parents were asked open-ended questions about their attachment relations in childhood and about the influences of these early relations on their own development.

Three distinct patterns of responding were identified: Autonomous-secure parents gave a clear and coherent account of early attachments (whether these had been satisfying or not); preoccupied parents spoke of many conflicted childhood memories about attachment, but did not draw them together into an organized, consistent picture; and, finally, dismissing parents were characterized by an inability to remember much about attachment relations in childhood. In some of the dismissing interviews, the parents' parents were idealized on a general level, but influences of early attachment experiences on later development were denied. Specific memories, when they did occur, suggested episodes of rejection. "Not only did the Adult Attachment Interview classifications correspond to Ainsworth's secure, ambivalent, and avoidant infant patterns at a conceptual level, but adult patterns were also empirically correlated with infant patterns (e.g., a dismissing parent tended to have an avoidant infant") (Bretheron, 1992, p. 769).

Bretherton (1992) reported that several assessment devices have been developed based on the strange-situation experiment. In a study of young adults in which Adult-Attachment-

Interview classifications were correlated with peer reports, similar findings were also obtained. A pictorial separation anxiety test for adolescents (p. 769) was developed, and has since been adapted for younger children. Preschoolers have been successfully assessed based on an attachment-based doll story completion task (p. 769). This tool has been validated against behavioral measures. Likewise, the simplified Attachment Questionnaire for Children (AQ-C) (Muris, Meesters, van Melick & Zwambag, 2001) is a single-item self-report measure that assesses peer attachment in children between the ages 9 and 18. The AQ-C is based on Hazan and Shaver's (1987) single item measure of adult attachment styles. The simplified version of the AQ-C utilizes three descriptions of feelings and perceptions with regard to the individuals' relationships with other children, and then asks the individual to choose the description that best fits his or her attachment style. Again, this attachment questionnaire utilizes Ainsworth et al.'s (1978) three attachment classifications.

Another self-report measure developed as a means of identifying parental and peer attachments is the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). Armsden and Greenberg (1987) devised a self-report questionnaire for individuals ages 16 through 20, in order to measure the affective and cognitive components of adolescent relationships to their parents and peers, with regard to psychological security. This measure is based on Bowlby's theory, which underscores the importance of the attachment figures' availability, responsiveness, and accessibility. In this vein, Gullone and Robinson (2005) revised Armsden and Greenberg's (1987) Inventory of Parent and Peer attachment as a vehicle for assessing parental attachment beyond infancy but prior to late adolescence. The Inventory of Parent and Peer Attachment Revised for Children (IPPA-R for Children) was modified by Gullone and Robinson (2005) from the original IPPA version in two significant ways. First, the

wording of the questions was simplified so as to promote comprehension for children and young adolescents. In addition, the original five-point Likert scale has been simplified to a three-point Likert design.

Based on these assessments, it has been determined that emotionally open responses were more often associated with secure attachment classifications or related behaviors. Finally, Waters, Crowell, Elliott, Corcoran and Treboux (2002) developed the Attachment Q-sort that can be used to assess a mother's internal working models of her child's attachment to her. In the area of attachment theory, these new assessment techniques have allowed the concept of attachment to be incorporated in other therapeutic arenas.

An Overview of Attachment Theory and Family Therapy

According to Cassidy and Shaver (1999), Bowlby wrote one of the first family-therapy papers. However, Bowlby believed that family research was too complex and, therefore, decided to research the dyadic aspects of attachment first. In a personal communication reported in Cassidy and Shaver (1999), Bowlby "never doubted, however, that family research would eventually be undertaken, and he became a steadfast supporter of family therapy" (p. 625). Cassidy and Shaver reported that Byng-Hall suggested that the reason attachment theory has only recently been incorporated into family therapy is that the theory was focused on the dyad and not the entire family system. Because of this, it is not difficult to understand the limited amount of empirical studies of family or couples therapy using an attachment paradigm. Recently, however, clinicians have begun to utilize aspects of attachment theory in their familytherapy practices.

According to Cassidy and Shaver (1999), John Byng-Hall suggested that attachment theory evoked and communicated the basis for family therapy. There are several ways clinicians can incorporate attachment theory into their clinical practices. According to Cassidy and Shaver (1999), Byng-Hall stated that providing a secure base during the therapy session is the fundamental aim of the family therapist. Fostering a secure base in a therapeutic setting enables the family psychologist or therapist to explore how the family members provide security for each other outside of the therapeutic counseling situation. The therapists can then delve into attachment patterns in families by looking at aspects of the family that are shared. For example, the family therapist can observe family members' shared beliefs, family rules, and behaviors which may be repeated in different patterns of the family's attachments and relational styles.

According to Rothbaum (2002), family-systems theory and attachment theory have important similarities and complementarities. He briefly reviewed family-systems theory and attachment-theory evidence pertaining to these points of convergence. Rothbaum (2002) explored only two of the many areas in which attachment- and family-systems theories converge:

- (a) in family systems theorists' description of an overly close, or "enmeshed," motherchild dyad, which attachment theorists conceptualize as the interaction of children's ambivalent attachment and mothers' preoccupied attachment;
- (b) in family systems theorists' description of the "pursuer-distance cycle" of marital conflict, which attachment theorists conceptualize as the interaction of preoccupied and dismissive partners (p. 328).

Rothbaum (2002) further posited that several similarities exist between attachment theory and family-systems theory. He stated that there are similarities that are at a broad, conceptual level, such as the theories revolving around a systemic frame of reference and concerning exploration of intimate human relationships (e.g., what draws people together, what drives them apart, how they deal with conflicts and intergenerational transmission). Other similarities are at

a more specific level, such as the correspondence between attachment classifications of secure, ambivalent, and avoidant relationships, on one hand, and family-systems categories of adaptive, enmeshed, and disengaged relationships on the other.

These two orientations to theoretical paradigms are perceived as mutually enriching, especially since attachment-theory researchers move toward a paradigm of external forces beyond the dyad that influence the attachment system. Both the similarities within, and differences between, the theories are seen as contributing to their compatibility and, ultimately, their integration (Rothbaum, 2002).

According to Kozlowska (2002), an alternative way of conceptualizing the relationship between attachment and family-systems theories is called "the network model". The network model resolved the dilemma of whether the theories can be merged into one theory, or if they should remain distinct theories on their own. Kozlowska utilized the concept of general-systems theory within the living-systems paradigm. A major characteristic of the living-systems paradigm is the tendency to form multileveled structures of systems within systems. For instance, although each system remains distinct, it is simultaneously a part of a more complex system that is distinct in its own right. Another characteristic of living systems is termed "organized complexity" (p. 293). This terminology refers to the idea that each system structure varies in complexity and is ruled by different kinds of laws which are specific to that system's structure. Inherent in the network model is the understanding that, although the information from different levels of complexity is unique, it is neither more nor less fundamental than information from another level. Levels of complexity are interrelated and interconnected, and one cannot exist without the other.

Kozlowska (2002) proposed a network model of living systems. This has clear implications for allowing the integration of attachment and family-systems theories. Dyadic, triadic, and family relationships represent distinct system structures (levels of complexity) with unique rules and properties. The implication is that the constructs used to describe phenomena at one level of complexity will differ from those used to describe phenomena on another level. Using the network model and the integration of the attachment model, family-systems theorists have been able to merge the two paradigms, yet keep them distinct. The integration of each level of complexity (e.g., dyad vs. family) as distinct, yet interconnected, enables the clinician to move through different "levels of complexity" within each theoretical framework. Looking at both patterns requires the clinician to focus and refocus the lens, moving backward and forward between patterns. The need for multiple, coexisting explanations and models is common in the study of complex phenomena and is fundamental to systems thinking. Merleau-Ponty (1967), likewise, considered these issues. While Merrleau-Ponty believed that simpler structures retain autonomy if they remain independent of other beings; if they form parts of more complex phenomena they become constituents of the more intricate phenomena. As Massey (1981) explained, "[T]he constituents continue to exert an influence on the phenomenon in which they are integrated, but the overall organization of the more complex entity cannot be reduced to nor totally explained by the functioning of the less inclusive phenomena". Thus, in considering attachment and systems theory we need to understand that both explanations contain insight, and there integrations will yield somewhat differing constructs at varying levels.

Kozlowska (2002) eloquently proclaimed, "[I]n other words, integration of attachment theory and family systems theory means that clinicians need to be able to consider the unique properties of the dyad, together with the unique properties of the family, as well as the

relationship between them. From this perspective, some aspects of attachment theory most useful to family practice are those that reflect the unique properties of the dyad" (p. 291).

Isabel Soars, Marinal Lemos, and Cristina Almeida (2005) stated that, after nearly 40 years, Bowlby's (1969, 1973, 1980) attachment theory has become the ubiquitous concept for the new millennium. A number of useful concepts have emerged from various investigators, including that attachment is a social-emotional concept which is related to a child's competency (Cicchetti, Cummings, Greenberg, & Marvin, 1990; Thompson, 1999), and that this development is facilitated by the actions of the mother, or frustrated if she is insensitive or emotionally unavailable (Bowlby, 1988; Koback, 1999; Main et al., 985; Sroufe, Egeland, & Kreutzer, 1990; Thompson, 1999). In addition, the child is found to be emotionally well-developed if the mother functions as a secure base (Grossmann, Grossmann, & Zimmerman, 1999; Main, 1983; Sroufe, 1996). On the other hand, if the mother is not perceived as a secure base, then emotional and attachment problems are presented (Ainsworth et al., 1970; Main, 1983).

In related research, Bartholomew and Shaver, 1998 (in Simpson and Rholes, Eds.), reliably reported that,

Infants classified as "avoidant" in the Strange Situation had caregivers who themselves were dismissing of attachment-related memories and feelings...infants classified as "anxious" had primary caregivers who were anxiously preoccupied with attachmentrelated issues; and infants classified as "secure" had caregivers who were "free and autonomous" with respect to attachment. In subsequent work, a fourth infant pattern, "disorganized," was found to be associated with caregivers who were "unresolved" with respect to losses and traumas in their attachment history (p. 25).

From this and other research George, Kaplan, and Main (1986) concluded that attachment styles of attachment histories were transgenerational, and that the attachment styles of the mother predicted later attachment styles of the children. With this in mind, Schneider et al. (2001) further indicated that the basic concept of attachment theory is based on the early formation of the parent-child bond and the interpersonal relationships across the life span. The child's world, according to Bowlby (1969; 1973; 1980; 1988), is directed by evolutionary survival. To accomplish that end, the child develops attachments to caregivers and constructs working models—or templates—of what to expect from the environment, significant others, and parenting relationships, in particular.

Attachment, Security and Peer Relationships

According to Schneider et al. (2001), these attachment and working models—really, expectancies of future behaviors based on past experiences—are modifiable, but generally resistant to change over time. While attachment theory is widely accepted, some authors, notably Hinde (1988), have made the point that other variables, including temperament, could account for the behavior described as attachment. Indeed, Belsky and Cassidy (1994) have argued that "the notion of internal working models as the causal process explaining the associations between attachment security and the developmental sequelae remains a useful interpretive heuristic in need of empirical evaluation" (Schneider et al., 2001, p. 86). Because attachment theory and working models are such a pervasive force in contemporary psychology, the authors sought to review a number of studies—a meta-analysis—to test the hypothesis that the "strength of the association between attachment security and peer relations are a prerequisite to the resolution of this controversy" (p. 89), namely the validity of the construct of attachment as predictor of peer relationships.

Clark and Ladd (2000) researched the concept of connectedness and autonomy support in the parent-child relationship. The research indicates that, across theories of the parent-child relationship, two central qualities emerge—emotional connectedness and the degree to which the child's autonomy is fostered by the relationship. The authors reported that connectedness is the emotional bond that is formed between the parent and child. According to Clark and Ladd, connectedness is defined as: "A coherence provided by the emotional availability of the caregiver in the presence of the infant ... sometimes referred to as 'resonance.' Similar constructs include 'warmth,' 'closeness,' and 'dyadic synchrony'" (p.485). This study was designed to explore the constructs of autonomy and connectedness (as predictor variables in the attachment/secure base paradigm) by arguing that, from these roots, the child discovered the nature of relationships with peers.

The method used to explore the constructs of autonomy and connectedness within parentchild relationships led researchers to the exploration of language (Bretherton, 1990). These authors followed the observation made by Bretherton (1990) that securely-attached children three years of age or older (in this case, five and a half years) would exhibit "emotionally open, fluent, and coherent (verbal) communication" (p. 57).

The participants in the Clark and Ladd (2000) study were 192 kindergarten children (96 girls, mean age = 5.5 years) and their mothers. The mothers were also participating in a larger longitudinal study. The children were from 16 full-day kindergarten classrooms located in three different Midwestern school districts. Participants were largely from two-parent families (78%), of which 36% were lower- to lower-middle income, 31% middle-income families, and 33% middle- to upper-income families. The ethnicity of the participants consisted of 77% White, 17% African American, 3% Latino, and 3.5% mixed race or other.

The method used to study the mother-child dyad and its relationship to peer relationships was a naturalistic one, and involved trained observers to engage mother and child in narrative storytelling. Here, the authors initiated three story segments lasting 5 to 10 minutes, and each was videotaped. In the first of these episodes, the mother was encouraged to tell the story of the child's birth. The logic behind this first narrative was that it involved the child in an event of importance to self, of which the youngster could have no first-hand knowledge. The purpose of the second narrative was to have the child relate a story that was "fun" (or "good") or "something not so fun" (or "bad") that happened at school (p. 488). The last narrative was made up of two segments, in which the mother and the child told stories that were "fun" and "not so fun" (order randomized) that happened when they were together (p. 488). The nature of the mother-child relationship was assessed. The peer relationship evaluation was comprised of 40minute, one-on-one interviews with the child at his school.

The primary hypotheses of this investigation were that (a) connectedness and autonomy support in the parent-child relationship promote the development of a prosocial-empathic orientation in children, and (b) the influence of connectedness and autonomy support on children's peer relationships is mediated through the child's emerging prosocial-empathic orientation (p. 487).

The results generally support the hypothesis, in that there is a small positive relationship between connectedness and number of friends (r = .25, p < .001). While autonomy was not significantly related to number of friends, connectedness and autonomy were both significantly related to peer acceptance (r = .31 and r = .15 respectively) (Clark et al., 2000, p. 492).

Relationship Between Peer Attachment and Teacher-Child Attachment Styles

Lyons-Ruth, Alpern and Repacholi (1993) conducted a study in which the participants were low-income mother-caregivers and their 62 preschool children, whose ages ranged from 48-71 months old. The low-income mothers were characterized by the following social risk factors: (1) 18% of the mothers had psychiatric hospitalization, (2) 16% of families had documented history of abuse, (3) 83% of the families were single-mother households, (4) 46% of mothers were not high school graduates, and (5) 23% were receiving Aid from Families with Dependent Children (AFDC). These mothers, according to Lyons-Ruth et al. (1993), were characterized as poor secure-base mothers if they were found to score high on the following demographic variables: (1) the mother's race, (2) the mother was not a high-school graduate, (3) the mother was under 20 at the birth of the child, (4) the mother was a single parent, (5) the mother was receiving AFDC, and (6) had three or more children under age six.

Lyons-Ruth et al. (1993) found that, with high-risk children, the caregivers are themselves at risk, and they set out to evaluate the contribution of the disorganized attachment classification in the prediction of teacher-rated behavior problems, as well as evaluate the longitudinal prediction available from three maternal-risk factors in infancy. These risk factors were characterized as a lack of maternal involvement, maternal hostility and intrusiveness and, finally, serious maternal psychosocial difficulties. Moreover, Lyons-Ruth et al. reported that "disorganization can occur in the context of an otherwise secure infant attachment strategy or in the context of insecure strategies characterized by the restriction (avoidant pattern) or argumentation (resistant pattern) of attachment-related behavior and affect" (p. 573).

The disorganized/disoriented attachment style (DDA) has been shown to be a function of the nature of the secure-base object, and its frequency increases with the vulnerability of the secure-base object in that (1) only 13% of a sample of middle-class, low-risk infants received the classification of DDA; while (2) 28% of low-income, high-risk children from families receiving support services were classified as DDA; and (3) 54 % of the low-income, high-risk infants of mothers who were rated as depressed had infants rated as DDA (Main and Soloman 1990; Lyons-Ruth et al. 1990).

The findings of Lyons-Ruth et al., as well as other findings regarding parents and children living in poverty, need to be interpreted with caution and not overgeneralized, in light of the findings by Werner and Smith (1992). Werner and Smith (1992) began their 10-year longitudinal research with a genetic hypothesis, and to their surprise obtained results that were more consistent with social-influenced explanations. Children who were born with genetic or perinatal complications who received poor nurturance did indeed display poorer development than other youngsters. But those who were born with genetic or perinatal complications and received more supportive caretaking seemed to be better developed than those who were born with no handicaps but were neglected or abused. Concomitantly, babies born with no handicaps who received adequate caretaking also developed well.

According to Howes, Matheson and Hamilton (1994), the dynamics of children who attended "day care programs" presented opportunities to explore two types of attachment relationships—"parent-child" and "teacher-child" (p. 264). The growing body of thought associated with Bowlby's (1969) attachment theory suggested that a child who has a "history of secure attachment relationships is more likely to see him or herself as worthy of love, and approach others, including peers with positive expectations" (Howes et al., 1994, p. 264). This observation is generally consistent with the research data. For example, when children classified as secure are paired with familiar playmates, their interactions are rated as more sociable (Pastor, 1981). When preschool children with a known secure maternal attachment rating are paired with same-sex unfamiliar but securely attached playmates, they are rated by their teachers as (1) higher in peer competence, (2) higher in sociometric status, (3) higher in social participation, (4) more harmonious, (5) less controlling, and (6) more responsive than secure-insecure pairs (La Freniere and Stroufe, 1985; Stroufe, 1983).

Howes et al. (1994) explored the nature of the contribution of teacher-child attachment classification. This reflected recent research that indicated that the nature of this relationship had predictive value. The reviewed research suggested that "children's competence in the classroom was associated with teacher relationship ratings" (p. 265). These researchers tested the hypothesis "that children's social competences with peers are associated with their maternal attachment security" (p. 265). Social competence was defined by a number of paper-and-pencil tests of ego-control and ego-resiliency. It was observed that children who were high on egoresiliency "have a flexible and adaptive personality style" (p. 265), while children who are low on ego-control are "impulsive and unable to delay gratification" (p. 265).

Howes et al's (1994) sample consisted of 94 children—47 girls and their mothers of predominately European-American middle-class children who came from two-parent families. All children were seen at age 12 months in a standard Strange Situation; 62% were rated as secure, 22% were rated as avoidant, 13% ambivalent, and 6% as disorganized. To assess motherchild attachment at 48 months, the children were observed in two settings, once in a two-hourlong play group with familiar children from their play group and a second time in a play group that was composed of four unfamiliar children and not in the children's regular group environment.

The results of the multivariate analysis (MANOVA) indicated that children rated as secure with their first teacher were seen as (1) more gregarious and (2) engaged in more complex play than either ambivalent or avoidant rated children. There was a significant multivariate main effect for first grade teacher relationships, F(4, 83) = 3.49. p < .05. When a multivariate analysis was conducted between teacher-child attachment and peer competence, there was a significant relationship between the two variables. In addition, children rated as more secure with their teachers four years later were shown to be (1) more gregarious, (2) rated higher in ego-resiliency, and (3) engaged in more complex play than those children rated as "insecure." The "children's social competence with peers was unrelated to their maternal security classification" (Howes et al., 1994, p. 270).

Mallinckrodt and Wei's (2005) study was derived from the social competencies and interpersonal processes (SCIP) model of attachment motivation. Mallinckrodt and Wei made the argument that insecure childhood attachment renders the individual bereft of the necessary social skills to develop close adult relationships. In addition, the SCIP model is based on the premise "that the relationships they do experience often serve as sources of stress in themselves" (p. 358). The SCIP model has heuristic value in that it provides a method of translating the purely theoretical musings of Bowlby (1969, 1973, 1988) into testable operational hypothesis. In this characterization, "insecure childhood attachment leads to attachment avoidance or anxiety in adults and also to deficits in social competencies" (p. 358). The hypothesis building for Mallinckrodt et al's (2005) study began with the argument that social self-efficacy is one of the social competencies that mediate attachment anxiety, while emotional awareness is a necessary mediator for individuals with attachment avoidance. Moreover, in the SCIP model it is the integrity and consistency of the attachment figure who gives rise to "working models" of a world that is stable and predictable. In contrast, inconsistent caregiving behaviors result in a world view that is negative and unproductive and gives rise to fears of abandonment. The

aforementioned serves as the operational definition of ambivalent attachment; on the other hand, variable, capricious, and inconsistent attention to the child's needs gives rise to fears of intimacy, which is characteristic of the avoidant-attachment style.

In theory, then, poor attachment and negative working models of self result in negative working models of others, leading individuals to experience attachment avoidance and display deactivated attachment strategies often characterized by cognitive and affect regulatory responses that divert attention away from the following attachment anxiety behaviors: (a) magnifying expressions of distress, (b) searching for clues of abandonment, and (c) proximityand comfort-seeking from the attachment figure. Individuals with negative working models of others exhibit attachment avoidant behaviors, such as (d) diverting attention from fear-producing stimuli and (e) attachment-related thoughts, feelings or emotions.

Mallinckrodt and Wei (2005) looked at two types of social competencies as mediating variables: (1) social self-efficacy and (2) emotional awareness. Social self-efficacy was defined as "the belief that one can initiate social contact and develop new friendships from initial acquaintances" (p. 360). Emotional unawareness (alexithymia) was characterized as the inability to put one's feelings into words (Lesser, 1981; Sifneos, 1972; Taylor, 1984). The hypotheses constructed by the author were: (1) both adult attachment avoidance and anxiety would be positively related to perceived psychological distress and negatively associated with perceived social support, (2) social self-efficacy would serve as the mediational variable for attachment anxiety, and (3) emotional unawareness would serve as a mediator for attachment avoidance.

Mallinckrodt and Wei's (2005) results indicated that emotional awareness was a significant mediator between attachment avoidance and (a) psychological distress and (b) social support. Likewise, the results supported the hypothesis that social self-efficacy would be a

significant mediator between attachment anxiety and social support, but social self-efficacy was not a significant mediator between attachment anxiety and psychological distress.

Harvey and Byrd (2000) proposed a study to look at the relationship between perception of family attachment and family coping skills. Their research was based on the hypotheses that secure families would demonstrate more effective coping skills. Harvey and Byrd further stated that individuals with high levels of secure attachment would more likely be drawn to their families because of strong familial relationships. It was hypothesized that individuals with secure attachment would also have a stronger sense of self and, therefore, be better able to influence family functioning and, when faced with problems, actively engage in problem-solving strategies. Conversely, individuals with high levels of avoidant-attachment would distance themselves from their families because of poor familial relationships. The authors speculated that these individuals would have a weak sense of being able to influence their families, and engage in passive coping strategies. Finally, individuals with anxious-ambivalent attachment would seek to maintain an extremely close relationship with their families as a result of fear of abandonment. These individuals were more likely to accept whatever the family did during the stressful situation rather than risk confrontation. The results of the Harvey and Byrd (2000) study were supported, and have indicated that individuals with high levels of anxious/ambivalent attachment perceived their families as using a passive appraisal coping strategy, possibly as a means to avoid confrontation for fear of disturbing family harmony. These findings suggest that the individuals' dispositional coping styles formed as a function of the type of familial attachment.

Throughout development, children create emotional bonds with, not only their parents, but with other individuals as well. Parent-child relationships impact social development, such as the creation of peer relationships. Hazan and Shaver (1994) stated that children must create bonds with other available figures and, as development progresses, peers become extremely important attachment figures. For example, adolescents begin to spend less time with parents and much more time with their peers. Kerns (1994) argued that the forming of closer peer bonds allowed adolescents to explore independence from parents. Additionally, Nickerson and Nagle (2005) found that adolescents go to their peers in times of need (proximity-seeking behaviors) more than before entering this developmental period. Importantly, peer relationships exist in different settings outside the family. Thus, the relationships that children have with friends allow for furthering of social development (Hazan and Shaver 1994). Examining the quality of friendships in adolescence, Hazan and Shaver (1994) stated that both positive qualities of peer relationships, such as trust and support, and negative qualities, such as jealousy and resentment, help with development in the social and personal realms.

Hazan and Shaver (1994) have studied correlates of positive friendships and have found relationships to self-esteem and lower levels of loneliness. Additionally, Weimer, Kerns, and Oldenberg (2004) established a relationship between positive friendship qualities in a best-friend dyad and security of each partner in the dyad, suggesting that those dyads with more security are made up of friends who feel better about not only the friendship, but also about themselves. Better communication between dyad partners was also related to more security in the dyad, supporting the importance of communication for attachment as mentioned before. As adolescents seek autonomy and independence from their parents, they turn to peers more than before (Nickerson & Nagle, 2005). Nickerson and Nagle looked at important changes in peer relationships across the transition from childhood to adolescence. Most importantly, they determined that support-seeking needs are fulfilled less by parents and more by peers as

childhood ends and adolescence begins. This does not undermine the importance of the parentadolescent attachment, but points toward a gain in importance and influence of peer attachment for positive development. Related to this, parental understanding and flexibility are related to adolescents' attachment satisfaction and general well-being. This bolstered the argument that flexibility is among the most important aspects of the relationships, since it is extremely important for communication (Laursen & Collins, 2004).

Relationship Between Parent and Peer Attachment

Peers are central to adolescent development and social life. Because adolescents experience close bonds with peers, it is imperative to look at adolescent peer attachments in conjunction to those with parents. Easterbrooks and Lamb (1979) found a relationship between mother-infant attachment (using Ainsworth's Strange Situation) and peer competence at the same point in infancy by observing dyads. The authors further determined that securely attached infants were more sociable with peer strangers and displayed more competent exploratory behaviors and problem-solving skills than did insecurely attached infants. In late infancy, the peer system, which is destined to become a major socializing influence, begins to emerge as a salient aspect of the infant's social world (Matas, Arend, & Sroufe 1978).

In another early study, Waters, Wippman, and Sroufe (1979) ascertained that attachment in infancy was related to peer interaction at age three and a half. Specifically, competence in the peer group was predicted by attachment status, suggesting that security of attachment to parents impacts child-peer relationships. Furman, Simon, Shaffer, and Bouchey (2002) also indicated that, based on Bowlby's previous work, working models of friendships (peer-related attachments) in late adolescence were related to those with parents and romantic partners. Furman et al. (2002) found significant differences in the attachment security status of adolescents to their parents and peers. For example, some adolescents who were classified as dismissing with their parents were classified as secure with their peers. One explanation for this was that, at this point in development, some adolescents may not feel that their parents are responsive in times of need, and therefore seek this comfort from friends instead.

Interestingly, Freeman and Brown (2001) conducted a study looking at the relationship between attachment style and choice of attachment figure in adolescence. They found that, in general, parents and peers were nominated quantitatively equally; however, there were nomination differences based on attachment status. Adolescents who were more secure nominated their mothers more, and those individuals who were more insecurely attached were more likely to nominate their peers. Although some qualities of the parent-adolescent attachment relationship decrease while other qualities of the adolescent-peer attachment relationship increase, parents still are utilized as important attachment-figures. On the other hand, Nickerson and Nagle (2005) and Kerns, Klepac, and Cole (1996) found that use of parents to fulfill secure-base needs did not change across this transition, which suggests that, as adolescents explore new relationships (i.e., peer-related relationships), parents still remain an important base for security.

Bowlby's (1969, 1973, 1988) attachment theory has become the "working model" for a great deal of research in psychology, especially in the field of social, cognitive, and developmental psychology. Bowlby (1988) noted that, "It is a little unexpected that, whereas attachment theory was formulated by a clinician for use in the diagnosis and treatment of emotionally disturbed patients and families, its usage hitherto has been mainly to promote research in developmental psychology" (p. ix).

Bowlby (1988) suggested that the well-attached child is an individual who would later develop healthy and non-neurotic relationships. This child would have "working models" of people that would allow for trusting and satisfying relationships. From this assertion, many studies have evolved in the area of peer relationships. The general conclusion derived from these studies (Howes et al., 1994; Kerns et al., 1996; Schneider et al., 2001; Clark & Ladd, 2000) are that Bowlby's clinical observation that there is a relationship between early mother-child attachment and later peer relationships is sound. Schneider et al. (2001) conducted a metaanalysis that was based upon 63 studies, and concluded that effect size for the child-mother attachment was in the small- to moderate- range; however, the relationship for peer attachment was greater as the child entered middle school age. This study indicated that the attachment to one's mother was only mildly related to the strength of later peer relationships. Based on the outcome of the numerous investigations, Schneider indicated that there is a relationship between early attachment to the mother and later peer relationships, but the strength of that association is still under study.

Clark and Ladd (2000) discovered that connectedness and autonomy were variables that suggested that the securely attached parent-child relationships emerged from object relations' and attachment theories. Clark and Ladd set out to examine the parent-child relationship in relation to socioemotional orientation, friendship, and peer acceptance. The authors used language development to measure the effects of the mother-child relationship and later functioning with peers, as framed in terms of connectedness and autonomy. The method used to explore the constructs of autonomy and connectedness within each parent-child relationship led researchers to the exploration of language (Bretherton, 1990). Clark and Ladd (2000) followed the observation made by Bretherton (1990) that securely attached children three years of age or

older (in this case, five and a half years) would exhibit "emotionally open, fluent, and coherent (verbal) communication" (Clark & Ladd, 2000, p. 57).

Lyons-Ruth et al. (1993) tried to rescue the attachment-peer strength hypothesis by looking at only those individuals who exhibit poor attachment styles, namely those designated disorganized-disoriented (DDA). Here, the findings are more clear cut. Those individuals who have the poorest attachment scores are the poorest candidates for having satisfactory peer relationships. Howes et al. (1994) attempted to expand this, suggesting that if a strong motherchild relationship predicted latter peer acceptance, why not extend the construct to include the teacher-child attachment style and predict that a stronger teacher-child attachment style will lead to better peer acceptance? The findings here indicated that children rated as secure with their first teachers were seen as (1) more gregarious, and (2) engaged in more complex play than either ambivalent or avoidant rated children. When a multivariate analysis was conducted between teacher-child attachment and peer competence, there was a significant relationship between teacher-child attachment and peer competence. In addition, children rated as more secure with their second teachers four years later were shown to be (1) more gregarious, (2) rated higher in ego-resiliency, and (3) engaged in more complex play than those children rated as insecure. "Children's social competence with peers was unrelated to their maternal security classification" (Howes et al., p. 270).

Bowlby (1988) called attention to the fact that academic functioning and peer relationships were mediated by the attachment style of the child, the so-called secure-base constructs (Ainsworth, Waters, Wall, 1978). Testing this hypothesis, Howes et al. found that little of predictive value was obtained by looking at the strength of the mother-child relationship and school functioning. The best predictor, however, was IQ, indicating that cognitive abilities are still the best overall predictors of later academic functioning.

One researcher in the area of attachment and subsequent peer acceptance-rejection is Kerns (1994), who focused directly on the peer acceptance-rejection construct. She took the research a step further and suggested that that the mother-child relationship and subsequent peer acceptance-rejection was a mental-health marker of future well-being. Kerns conducted two studies examining the mother-child relationships and peer-relationships. Study one had 74 5thgrade students as participants. Results of the first study indicated that children who received higher secure scores on the security scale were more likely to: (a) get a higher rating from peers, (b) be involved in more reciprocated friendships, and (c) report feeling less lonely. The sample for study two consisted of 44 same-gender friend pairs in the 5th and 6th grades. The results from study two indicated that secure-secure dyads performed significantly better on all measures than did secure-insecure dyads. The findings that peer acceptance-rejection is related to security ratings is consistent with the available literature and confirms the robustness of the attachment construct.

Thus it is clear that outcome studies, and studies designed to predict peer relationships, have become the workhorse of the attachment paradigm. It is when attachment style is used as a mediation variable that the biggest contribution to theory building is made. Here we particularly have in mind the work of Mallinckrodt and Wei (2005), who furthered the theory-building by suggesting a mediation hypothesis they call "the social competencies and interpersonal processes (SCIP) model of attachment motivation". In this continuation of Bowlby's work, the secureinsecure model is seen as a process that, rather than identifying attachment styles, categorizes them as a process that mediates and motivates. In this characterization, "insecure childhood

attachment leads to attachment avoidance or anxiety in adults and also to deficits in social competencies" (Mallinckrodt, 2005, p 358).

Finally, it is noteworthy to yet again reiterate that Bowlby (1973) presented views on attachment that decisively pointed to how the incredible need for parental acceptance often caused children to adapt their emotional functioning to match their parents', even when it may be at the expense of their own emotional stability as well as their ability to trust themselves and others. It is almost axiomatic in the research literature that children with secure attachment histories are more likely to develop internal representations of others as supportive, helpful, and positive and to view themselves as competent and worthy of respect (Jacobsen & Hofmann, 1997). Similarly, Ainsworth (1985) noted that, as humans grow into adulthood, the nature of their relationships changes, but "it seems likely that a person seeks in a bond something of the same kind of security that he or she previously sought from parents" (p. 26). Similarly, Kennedy and Kennedy (2004) noted that children rated secure, when rated on parental security measures, presented themselves as more sensitive and responsive to their peers. Thus, it does not seem much of an inductive leap to argue that one could assess attachment by measuring peerattachment since these seem to be reciprocal processes (Howes et al., 1994; Jacobsen & Hofmann, 1997; Main et al., 1985).

Parenting Styles

Alfred Adler (1931), a pioneer in the use of a systems approach, indicated that the family influence on the child or adolescent should not be underestimated. Adler understood that the individual must be viewed within the larger system ranging from the family to the community. According to Adler, most children develop their values, beliefs about others and self, and typical patterns of behaviors within their family systems.

According to Minuchin (1974), clear boundaries are based upon the ideal structure of the family, which includes essential functions such as support, nurturance, and socialization of each family member. Reportedly, the family will carry out these various functions through the spouse, parent, and sibling subsystems, which must be clearly differentiated for proper family functioning. The ideal structure provides each member with a sense of separateness and belonging, both necessary for healthy living (Minuchin, 1974). Minuchin has indicated that families often function on a continuum, and boundaries can range from rigid on one end, resulting in disengagement to diffuse, leading to enmeshment.

Minuchin (1974) again observed that a family dynamic that is structured around rigid boundaries often implies that family members are disengaged or isolated from one another. In addition, the individual is characterized as self-reliant and segregated. Access between the parental and sibling subsystem is limited and the child learns to negotiate his or her environment on his or her own. Members in such families may learn to rely on systems outside the family for support and nurturance.

A clear boundary is the ideal arrangement between subsystems. Family members are supportive of one another, but allow for the freedom to experiment and to be one's own person. There is frequent communication between subsystems, which is necessary to facilitate change. Family members believe that change is a natural occurrence, which paradoxically preserves family stability.

Conversely, a diffuse boundary is seemingly the polar opposite of rigid boundaries and leads to enmeshment. Family members experience a complete loss of independence and autonomy. An enmeshed family system is characterized by an excessive degree of involvement and responsiveness demonstrated by the interdependence of relationships, encroachment on

personal boundaries, poorly differentiated perceptions of self and of other family members, and weak family subsystem boundaries. During periods of change and growth, an enmeshed family experiences extreme difficulty, and the members frequently insist on preserving familiar methods of interaction. Issues which threaten change, such as negotiations of individual autonomy, are not permitted to surface (Minuchin, 1974).

Baumrind's (1971) parenting styles (authoritative, authoritarian, and permissive) continue to be powerful constructs in the socialization literature, and are used frequently as descriptions of individual differences in parenting within child development theory. Research based on Baumrind's model has yielded fairly consistent findings on the parenting behaviors that promote positive adjustment in children, particularly among middle-class, Caucasian families (Baumrind, 1989). Authoritative parenting (characterized by emotional supportiveness, limit setting, and firm yet responsive disciplinary strategies) is consistently associated with positive educational, social, emotional, and cognitive developmental outcomes in children. Conversely, authoritarian parenting (characterized by strong control and limited emotional support and responsiveness) and permissive parenting (characterized by high levels of emotional support/responsiveness and little discipline/control) are typically linked with poorer outcomes for children (Baumrind, 1989).

Parenting Dynamics and Attachment Patterns

Numerous variables contribute to the formation of attachment between child and caregiver. According to Ainsworth and Bell (1970), mothers of securely attached children rate higher on scales of sensitivity, cooperation, and emotional accessibility. As a result, the child has the ability to demonstrate greater autonomy, affective sharing, cognitive flexibility, problemsolving abilities, and perseverance. All of these outcomes indicate that secure attachment results in healthy family and peer relationships, as well as high self-esteem for the child (Bowlby,

1988). On the other hand, mothers of insecurely attached children exhibit behaviors that range from chaotic or inconsistent caretaking to rejection and maltreatment of their children (Ainsworth, 1989). In response to these parenting techniques, these children demonstrated behaviors that are emotionally isolating from both family and peers. Likewise, they seldom have stable interpersonal relationships or good self-concept/internal working models (Bowlby, 1988).

Collins and Read (1990) proposed that early attachment histories are the basis of an internal working model for adult relationships. As a result of a securely attached upbringing, individuals with secure childhood attachments display higher levels of trust, closeness, and dependability, while insecure childhood attachments often predict the reverse (Bowlby, 1973, 1980, 1982). However, there are other variables within a parent-child relationship that might also predict the outcome of the child's future interpersonal relationships. One of these variables is that of parenting styles. Baumrind (1966) defined the three types of parenting styles as authoritative, authoritarian, and permissive. Parental behavior for each of these styles seems to parallel that of parental behavior for individual attachment patterns. For example, similar to the parent of a securely attached child, the authoritative parent is sensitive to the child's needs, does not use punitive discipline, and reasons with the child in a loving and affectionate manner (Baumrind, 1966).

Attachment, Parenting and Internal Working Models

The processes underlying the development of attachment with caregivers, family, and friends are believed to be governed by an "internal working model" of the relationship between attachment figures and one's self (Bretherton, 1985). This model is thought to be constructed and revised based on the quality and quantity of care and support received from caregivers. Accordingly, internal working models are used as a means of guiding the social interactions with

others, but also as a way of evaluating present and future interpersonal situations and assessing the feasibility of dealing with perceived interpersonal difficulties as guiding the formulation of plans to deal with life events (Bowlby, 1969; Bretherton, 1985). Therefore, the manner in which individuals interact with their environment (and the people in it) can be seen as dependent on the quality of an internal working model. For example, a child with a secure pattern of attachment with his or her family will have experienced high levels of support in the past and will continue to expect support in the future. Individuals who have developed avoidant or anxious/ambivalent patterns of attachment will similarly come to expect a continuation of the same type of familial support (or lack thereof) to which they have become accustomed. Moreover, working models illuminate the degree to which individuals work in concert with their families (Bowlby, 1980; Bretherton, 1985).

Although research has shown that family functioning predicts many aspects of both normal and maladaptive developmental patterns (Campbell, Adams, & Dobson, 1984), few studies have directly examined the effects of familial attachment on adult development. Exceptions include investigations by Hazan and Shaver (1987) and Feeney and Noller (1990). These researchers indicated that the attachment styles of young adults predicted their romantic relationships. In general, young adults who had a secure attachment style reported positive perceptions of their family relationship and wished to attain similar adult relationships. In contrast, young adults with an avoidant attachment style reported a sense of mistrust in their adult relationships. Anxious/ambivalent young adults expressed a desire for deep and secure commitment in their adult relationships. Similar findings have been reported by Hinde and Schwartz (1994), who examined adolescents' perceptions of family backgrounds and observed that being reared in a family perceived as dysfunctional (i.e., having dysfunctional attachment

patterns) predicted anxious and obsessive romantic relationships among adolescents. Therefore, consistent with the opinions of both Bowlby (1969) and Ainsworth et al. (1978), the patterns of attachment in family systems can be seen as providing long-lasting frameworks for intimate relationships in adulthood.

Many of these studies (Hinde & Schwartz, 1994; Hazan & Shaver, 1987; and Feeney & Noller, 1990), offered insights into how patterns of familial attachment functioned. They provided a foundation from which to explore the consequences of different patterns of familial attachment, but did not consider the manner in which these attachment patterns functioned and operated. For that reason, Olson and DeFrain (1997) examined the relationship between attachment patterns and family environments. Specifically, they investigated the manner in which young adult patterns of familial attachment are related to the young adults' perceptions and the ways in which their families coped with family stress and problems. Perceptions of family coping strategies were utilized, since it was thought that the manner in which families dealt with their problems was particularly indicative of how they would typically function and, therefore, be representative of the manner in which familial attachment systems operated as a means of establishing emotional bonds between the family members.

The primary attachment relationship, according to Bowlby (1988), is essentially dyadic in nature; that is, it is a relationship developed as a result of the actions, interactions, and responses of the mother-infant interaction. Harvey (2000) stated that understanding these relationships required more than the observation of what the parent/caregiver and infant/child do together; it must also include how these relationships are developed and what predictable patterns of interaction will determine the quality of the relationship. It is not only the frequency of positive

interactions that determine security of attachment, but the established pattern of interactions within the dyad that matter.

The attachment literature indicates that mothers of securely attached infants are available and responsive to the needs and signals of their infants (Ainsworth et al., 1978; Isabella & Belsky, 1991). A well-adjusted, secure mother-infant dyad will be the one in which both parties are enjoying each other's company, and the infant is feeling secure with his or her mother. A secure infant can, and does, depend upon his/her parent/caregiver when in distress, and the parent/caregiver is, and remains, attuned to the infant's needs and is able to respond to these needs, wants, and desires in a sensitive, responsible way a majority of the time.

Mothers of ambivalent children are more likely to be inconsistent in their responses and under-involved as parents. Mothers of avoidant children are more likely to be rejecting and emotionally aloof, and do not read distress signals well or respond to them appropriately (Ainsworth et al., 1978).

Harvey and Byrd (2002) indicated that there are essential differences between the styles of parenting/care-giving and attachment systems. Stated more succinctly, the major function of parenting/care-giving is to protect the child, while the primary goal of activating the attachment system is to be in close proximity to the attachment figure and to be provided with a secure base.

Most parents look after the basic physical needs of their infants and children (feeding, clothing, keeping them warm, ensuring sleep), provide the necessary psychological support (loving, warmth, emotional needs), help them with social adaptation (stages of development), and guide their cognitive development (stimulating environment, teaching problem-solving, developing school readiness). These are characteristics of what Winnecott (1965) termed good enough parenting.

Locus of Control

Within the field of psychology, locus of control is considered to be an important aspect of personality. The concept of locus of control was initially developed by Julian Rotter in the 1950's (Rotter, 1966). Locus of control refers to an individual's perceptions about the underlying main causes of events in his or her life. More simply put, does a person believe that one's destiny is controlled by self or by external forces?

Locus of control is a construct that was developed within Rotter's (1966) larger personality theory referred to as social learning theory. More specifically, Rotter's social learning theory is based on the premise that personality is a result of the individual's interaction with his or her environment. According to Rotter, behavior cannot be viewed as an automatic response to stimuli, but rather as an interaction of the individual's personal experiences and the environment. Rotter (1990) described locus of control as a "generalized expectancy of internal versus external control over behavior outcomes. The notion of a generalized expectancy, of course, involves the learning theory principal of generalization and a gradient of generalization. Such a gradient implies both generality and specificity..." (p.490). In theory, however, Rotter did not specify independent traits, faculties, or types, but has been challenged by numerous psychologists who, according to Rotter, mistakenly concluded that the concept had no generality because some specificity had been demonstrated. Rotter contended that "generality-specificity is a matter of degree, not kind" (p. 490). According to Nunn, (1995) "locus of control was viewed as a cognitive expectancy which defined the individual's view of causal factors related to these outcomes" (p. 421). Rotter (1966) observed individuals personality and, therefore, understood that behaviors are able to be transformed. Rotter suggested that if there is a change in the way

the person thinks, or a change in the environment has occurred that the individual is responding to, ultimately the behavior would change.

Rotter's (1966) view was that an individual's behavior was largely guided by reinforcements (i.e., rewards and punishments), and that, through unforeseen events (such as rewards and punishments) individuals come to hold beliefs about what caused their actions. These beliefs, in turn, guided what kinds of attitudes and behaviors these individual adopted. "A locus of control orientation is a belief about whether the outcomes of our actions are contingent on what we do (internal control orientation) or on events outside our personal control (external control orientation)" (Zimbardo, 1985, p. 275). Thus, locus of control is conceptualized as referring to a one-dimensional continuum, ranging from external to internal.

According to Krampen (1989), links have been found between locus of control and behavior patterns in a number of different areas. First and foremost, adults and children with an internal locus of control are more inclined to take responsibility for their actions, are not easily influenced by the opinions of others, and tend to do better at tasks when they can work at a personal pace. By comparison, people with an external locus of control tend to blame outside circumstances for their mistakes, and credit their successes to luck rather than to their own efforts. They are readily influenced by the opinions of others, and are more likely to pay attention to the status of the opinion-holder. Conversely, individuals with an internal locus of control pay more attention to the content of the opinion, regardless of who is expressing the opinion.

Likewise, there may be a relationship between a child's locus of control and his or her ability to delay gratification (to forego immediate pleasure or desire in order to be rewarded with a more substantial one later). In middle childhood, children with an internal locus of control are

relatively successful in the delay of gratification, while children with an external locus of control are likely to make less of an effort to exert self-control in the present because they doubt their abilities to influence events in the future (McClun & Merrell, 1998).

Although people can be classified comparatively as "internals" or "externals," chronological development within each individual generally proceeds in the direction of an internal locus control. As infants and children grow older, they feel increasingly competent to control events in their lives. Consequently, they move from being more externally focused to a more internal orientation.

Locus of Control and Locus of Responsibility

Building upon the concept of locus of control (Rotter, 1966) and attribution theory, Sue and Sue (2003) combined these two paradigms and coined the term "locus of responsibility". According to Sue and Sue, locus of responsibility is "[b]ased on past experiences, people learn one of two worldviews: The locus of control rests with the individual of with some external force" (p. 271). In this worldview, the individual's locus of responsibility can be viewed as either the degree of responsibility or blame placed on the individual or the system. The amount of emphasis that is placed on the individual, and not on the system, has a great deal to do with a person's behaviors and formation of their life orientation. This worldview is described as either person-centered or person-blame. Conversely, in a situation-centered or system-blame perspective the individual views the sociocultural environment as more powerful than the individual. For example, Sue and Sue (2003) stated that in the "case of African Americans, their lower standard of living may be attributed to their personal inadequacies and shortcomings or the responsibility for their plight may be attributed to racial discrimination and lack of opportunity" (p. 274). In this example, the first description involves blaming the individual, while the second

explanation entails blaming the system. Defining a problem as residing in a racial or ethnic minority population enables other members of society to ignore relevant factors and to protect and preserve social institutions and belief systems. Locus of control, attribution theory, and locus of responsibility enable ones cultural and ethnic beliefs, traditions, and customs as well as family history, surroundings and environment to be considered when identifying an individual's internal or external locus of control.

Parenting and Locus of Control

In order to build upon the concept that locus of control is related to the individual's reinforcement behavior, the idea that a relationship exists between parent and child reinforcement behaviors has been explored. To this end, several studies were found that identified that a relationship between parental locus of control and children's locus of control does exist (Gordon et al., 1981). Chance and Goldstein (1971) reported that a parent who is warm, supportive, flexible, approving, consistent in discipline, and who expects early independence in his or her child's life is more likely to encourage his or her child's beliefs in internal control than the parent who is rejecting, punitive, dominating, and critical.

There have been a limited number of studies in which researchers have investigated the relationship between parental behaviors and locus of control in adolescents. However, the few studies that have been conducted suggest that parenting behaviors and locus of control are related (Krampen, 1989) as speculated by Rotter (1966) in his writings on locus of control. More specifically, parenting behaviors have been found to correlate with locus-of-control orientation (internal or external) in adolescents when the parenting style is either consistent in discipline, protectiveness, nurturance, approval, attentiveness, allowance of autonomy, degree of control, reinforcement of positive behaviors, and physical punishment (Krampen, 1989).

Various researchers have investigated the relationship between locus of control orientation and self-concept in adolescents, in addition to social behavior, scholastic achievement, drug use, depression and delinquency (Bandura, 1977; Gordon, 1977; Harter, 1981; Nowicki & Roundtree, 1971). Results have consistently demonstrated a strong relationship between an external locus of control orientation (e.g., the belief that events and consequences are controlled by external forces rather than by a self-initiated behavior, choices, and attitudes) and low self-concept ratings. In turn, poor self-concepts have been shown to be strongly associated with maladaptive social-emotional behaviors and low academic achievement. Building upon the premises set by these studies, identification of the major factors that influence locus of control orientation and self-concept becomes an important step toward developing effective techniques for preventing and changing maladaptive behavioral patterns and cognitive styles of adolescents (McClun & Merrell, 1998).

Locus of Control, Attachment and Bullying

The aim of a study conducted by Geist and Borecki (1982) was to determine if a link between locus of control and attachment styles exists. Geist and Borecki determined that individuals who exhibited significantly higher social distress and avoidance in social situations were more likely to be rated high on external locus of control. This is a finding that supports the hypothesis of this current study—that an external locus of control is associated with an avoidant/ insecure attachment style. Likewise, Feeney (1995) observed a relationship between locus of control and attachment styles. In this study, individuals rated as secure tended to have scores associated with an internal locus of control—again supporting the hypothesis that locus of control and attachment styles may be related.

With regard to the relationship between bullying and attachment behavior contradictory results have been reported. Troy and Sroufe (1987), for example, determined that securely rated children were less likely to have peer-related problems, while Elliot and Cornel (personal communication, 2006) noted that attachment styles were not directly related to bullying behavior. In any event, based on the available research, there may be some relationship between attachment styles and locus of control. The nature of the relationship between locus of control, attachment styles and bullying behavior, has not as yet been resolved.

Research on Bullying Behaviors

Bullying

Bullying has received research attention only since the early 1970's, when Dan Olweus, a Norwegian researcher, began to study this area. At that time, a strong societal interest in bully/victim problems emerged in Scandinavia, where bullying was known as "mobbing"

In Scandinavia, school officials did not take serious action against bullying until a newspaper report in 1982 alerted them to be aware that three early adolescent boys from Norway had committed suicide because of severe bullying by peers (Olweus, 1993). This event triggered a nationwide campaign against bully/victim problems, and data were obtained from 140,000 students in 715 schools (Olweus, 1987).

The results suggested that 15%, or one out of seven children in Norwegian schools were involved in bullying "now and then," or more frequently. About 9% of the students were classified as victims, while 6% were bullies. In 1989, Olweus developed the Bully/Victim Questionnaire (Olweus, 1989) with two versions—one for grades one to four, and the other for grades five to nine and higher.

According to Craig (1998), and Kumpulainen, Rasanen, Henttonen, Almqvist, Kresanov, Linna, Moilanen, Piha, Puura and Tamminen (1998), research suggests that children and adolescents identified as bullies demonstrate poorer psychosocial functioning than their classmates. Likewise, bullies have been reported to be aggressive, impulsive, hostile, domineering, antisocial, and uncooperative toward peers and to exhibit little anxiety or insecurity. When they are in control, bullies feel more secure and less anxious (Batsche & Knoff, 1994). According to the participants who completed self-report measures, bullies make friends more easily (Nansel et al., 2001), and are able to obtain classmate support similar to that of uninvolved youth (DeMaray & Malecki, 2003). The uninvolved child is described as an individual who remains on the sideline. This child does not engage in bullying behaviors, he/she is not victimized, nor does this child respond in a pro-social fashion (DeMaray & Malecki, 2003). The research indicates that bullies believe they will achieve success through their aggression, are unaffected by inflicting pain and suffering, and process information about victims in a rigid and automatic fashion (DeMaray & Malecki, 2003). Bullies believe that they pick on their victims because they are provoked or because they do not like the victims (Boulton & Underwood, 1992). They show poorer school adjustment, both in terms of achievement and well-being (Nansel et al., 2001), and perceive less social support from teachers (DeMaray & Malecki, 2003). These children may be more difficult in the classroom and more frustrating for their teachers (DeMaray & Malecki, 2003). Evidence suggests that bullies come from homes in which parents prefer physical discipline, are sometimes hostile and rejecting, have poor problemsolving skills, and are permissive toward aggressive childhood behavior or even teach their children to strike back at the least provocation (DeMaray & Malecki, 2003).

Research on Victimization

Research on victimization suggests that children and adolescents identified as victims also exhibit poor psychosocial functioning. They tend to be more withdrawn, depressed, anxious, cautious, quiet, and insecure than others (Craig, 1998; Kumpulainen et al., 1998; Olweus, 1993), and are also less pro-social than uninvolved children (Schwartz, 2000). Victims reported feeling much lonelier and unhappy at school, as well as having fewer good friends (Boulton & Underwood, 1992; Nansel et al., 2001; Nansel, Overpeck, Haynie, Ruan & Scheidt, 2003) than their classmates. The most frequently cited motivation for victimization is that the victims "did not fit in" (Hoover, Oliver & Hazler, 1992). At the same time, other children avoided the victimized child, for fear of being bullied themselves or losing social status among their peers (Nansel et al., 2001). Although victims responded in various ways to bullying, avoidant behaviors (such as not going to school and refusing to go to certain places) were most common (Batsche & Knoff, 1994; Kumpulainen et al., 1998).

There was a paucity of information on the relationship between parenting and victimization, but Batsche and Knoff, (1994) and Kumpulainen et al. (1998) did examine the associations between parenting and victimization. According to Batsche and Knoff (1994) and Olweus (1993), overprotection and poor identification with the parent affected the degree to which individuals were victimized by their peers. Nansel et al. (2001) and Nansel et al. (2003) suggested that victimization was associated with perceived maternal overprotection for boys and with perceived maternal rejection for girls. Victimization was also associated with greater parental involvement in school. This may reflect parental awareness of children's difficulties but may also be a sign of a reduced independence among these youths.

Research on Bully/Victim

Other research suggested that bullies and victims are not mutually exclusive categories (Austin & Joseph, 1996; Espelage & Swearer, 2003; Haynie et al., 2001). About half of the bullies reported being victims as well as bullies. Recently, researchers have begun to investigate the characteristics of these bully/victims (or aggressive victims as opposed to passive victims). The findings suggested that bully/victims demonstrated higher levels of both aggression and depression, and they tended to score low on measures of academic competence, pro-social behavior, self-control, social acceptance, and self-esteem. Overall, they functioned more poorly than bullies or victims (Nansel et al., 2001; Nansel et al., 2003). They were also reported to be more involved in other problem behaviors such as alcohol abuse, delinquency, and violations of parental rules. Bully/victims are among the most disliked members of a classroom (Batsche & Knoff, 1994). Evidence suggests that bully/victims come from homes in which parents are less involved with their children, and are at times hostile and rejecting (Bowers, Smith & Binney, 1992). At elementary school age, these youths apparently represented a particularly high-risk group, and are probably at greater risk of future psychiatric problems (Kumpulainen & Rasanen, 2000).

In general, the research suggested that boys are overrepresented among bullies, particularly among bully/victims, whereas differences between boys and girls are less pronounced among victims (Espelage, Mebane & Adams, 2004). Boys use more physical aggression and employ more direct, or overt, bullying behaviors, whereas girls use more relational aggression and a more indirect or covert bullying-type behavior (Craig, 1998). However, name calling and social exclusion are forms of bullying that are common for both boys and girls. Hitting and threatening are types of bullying behaviors that are most common for boys

while gossiping and taking personal belongings are types of bullying behaviors that are more frequent for girls.

Bullying, Attachment Styles and Parenting styles

Several studies have linked early insecure attachment to poorer peer relationships, lower social competence, and more aggression (LaFreniere and Sroufe, 1985; Lyons-Ruth & Block, 1996). However, there has been a limited amount of research to look at the relationship between bullying and victimization and attachment directly.

Several studies have focused on the relationship between attachment and bullying in preschool populations. As might be expected, securely attached preschoolers are less likely to engage in bullying others, or to become victims of bullying than are insecurely attached preschoolers. Avoidant children, as compared with children of all other attachment classifications, are most likely to bully others, and ambivalent children are most likely to be victimized (Jacobson & Willie, 1986; Pastor, 1981, Troy & Sroufe, 1987). For example, Troy and Sroufe observed children four and five years old at play in secure-insecure dyads. None of the securely attached children in their study were involved in peer conflict as either a victim or a bully. In contrast, all of the anxious-avoidant children in their study bullied peers, and all of the anxious-ambivalent children were victimized.

Studies of preschool students reveal that toddlers with different attachment classifications engage their peers differently. This offers some explanation for the bullying roles they tend to assume. For example, Pastor (1981) found that anxious-avoidant toddlers were more likely than others to use negative interactions while initiating play with peers. Anxious-ambivalent toddlers have been observed to isolate themselves or to elicit antagonistic responses such as provoking peers to take their toy away (Jacobson and Willie, 1986; Pastor, 1981).

Troy and Sroufe (1987) observed the behaviors of four- and five-year-old children in pairs. Children who were bullies, and children who were victimized, were more likely to have been identified as insecurely attached by the Strange Situation at 12 and 18 months. Myron-Wilson and Smith (1998) examined the attachment classifications of children aged 7 to 10 years, who were identified by their classmates as bullies and victims. Myron-Wilson and Smith uncovered several interesting characteristics of bullies and victims, respectively. Both bullies and victims were more likely to be insecure than were the non-involved children. The noninvolved child is one who is generally a bystander, not a bully or a victim. The non-involved child, likewise, does not respond in a pro-social fashion. The nature of victimization in four- to six-year-olds differed from those found in middle childhood and adolescence, in terms of the types of aggression used by children and the stability of the roles.

According to Myron-Wilson and Smith's (1998) previous research had indicated that, in middle childhood, bullies, or aggressors, and victims differed in terms of their social cognitive skills and executive functioning, and were more likely to be insecurely attached. Myron-Wilson and Smith aimed to examine the correlates in a group of four- to six-year-olds. Specifically, how the performances of children who were designated as aggressors, victims, and defenders compared on tasks assessing social cognition, executive functioning, and attachment profiles. It was predicted that children victimized at an early age (four to six years old) would not show the pattern of "risk factors" identified in victims during middle childhood years. Moreover, children in middle childhood demonstrated poorer executive functions and insecure attachment. Likewise, it was expected that aggressors would exhibit poor social/cognitive abilities, since peer victimization is less group-related and more direct in nature at this age. In addition, it was

presumed that young aggressors would be more likely to be insecurely attached than other children would be.

Another goal of the Myron-Wilson and Smith (1998) study was to obtain a qualitative sense of what kinds of families and parenting experiences bullying and victimized children have been exposed to. A possible explanation for the findings might be that from birth humans begin building perceptions of life regarding what Bowlby (1988) termed "internal working models". Individuals are context-bound and implicit in thinking. In gaining life experiences, children move away from a concrete way of thinking to a more symbolic way of thinking. At a younger age, implicit reasoning has only one meaning; yet, as the youngster matures, he or she develops a thinking pattern that is more explicit with many interpretations. The youngster is no longer bound by context, but begins to reason out the meaning of an event based on his or her own life experiences. When children are traumatized, they lose facility in symbolizing, or in selecting from, a repertoire of choices. Responses become automatic and, therefore, they lose their sense of self and others. Their "internal working model" takes over. Consequently, children with bullying tendencies no longer view their potential victims as people with feelings and respond with emotional unawareness.

Generally, male bullies are aggressive, tough, confident, impulsive, lacking in empathy, of average popularity, but below average in school attainment (Olweus, 1994). Less is known about characteristics of female bullies. Whereas victims are low in self-esteem and selfconfidence, bullies are not (Rigby and Cox, 1996). Delinquents are also aggressive, impulsive, low in empathy, and markedly low in school attainment. However, several studies suggested that delinquents, unlike bullies, tend to have low self-esteem (Rigby & Cox, 1996). In general, parents of bullies tended to be in conflict, lacking in emotional warmth, authoritarian, using

power-assertive disciplinary methods, including but not limited to physical punishment (Olweus, 1994; Myron-Wilson and Smith, 1998). In Italy, Berdondini and Smith (1996) replicated the earlier finding by Bowers, Smith and Binney (1992) that bullies were more likely to live in lowcohesive families. The parents of delinquents also tended to be in conflict, lacking in emotional warmth, authoritarian, and to use harsh and inconsistent discipline.

Research Questions

Based on the previous literature review the following research questions were devised:

- 1. Are higher levels of an emotionally warm parenting style, a secure peerattachment style, a secure parental-attachment style, and internal locus of control predictive of pro-social behaviors?
- 2. Are higher levels of a rejecting parenting style, avoidant/insecure peerattachment, insecure parental-attachment, and a more external locus of control predictive of greater bullying behaviors?
- 3. Are higher levels of an anxious rearing/overprotected parenting style, an ambivalent/ insecure peer-attachment style, insecure parental-attachment style and an external locus of control predictive of victimization?

Research Hypotheses

Based on a review of the literature, the following hypotheses are proposed:

Hypothesis 1: Parenting styles characterized by emotional warmth, secure peerattachment, secure parental- attachment, and an internal locus of control will predict a pro-social behavioral style.

- Hypothesis 2: Parenting styles characterized by rejection, an avoidant/insecure peerattachment style, an insecure parental-attachment style, and an external locus of control will predict bullying behaviors.
- Hypothesis 3: Parenting styles characterized by anxious rearing and overprotection an ambivalent/insecure peer-attachment style, an insecure parentalattachment style and an external locus of control will predict victimization of the adolescent.

Definition of Key Terms

Parenting Style Variables

For this study, the four parenting style variables (emotional warmth, overprotection, anxious rearing, and rejection) were measured by administering a 40-item assessment tool entitled, the Egna Minnen Betraffende Uppfostran (EMBU), "My memories of Upbringing" EMBU-C (Castro et al., 1993; Markus et al., 2003).

Emotional Warmth - Emotional warmth is defined as the degree to which an adolescent feels loved and supported by a parent. In this study, emotional warmth was operationally defined as the 10-item subscale scores on the EMBU-C, "Your parents show that they love you" (Castro et al., 1993; Markus et al., 2003).

Overprotection - Overprotection is defined as a high degree of intrusiveness, strict regulations, and monitoring behaviors the adolescent perceives on the part of the parent. In this study, overprotection was operationally defined as the 10-item subscale scores on the EMBU-C, "Your parents want you to reveal your secrets to them" (Castro et al., 1993; Markus et al., 2003).

Anxious Rearing - Anxious rearing is defined as a high degree of parental fear when an adolescent engages in autonomous activities. In this study, anxious rearing was operationally defined as the 10-item subscale scores on the EMBU-C, "Your parents are scared when you do something on your own" (Castro et al., 1993; Markus et al., 2003).

Rejection - Rejection is defined as parental hostility towards the adolescent, harsh, punitive and punishing parenting, derogation; and criticism. In this study, rejection was operationally defined as the 10-item subscale scores on the EMBU-C, "Your parents wish that you were like somebody else" (Castro et al., 1993; Markus et al., 2003).

Attachment Variables

For this study, the simplified version of Hazan and Shaver's (1987) descriptions of three peer-attachment patterns (secure, ambivalent, avoidant) were used to assess children's attachment styles as either securely attached, ambivalently attached or having an avoidant attachment style (AQ-C) (Muris et al., 2001).

Secure Attachment - For the purpose of this study, a measure of secure attachment was derived from the Description of Attachment Patterns for Children on the AQ-C (secure attachment) (Muris et al., 2001). Example items include, "I find it easy to become close friends with other children. I trust them and I am comfortable depending on them. I do not worry about being abandoned or about another child getting too close friends with me" (p. 515).

Ambivalent Attachment - For the purpose of this study, a measure of ambivalent attachment was derived from the Description of Attachment Patterns for Children on the AQ-C (ambivalent attachment) (Muris et al., 2001). Some items are, "I often find that other children do not want to get as close as I would like them to be. I am often worried that my best friend

doesn't really like me and wants to end our friendship. I prefer to do everything together with my best friend. However, this desire sometimes scares other children away" (p. 515).

Avoidant Attachment - For the purpose of this study, a measure of avoidant attachment was derived from the Description of Attachment Patterns for Children on the AQ-C (avoidant attachment) (Muris et al., 2001). Some descriptions are "I am uncomfortable to be close friends with other children. I find it difficult to trust them completely, difficult to depend on them. I get nervous when another child wants to become close friends with me. Friends often come more close to me that I want them to" (p.515).

For the purpose of this study, the Inventory of Parent and Peer Attachment—Revised for Children was used to assess the positive (secure - trust, communication) and negative (insecurealienation) affective and cognitive dimensions of pre-adolescent's relationships with their parents and peers (Gullone & Robinson, 2005).

Trust - Trust is defined as the positive affective experience associated with the accessibility of attachment figures. An example is "I tell my parents about my problems and trouble" (p. 77). For the purpose of this study, a measure of trust or secure attachment was operationally defined as responses to questions that assess trust on the Inventory of Parent and Peer Attachment—Revised for Children (Gullone & Robinson, 2005).

Communication - Communication is defined as the perception that an attachment figure is sensitive and responsive to the individual's emotional states and helpful with concerns. An example is "My parents listen to my opinions" (p.77). For the purpose of this study, a measure of communication or secure attachment was operationally defined as responses to questions that assess communication on the Inventory of Parent and Peer Attachment—Revised for Children (Gullone & Robinson, 2005).

Alienation - Alienation is defined as the negative affective experience of anger resulting from unresponsive attachment figures described as "I can't depend on my parents to help me solve a problem" (p.77). For the purpose of this study, a measure of alienation or insecure attachment was operationally defined as responses to questions that assess alienation on the Inventory of Parent and Peer Attachment—Revised for Children (Gullone & Robinson, 2005).

Locus of Control Variables

For this study the Nowicki-Strickland Locus of Control Scale was used to assess the degree of internal to external locus of control in children.

Internal Locus of Control - Is defined as a belief that behavior is directly related to outcomes, because individuals have control over their environments. An example would be, "Are you often blamed for things that just aren't your fault?" For the purpose of this study, a measure of internal locus of control was operationally defined as responses to questions that assess internal locus of control on the Nowicki-Strickland Locus of Control Scale for Children. (Nowicki & Strickland, 1973).

External Locus of Control - Is defined as a failure to see the relationship between one's behaviors and the consequences for example, "Are some kids just born lucky?" For the purpose of this study, a measure of external locus of control was operationally defined as responses to questions that assess external locus of control on the Nowicki-Strickland Locus of Control Scale for Children (Nowicki & Strickland, 1973).

Bullying Variables

For this study, the Peer Relations Questionnaire for Children (Rigby & Slee, 1993) was used to assess bullying behaviors.

Pro-social Behavior - Pro-social behavior is defined as a cooperative style of peer relating, characterized by a high degree of constructiveness and sharing. For the purpose of this study, a measure of pro-social behavior was operationally defined as responses to questions that assess pro-social behaviors from the 20 items on the Peer Relations Questionnaire for Children, "I like to make friends" (Rigby & Slee, 1993).

Bullying - Bullying behavior is defined as an aggressive personality pattern with a tendency to react aggressively in many different situations, with fairly weak control of inhibitions against aggressive tendencies, and with a positive attitude to violence. These behaviors include hitting others, verbal abuse, and excluding other children from desired activities. For the purpose of this study, a measure of bullying behavior was operationally defined as questions that assess bullying behaviors from the 20 items on the Peer Relations Questionnaire for children, "I like to make others scared of me" (Rigby & Slee, 1993).

Victims - Victims of bullying behavior report being persistently victimized. Habitual victims have been characterized as generally anxious, low in assertiveness, and often physically weaker. For the purpose of this study, a measure of victim behavior was operationally defined as questions that assess victimization from the 20 items on the Peer Relations Questionnaire for Children "I get called names by others" (Rigby & Slee, 1993).

CHAPTER III

METHODOLOGY

Introduction

This chapter includes the design of the proposed study, discussion of selection and recruitment of participants, sample size, and demographic information obtained from the population utilized. The independent and dependent variables are specified, as well as the statistical analyses implemented. In addition, normative data was discussed for each of the assessment tools utilized in this study.

The Design of the Study

The design of this study was a correlational investigation used to explore the relationships among parental styles, locus of control, parental-attachment based on Bowlby's theory (1982), peer-attachment styles based on Ainsworth's (1978) three attachment categories, and bullying behavior. Parental styles (emotional warmth, overprotection, anxious rearing, and rejection) plus locus of control (internal and external), parental-attachment (secure, insecure) and peer-attachment styles (secure, ambivalent, avoidant) were the criteria or independent variables with bullying behavior (pro-social, bully, victim) serving as the dependent or outcome variable.

Participants

The sample populations of participants involved in this study were male and female students enrolled in a public charter school located in the New York/New Jersey metropolitan area. The public charter school provides academic instruction to all students, based on the New Jersey Core Curriculum Content Standards for their grade (New Jersey Department of Education, 2004). The school currently has 540 students enrolled, from kindergarten through the eighth grade. For the purpose of this study, the participants were middle school (6th-8th-grade) male and

female students who were enrolled in the public charter school. The demographics of the student population attending the public charter school consisted of individuals from an urban area and its surrounding suburban New York/New Jersey major metropolitan area. The assessments were administered to the students by this researcher with two licensed social workers who were available to provide immediate supports and services should they become needed. In addition, consent and assent forms included outside professional wrap-around counseling services if they were required (see Appendix J). Once all the assessments had been administered, and the data analyzed, a psychoeducational in-service was given to the students, staff, and any family members as a means of providing possible preventative assistance, as well as school-based interventions. The school demographic and ethnic makeup of the participants from the identified school consist of approximately 48% African American male and female students, approximately 24% Caucasian, 21% Hispanic, and 6% Asian. Socioeconomic status (SES) was not collected in this study. The number of participants needed in this study was calculated by conducting a power analysis utilizing GPOWER software (Faul, Erdfelder, Lang & Buchner, 2007). According to the GPOWER software program, the alpha was set at 0.05 and an effect size (high moderate) of .25 was set. An a priori power analysis was conducted to determine the minimum number of participants required to test the study hypotheses. Given a conventional alpha =0.05, high moderate anticipated effect size (0.25) derived from previous studies within the scientific literature, and power = 0.80, the number of participants required for the present study was 58.

Procedure

Prior to engaging in this study, authorization was obtained from the Institutional Review Board (IRB) at the designated institution. The parents of all participants were contacted, and signed letters of consent were obtained. Likewise, the students who participated were contacted, and signed letters of assent were secured. Any participants who did not have parental approval were not allowed to participate in this study. All qualifying students were given packets of selfreport tests in a group setting. In all cases, participation was voluntary, and at all times participants had the option of discontinuing testing if they felt any discomfort, became anxious, or believed that they were unable to continue. Because the testing procedure involved questions (i.e., "I get picked on by others") that could arouse unpleasant feelings, participants were advised that at all times counseling from the school's counselors would be available to ease any negative transitory feelings that may be aroused by this study. No public record connecting a participant to any questionnaire data was published. In addition, no follow-up information was gathered once the assessments had been filled out by the participants.

All testing materials were presented by this author in a single packet and contained the following items: (1) A locus of control scale for children (Nowicki, S. and Strickland, B. R., 1973); (2) EMBU-C (Egna Minnen Betraffende Uppfostran) (A Swedish acronym for "My memories of upbringing") (Brown & Whiteside, 2008; Castro, Toro, Van der Ende, & Arrindell, 1993;), (3) (PRQ) The Peer Relationship Questionnaire for Children (Rigby, K. and Slee, P. T., 1993), (4) Inventory of parent and peer attachment—revised attachment--revised for children (Gullone & Robinson, 2005), (5) Attachment Styles (Hazan & Shaver, 1987; Muris et al., 2000), and (6) a demographic data sheet.

Measures

Demographics Page

A demographics page was provided in the questionnaire packet to determine specific information about the sample participants. The demographics page was divided into two sections. In the first section, participants stated their age, grade, gender, and ethnic/cultural

background. In the second section, participants indicated all the members who comprised their household by checking off the appropriate family designation. Examples of the possible household members were: mother, father, grandmother, grandfather, foster parent, aunt, uncle, legal guardian, siblings, stepsiblings, and cousins. Numerous options were given as a means of allowing for a wide variety of family dynamics, and participants were able to check more than one option based on family members.

Standardized Measures

The following five instruments were selected as viable measures for this study: Egna Minnen Betraffende Uppfostran (EMBU-C) (Castro et al., 1993); Nowicki-Strickland Locus of Control Scale for Children and Adolescents (Nowicki & Strickland, 1973); Peer Relations Questionnaire (PRQ) (Rigby & Slee, 1993); Attachment Styles: The Single-question format modified for children (Muris et al., 2000); and The Inventory of Parent and Peer Attachment— Revised for Children (Gullone and Robinson, 2005). These assessment measures were specifically chosen, since they tap into the hypothesized variables. These variables are parenting styles, parent and peer attachment styles, locus of control, and pro-social/bullying behaviors.

Each assessment instrument was selected based on reliability and validity considerations, in addition to their having 4th- to 6th-grade readability levels. Moreover, these questionnaires can be easily administered in a large group format, as they are relatively short and require very little direction for implementation.

Originally, the EMBU was developed to assess the perceptions of parent's rearing behaviors by adults (Brown & Whiteside, 2008; Castro et al., 1993). The EMBU is a self-report questionnaire, which has been shown to have good construct validity and reliability (Arrindell and Van der Ende, 1984). Over the years, it has been translated into several languages, again

with adequate cross-national validity (Castro et al., 1993). The EMBU was comprised of 14 aspects of parental behaviors and attitudes. These variables were abusive, depriving, punitive, shaming, rejecting, overprotective, overinvolved, tolerant, affectionate, performance-oriented, guilt-engendering, stimulating, favoring subject, and favoring siblings (Castro et. al., 1993). The 14 variables of the EMBU were ultimately reduced to four dimensions: rejection, emotional warmth, overprotection and favoring subjects. According to Markus et al. (2003), studies conducted worldwide have shown that the first three variables (emotional warmth, overprotection, and rejection) were identified in the various studies conducted; however, the non-replication of favoring subjects suggested that this factor may have been culture-specific, rather than a universal variable.

The modified version of the EMBU-C (Castro et al., 1993) consists of 40 items that can be allocated to four subscales, with each representing a domain of parental rearing: emotional warmth (10 items; e.g., Your parents show that they love you), anxious rearing (10 items; e.g., Your parents are scared when you do something on your own), overprotection (10 items; e.g., Your parents want you to reveal your secrets to them), and rejection (10 items; e.g., Your parents wish that you were like somebody else). All items are answered on a 4-point Likert scale (1=No, never, 2=Yes, but seldom, 3=Yes, often, 4=Yes, most of the time) and tap one of the four separate domains of ongoing parental rearing behaviors.

The EMBU-C (Castro et al., 1993) has been developed to assess children's and adolescents' perceptions of parents' rearing practices. According to Muris, Meesters and von Brakel (2003), the modified EMBU-C contains the factors emotional warmth, anxious rearing, overprotection, and rejection. The scale for emotional warmth contains 10 items, with an internal consistency of .91 for both fathers and mothers. The scale for anxious rearing contains

10 items, with an internal consistency of .78 for fathers and .79 for mothers. The scale for overprotection contains 10 items, with an internal consistency of .70 for fathers and .71 for mothers. The overprotection factor is measured by fearfulness and anxiety for the child's safety and intrusiveness. The scale for rejection contains 10 items, with an internal consistency of .84 for fathers and .83 for mothers. The rejection factor is characterized by hostility, punishment (physical or not, abusive or not), derogation, and blaming of respondents. The answers for both parents were highly correlated (r = .79 for Emotional Warmth, .83 Anxious Rearing, .81 for Overprotection, and .67 for Rejection) (See Chart 1).

Chart 1: EMBU-C alpha coefficients:

Muris et al. (2003) Mother Father			Brown and Whiteside (2008) <u>Parents</u>
Emotional Warmth	0.91	0.91	0.89
Anxious Rearing	0.79	0.78	0.81
Overprotection	0.71	0.71	0.64
Rejection	0.83	0.84	0.83

Dekovic et al. (2006)

	Maternal		Paternal	
	<u>Dutch</u>	<u>Immigrant</u>	<u>Dutch</u>	<u>Immigrant</u>
Emotional Warmth	0.90	0.92	0.90	0.93
Overprotection	0.73	0.71	0.67	0.71
Rejection	0.80	0.88	0.84	0.85

In Brown and Whiteside's (2008) study, the children's responses to the EMBU-C were based on their present perception of combined parenting styles. The internal-consistency

Cronbach alphas for each of the four parental rearing styles were emotional warmth =.89, anxious rearing = .81 overprotection = .64, rejection = .83. Test-retest coefficients over a twomonth period were .78 or higher (Muris et al., 2003) (See Chart 1). In addition, according to Dekovic, ten Have, Vollebergh, Pels, Oosterwegel, Wissink, De Winter, Verhulst and Ormel's (2006) cross-cultural research, the internal consistency coefficients for maternal warmth, rejection, and overprotection in the Dutch sample were .90, .80, and .73, respectively, and .92, .88, and .71 in the immigrant sample population. The immigrant sample population consisted of individuals from Surinam, the Dutch Antilles, Indonesia, Morocco, Turkey, and other non-Western countries, Iraq, Iran, and Somalia. The internal consistency alphas for paternal emotional warmth, overprotection, and rejection in the Dutch sample were .90, .84, and .67, as compared to the immigrant sample population whose values were .93, .85, and .71 (See chart 1). The Alpha test (Hakstian & Whalen, 1976) indicated that these coefficients did not differ significantly across cultures. Overall, these results suggest that the EMBU-C four subscale questions have factor structure and reliability. Anxious rearing was not a factor in this study.

The perception of parental rearing behaviors, as measured by the EMBU, consistently proved to be related to various categories of psychological disorders. Markus et al. (2003) pointed out that attachment research showed that children are influenced by the rearing behaviors of their parents through children's mental representations or "working models" of parents' behaviors (Main et al., Kaplan, & Cassidy, 1985). "Therefore, when investigating the role of parental rearing, it is important to capture the child's perception of the upbringing" (Markus et al., 2003, p. 504). However, the retrospective nature of the assessment tool used by adults over an extended period of time proved to preclude a straightforward interpretation. Therefore, the EMBU was scaled down from 81 items for adults to 40 items for children, grouped into four

parental-rearing domains. The parental-rearing categories are emotional warmth ("When you are unhappy, your parents console you and cheer you up"); anxious rearing ("Your parents are afraid when you do something on your own"); overprotection ("When you come home, you have to tell your parents what you've been doing'); and rejection ("If something happens at home, you're the one who gets blamed for it") (Muris et al., 2003). These four variables ultimately tapped into the assessment of the child's perception, rather than actual adult recall of parental rearing (Muris et al., 2003).

Finally, Dekovic et al. (2006), anticipating scrutiny of the EMBU-C standardized sample, conducted several studies to establish that there was no cultural bias in the test, although in the first use of the EMBU-C, participants were of a mostly White Scandinavian population (Markus et al., 2003). The results of the Dekovic study indicated that third-world, or at-risk children, responded in a statistically similar way as did the mostly White Dutch population. Likewise, the scale measured the child's perceptions of his/her upbringing (Brown & Whiteside, 2008). Following on Dekovic's research, one should expect, a priori, that the scales of the EMBU-C would demonstrate a full range of scores, since it is the child's perceptions of his or her upbringing and not the actual parental style that is being elicited.

The Nowicki-Strickland Locus of Control Scale for Children and Adolescents

The Nowicki-Strickland Locus of Control Scale for Children and Adoloscents (Nowicki & Strickland, 1973) is a paper-and-pencil measure consisting of 40 questions that are answered either yes or no. The Nowick-Strickland Locus of Control Scale derived from the work that had begun with Rotter's definition of the internal-external control-of-reinforcement dimension. Nowicki and Strickland set out to devise a self-report instrument to assess an individual's belief that the locus of reinforcement resided in his or herself (internal locus of control), or in external

forces such as fate and/or chance (external locus of control). According to Nowicki and Strickland (1973), previous measures of locus of control were not adequate measures. Bialer's (1961) scale, according to Nowicki and Strickland (1973), had poor reliability with a split-half reliability of .49. Moreover, the basic format of Bialer's scale consisted of items that scaled in the same direction, an open invitation for response style which significantly affected the scores. A scale developed by Rotter was utilized for assessing locus of control but was difficult to administer to large groups. Nowicki and Strickland (1973) stated that there is incomplete reliability information on the Rotter scale. As a result of these deficiencies in assessment tools for locus of control, Nowicki and Strickland devised an instrument that allowed a researcher to study the effects of a generalized locus of control orientation of a child's behavior.

The Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973) was developed to measure the locus of control of children in the 3rd- through 12th- grades. This instrument has a 5th-grade readability level. When used with children in lower grades, it is administered verbally. It is a paper-and-pencil measure with 40 yes and no questions, such as "Are some kids just born lucky?" and "Are you often blamed for things that just aren't your fault?" Scores range from 0 to 40, with higher scores reflecting more external locus of control.

The original Nowicki-Strickland Locus of Control instrument consisted of 102 items. During test development, nine clinical psychology staff members were asked to answer the items in an external manner. If there was not complete agreement among these individuals, the item was eliminated. This process left 59 items, which were then given to 152 children in grades 3 through 9. The means changed from 19.1 (SD = 3.86) for 3^{rd} - graders to 11.65 (SD = 4.26) for 9th-graders. Test-retest reliability for a six-week period was .67 for the 8- to 11-year-old group and .75 for the 12- to 15-year-old group. Item analysis, which included comments from teachers

and students, resulted in a 40-item questionnaire. The 40-item scale was given to 1,017 students in 3rd- through 12th-grades. Estimates of internal consistency via the split-half method, corrected by the Spearman-Brown formula, were r = .63 (for grades 3, 4, and 5), r = .68 (for grades 6, 7, and 8), r = .74 (for grades 9, 10, and 11), and r = .81 (for grade 12). Test-retest reliabilities sampled at six weeks apart at three grade levels ranged from .63 for 3rd-grade students to .71 for 10th-grade students. The items described in the Nowicki-Strickland scale deal with reinforcement situations across interpersonal and motivational areas such as affiliation, achievement, and dependency. The goal of this scale development was to make the items readable at the 5th-grade level, as well as appropriate for older students. All these items were administered to a group of clinical psychologists (N=9), who were instructed to respond to each question in an external direction. Questions that did not receive complete agreement among the judges were dropped. This left the preliminary scale with 59 items. The remaining 59 items were given to a sample population of children (N=152), ranging from grades 3 to 9. Means for this testing ranged from 19.1 (SD = 3.86) in 3rd grade to 11.65 (SD = 4.26) in the 9th grade, with higher scores being associated with an external orientation. Nowicki and Strickland (1973, p. 149) reported the means for 6th-, 7th- and 8th-grade students ranging in age from 13.75 to 14.73 for males, with standard deviations in the 5.16 to 4.35 range. Female means ranged from ages 13.32 to 12.29, with standard deviations in the 4.58 to 3.58 range. Split-half Spearman-Brown correlations for grades 6, 7 and 8 were .74, indicating a high degree of reliability (Nowicki & Strickland, 1973). In a study with a similar population, Miller, Fitch & Marshall (2003) reported test-re-test reliability as .75. Nowicki and Strickland (1973, p. 153), referring to the validity of the scale, suggest that validity is acceptable, in that a number of research findings "suggest that particularly for males, an internal score on the Nowicki-Strickland is significantly related to

academic competence, to social maturity, and appears to be a correlate of independent, striving self-motivated behavior." Lastly, Andreou (2002) found that victims of bullying reported the highest levels of external locus of control. Kisha et al. (2003) found that locus of control predicted bully and victim status to a very significant degree, indicating that the Nowicki-Strickland Scale could be used to predict bullying behavior in this population. Kisha also noted that a PsychInfo search of locus of control and bullying behavior yielded only one study (Andreou, 2002). The Kisha study and this proposed study would make three in all.

The Peer Relations Questionnaire (PRQ)

The Peer Relations Questionnaire (PRQ) (Rigby & Slee, 1993) is a self-report, Likerttype measure developed on an Australian population to assess bully/victim problems between school children. The PRQ is designed for use with children 10 years and above in age and consists of four sections with a total of 20 items. The first of these sections contains 6 items designed to elicit responses related to the tendency to bully. The second section, with 6 items, taps a tendency to be a victim. Four items measure pro-social behavior, and there were four filler items. Students were asked how often each statement was true of them. The response categories are "never," "once in a while," "pretty often," or "often." Responses for each item are scored according to a 4-point scale with high scores being given to responses indicating frequency. Rigby and Slee (1993) reported that the four scales are factorially distinct from each other, and have adequate internal consistency and reliability. To examine the reliability of the three 4-item scales, alpha coefficients were computed. The results are as follows:

(a) to bully others, (b) to be victimized by others, and (c) to relate to others in a pro-social and cooperative manner. The resultant validity measures are as follows: Tendency to Bully, or Bully Scale, 75 (School A) and 78 (School B); Tendency to be Victimized, or

Victim Scale, 86 (School A) and 78 (School B); Pro-social Tendency or Pro-social Scale, 71 (School A) and 74 (School B). Thus, the internal consistency of each scale in each case exceeded .7 and may be regarded as adequate. (p. 38)

Rigby and Slee (1993) further examined the greater relationship between each of the four-item scales. They controlled for the contribution of age, and results were computed for male and female participants separately. The results confirmed the existence of three dimensions. This study suggested that, among school-aged children, the tendencies to bully, be victimized, or behave in a prosocial manner are largely independent. Moreover, these tendencies have implications that appear to have contributed to different aspects of psychological wellbeing.

Attachment Styles: The Single-Question Format Modified for Children (AQ-C)

The Single Question Format Modified for Children (AQ-C) (Muris et al., 2000) is a brief instrument to assess attachment styles. This measure is based on the assumption that attachment is a stable personality variable. Accordingly, Muris et al. constructed his modified children's version on Hazan and Shaver's (1987) attachment-style measure. The items of the attachmentstyle measure consist of descriptions concerning feelings about, and perceptions of, a person's relationship to a current attachment figure. There are three descriptions of attachment patterns, each corresponding with one of the three original attachment styles identified by Ainsworth et al. (1978). Participants are asked to choose one of the descriptions. This results in the individuals' classifying themselves as either securely, avoidantly, or ambivalently attached. Muris et al. (2000) were the first to attempt to determine whether Hazan and Shaver's (1987) attachment style measure could be employed with children. The assessment tool was administered to a group of 12-year-olds who were instructed to choose the descriptions that applied best to them.

Muris et al. (2000) determined that children chose descriptions of secure, avoidant, and ambivalent attachment 79%, 7.7% and 13.2% respectively. This suggested that one out of five children reported having an avoidant or ambivalent attachment style. Ainsworth et al. (1978), utilizing the strange-situation, found a higher percentage of avoidant and ambivalent attachment among young children (15% and 20% respectively). Likewise, Garbarino (1998) reported low or no test-retest reliability for this single measure scale, although it is widely used. These results may indicate that children at this age may underreport their insecure attachment style.

The Inventory of Parent and Peer Attachment Revised—for Children (IPPA-R)

The Inventory of Parent and Peer Attachment—Revised for Children (IPPA-R) (Gullone & Robinson, 2005) was devised in response to a noted absence of a valid and reliable assessment tool to measure parental attachment beyond infancy but prior to late adolescence. The Original version of the Inventory of Parent and Peer Attachment (IPPA) (Armsden & Greenberg, 1987) is a self-report questionnaire designed to assess affective and cognitive components of an adolescent's relationship to his or her parents and peers based on psychological security (Armsden & Greenburg, 1987). The IPPA is based on Bowlby's theory of attachment, with an emphasis on the significance of accessibility, responsiveness, availability and sensitivity of the attachment figure.

The IPPA taps parental- and peer-attachment constructs that are based on three interpersonal areas (Trust, Communication, and Alienation). Attachment beliefs are regarded as a concentration of trust plus communication minus alienation. Higher attachment belief scores indicate more secure attachment beliefs, whereas lower attachment-belief scores indicate less secure attachment beliefs.

The IPPA has good reliability and validity. For example, internal consistency of the three subscales ranges from .86 to .91, and test-retest reliability over a 3-week period was .93 (Armsden & Greenburg, 1987). The IPPA has also demonstrated convergent validity (i.e., correlation coefficients of .56, .52, and .78 with Family Environment subscales of Cohesion, Expressiveness, and Family Self-concept (Armsden & Greenburg, 1987). Significant intercorrelations were also found among the subscales (Garbarino, 1998). Armsden and Greenberg (1987) observed significant intercorrelations among all subscales. Specifically, Trust and Communication were positively correlated (r = 0.76 for each of the parent and peer scales). In contrast, the Alienation subscale was negatively correlated with Communication (r = -0.70 for parents and r = -0.40 for peers) and Trust (r = -0.76 for parents and r = -0.46 for peers). Subsequently, Mattanah et al. (2004), utilizing the IPPA, demonstrated that secure attachment positively correlated with self-esteem and lower levels of problem behaviors. Additionally, it has been determined that a secure parental-attachment relationship as determined by the IPPA was predictive of positive academic, social, and psychological adjustment during times of transition.

On the basis of several criteria, specifically the IPPA's assessment of prominent processes in an attachment relationship; i.e., trust, communication, and alienation. In addition to viewing the instrument as a robust psychometric tool, Gullone and Robinson (2005) deemed the IPPA an appropriate measure to adapt and modify for use with children. To that end, these researchers simplified the wording of the IPPA items. Specifically, 16 of the 28 parentattachment items were revised, as were 14 of the 25 peer-attachment items.

Gullone and Robinson (2005) reported that the IPPA-R's psychometric properties included an initial set of analyses aimed at examining whether age and gender differences on the IPPA-R scale and subscale scores would be found. These analyses yielded significant differences, indicating that the IPPA-R is sensitive to age and sex differences.

According to Gullone and Robinson (2005), when looking at Parent Attachment, the child group, on the whole, scored significantly higher than the adolescent group on all scores, with the exception of the Alienation subscale, for which there were no age-group differences. Gullone and Robinson (2005) indicated that this finding should not be interpreted as an indication that attachments to parents are less important for adolescents' psychological wellbeing compared to those of children (Gecas, 1972; O'Donnell, 1976), as is indicated by the correlations found between IPPA-R scale and subscale scores and self-esteem. Analyses pertaining to the reliability of the IPPA-R verified that the internal consistency coefficients did not differ markedly by age or gender group. The coefficients scores ranged between 0.60 (on Parent Alienation for males) and 0.88 (on Peer Trust for females), and thus signified adequate-togood internal consistency for each subscales of the IPPA-R across the samples that were investigated. The coefficient results generated were highly comparable to those reported by Armsden and Greenberg (1987) on the original version of the IPPA. Scores ranged between 0.72 and 0.91 for the subscales across both the parent and peer scales. Consistent with the work by Armsden and Greenberg with the IPPA, Gullone and Robinson (2005) examined the convergent validity by correlating reports on the IPPA-R with reports on self-esteem. In general, moderate correlations in the predicted direction were found for all scores on the IPPA-R and, therefore, provided support for the validity of the revised measure. It is also important to note that, while the differences were not large, there was some tendency for the correlations between self-esteem and parent attachment to be stronger for the adolescent subsample, compared with the child subsample. This is consistent with outcomes reported in studies comparing peer and parent

relationships in relation to psychological adjustment. Such studies have primarily shown that post-adolescence youths' perceptions of their relationships with their parents remain more important than those with peers (e.g., Gecas, 1972; O'Donnell, 1976).

Statistical Analysis

The present study employed a correlational design to understand factors that predict bullying behavior. To this end, the following predictors (i.e., independent variables) were assessed via self-report questionnaire: a) parental styles, the EMBU-C (Castro et al., 1993; b) locus of control, Nowicki-Strickland Locus of Control Scale for Children (NLOCS) (Nowicki, 1973); c) peer attachment styles, the Attachment Styles Single question format modified for children (AQ-C) (Muris et al, 2001); and d) parent attachment Inventory of Parent and Peer Attachment—Revised for Children (IPPA-R) (Gullone & Robinson, 2005). Bullying behavior served as the dependent variable, and was assessed via self-report questionnaire across the three domains of pro-social behavior, bullying behavior, and victimization using the Peer Relations Questionnaire (PRQ) (Rigby & Slee, 1993). The primary objective was to determine whether or not these predictors are related to bullying behavior and, if there is a relationship, the strength and linear direction of the association.

Methodology

Once approval by the Institutional Review Board (IRB) and dissertation committee was obtained the study commenced (see Appendix A). Parents/guardians of all potential participants were contacted via mail and the nature of the study was explained. For those parents/guardians who agreed to allow participation, a signed letter of consent was returned to the primary investigator (see Appendix B). Likewise, for the children whose parents provided consent, a signed letter of assent was obtained from the student prior to providing the questionnaire packet

in class (see Appendix C). Any students who did not have parental consent and did not provide formal assent to participate were not included in the study. Another exclusion criterion for this study was for students who participated within special education, including those classified students who were mainstreamed.

Data Collection

Data collection took place in a group setting. Questionnaire packets were administered during non-academic classes, thereby ensuring that delivery of grade-relevant core curriculum content was left uncompromised by participation in this study. In lieu of a scheduled class, the principal investigator, with approval of the instructor, entered the classroom and briefly explained the study to students using lay terminology. As part of this explanation, students were told that all the questionnaire packets were the same regardless of participation, so as to preserve the confidentiality of those students who had elected to not participate, or for whom there was not parental consent, as described below. This was done so no students would be excluded during the assessment process, and therefore identified as a nonparticipant.

The students for whom the principal investigator obtained consent for participation in this study were provided a packet of self-report questionnaires. The principal investigator provided the students for whom consent was not obtained a packet that appeared similar in all respects with the exception that the content was comprised of benign activities as opposed to questionnaire items.

This component of the methodology was essential in order to preserve confidentiality around which students were participating and which were not. In order to accomplish this objective, the principal investigator individually provided each student with a packet. As the principal investigator provided their packets, diligence was enacted to ensure only consented

students receive questionnaires and, further, students for whom an assent form was not signed; received the sham activity packet. Using this methodology, it was not readily apparent that some students were not participating in the study.

As part of the methodology, participants completed assessment items and were permitted to ask questions about items. The principal investigator provided clarity to the participant individually as was needed. The investigator maintained a log of questions and responses for later review, in order to understand potential ambiguity and uncertainty around items that needed to be factored into the analysis or interpretation of data.

Ongoing participation in the study was voluntary and students were told prior to participating that they had the option to discontinue testing at any time, however, all participants persisted through the full duration of the study. As the nature of some items administered had the potential to slightly increase a student's experience of anxiety and/or to cause mild discomfort/unpleasant feelings (i.e., "I get picked on by others") participants were provided with an opportunity for counseling to ease any negative transitory experience. While counseling was available by school counselors, none of the study participants required care. While the content of some items could elicit a mild emotional reaction, it was not expected that any student would experience significant discomfort that would require intensive treatment. These additional resources and care coordination were a precautionary component of the overall study methodology.

In order to preserve anonymity, questionnaire packets did not request the student to provide his/her name. Each packet was pre-populated in the upper right hand corner with an ordinal number. During the questionnaire administration, a form was circulated. The form contained a table with two columns. In the first column the name of each student appeared

within the class being examined. The second column was initially blank and each participant, upon receiving the form, was requested to populate the number on his or her questionnaire packet. Once completed, the form served as the key to the data, and was maintained and utilized in accordance with procedures outlined in the section of this document pertaining to data integrity. In this manner, student identity was not associated with the questionnaire packet, thereby preserving anonymity. The purposes of obtaining the student identity was only to have data on file in the unlikely scenario of an adverse event during which questionnaire responses might need to be reviewed in order to provide appropriate care. No follow-up data was obtained once the in-class assessments had been completed.

Measures

Data collection required about 40 to 45 minutes for completion. All standardized assessments utilized have been normed on a student population that ranged from the 6th through 12th grades, and have a readability level of about a 4th- to 5th-grade level (Gullone and Robinson 2005, Nowicki and Strickland 1973, Muris et al., 2000; Muris et al., 2003; Rigby & Slee, 1993). The questionnaire packet consisted of the EMBU-C (Castro et al., 1993), (see Appendix D), which measures participant remembrances of his or her parental upbringing, the Locus of Control Scale for Children (Nowicki and Strickland, 1973) (see Appendix E), which is a selfreport instrument utilized to assess an individual's belief that the locus of reinforcement resided in him or herself (internal locus of control) or in external forces such as fate and/or chance (external locus of control); the Single-Question Format Attachment Questionnaire for Children (Muris et al., 2000) (see Appendix F) measures peer-attachment styles; the Inventory of Parent and Peer Attachment—Revised for Children (Gullone and Robinson 2005) (see Appendix G), which measures parental attachment; and the Peer Relationship Questionnaire for Children

(Rigby and Slee, 1994) (see Appendix H), which is used to assess cooperative and uncooperative social behaviors among school age children. A demographic data sheet was also administered (see Appendix I). All measures utilized within this research are available in the public domain and, therefore, may be used without the author's written permission (Gullone and Robinson 2005, Muris et al., 2000; Muris et al., 2003; Nowicki and Strickland 1973; Rigby and Slee, 1993).

Data and Statistical Analysis

Descriptive Statistics and Database Screening

Prior to conducting inferential analyses to test study hypotheses, descriptive analyses of data were conducted across each domain for all measures administered, as well as for total instrument scores, as appropriate. Frequency counts and percentages were calculated for discrete variables, and means and standard deviations were calculated for all continuous variables. Data were also examined for the presence of outliers that might impact the interpretation of findings. Data was also examined for significant departures from normality and/or linearity, as well as the presence of outliers, as was appropriate, to prepare data for analysis. No data transformation was required, as all variables were within the normal range. Finally, prior to examining study hypotheses with statistical analyses, demographic variables were summarized and presented to represent the sample collected. Their relationship with study variables was also explored with Pearson bivariate correlation.

Inferential Analyses

The present study employed a correlational design to measure the strength and direction of the linear relationship between proposed predictors and the bullying criterion variable. The primary statistical model employed was a standard (simultaneous) ordinary least squares

multiple regression analysis. This multivariate model was selected in order to simultaneously understand the relationship between groups of predictor variables and the criterion variable. Order of entry was set to standard, sequential in order to circumvent the methodological limitations associated with potential Type 1 error in step-wise models and the lack of a clear a priori hypothesized order of entry, as required in a hierarchical analysis. Numerous multiple regression analyses were employed, as described below, in an effort to understand patterns of relationships between predictors and the criterion. Regression interpretation commenced with examination of model fit data, as obtained via inspection of an analysis of variance (ANOVA), which compared the ratio of regression to residual mean sum of square variance. Some significant ANOVAs suggested that the model predicted the criterion at a level greater than chance. Significant models were then examined in terms of the total variance explained (R and R^2) and the individual contribution of each predictor (standardized beta weights, Student's T and p-values, and partial correlations). P values for a particular predictor that met the established α < 0.05 criterion were considered significant and meriting interpretation.

Multicollinearity

The present study employed numerous predictors that would likely share variance and potentially could pose a concern for multicollinearity. This methodological concern was managed by using a variety of techniques. First, variance inflation factors (VIF) and tolerance statistics were inspected to determine the extent to which each predictor was independent of other predictors within the model conducted. Variables with significant concern for variance overlap were considered for exclusion in order to avoid potential Type II error that can occur secondary to inflated residual variance when multiple overlapping variables enter a regression equation. These analyses did not reveal concern related to multicollinearity within this study.

Statistical Models to Be Tested

Given the large number of predictor variables, it was not feasible to include all within one regression model. Therefore, a series of more parsimonious models were tested to best capture families of variables. Specifically, 12 independent multiple regression analyses were conducted, one for each of the four predictor instruments (EMBU-C; AQ-C, IPPA-R, and NLOC) by one for each of the three criterion domains of the bullying dependent variable (pro-social behavior, bully, and victim). Given that predictors are appropriately grouped by instrument, and that there was not an intention to draw cross-inferences that would associate the content of the domains, there was limited risk of family-wise error rate using this methodology (FWER). On the contrary, appropriately categorizing and grouping the analyses reduced the risk of Type II error that might otherwise had occurred secondary to an inclusion of a greater number of predictors than the statistical power of this study would allow.

All data collected included means, standard deviations, and internal consistency scores for the EMBU-C (Castro et al., 1993), Nowicki-Strickland Locus of Control Scale for Children (NLOCS) (Nowicki & Strickland, 1973), the Peer Relations Questionnaire (PRQ) (Rigby & Slee, 1993), the Attachment Styles Single question format modified for children (AQ-C) (Muris et al., 2001), and the Inventory of Parent and Peer Attachment—Revised for Children (IPPA-R) Gullone & Robinson, 2005), as well as selected demographic variables. Exploratory analyses of demographical information were performed to measure whether any demographic information had a relationship to independent and/or dependent variables.

Hypothesis 1: A parenting style of emotional warmth, secure peer-attachment, secure parental attachment and an internal locus of control will predict a pro-social behavioral style. In order to test this first hypothesis, multiple regression analyses were performed. The variable of

emotional warmth was constituted by scores on the subscale of emotional warmth from the EMBU-C (Castro, 1993). The variable of secure peer-attachment was constituted by the score on the modified Attachment Questionnaire for Children (AQ-C), with higher scores indicating a more secure peer-attachment style (Muris et al., 2001). The variable of parental attachment was constituted by the score on the IPPA-R, with higher scores indicating a more secure parentalattachment style (Gullone & Robinson 2005). The variable of locus of control was constituted by the score on the locus of control scale, with higher scores indicating a more external orientation (Nowicki & Strickland, 1973). The pro-social variable was constituted by the score on the subscale of pro-social measures on the Peer Relationship Questionnaire (Rigby & Slee, 1993).

Hypothesis 2: A parenting style characterized by rejection, an avoidant/insecure peerattachment, an insecure parental-attachment and an external locus of control will predict bullying behaviors. In order to assess the second hypothesized relationships, two simultaneous multiple regression analyses were performed. The variable of rejection was constituted by scores on the subscale of rejection from the EMBU-C (Castro, 1993). The variable of avoidant attachment was constituted by the score on the modified Attachment Questionnaire for Children (AQ-C) (Muris et al., 2001). The variable of insecure parental-attachment was constituted by the score on the IPPA-R (Gullone & Robinson 2005). The variable of locus of control was constituted by the score on the locus of control scale (Nowicki & Strickland, 1973), in which high scores indicate more external locus of control (LOC). The bullying variable was constituted by scores on the subscale of bullying from the Peer Relationship Questionnaire (Rigby & Slee, 1993). The two measures of secure peer attachment, AQ-C (Muris et al, 2001) and IPPA-R (Gullone & Robinson, 2005), were entered separately into the first or second multiple regression analyses.

Hypothesis 3: A parenting style characterized by anxious rearing, overprotection and ambivalent/insecure peer-attachment style, and an insecure parental-attachment style and an external locus of control, will predict victimization of the adolescent. In order to test the third hypothesized relationship, two simultaneous multiple regression analyses were performed. The variable of anxious rearing and overprotection was constituted by scores on the subscale of anxious rearing and overprotection from the EMBU-C (Castro, 1993). The variable of ambivalent attachment was constituted by the subscale score on the modified Attachment Questionnaire for Children (AQ-C) (Muris et al., 2001). The variable of insecure parentalattachment was constituted by the score on the IPPA-R (Gullone & Robinson 2005). The variable of locus of control was constituted by the score on the locus of control scale (Nowicki & Strickland, 1973). The victim variable was constituted by the scores on the subscale of victim from the Peer Relationship Questionnaire (Rigby & Slee, 1993). The two measures of secure peer attachment, AQ-C (Muris et al., 2001) and IPPA-R (Gullone & Robinson, 2005), were entered separately into the first or second multiple regression analyses.

Summary

In conclusion, this research was intended to explore whether there are any relationships between parenting styles, peer-attachment styles, parental attachment, locus of control, and prosocial/bullying behaviors. It was expected that rejecting, anxious, controlling parenting and attachment styles and an external locus of control would predict self-reported bullying behavior. It was also predicted that a warm, connected and consistent parenting and attachment style, in conjunction with an internal locus of control would be related to self-reported pro-social behaviors. Finally, it was predicted that an anxious rearing and overprotecting parenting style and an ambivalent/insecure attachment would result in victimization.

CHAPTER IV

RESULTS

Introduction

This chapter contains a comprehensive overview of the data, including descriptions of the sample, descriptive analyses, and an overview of the scales. Additionally, evaluations of assumptions are supplied, as well as exploratory analyses and hypotheses testing. Tables are presented throughout this chapter to give representation of the data obtained.

Overview of the Data

Sample

The present study involved responses from 88, 6th- through 8th-grade middle-schoolstudent participants. One hundred questionnaire packets were distributed to the identified sample population. Nine packets were excluded from data analyses because participants failed to complete the measures, and three packets contained multiple answers for one item. The results of the present study are, therefore, based upon 88 accurately completed questionnaire packets.

Demographics

The present study recruited middle school participants from an urban area, and its surrounding suburban area in northern New Jersey. Prior to data collection consent and assent were obtained from all voluntary participants. All questionnaire packets were distributed by the primary examiner. All participants were asked to complete a demographic form that included information on gender, age, grade and family ethnicity. Overall, age ranged from 11 to 15, with a mean of 12.9 (SD = 0.90), and with the largest proportion of participants being 13 years of age. The majority of participants were female (n = 46, 52.3%). While participants were enrolled in grades 6 through 8, the majority were in 7^{th} grade (n = 48, 54.5%), followed by 8^{th} grade (n = 32, 36.8%), and finally 6^{th} grade (n = 7, 8.0%). Numerous ethnic categories were represented among the students examined; however, the sample was notable for having a substantial proportion of African American parents (50.0%), followed by lesser percentages of Caucasian (29.5%) and Hispanic parents (12.5%), as represented in Table 1. Household composition revealed a variety of both nuclear and extended family members within the home, with 87.5% (n = 77) reporting living with their mother, 56.8% (n = 50) living with a sister, 55.7% (n = 49) with a brother, and 54.5% (n = 48) living with a father. Other additional extended family members were also well represented. Demographic characteristics for the participants are summarized in Table 1.

Table 1 (cont.)

	<u>N (%)</u>
Father Ethnicity	
African American	44 (51.8)
Caucasian	26 (30.6)
Hispanic/Latino	11 (12.9)
American Indian	3 (3.5)
Other	1 (1.2)
Household Composition*	
Mother	77 (87.5)
Sisters	50 (56.8)
Brothers	49 (55.7)
Father	48 (54.5)
Step-father	15 (17)
Uncle	11 (12.5)
Cousins	11 (12.5)
Aunt	10 (11.4)
Grandmother	9 (10.2)
Grandfather	7 (8)
Step-sisters	5 (5.7)
Step-mother	4 (4.5)
Step-brother	3 (3.4)
Legal Guardian	3 (3.4)

Descriptive Statistics

Prior to conducting inferential statistics used to test the study hypotheses, descriptive statistics in the form of means and standard deviations were calculated, in addition to measures of skew and kurtosis, for primary study variables, and all are presented as Table 2. Observation of the descriptive values suggests that standard deviations are proportionate to means, suggesting minimal variability within the measures. Further, the variables are well-distributed, with the majority having near-normal kurtosis (i.e., modest deviation from 0), with the exception of PRQ bullying, which appears to have relatively more clustering than the other variables collected. There is minimal skew in the outcome variables with moderate deviations observed only for PQR Bully and Victim, both having greater negative skew.

Scales

Means and standard deviations were determined for each of the dependent and independent variables. The locus of control was measured by the Nowicki-Strickland Locus of control Scale, and means and standard deviations for the locus of control total score were, M =16.4, SD = 4.7. These are presented in Table 2. The predictor variables—total score, overprotection, emotional warmth, rejection, and anxious rearing—were measured by the EMBU-C (Egna Minnen Betraffende Uppfostran, "My memories of Upbringing"). The means and standard deviations scores were M = 95.7, SD = 14.2 for the total score; M = 24.3, SD = 5.1 for overprotection; M = 28.9, SD = 6.3 for emotional warmth; M = 16.5, SD = 4.8 for rejection; and M = 25.9, SD = 5.9 for anxious rearing (see table 2). For the IPPA-R-R (parent and peer, respectively) the means and standard deviation for the predictor variables on the parent subscale are-M = 64.5, SD = 9.3 for the total score; M = 24.5, SD = 4.0 for trust; M = 22.1, SD = 4.1 for communication; and M=17.9, SD=3.3 for alienation. For the peer subscale means and standard deviation score were M = 59.0, SD = 7.9 for the total score; M = 24.9, SD = 3.9 for trust; M = 24.9, M = 218.6, SD = 3.4 for communication; and M = 15.5, SD = 2.0 for alienation (see table 2). The remaining three predictor variables, secure attachment, avoidant attachment and ambivalent attachment were measured by the score on the Attachment Questionnaire for Children (AQ-C). The means and standard deviations scores for secure attachment were M = 5.1, SD = 1.6; for avoidant attachment M = 3.6, SD = 1.9 and for ambivalent attachment M = 2.9, SD = 1.9 (see table 2). The outcome variables were bully, victim, and pro-social behaviors, as measured by the Peer Relationship Questionnaire (PRQ). The mean bully score was 8.3, with a standard deviation of 2.9; for victim M = 7.8, SD = 2.6; and the mean pro-social score was 12.0, with a standard deviation of 4.7 (see Table 2).

Though not provided within the table, frequency counts were also calculated to understand the proportion of participants who were classified using the AQ-C to indicate secure, avoidant, or ambivalent attachment. The results indicated that the majority of participants were securely attached (n = 59, 67.0%), followed by avoidant (n = 17, 19.3%), and then ambivalent (n = 17, 19.3%) = 12, 13.6%).

Scale Reliability

In addition to testing study hypotheses, a reliability analysis for each of the administered scales and subscales was conducted. Specifically, individual items from each study scale and subscale were examined, in order to report internal consistency reliability using Crohnbach's coefficient alpha, based on data from the present study. Internal consistencies of these measures were computed in order to assess levels of confidence within the data to insure that this research sample matched the sample on which the measures were based. Cicchetti (1994) set guidelines for measuring the size of the coefficient variables. Cicchetti determined that "when the size of

the coefficient alpha...is below .70 the level of clinical significance is unacceptable; when it is between .70 and .79, the level of clinical significance is fair; when it is between .80 and .89, the level of clinical significance is good and when .90 and above, the level of clinical significance is excellent" (p.286).

Overall, the majority of the scales were found to have good internal consistency within this study. Relatively lower reliability was observed only for the locus of control ($\alpha = .47$) and the IPPA-R Peer Alienation ($\alpha = .35$) scales. Based on the analyses, the majority of the aforementioned measures had adequate reliability, thus making the present study's sample population generally reliable. The results are summarized in Table 2. A Table of intercorrelations for all study variables is provided as Table 3.

Table 2 Descriptive Statistics for Study Outcome Measures

	М	SD	Min	Max	Coefficient
					Alpha
PRQ					
Total Score	39.6	5.6	28	53	.68
Bully	8.3	2.9	6	19	.81
Victim	7.8	2.6	5	15	.79
Prosocial	12.0	2.6	4	16	.78
Locus of Control (sum)	16.4	4.7	4	27	.47
EMBU-C					
Total Score	95.7	14.2	64	127	.83
Overprotective	24.3	5.1	11	36	.69
Emotional Warmth	28.9	6.3	11	40	.86
Rejection	16.5	4.8	10	29	.75
Anxious Rearing	25.9	5.9	12	37	.77
IPPA-R Parent Scores					
Total	64.5	9.3	43	84	.76
Trust	24.5	4.0	11	30	.85
Communication	22.1	4.1	12	30	.80
Alienation	17.9	3.3	8	24	.75

Table 2 (cont.)

	М	SD	Min	Max	Coefficient
					Alpha
IPPA-R Peer Scores-					
Total	59.0	7.9	42	74	.74
Trust	24.9	3.9	16	30	.87
Communication	18.6	3.4	10	24	.84
Alienation	15.5	2.0	9	20	.35
AQ-C-					
Secure Statement	5.1	1.6	1	7	
Avoidant Statement	3.6	1.9	1	7	
Ambivalent Statement	2.9	1.9	1	7	

Table of Intercorrelations for All Demographic and Primary Study Variables

1. Age 1.00 0.81 -0.12 -0.07 -0.09 -0.04* 0.05 -0.06 -0.09 -0.01 -0.09 -0.22 -0.22 -0.00 -0.09 -0.02 -0.09 -0.01 -0.09 -0.02 -0.09 -0.01 -0.09 -0.02 -0.09 -0.01 -0.09 -0.03 <th< th=""><th></th><th>_</th><th>2</th><th>1 2 3 4</th><th>4</th><th>5</th><th>9</th><th>7</th><th>∞</th><th>6</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th><th>17</th></th<>		_	2	1 2 3 4	4	5	9	7	$ \infty $	6	10	11	12	13	14	15	16	17
F. 1.00 -0.08 -0.17 -0.15 0.02* 0.08 0.09 -0.22 0.07 -0.02 0.015 0.14 0.14 0.01 0.02 0.011 0.05* 0.05 0.011 0.02 0.013 0.015 0.015 0.14 0.05 0.02 0.011 0.014 0.05 0.014 0.05 0.014 0.05 0.014 0.05 0.15 0.015 0.015 0.00 0.10 0.14 0.05 0.15 0.15 0.10 0.00 0.10 0.14 0.05 0.15 0.15 0.10 0.00 0.10 0.14 0.05 0.15 0.15 0.10 0.10 0.10 0.10 0.14 0.05 0.15 0.15 0.10 0.10 0.10 0.10 0.10	1. Age	1.00	0.81	-0.12	-0.07	-0.09	-0.04	0.05	0.11	-0.26	1		-0.04	-0.11	0.03	-0.09	-0.22	- 1
r Ethin 1.00 -0.21 -0.11 0.06* 0.05 -0.11 0.32 -0.09 -0.03 0.16 0.16 -0.01 0.01 0.00 0.14 0.05 0.27* -0.11 -0.17 0.03 0.16 0.06 0.02 0.25* 0.17 0.00 0.19 0.14 0.05 0.27* -0.11 -0.17 0.03 0.16 0.09 0.00 0.00 0.10 0.14 0.05 0.15 0.15 0.03 0.16 0.09 0.00 0.10 0.13 0.14 0.14 0.14 0.14 0.14 0.14 0.14 0.14	2. Grade		1.00	-0.08	-0.17	-0.15	0.02*	0.08					-0.05	0.01	-0.04	0.00		
Ethn 1.00 0.14 0.05 0.27* -0.11 -0.17 0.03 0.16 0.06 -0.02 0.25* 0.17 0.00 0.10 0.14 0.05 0.15 -0.15 0.07 0.03 0.09 0.00 0.00 0.10 0.19 0.18 0.18 0.19 0.10 0.10 0.10 0.10 0.10 0.10 0.10	3. Gender			1.00	-0.21	-0.11	0.06*	0.05	-0.11	0.32		-0.03	-0.15	0.14	-0.11	-0.02		
Ethn 1.00 0.01 -0.14 0.05 0.15 0.01 0.00 0.00 0.00 0.00 0.00	4. Mother Ethn				1.00	0.14	0.05	0.27*	-0.11				90.0	-0.02	0.25^{*}	0.17	0.00	
otal 1.00 0.62 0.45 0.07 0.20 0.10 -0.03 0.28 0.19 -0.02 0.10 -0.03 0.28 0.19 -0.02 0.01 -0.13 0.24 0.25 -0.24 0.02 0.01 -0.13 0.02 0.02 0.01 -0.13 0.02 0.02 0.01 0.01 0.02 0.02 0.01 0.01 0.02 0.02 0.01 0.01 0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.03 0.02 0.02 0.02 0.03 0.02 0.03 0.02 0.03 0.02 0.03	5. Father Ethn					1.00	0.01	-0.14			-0.15	0.07	-0.03	0.09	0.00	0.10		
1.00 0.12 -0.15 0.22 0.19 0.01 -0.13 0.42 0.25 -0.24 lial lial lial lial liad 0.09 0.21 0.10 0.15 -0.08 0.20 0.02 -0.06 lial liad liad liad liad liad liad liad	6. PRQ Total						1.00	0.62	09.0			0.20	0.10	-0.03	0.28	0.19		0.17
1.00 0.09 0.21 0.15 -0.08 0.20 0.02 -0.06 1.00 -0.37 0.09 0.08 0.24 -0.19 0.04 0.28 1.00 -0.08 -0.15 -0.55* 0.48* 0.14 -0.53 1.00 0.83** 0.55** 0.29** 0.87** 0.23 1.00 0.39** 0.11 0.61** 0.77 1.00 -0.48 0.31 0.77 1.00 -0.48 0.31 0.79 1.00 0.30 -0.59	7. Bully							1.00	0.12	-0.15	0.22	0.19	0.01	-0.13	0.42	0.25		0.09
$1.00 -0.37 0.09 0.08 0.24 -0.19 0.04 0.28$ $1.00 -0.08 -0.15 -0.55^* 0.48^* 0.14 -0.53$ $1.00 0.83^{**} 0.55^{**} 0.29^{**} 0.87^{**} 0.23$ $1.00 0.39^{**} 0.11 0.61^{**} 0.13$ $1.00 -0.48 0.31 0.77$ $1.00 0.30 0.30 0.59$ $1.00 0.30 0.30 0.10$	8. Victim								1.00	0.00		0.10	0.15	-0.08	0.20	0.02		-0.20
1.00 -0.08 -0.15 -0.55 0.48 0.14 -0.53 1.00 0.83* 0.55 0.29* 0.87* 0.23 1.00 0.39* 0.11 0.61* 0.13 1.00 0.39 0.11 0.61* 0.13 1.00 -0.48 0.31 0.77 1.00 0.30 -0.59 1.00 0.30 -0.59	9. Prosocial									1.00	-0.37	0.00	0.08	0.24	-0.19	0.04		0.33
1.00 0.83** 0.55** 0.29** 0.87** 0.23 1.00 0.39** 0.11 0.61** 0.13 1.00 -0.48 0.31 0.77 1.00 0.30 -0.59 1.00 0.30 0.10	10. Locus										1.00	-0.08		-0.55*	0.48*	0.14		
1.00 0.39** 0.11 0.61** 0.13 - 1.00 0.34 0.31 0.77 1.00 0.30 -0.59 - 1.00 0.10 1.00 0.10 1.00 0.10	11. EM Tot											1.00				0.87**		0.04
1.00 -0.48 0.31 0.77 1.00 0.30 -0.59 1.00 0.10	12. EM Prot												1.00			0.61**		-0.17
1.00 0.30 -0.59 - 1.00 0.10 1.00 0.10 1.00	13. EM Warm													1.00		0.31		0.22
1.00 0.10	14. EMBU Rej														1.00	0.30	-0.59	-0.12
1.00 1.00	15. EM Anxious															1.00	0.10	0.10
	16. Parent Total)	1.00	0.30
	17. Peer Total																	1.00

Note. *p < 0.05; **p < 0.01

Hypothesis Testing

Hypothesis I

In the initial hypothesis it was posited that parenting styles characterized by emotional warmth, secure peer-attachment, secure parental-attachment, and an internal locus of control will predict a pro-social behavioral style. In order to test this hypothesis, a multiple regression analysis with a standard entry of predictors was utilized. The predictor variables were emotional warmth, secure peer-attachment, secure parental-attachment, and locus of control, with prosocial behavior's being the criterion variable.

The results provide partial support for this hypothesis. Overall, analysis of variance comparing regression to residual variance indicated a statistically significant model, F(5, 82) = 4.5, p < 0.001), accounting for 21.4% (R = 0.46) of the variance. Regression coefficients for the model are provided in Table 4. The findings indicate that the Peer IPPA-R total score, t = 2.27, p = .03; $\beta = 0.24$, and the Locus of Control score, t = -2.38, p = .02, $\beta = -0.29$, are significantly associated with pro-social behavior. As expected, these findings suggest that an internal locus of control and a secure peer-attachment are both associated with a pro-social behavioral style. The variables, emotional warmth, t = -0.25, p = 0.80, $\beta = -0.04$, parent IPPA-R total score, t = 0.53, p = 0.59, $\beta = 0.09$, and the AQ-C total sore, t = -0.27, p = 0.43, $\beta = -0.08$, were predictor variables that did not show a significant relationship to pro-social behavior.

In order to explore this hypothesis further the regression model was repeated with the parent IPPA-R subscores (i.e., Trust, Communication, and Alienation) entered individually as predictors. These individual scores were used as a replacement for the IPPA-R Total score used in the original analysis. The results of this new analysis indicate no incremental benefit to individually entering these variables (see Table 5). The suspected relationship between the

parent subscale scores of trust and communication were not in support of the hypothesis. The association between locus of control and pro-social behavior remains valid, t = -2.20, p = 0.03, - $\beta = 0.28$. However, when the peer IPPA-R variables are entered individually again replacing the peer total score the findings indicate a significant relationship for both peer communication, t = -2.20, p = 0.03, -0.37, and locus of control, t = -2.45, p = 0.02, $\beta = -0.28$ (see Table 6). These findings are in partial support of the hypothesis and would suggest that both peer-attachment and locus of control are related to a pro-social behavioral style.

Table 4

Table of Regression Coefficients for Hypothesis I

Predictors	В	T	P	Partial	Tolerance	VIF
Emotional Warmth	-0.04	-0.25	.80	-0.03	0.37	2.68
IPPA-R Parent Total	0.09	0.53	.59	0.06	0.37	2.72
Score						
IPPA-R Peer Total*	0.24	2.27	.03	0.24	0.86	1.17
Score						
Locus of Control*	-0.29	-2.38	.02	-0.25	0.66	1.51
AQ-C Attachment	-0.08	-0.79	.43	-0.09	0.93	1.08

Note. *p < 0.05. Criterion = Pro-social behavior. IPPA-R = Inventory of Parent and Peer

Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Table 5

Multiple Regression Predicting Pro-Social Behavior from Emotional Warmth

Predictors	В	T	P	Partial	Tolerance	VIF
Emotional Warmth	-0.14	-0.77	.44	-0.09	0.33	3.06
Locus of Control*	-0.28	-2.20	.03	-0.24	0.63	1.58
AQ-C Attachment	-0.15	-1.43	.16	-0.16	0.98	1.02
IPPA-R Parent						
Trust	0.21	1.18	.24	0.13	0.31	3.26
Communication	0.09	0.53	.60	0.06	0.35	2.83
Alienation	-0.05	-0.49	.63	-0.05	0.86	1.16

Note. *p < 0.05. Criterion = Pro-social behavior. IPPA-R = Inventory of Parent and Peer

Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Hypothesis II

In the second hypothesis it was expected that parenting styles characterized by rejection, an avoidant/insecure peer-attachment style, an insecure parental-attachment style, and an external locus of control will predict bullying behaviors. In order to test this hypothesis, a multiple regression analysis with standard entry of predictors was utilized. The predictor variables were rejection, avoidant/insecure peer-attachment, insecure parental-attachment and an external locus of control, with bullying behavior being the criterion variable.

The results provide partial support for this hypothesis. Overall, analysis of variance comparing regression to residual variance indicated a statistically significant model, F(5, 82) = 4.2, p = 0.002), accounting for 20.3% (R = 0.45) of the variance. Regression coefficients for the model are provided in Table 7. The findings for this regression indicates a significant relationship between Rejection (t = 3.24, p = 0.002, $\beta = 0.41$), and bullying behavior. As expected a connection between parental rejection and a bullying behavioral style was found. External locus of control, and avoidant/insecure peer-attachment were variables that demonstrated no significant relationship to bullying behaviors.

In order to further examine the present findings with confidence, an additional exploratory examination of this hypothesis was performed. The impact of secure peer- and parental-attachment was explored in greater detail. The regression model was repeated with the parent IPPA-R subscores (i.e., Trust, Communication, and Alienation) entered individually as predictors. These subscale scores again replaced the IPPA-R Total score used in the original analysis. The results indicate that when parent IPPA-R scores are entered individually, a significant model again emerges, F(6, 81) = 4.5, p = 0.001. The new analysis indicates that both Parent Alienation (t = -2.38, p = 0.02, $\beta = -0.25$), and Emotional Rejection (t = 2.90, p = 0.005, $\beta = 0.005$, $\beta = 0.00$

= 0.39) are significantly related to a bullying behavioral style. Although parent alienation is significant, it should be noted that it is not in the hypothesized direction (please refer to Table 8). Thus, in the revised model independently assessing IPPA-R parent subscores provides the additional information that less parent alienation and more emotional rejection are associated with increased bullying behavior. When peer variables are entered individually, the model is significant, F(6, 81) = 4.3, p = 0.001), with only emotional rejection emerging as a significant predictor (t = 3.73, p < 0.001, $\beta = 0.42$; Table 9).

Table 7

Multiple Regression Predicting Bullying Behavior

Predictors	В	T	p	Partial	Tolerance	VIF
IPPA-R Parent Total Score	-0.02	-0.15	.88	-0.02	0.54	1.87
IPPA-R Peer Total Score	0.16	1.53	.13	0.17	0.85	1.17
Locus of Control	0.05	0.39	.70	0.04	0.66	1.51
AQ-C Attachment	0.03	0.30	.77	0.03	0.92	1.08
Emotional Rejection*	0.41	3.24	.00	0.34	0.61	1.65

Note. *p < 0.001. Criterion = Bullying. IPPA-R = Inventory of Parent and Peer Attachment

Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Table 8

Multiple Regression Predicting Bullying Using IPPA-R Parent Scales

Predictors	В	T	p	Partial	Tolerance	VIF
Emotional Rejection*	0.39	2.90	.00	0.31	0.51	1.95
Locus of Control	0.07	0.58	.57	0.06	0.64	1.56
AQ-C Attachment	-0.03	-0.29	.77	-0.03	0.97	1.03
IPPA-R Parent						
Trust	-0.01	-0.04	.97	0.00	0.28	3.63
Communication	0.22	1.41	.16	0.15	0.40	2.53
Alienation*	-0.25	-2.38	.02	-0.26	0.81	1.24

Note. *p < 0.01. Criterion = Bullying. IPPA-R = Inventory of Parent and Peer Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Table 9

Multiple Regression Predicting Bullying Using IPPA-R Peer Scales

Predictors	В	T	р	Partial	Tolerance	VIF
Emotional Rejection*	0.42	3.73	.00.	0.38	0.74	1.35
Locus of Control	0.10	0.84	.41	0.09	0.70	1.44
AQ-C Attachment	0.07	0.72	.48	0.08	0.88	1.13
IPPA-R Peer						
Trust	0.25	1.49	.14	0.16	0.33	3.05
Communication	0.06	0.35	.72	0.04	0.34	2.90
Alienation	-0.18	-1.60	.11	-0.18	0.76	1.31

Note. *p < 0.001. Criterion = Bullying. IPPA-R = Inventory of Parent and Peer Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

(see Table 11). When the peer variables were entered individually, as observed in Table 12, the overall model was not significant, F(7, 80) = 1.92, p = .080).

Table 10

Multiple Regression Predicting Victimization

Predictors	В	T	p	Partial	Tolerance	VIF
IPPA-R Parent Total Score	0.11	0.86	.39	0.09	0.65	1.53
IPPA-R Peer Total Score	-0.07	-0.58	.56	-0.06	0.76	1.32
Locus of Control*	0.30	2.20	.03	0.24	0.58	1.73
AQ-C Attachment	0.17	1.54	.13	0.17	0.91	1.10
Emotional Anxious Rearing	-0.18	-1.23	.22	-0.14	0.48	2.08
Emotional Overprotection	0.27	1.78	.08	0.19	0.47	2.12

Note. *p < 0.05. Criterion = Victimization. IPPA-R = Inventory of Parent and Peer Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Table 11

Multiple Regression Predicting Victimization Using IPPA-R Parent Scales

Emotional Anxious Rearing						
Anxious Rearing						
	-0.21	-1.46	.15	-0.16	0.50	2.00
Overprotection	0.24	1.68	.10	0.18	0.51	1.96
Locus of Control*	0.35	2.62	.01	0.28	0.57	1.74
AQ-C Attachment	0.17	1.62	.11	0.18	0.93	1.07
IPPA-R Parent						
Trust	0.20	1.17	.25	0.13	0.36	2.78
Communication	0.06	0.35	.72	0.04	0.36	2.78
Alienation	-0.16	-1.42	.16	-0.16	0.79	1.26

Note. *p < 0.05. Criterion = Victimization. IPPA-R = Inventory of Parent and Peer Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Table 12

Multiple Regression Predicting Victimization Using IPPA-R Peer Scales

Predictors	В	· T	p	Partial	Tolerance	VIF
Emotional						
Anxious Rearing	-0.17	-1.16	.25	-0.13	0.48	2.07
Overprotection	0.26	1.74	.09	0.19	0.47	2.14
Locus of Control*	0.25	2.10	.04	0.23	0.73	1.36
AQ-C Attachment	0.19	1.69	.10	0.19	0.87	1.15
IPPA-R Peer						
Trust	0.05	0.30	.76	0.03	0.32	3.10
Communication	-0.05	-0.26	.80	-0.03	0.34	2.97
Alienation	-0.08	-0.67	.50	-0.07	0.73	1.36

Note. *p < 0.05. Criterion = Victimization. IPPA-R = Inventory of Parent and Peer Attachment Revised-for Children. AQ-C = Attachment Questionnaire for Children.

Summary

This chapter contains results of the multiple regression analyses conducted to determine the validity of the hypotheses statements. Based on the data, there were significant relationships between an internal locus of control, a secure peer-attachment style and a pro-social behavior among adolescents. The statistically significant relationship between parental rejection and bullying was in the hypothesized direction while the relationship between bullying and parental alienation was not. There was also a significant relationship between an external locus of control and victimization in adolescents.

Descriptive statistics were conducted and indicated that the average participant age for this study was 12.9. Forty-six (52.3%) of the participants were female, and 38 (43.2%) of the participants were male. The majority of the participants were 7th-graders (54.5%). A large number of participants identified a substantial portion of their parents as African American, followed by Caucasian and Hispanic. The overall household composition revealed both nuclear and extended family members within the home.

CHAPTER V

SUMMARY AND CONCLUSION

This chapter contains an overview of the findings of this study. In order to adequately discuss the findings, the research problem is restated, and the sample is described. A discussion of the results involves comparing this study to results of previous research to determine whether there are commonalities. Limitations of the study are discussed as well as recommendations for future research and clinical practice.

Problem Restatement

Bullying is a broad problem in our schools and communities, with an estimated 10% to 30% of children and youths involved in bullying. A recent report from the American Medical Association on a study of over 15,000 6th- through 10th-graders estimates that approximately 3.7 million youths engage in, and more than 3.2 million are victims of, moderate or serious bullying each year (Nansel et al., 2001). Moreover, bullying is reported to increase during the middle school years as children begin to enter adolescence. Thus, bullying behaviors represent a serious threat to healthy adolescent development. A serious consequence of bullying is the non-compliant, anti-social conduct that often leads to delinquency, crime, and substance and/or alcohol abuse in exposed children (Kaltiala-Heino et al., 2000). Therefore, given the numerous consequences related to bullying, the present study was designed to gain a broader understanding of pro-social/bullying behaviors, and how these behaviors are influenced by parenting styles, peer and parental attachments, and locus of control. The objective was to better understand these related constructs, in an effort to reduce bullying and improve life quality for the many young students impacted by this behavior. More recent data confirmed similar incidence and prevalence of bullying among 12- to 18-year-old students. Among these students, 19% reported

being bullied verbally, 15% reported being the subject of rumors, and 9% reported being bullied through physical means (Dinkes, Cataldi & Lin-Kelly, 2007).

Several studies have confirmed an inverse relationship between grade level and involvement in bullying (Dinkes et al., 2007; Nansel et al., 2001). Specifically, bullying and victimization are most prevalent during the middle school years, typically 6th through 8th grades, and tend to decrease as students reach 12th grade.

Gaining a broader understanding of pro-social, bullying, and victim behaviors and how these behaviors are influenced by parenting styles, peer and parental attachment, and locus of control, is the key to discovering the development of pro-social/bullying behaviors.

This study was designed to explore dynamic family factors that may influence and/or predict the development of bullying behavior in children. The present study holds that various styles of parenting, attachment, and locus of control might result in the development of prosocial, victimization, and bullying behaviors in adolescents. This research investigated the following questions: Are higher levels of an emotionally warm parenting style, a secure peer-attachment style, a secure parental-attachment style, and internal locus of control predictive of pro-social behaviors? Are higher levels of a rejecting parenting style, avoidant/insecure peer attachment, insecure parental-attachment, and a more external locus of control predicative of greater bullying behaviors? Are higher levels of an anxious rearing/overprotected parenting style, an ambivalent/insecure peer attachment style, and an insecure parental-attachment style predictive of victimization?

It was predicted that parenting styles characterized by emotional warmth, secure peer attachment, secure parental attachment, and an internal locus of control would be significantly related to a pro-social behavioral style. Further, parenting styles characterized by rejection, an

avoidant/insecure peer-attachment style, an insecure parental-attachment, and an external locus of control were expected to be significantly related to bullying behaviors. Finally, it was thought that parenting styles characterized by anxious rearing and overprotection as well as an ambivalent/insecure peer-attachment style, an insecure parental-attachment style, and an external locus of control would be significantly related to victimization. These hypotheses were tested within a sample of 88 adolescents from a public charter school in the New York/New Jersey metropolitan area.

Overall, the results provided data to partially support all three hypotheses. Specifically, a secure peer-attachment and an internal locus of control were associated with a pro-social behavioral style. Parenting styles characterized by emotional rejection and an insecure parental-attachment (alienation) were significantly associated with bullying behaviors. Anxious rearing/overprotected parenting style, ambivalent/insecure peer-attachment, an insecure parental-attachment style, and an external locus of control were significantly associated with victimization of the adolescent.

This study contributes to the literature on pro-social, bullying, and victimization behaviors among middle-school adolescents as well as the relationships among peer/parental attachments, parenting styles, and locus of control. Lately, the topic of bullying has garnered a great deal of public attention and empirical research.

These study findings are a critical addition to the scientific literature. Recent research in the field of bullying has shown that the family plays an important role in developing a more cooperative, pro-social behavioral style or, conversely, a more uncooperative, bullying position. However, there were no studies located that link all areas of this research. Thus, this study is unique in seeking to bridge the gap in the literature with regard to the relationship between

parenting styles, and parental and peer attachments as well as one's locus of control and how they may directly impact the development of pro-social, bullying, or victimized behaviors in children and adolescents. The following shall provide a context for this study within the existing peer-reviewed scientific literature.

Discussion of Hypotheses

Hypothesis I

It was predicted that parenting styles characterized by emotional warmth, secure peerattachment, secure parental attachment, and an internal locus of control would predict a prosocial behavioral style. This hypothesis was partially supported by the findings.

In the first study hypothesis, secure peer-attachment as well as an internal locus of control were found to be predictive of a pro-social behavioral style in children. These findings indicate that children who have a secure peer-attachment are less apt to engage in non-compliant, uncooperative, socially unacceptable peer interactions. Research indicates that strong relationships with peers have been linked with perceived self-worth, high levels of perspective-taking and pro-social behavior, and decreased risk of emotional and behavioral problems (Labile, Carlo & Raffanelli (2000). Children who are more secure and have an internal locus of control, or a belief they have control over the environment, are more apt to behave in a pro-social, compliant and cooperative manner. Trust and trustworthiness have been associated with individuals who have an internal locus of control. An internal locus of control orientation enabled the adolescent to develop an internal representation of self—the ability to identify that personal action can make a difference in the individual's daily activities as well as in future endeavors. This strengthened sense of self may be the result of a parent/caregiver's encouraging the child to freely explore the environment and to begin to develop individuation and autonomy.

According to Labile et al. (2000), the parent and peer relationships serve similar (although not necessarily equal) functions in terms of adolescent adjustment.

The results of this study were consistent with research conducted by Bowlby (1988), who noted that, as a child enters the preadolescent years, changes can occur in attachment. Bowlby further stated that, as a child matures and develops, there may be a decline in the frequency and the intensity of the parental bond and/or attachment. This noted decline in parental attachment and increase in peer attachments may be the result of the attachment paradigm's shifting to the role of a peer-bonding (attachment) relationship rather than that of the parent. The current findings also correspond with the interpretation Marvin and Britner (1999) held that as a child's self-reliance increases from an insecure attachment, so does the sense of autonomy. The older child/adolescent is better able to rely on peers for dealing with new and challenging social situations. While the powerful influence of parents and peers is quite similar from early childhood into adolescence, during middle- to late-adolescence, self-esteem and life satisfaction seem to be more related to peer attachment. As some authors have pointed out (Dekovic, 1999; Labile et al., 2000), adolescents begin to rely on peers more often than parents as sources of support, possibly because of an increase in autonomy from the family or from emerging new concerns and interests that they share with their peer group.

A child's remembrances of an emotionally warm parenting style and a secure parental-attachment were *not* significantly related to a pro-social behavioral style in children. These findings were unexpected and contrary to much of the literature indicating that both of these independent variables would have some relationship to a child's more cooperative and pro-social peer interactions. When the independent variable, secure parental attachment, was disassembled into parental trust and communication, again there was not a significant relationship or outcome.

There are several possible explanations as to why emotional warmth and a secure parental attachment did not have the anticipated results. One potential explanation for this unexpected result might be the instruments selected for this study. It was predicted that adolescents' remembrances of a parenting style described as emotionally warm, in addition to a secure parental-attachment, would increase the likelihood that an adolescent would have more cooperative and pro-social peer relationships. The EMBU-C (Muris et al., 2003) was used to measure the adolescents' remembrances of the parenting style, and emotional warmth. Gullone and Robinson's (2005) IPPA-R was utilized to explore a secure parental-attachment. Although both of these measures seemed to sufficiently include the variables of parenting styles and parental attachment, these self-report measures may not have captured the true essence of the research question. This unexpected result is, however, similar to results obtained by a current study conducted by Renes and Strange, (2009). Renes and Strange's study explored both parental- and peer-attachment styles with regard to an increase in adolescent alcohol and substance use. As the current study, Renes et al. (2009) also noted an inverse relationship between peer-attachment styles and parental-attachment styles. The empirical results of the Renes et al. study and the current study both utilized the IPPA-R to relate Peer and Parental Attachment, and both studies' results indicated that the overall scores for peer attachment were higher than for parent attachment. Perhaps a self-report measure that can pick up on the subtle nuances that may arise as an adolescent begins to move into the separation/individuation developmental phase of the early teenage years needs to be explored.

Another factor that may have resulted in the failure to obtain significant results can be attributed to the findings of a study by Allen, McElhaney, Land, Kupermine, Moore & O'Beirne-Kelley (2003). Although not noted within this current research, Allen et al. found that an

adolescent's secure base was associated with an attachment security that developed by way of the adolescents' de-idealization of the mother or primary caregiver. Perhaps when the adolescent reflected back upon his or her parent/caregiver relationship, his or her level of parental-attachment was linked to the ability to demonstrate relatedness even while remembering significant areas of disagreement. Conceivably, at the time of assessment the parental-attachment paradigm, as well as remembered feelings of emotional warmth and security may have been established based upon the individual's ability to openly disagree and argue with the parent/caregiver. Although the child had internalized security and trust in the parental relationship, the individual's recall of assessment questions during the time of study may have been answered with some conflict on the part of the adolescent. To this end, the literature revealed that adolescents with securely attached peer relationships, but less securely attached parental relationships, reported better adjustment (in terms of depression, aggression, and sympathy) than those who reported a secure relationship with a parent, but a less secure relationship with peers.

Bowen (1978), a systems theorist, strongly believed in the process of differentiation whereby the individual gained independence when differentiating or separating from the family emotional system (parental/caregiver attachment) and, in doing so, experienced diminishing levels of reactivity. The ability of the adolescent to differentiate from his or her family's emotional system and move into peer relationships again speaks to the strength of peer-attachments and ultimately socially acceptable peer social interactions.

Hypothesis II

Parenting styles characterized by rejection, an avoidant/insecure peer-attachment style, an insecure parental-attachment style, and an external locus of control, will predict bullying behaviors. This research question was partially supported by the findings.

The second hypothesis found a parenting style characterized by emotional rejection, as well as an insecure parental-attachment style were predictive of bullying behavior. As suspected, bullying behaviors were more likely to emerge when the adolescent's remembrances of his or her upbringing were ones of parental rejection. Parental rejection has been characterized by hostility, punishment, derogation, and blaming of the child. Similarly, in families in which the child's discipline was inconsistent, there was little parental emotional warmth, and an insecure parental-attachment, increased the likelihood of bullying in the children. In addition, an insecure parental-attachment was found to be predictive of bullying behaviors in adolescents.

The above findings are consistent with research conducted by Smith, Twemlow and Hoover (1999). According to these authors a rejecting parenting style involves punitive discipline. Smith et al. (1999) further reported that children who were poorly monitored by their parents as well as harshly disciplined exhibited higher levels of aggression. Most noteworthy was that "none of the bullies seemed to remember ever being held or cuddled by either parent" (Smith et al., 1999, p. 35). This researcher's results are also in line with those of Bowlby, who explained that childhood memories become organized into "representational models" which are cognitive structures of "internal working models" (Cassidy & Shaver, 1999, p.7). If a child fails to have the internal controls or the emotional equilibrium required to achieve a healthy internal working model, due to an insecure attachment bond, the youngster will lack social competence. This will influence the child's development across the life span, leading to the cultivation of

maladaptive behavior that may persist into adulthood (Pickover, 2002). Children with an avoidant-attachment style are not motivated by the same factors as their securely attached peers, because their attachment bonds have not been built upon a secure base. These children view the world as unresponsive, unpredictable, threatening, angry, and overwhelming.

Although an external locus of control and an avoidant peer-attachment were predicted to be significantly related to a bullying behavior style, the results for these two independent variables were not significant. Unexpectedly, an external locus of control was not significantly related to a bullying behavioral style. Current research, however, does not generally support the theory that bullies suffer from low self-esteem and intimidate and aggress towards others to boost their sense of self. On the contrary, Zariski and Cole (1996) reported bullies as perceiving themselves in a positive light, perhaps sometimes displaying a skewed and inflated self-view. Thus, this study's finding may have significant clinical utility.

In this study an avoidant peer-attachment was not significantly related to a more uncooperative, non-compliant bullying behavioral attitude. If a bullying behavioral style is the result of an insecure parental-attachment and a rejecting parent, then the child would not be able to develop the internal working models that would enable engaging in socially acceptable peer interactions. Thus, it was hypothesized that peers would classify themselves as having avoidant-attachment. There are several possible explanations for this outcome. As previously noted, perhaps the measure selected to assess secure/insecure peer-related attachment styles did not effectively provide a clear picture of the three attachment styles. The Attachment Question for Children (AQ-C) (Muris et al, 2001) involved three statements, each describing one of the three attachment styles (secure, avoidant, ambivalent), and the participant was asked to choose the statement that best described each individual's peer attachments. Perhaps the participants were

not able to fully understand the descriptions, or did not feel comfortable choosing responses that may have conceptualized them in a negative light.

Hypothesis III

Parenting styles characterized by anxious rearing and overprotection as well as an ambivalent/insecure peer-attachment style, an insecure parental-attachment style and an external locus of control were expected to predict victimization of the adolescent. The results of this study partially supported this hypothesis. The third study hypothesis found that adolescents who reported an external locus of control orientation were significantly related to victimization.

These results suggest that adolescents that feel they do not have control over their daily activities are more likely to be victimized. Individuals expressing an external locus of control may fail to see the relationship between their behaviors and the consequences. Andreou (2002) also found that victims reported the highest levels of external locus of control, followed by bully-victims, bullies, and no-status students.

The findings of this study are inconsistent with much of the literature. According to Spokas and Heimberg (2009), a child may hold a cognitive belief about his or her daily activities' being controlled by others. This external locus of control may lead to an increase in the child's reliance on the parent, which could contribute to parents' increasing their control and protection. Reinforcing such beliefs through overprotection may serve to increase the child's social anxiety, and may also increase the child's avoidance.

It was also predicted that an overprotective parenting style and an insecure attachment style would be related to adolescent victimization. There is evidence in the literature that parental overprotection may inhibit or prevent the child from being able to defend themselves or deal effectively with attacks by other children. However, the results of this study were not in line

with the literature. One possibility for this unexpected finding may be that as a result of the child's victimization, the parent becomes more controlling, overprotective and anxious for the child. It may be an inverse effect in that it is the child's being targeted by a bully that leads to parental overprotection.

Clinical Implications

The present study was designed to explore the link between parent and peer relationships and adolescent behavioral styles (i.e., bully, victim, pro-social). The objective for doing so was to provide empirical data regarding how different types of parent and peer relationships, in addition to locus of control, would influence an adolescent's bullying, victimization, or prosocial behavioral style, so that appropriate family-based therapy and school-based programs might be supported and developed.

As bullying is often conceptualized as a school problem, most interventions are school-based and exclude the family. However, family therapy interventions coupled with school-based programs must occur for long-term resolution. Understanding family dynamics, such as familial communication patterns, family structure and cohesion, and how the family is organized, as well as awareness of the established family relationship and the ability to solve family conflict, must be explored while encompassing school-based prevention/intervention programs.

Complex relationships exist among adolescents, their parents and peers. Therefore, it would not be recommended that bullying behaviors be addressed without also exploring the attachment relationships from which children develop internal working models and related behaviors that enable or impede healthy interactions with peers and their environments. The school setting is the primary environment in which early peer-attachment relationships develop and subsequently peer-attachment styles converge. It is at this crossroad that a child will

encounter either successes or failures in academic endeavors or develop specific, interpersonal peer-relationships and behavioral styles. While many researchers agree that it is important to assist the bully and/or victim in achieving successful peer interations, it must be noted that the adolescent and his or her behavioral style do not exist in isolation. Instead, the adolescent's social/relational interactions are intertwined with those of the parents, peers, and are impacted by their environments, and therefore have greater systemic implications.

While bullying is a pervasive problem in schools, the findings of the research have practical implications for school psychologists and/or clinicians working with children and/or families of bullies and victims. The results of this study suggest that peer-attachment styles and locus of control are associated with a pro-social behavioral style. As a result, there may be several clinical steps that can be implemented to improve the school climate and facilitate positive peer-interactions and pro-social peer relationships.

In 2002, New Jersey passed AB 1874 (www.njbullying.org/legalissues.htm), a law which required each school district to adopt a policy prohibiting harassment, intimidation or bullying on school property, at a school-sponsored function, or on a school bus. The policy must include a definition of bullying behavior, consequences for engaging in such behavior, a procedure for investigation of reports of such behavior, a statement prohibiting retaliation or reprisal against persons reporting bullying behavior, and consequences for making a false accusation. This law requires school employees, students or volunteers to report any incidents of bullying, intimidation and harassment to appropriate school officials. It also grants immunity from any cause of action for damages arising from a failure to remedy the reported incident to persons reporting these incidents.

Based upon the current research in addition to the NJ 2002 bully legislation, when addressing the systemic bullying/victimization paradigm within the school it is necessary for the school administration and staff in addition to the parents, students, and community to implement a social, emotional and behavioral learning style that promotes warmth, respect, and inclusion of students and staff. Schools must implement a multifaceted approach when addressing the core aspects of bullying and victimization. First, there needs to be a school-wide component that is focused on bully/victim training (ability to identify characteristics), awareness, and ageappropriate assessment, and all aspects must be monitored school-wide. Next, there must be a classroom-based module that reinforces the school-wide rules, while addressing social, emotional and behavioral skills, such as social problem-solving, conflict resolution and empathy awareness/training. An intervention element must accompany the school component that addresses the students who are targets or perpetrators of bullying. Once the school has begun to implement the bully proof prevention program the students who demonstrate pro-social behavioral styles will be utilized as a means of peer-mediation. Providing victimized children with peer-mediators may help them to feel less isolated and accepted by peers. Children who are victimized and have a sense of acceptance by peers are less likely to be bullied and more likely to be assisted by peers if targeted by a bully.

Schools across America have begun to develop and implement empirically based anti-bullying programs to intervene and prevent bullying behaviors (Brock, Lazarus, & Jimerson, 2002). Examples of research-based programs include Bully Busters (Newman, Horne & Bartolomucci, 2000), Bully Prevention Program (Olweus & Limber, 1999), and Bully Proofing Your School (Garrity, Jens, Porter, Sager & Short-Camilli, 2004). Programs such as these have demonstrated effectiveness by reducing bullying by up to 50% (Olweus, 1997; Smith, Cousins &

Stewart, 2005). Components of empirically-based anti-bullying programs typically include universal interventions to promote respect and responsibility, early interventions to promote skill acquisition and application, and individual interventions to provide more intensive support for bullies and victims (Olweus, 1997).

The finding that peer-relationships can shield and take the place of the adolescent's previous parenting style instills the need for the development of school-based programs aimed at cultivating relationships between cooperative pro-social adolescents and those students who do not demonstrate cooperative peer-relationships. Consistent with this, the findings of the present research have practical implications for clinicians who are working with children who have ever been a victim *or* aggressor in a bullying relationship. Although Bowlby's (1982) attachment theory has promoted the influence of the parental-attachment paradigm as well as the parent's influences on the child's relationship, the possibility arises that, by adolescence, peer attachment figures may be just as important, if not more essential, for adolescent adjustment and pro-social, cooperative peer interactions.

Implications for Practice

Understanding that the school may be the first line of defense against bullying behaviors, the State of New Jersey passed new legislation requiring that all New Jersey school districts are required to establish Bullying Prevention Programs (N.J.S.A. 18A:37-17). The establishment of the bullying prevention programs along with other initiatives must involve school staff, students, administrators, volunteers, parents, law enforcement, and community members.

School-wide bullying-reduction efforts must be based upon systemic interventions. All parties involved in the school from administrators to custodians must have an understanding of bullying and victim behaviors, as well as be able to identify these behaviors among the children

in school. All children are occasionally involved as aggressor, victim or encouraging bystander, but some children are more frequently involved in negative and uncooperative behaviors. Once personnel in the school district are able to identify various bullying situations, specific preventions and interventions must be implemented. In utilizing the New Jersey Core Curriculum Content Standards (NJCCCS), specific prevention/interventions can be outlined and implemented based upon grade level. Providing a cognitive-behavioral classroom curriculum that addresses pro-social peer norms and appropriate peer-assertiveness, in addition to a general awareness of social-emotional skills is the first step to developing a Bully Proof school. In order for schools to allow children to become self-assured, self-confident and in control of daily activities, the school must provide all children with an environment that is conducive to social, emotional, behavioral and academic success. The school-wide interventions are geared to providing adults and children with systemic support and specific procedures that counter bullying and motivate socially responsible behavior. Next, the program will move into the classrooms and, if needed, smaller peer groups. Classroom lessons and instruction will target children's normative beliefs related to bullying (Huesmann and Guerra, 1997), as well as socialemotional skills for responding to bullying and increasing peer acceptance. Finally, supports and services must be provided at the individual level for those involved in bullying. These processes will enable schools to effect major changes in the school, while fostering pro-social, cooperative peer-relationships and decreasing bullying behaviors.

Once school-based interventions have been implemented, it is important to provide therapeutic support to a child as well as the entire family. One way to collaborate with families of children who are either bullies or victims is by providing the family with family-based interventions such as Brief Strategic Family Therapy (BSFT) (Nickles et al., 2006). In the BSFT

paradigm the family is the primary context for the child's development and socialization. Adaptive family functioning can help to protect children and adolescents from developing behavior problems. For example, parental investment, open and active parent-child communication and bonding, and monitoring and supervision of peer relationships and activities, have all been associated with reducing adolescents' risks for behavior problems. Another important system for adolescents is the peer network. Research has consistently documented that association with deviant and uncooperative peers might be the most significant predictor of adolescent behavior problems (Nickles, et al., 2006). This link is not surprising, given the relational relevance of the peer group during adolescence. In BSFT, considerable attention is devoted to weakening the adolescent's links to deviant peer relationships and fostering more socially acceptable peer-interactions and relationships by improving family relationships, improving parents' abilities to monitor and supervise adolescents' activities, and connecting adolescents with pro-social peer networks. In BSFT, a considerable amount of effort is devoted to repairing these relationships and reconnecting an adolescent (and her/his parents) to school. Much of this work involves building parents' skills and improving parent-school connections to maximize the parent's ability to function as a leader in this aspect of the child's life.

Study Limitations

The present study provides numerous methodological advances from previous research in providing an appropriate sample size, a relatively equal number of males and female participants, and the simultaneous inclusion of instruments to assess parenting styles, parent and peer-attachment styles, and locus of control, in relation to the development of bullying behaviors among adolescents. Despite these advances, there are some limitations that should be considered to provide full context for the study findings.

Generalizations from the data of the present study should be made with caution, because the participants were middle-school students, primarily who identified their ethnic/cultural backgrounds as having a substantial proportion of African American parents, followed by Caucasian and Hispanic parents. Further, household composition was very variable, with both nuclear and extended-family living arrangements. Reportedly, a majority of the participants (87.5%) reported living with their mothers and only (54.5%) reported living with their fathers. The sample should be considered when examining the findings. The fact that the sample was predominately African American, followed Caucasian and Hispanic, must be considered, and any generalizations beyond the description provided for the population utilized in this study are not possible. Thus, the results are restricted to this population. The study was also circumscribed by the use of self-report measures.

Since the results were drawn solely from self-report questionnaires completed by the adolescents, and not other family members, the uni-dimensional aspect of the responses may serve as an additional methodological shortcoming. Specifically, self-report questionnaires may increase response bias that compromises results.

Another identified limitation within this research study is the lack of adequate self-report, child-administered assessments that tap the child-caregiver attachment paradigm based on both Ainsworth's (1969) strange situation categories and the addition of the fourth disorganized/disoriented classification by Main and Solomon (1990). While the assessments utilized in this research had adequate validity and reliability, the study's sole use of these self-report measures limited the scope and nature of the overall research. In the current study, participants were required to reflect back, or remember, various parenting and attachment styles. False remembrances or inaccurate recollections by the participants must be accounted for when

examining retrospective data. The study should be repeated utilizing additional assessment methods, such as direct family observations and self-report questionnaires provided by all family members as well as the child's teacher.

In addition to the variables studied, confounding variables such as substance abuse, verbal/physical abuse in family dynamics may have been present and influenced pro-social, bullying, and victimization behaviors. Also, all of the data used in the current study were obtained from students in only one school.

Recommendations for Future Research

Since bullying behavior is a topic of growing interest in society, it needs to be addressed by the community, schools, and parents. Parents need to learn preventive parenting skills that encourage their children to develop positive relationships. Schools and parents must also learn to recognize bullying characteristics, and not discard them as a "natural" part of childhood.

When considering future research directions in the bully/victim/pro-social arena, this current research should be replicated using a larger sample size and a more diverse population to ensure reliability. Once the study is replicated, future studies should involve more comprehensive methods of collecting data. The present study contained only self-report measures to assess the middle-school students' recall of parenting styles and attachment patterns. With administration of assessments based solely on the accuracy of the individual reporting the data, recall may be inaccurate due to faded memories or false responses. For this reason, future studies need cross-validation of findings by assessing parents/caregivers and the adolescents' teachers. A study with cross-validation would strengthen the accuracy of the findings and provide a richer and more robust outcome.

The current study was based on measures of only secure, anxious/avoidant and anxious/resistant attachments, the three types initially identified by Ainsworth (1985). It was not structured to measure anxious/disoriented-disorganized attachment as researched by Main and Solomon, (1986), which has been shown to be associated with early trauma in children and with unresolved issues in parents, related to the ways they were parented. The inclusion of this fourth attachment type in further research on bullying may cast a light on the etiology of bullying.

This fourth attachment category termed, disorganized attachment (Main & Solomon, 1990) was subsequently identified and researched when a large number of infants did not fit into Ainsworth's attachment classification in terms of her original model. Main et al. determined that, with the lack of a coherent or organized behavioral strategy for dealing with the stresses (i.e., the comings and goings of the caregiver), the infant experiences the caregiver as either frightening or frightened. Accordingly, a frightened caregiver is alarming to the child, especially when the child looked at the caregiver's facial expression to ascertain whether a situation is safe. A frightening caregiver tends to display at times aggressive as well as supportive and nurturing behaviors towards the child. This unsettling back and forth puts the child in a chaotic, disorganized and unpredictable situation. In other words, the caregiver is both the source of the child's alarm as well as the child's haven of safety. The caregiver's interactions are experienced as erratic; therefore, the child is unable to form a coherent, organized internal working model of self and other. Subsequently, there is a growing body of research on the links between abnormal parenting, disorganized attachment and risks for later psychopathologies (Faris & Ennett, In Press). Abuse has been associated with a disorganized attachment style, and according to Athens (1989), this child learns to be aggressive and/or violent. His or her social learning paradigm, called violentization suggests that the child endures a kind of boot camp of brutalization,

belligerency, and violent performances which ends with virulency—the desire to act with violence with little or no provocation (Rhodes 1999). What makes Athens (1992) and his theory so compelling is that Athens viewed this aggressive behavior, not as a genetic inheritance or psychopathology that leads to violent crime, but as the process of violentization which becomes a template for future behavior.

The current study was quasi-experimental and based on a self-reported paper-and-pencil assessment. The next phase of bully/victim research must move away from identifying only demographic characteristics and tendencies of bullying to that of a more predictive and, more importantly a preventative model. Research on bullying has been and is still mainly conducted by administering surveys and questionnaires to students, parents, and teachers. Although this method of data collection has had a significant impact on our current knowledge of bullying, as well as provided a great deal of critical information, paper-and-pencil assessments have not enabled the research opportunities needed to study bullying as social processes involving peer interactions with an experimental design. An experimental design would allow the researcher to assess whether the prescribed intervention being utilized would have any effect on the dynamics of peer bullying, victimization, and pro-social behaviors within the framework of the intervention group. This group of randomly assigned participants would receive the approved pro-social peer-mediated bully/victim intervention, while another group of randomly assigned students would continue with treatment as usual, receiving social skills and conflict-resolution techniques from the school psychologist. The peer-driven prevention/intervention group would utilize a group of adolescents who are able to engage in socially acceptable peer interactions in order to model and coach the students who are self-defined as the bystander, bully, or victim. Moreover, the group comparison research should involve a more culturally diverse population as well as a larger sample size. The data gathered from these two groups could generate richer information that would demonstrate the utility of a school-wide *bully-proof* program. By gathering data in this manner, internal validity is assured as is the knowledge that the treatment is affecting change.

Another area of research that needs to be addressed is the bully/victim paradigm and empathy. Exploring the relationship between an adolescent's empathy awareness and pro-social, bully, and victimization behavior may lead to a better understanding of the intervention/prevention modules that can be implemented within the family, school, and community ultimately giving students, teachers, and other educators involved the opportunities to discuss their own understandings of bullying and bullying experiences in their own voices.

Conclusion

The search for scientific truth takes place within a matrix of conflicting concepts and currents. Bowlby had to swim against these currents in order to give the world an accurate vision of his systemic theoretical orientation. Turning the scientific world upside down is not an enviable task, Bowlby felt strongly that psychoanalysis was putting far too much emphasis on the child's fantasy world and far too little on actual events that transpired in and shaped their lives.

Bowlby (1940) expressed this view in a motivating paper, *The Influence of Early Environment in the Development of Neurosis and Neurotic Character*, which contains many of the ideas that were later to become the central components of attachment theory. In emphasizing the influence of early family environment on the development of neurosis, he claimed "like nurserymen, psychoanalysts should study the nature of the organism, the properties of the soil and their interaction" (Bretherton, 1992, p. 760).

The current study was based primarily on Bowlby's attachment theory. It explored the relationships between bullying behavior, attachment, locus of control and parenting styles.

Because of Bowlby's pioneering work we were able to ask questions like: What is the context in which bullying arises? Is it the child's relationship to the parents? Is it the schools? Is it our culture? Is it in human nature? Is an interactive combination of two or more of these? Before Bowlby and the evolution of a systemic approach, none of these questions would have been possible. The concept of proximity seeking gives us the opportunity to wonder if the nature of the attachment to parents is related to bullying. Because representations of working models, are both external and internal we could turn to locus of control and query whether the externalizing or internalizing child is more likely to be a bully, a victim or a bully-victim; and because Bowlby anticipated that this construct (internal working models) would generalize we could wonder at the relationship between peer-attachment and bullying. This study ultimately bridged the gap in the literature among attachment and bullying.

A systemic approach may continue to prove to be most useful in researching and, hopefully, ameliorating the issue of bullying in the schools. A systemic approach is based in the premise that all of the social systems (family, school, workplace and community) in which a person participates are mutually influential. Human behavior is multi-determined and not the result of a single, linear cause. This multilateral approach to understanding causality requires one to examine issues from many perspectives, and thus avoids the pitfall of either-or thinking that leads to blaming and shaming of individuals; i.e., of a "neglectful" administrator, an "uncaring" teacher, a "bad" parent, or an "incorrigible" child. Coming to know the varied experiences and perspectives of parents, teachers, administrators and of children who have been bullied or of those who have participated in bullying as well as of those who have witnessed it,

but not intervened or reported it, should help in understanding which factors support and which may avert bully, victim and bystander behaviors. No individual or group is singled out as bearing sole responsibility for the emergence of bullying. All are invited to help structure family interactions and school relationships (this may be encouraged by administrators, led by teachers, and/or peer initiated) which nurture respect for self and others, build interpersonal trust, and nurture social skills that facilitate interpersonal problem resolution. Parents, administrators, teachers and children, who reason with one another about problematic issues and work together to resolve them, in doing so, help to nurture strong, capable individuals, families, schools and communities.

Given the significant impact bullying can and does have on children, it is crucial that researchers continue to examine this relevant and vital issue. The current research will provide a deeper understanding of the factors that are associated with pro-social, bullying and victimization behaviors, as well as prepare mental health professionals, teachers, and parents to deal effectively with this ongoing and extensive problem. The results of the current study highlight the importance of children's quality of attachment to their peers and the need for positive peer relations in school-age children. The findings also imply that including parents, peers, and school-based personnel in providing intervention efforts may be beneficial in reducing school bullying. According to attachment theory, children's early experiences with their primary attachment figures set the stage for later peer relations by creating expectations, or working models, for social interactions (Renken, Egeland, Marvinney, Sroufe & Mangelsdorf 1989).

Securely attached children, who have experienced warm, consistent, and emotionally available caregivers, will likely expect social relationships to be positive and productive (Weinfield, Sroufe, Egeland & Carlson 1999). Thus, they are unlikely to bully others because harassment

has a negative and counterproductive impact on relationships (Troy & Sroufe, 1987). In fact, research shows that they may actually be inclined to stand up for or defend victims of bullying (Nickerson, Mele & Princiotta, 2008). Furthermore, because their parents have been models of empathy, kindness, and compassion, children with high-quality attachments are likely to display similar behaviors in their interactions with peers. Consequently, behaving pro-socially increases the likelihood of being socially accepted and decreases the likelihood of being excluded from peer groups (Georgiou, 2008). Therefore, they are also unlikely to be bullied by others.

Children with insecure attachment styles, on the other hand, carry with them the expectations that others are unavailable and that social exchanges are not positive or rewarding (Renken et al., 1989). This negative bias regarding social interactions is likely to result in hostile interpretations of others' behaviors and aggressive reactions to them. Thus, children with poorquality parental attachment relationships are more likely to bully others than children with high-quality attachments. In addition, the experience of having a parent who is unresponsive or inconsistently responsive to a child's needs may lead to feelings of insecurity and low self-esteem (Georgiou, 2008). This, in turn, creates vulnerability to bullying, as perpetrators often perceive children with insecurities and low self-esteem as being submissive and unlikely to retaliate against attack.

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APPENDIX A: INSTIUTIONAL REVIEW BOARD APPROVAL



July 20, 2009

Reesa Weingold 6 Ash Avenue West Orange, NJ 07052

Dear Ms. Weingold,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "Family Dynamics: A Systemic Investigation of Parenting Styles, Parent and Peer Attachment, Locus of Control and Social Behaviors". Your research protocol is hereby approved as revised under full review.

Enclosed for your records are the signed Request for Approval form, the stamped original Assent Form, and the stamped original Consent Form. Make copies only of these stamped Forms.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. <u>During this time</u>, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for your cooperation.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final discussion and the vote.

Sincerely,

Mary F. Ruzicka, Ph.D.

Professor

Director, Institutional Review Board

cc: Dr. Robert Massey

Presidents Hall • 400 South Orange Avenue • South Orange, New Jersey 07079-2641 • Tel: 973.313.6314 • Fax: 973.275.2361

APPENDIX B: STATEMENT OF CONSENT

JUL 20 2009

Approval Date

Statement of Informed Consent

The purpose of this document is to describe rights related to participation in a research project which seeks to understand the relationship between parenting and child social behavior. All sections should be read carefully prior to providing consent for participation (signing this form).

1. Purpose of Research

The purpose of this research is to focus on child social behavior, both cooperative and uncooperative and to try to determine if there is a relationship between social behavior and the way in which a child is parented. Specifically, the goal is to determine how social behavior relates to the association or connection between parents and their children, children's beliefs about themselves and their peer friendships.

This study is being conducted by Reesa Weingold, a student at Seton Hall University, who is presently pursuing a doctoral degree with the Family Psychology Program, in the Department of Professional Psychology and Family Therapy at Seton Hall University, South Orange, NJ. Mrs. Weingold is the principal investigator for this study, which is being conducted as partial fulfillment of the requirements for her doctoral dissertation and Ph.D.

2. Duration of Study

The study uses questionnaires to collect data and should take approximately 40 minutes to complete.

3. Study Procedure

Participants will be asked to complete five questionnaires during one of their class periods at school. The questionnaires will be distributed during a non-academic class so that no curriculum-based content is missed. For those students who choose not to participate, a packet that looks very similar to the actual questionnaire packet will be provided, making it very difficult for other children to know who is and who is not participating in the study. For students who choose not to participate in either the study or alternative activity the school will make available a school-based activity in another classroom setting.

Only the principal Investigator will know which student will be given either the questionnaire packet of the alternative packet based upon permission obtained from parent/guardian and student.

4. Questionnaires to be answered during the study

Those students who have agreed to be in the study and for whom their parent/guardian has provided permission will be given a packet containing the questionnaires and forms listed below.

Department of Professional Psychology and Family Therapy 400 South Orange Avenue • South Orange, New Jersey 07079-2685 • Tel: 973.761.9451 Those students who choose not to participate in the study and have not been provided parent/guardian permission but have agreed to participate in the fun alternative activity and have obtained parent/guardian permission will be provided a packet containing trivia activities to be completed during the period when the study is being conducted.

Those students who have not agreed to be in the study or participate in the alternative activity and for whom parent/guardian permission has not been provided a school based activity will be made available in another classroom setting. Parent/guardians are entitled to review these questionnaires, in full, prior to agreeing to permit their child to participate in this study. Please contact the principal investigator, as indicated at the end of this document.

Brief Description of Study Questionnaires

- 1) The first questionnaire is the EMBU-C, which has statements such as, "Your parents listen to you and consider your opinion" and "Your parents worry about what you are doing after school."
- 2) The second questionnaire is the Nowicki-Strickland Locus of Control Scale for Children (NLOCS). Statements from the (NLOCS) include "Do you believe that if somebody studies hard enough he or she can pass any subject" and "Have you ever had a good-luck charm?"
- The third questionnaire is the Simplified Version of the Attachment Questionnaire for Children (AQ-C). Statements from the AQ-C include, "I find it easy to become close friends with others" and "I find it difficult to trust them completely."
- 4) The fourth questionnaire is the Inventory of Parent and Peer Attachment— Revised for Children (IPPA-R) and includes the statements, "When I am angry about something, my parents try to understand" and "I like to get my friends' opinions on things I'm worried about."

5) The fifth questionnaire is The Peer Relationship Questionnaire (PRQ) and has statements such as "I like to make friends" and "I get picked on by others."

6) A demographic form asking about age, grade, race, ethnicity and household composition, will also be included in the packet.

Upon completion all students will be asked to seal their packets in the provided enveloped and to return them directly to a data-collection box located within the classroom. nstitutional Review and to return them directly to a data-collection box located within the classroom.

5. Voluntary Participation

Participation in this study is completely voluntary. Participants may withdraw from the study at any time without any consequences. Participants who choose not to participate or who may withdraw during the actual data collection in class will not be penalized in any way and this decision will not impact on the participant's academic grades or standing.

6. Child Anonymity

In order to protect participants, only the principal investigator for this study will know who completed which questionnaire. In this way, if any of the questionnaire responses indicate distress, a counselor can be contacted, as appropriate. If a participant experiences distress or a referral to an outside agency is required, the parent/guardian will be notified. Any participant response that indicates possible harm to self and/or others will be disclosed to the parent/guardian and proper outside agency. However, in order to preserve confidentiality, participant's names will not be included on the questionnaire and instead a number will be used for which only the principal Investigator will have the key. Further, all information obtained will be reported as a group and individual student responses will never be shared.

7. Confidentiality

All materials will be kept confidential and collected by the primary investigator in a sealed envelope and placed in an unmarked data-collection box.

8. Access to Records

Returned questionnaires will be stored in a locked cabinet in a secure location and will be accessible only to the principal investigator and her research advisor, Dr. Robert Massey. Data will be stored on a USB memory key, without any personally identifying information.

9. Anticipated Risks and Discomfort

This study is not an experiment, and participants will not be receiving any treatment. Therefore, there are minimal risks. However, thinking about one's life and relationships with parents and friends can at times bring about different feelings. These feelings can range from soothing to uncomfortable. While it is unlikely that participants will experience any discomfort or confusing feelings, either during or after data collection, participants will be told how to contact one of the school's social workers or counselor, a private practice clinician, a family member, or the researcher should any participant feel uncomfortable and would like to talk with someone for help.

10. Anticipated Benefits

By responding to this study, students may become more aware of their behaviors. Once the study is completed, this researcher will provide a group summary to the school administration. Findings will be presented in a group format as a means of protecting participants' identity. Results will assist in identifying students' needs as well as providing additional information which may be helpful in developing student services. Additionally, participation may contribute to the knowledge-base from which comprehensive programming for students can be developed.

11. Payment or Remuneration

No participants will receive payment or remuneration for this study.

12. Alternative Treatment Procedures

This research is only an exploratory survey project. It is not a treatment procedures are provided.

Institutional Review Board

JUL 20 2009

Approval Date

IUL 20 2010

JUL 20 2009

13. Video or Audio Taping

There will be no video or audio taping of any kind for this study.

Approval Date

14. Research Contact

The primary researcher very much appreciates the student volunteer's willingness to consider participating in this research. Should participants have any questions regarding this study, or want to review copies of the questionnaires being administered or to learn about the results, please contact the primary researcher, **Reesa Weingold**, at **(973)761-9591**. Participants may also contact the principal investigator's research advisor, Dr. Massey at (973) 761-9591 or Dr. Mary Ruzicka, the Director of the Seton Hall University Institutional Review Board for Human Subjects Research at (973) 313-6314.

15. Statement of consent

This signature will allow the researcher to obtain the student's assent to participate. Please return both this signed Consent Form (parent/guardian) and the Assent Form (student participant) with **both signatures** in the enclosed self-addressed, stamped envelop as soon as possible. A copy of this signed and dated form will be returned by mail to the parent/guardian.

Please choose one of the following options and provide the requested signatures.

questionnaires as outlined within this	ticipate in this research by completing the study document.
Parent/Legal Guardian	Date
Child's Name	Age
	d participate in this research study. My signature y child complete a trivia activity during the time w
Parent/Legal Guardian	Date
Child's Name	

Expiration Date

I DO NOT consent to have my child activity. My signature below provides a school-based activity in another classro	my consent to have my chi	•
Parent/Legal Guardian	Date	
Child's Name		

JUL 20 2009

Approval Date

Expiration Date

JUL 20 2010

APPENDIX C: STATEMENT OF ASSENT

JUL 20 2009

Statement of Assent

Approval Date

1. Purpose of Research

The research study is trying to see if the way a child is parented may be related to the way a child thinks, feels, and behaves in school and with friends. The goal is to understand if things that happen between a parent and a child can make it easier or harder for a student to have good relationships and friendships.

This study is being carried out by Reesa Weingold. Ms. Weingold is working towards completing her doctoral degree and is doing this research as part of her school requirements at Seton Hall University.

2. Duration of Study

It will take about 40 minutes to fill out a few questionnaires (question sheets) for the study.

3. Study Procedure

Students will complete 5 questionnaires during class. For students who choose not to participate there will be fun trivia activities. It will be difficult for other students to tell who is and who is no doing the study. For students who do not want to be in either the study of the trivia activity, an ordinary school-based project will be made available in another classroom.

4. Questionnaires to be answered during the study

Students will complete the following questionnaires during the study:

- 1) The first questionnaire is the EMBU-C, which has statements such as, "Your parents listen to you and consider your opinion" and "Your parents worry about what you are doing after school."
- 2) The second questionnaire is the Nowicki-Strickland Locus of Control Scale for Children (NLOCS). Statements from the (NLOCS) include "Do you believe that if somebody studies hard enough he or she can pass any subject" and "Have you ever had a good-luck charm?"
- 3) The third questionnaire is the Simplified Version of the Attachment Questionnaire for Children (AQ-C). Statements from the AQ-C include, "I find it easy to become close friends with others" and "I find it difficult to trust them completely."
- 4) The fourth questionnaire is the Inventory of Parent and Peer Attachment— Revised for Children (IPPA-R) and includes the statements, "When I am angry

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- about something, my parents try to understand" and "I like to get my friends' opinions on things I'm worried about."
- 5) The fifth questionnaire is The Peer Relationship Questionnaire (PRQ) and has statements such as "I like to make friends" and "I get picked on by others."
- 6) A demographic form asking about age, grade, race, ethnicity and household composition, will also be included in the packet.

Once the questionnaires are done they will be sealed and dropped into a box in the classroom.

5. Voluntary Participation

Students do not have to participate in this research. There is no penalty for not participating and grades will not be based upon student participation.

6. Child Anonymity

No one except Ms. Weingold will know the answers to the questions. If a student writes something on the questionnaire that makes it seem that they are having trouble or need help, Ms. Weingold will help the student to get in touch with someone either in the school or outside the school. There will be no names on the questionnaire. Instead, a number will be used and only Ms. Weingold will know who answered which questionnaire. There will be no need to see which student provided which answer unless the questionnaires say there is a problem that a student could use help with.

7. Confidentiality

No one will be able to see the questionnaires except Ms. Weingold and her supervisor, Dr. Massey.

8. Access to Records

Once the study is over the questionnaires will be kept locked in a cabinet and only Ms. Weingold and Dr. Massey, her supervisor, will have the key.

9. Anticipated Risks and Discomfort

There is no reason to believe students will feel hurt by taking part in the study. Sometimes people feel badly after they fill out a questionnaire because it makes them think of things they don't like to think about. On the other hand, sometimes people feel better after thinking about things on a questionnaire. If a student feels badly after filling out the questionnaire, Ms. Weingold will help the student find someone to talk with either inside or outside the school.

10. Anticipated Benefits

Students who take part in this study may make it easier to help other students who do not have good relationships or friendships. Having friends and good relationships is important and this study may help improve the way children and parents talk and behave so that their lives can be better.

11. Payment or Remuneration

Seton Hall University Institutional Review Board

JUL 20 2009

Approval Date



Students will not receive any money or any other payment (such as a gift) for being in this study.

12. Alternative Treatment Procedures

This study does not try to directly fix parenting or students' relationships. Other than not participating, there is no alternative to not being in this study.

13. Video or Audio Taping

Students will not be recorded at all (no CD's, camera, video, etc.).

14. Research Contact

Ms. Weingold can be reached at (973)761-9591.

Dr. Massey, her supervisor, can be reached at (973) 761-9591.

Dr. Mary Ruzicka, the Director of the Seton Hall University Institutional Review Board for Human Subjects Research can be reached at (973) 313-6314.

Students can ask to see the questionnaires before signing this form by calling Ms. Weingold at (973)761-9591.

15. Statement of consent To participate please read and sign below.		
, understand that my parents (mom and d)/guardian have/has given permission (said it's okay) for me to take part in this research dy at my school.		
am taking part because I want to. I have been to nothing will happen to me if I want to stop.	told that I can stop at any time I want and	
Signature of Student	Date	
Signature of Parent/Legal Guardian	Date	
Thank you for helping.		
Sincerely, Reesa Weingold. Ed.S., LPC	Seton Hall University Institutional Review Board	
973) 761-9591/ Weingore@shu.edu	JUL 2 0 2009	

Expiration Date
JUL 20 2010

Approval Date

APPENDIX D: (EGNA MINNEN BETRAFFENDE UPPFOSTRAN, "MY MEMORIES OF UPBRINGING" EMBU-C)

Instructions

The questions on the next pages relate to your remembrances about the way in which your parent treats you. This is different for each child. That is why we want to ask you to answer all these questions yourself. You cannot give a wrong answer to any of these questions. This is not a school test. Usually, you know quite well what the rules and customs are at your home and how you and your family get along. Try to give the best answer to the question with the help of events that you remember. What is important is what **you** feel about things, and not what other people think

Choose a single answer from the following answers that best describes how your parents treat you. **There is no right or wrong answers**. Darken only **one** answer for each question.

Modified version of the EMBU-C (My memories of upbringing)

		1 No, never	2 Yes, but seldom	3 Yes, often	4 Yes, most of the time
1.	When you come home, you have to tell your parents what you have been doing	0	0	0	0
2.	When you are unhappy, your parents console you and cheer you up	0	0	0	0
3.	Your parents want you to reveal your secrets to them	0	0	0	0
4.	Your parents tell you that they don't like your behaviour at home	0	0	0	0
5.	Your parents like you just the way you are	0	0	0	0
6.	Your parents worry about what you are doing after school	0	0	0	0
7.	Your parents play with you and are interested in your hobbies	0	0	0	0
8.	Your parents treat you unfairly	0	0	0	0
9.	Your parents are afraid that something might happen to you	0	0	0	0

		1 No, never	2 Yes, but seldom	3 Yes, often	4 Yes, most of the time
10.	Your parents listen to you and consider your opinion	0	0	0	0
11.	Your parents wish that you were like somebody else	0	0	0	0
12.	Your parents want to decide how you should be dressed or how you should look	0	0	0	0
13.	Your parents worry about you getting into trouble	0	0	0	0
14.	Your parents blame you for everything that goes wrong	0	0	0	0
15.	Your parents punish you for no reason	0	0	0	0
16.	Your parents tell you what you should do after school hours	0	0	0	0
17.	Your parents want to be with you	0	0	0	0
18.	Your parents worry about you doing dangerous things	0	0	0	0
19.	Your parents show that they love you	0	0 ,	0	0
20.	Your parents criticize you in front of others	0	0	0	0
21.	Your parents know exactly what you are allowed to do and what not	0	0	0	0

		1 No, never	2 Yes, but seldom	3 Yes, often	4 Yes, most of the time	
22.	Your parents worry about you making a mistake	0	0	0	0	
23.	You feel disappointed because your parents don't give you what you want	0	0	0	0	
24.	Your parents allow you to decide what you want to do	0	0	0	0	
25.	Your parents take care that you behave by the rules	0	0	0	0	
26.	Your parents are afraid when you do something on your own	0	0	0	0	
27.	Your parents and you like each other	0	0	0	0	
28.	Your parents are mean and grudging towards you	0	0	0	0	
29.	Your parents are anxious people and therefore you are not allowed to do as many things as other children	0	0	0	0	
30.	When you have done something stupid, you can make it up with your parents	0	0	0	0	
31.	Your parents watch you very carefully	0	0	0	Ο	

		1 No, never	2 Yes, but seldom	3 Yes, often	4 Yes, most of the time
32.	Your parents think that they have to decide everything for you	0	0	0	0
33.	Your parents give you compliments	0	0	0	0
34.	If something happens at home, you are the one who gets blamed for it	0	0	0	0
35.	Your parents warn you of all possible dangers	0	0	0	0
36.	Your parents help you when you have to do something difficult	0	0	0	0
37.	Your parents are worried when they don't know what you are doing	0	0	0	0
38.	Your parents keep a check on you	0	0	0	0
39.	Your parents beat you for no reason	0	0	0	0
40.	Your parents want to keep you from all possible dangers	0	0	0	0

Authors: Castro et al. (1993), Muris et al. (2003).

APPENDIX E: NOWICKI LOCUS OF CONTROL SCALE (NLOCS)

THE LOCUS OF CONTROL SCALE

Here are a number of statements. There is no right or wrong answer. We just want your opinion. If you think that the statement is true circle **Y** for YES. If you think the statement is false circle **N** for NO.

- Y N 1. Do you believe that most problems will solve themselves if you just don't fool with them?
- Y N 2. Do you believe that you can stop yourself from catching a cold?
- Y N 3. Are some people just born lucky?
- Y N 4. Most of the time, do you feel that getting good grades meant a great deal to you?
- Y N 5. Are you often blamed for things that just aren't your fault?
- Y N 6. Do you believe that if somebody studies hard enough he or she can pass any subject?
- Y N 7. Do you feel that most of the time it doesn't' pay to try hard because things never turn out right anyway?
- Y N 8. Do you feel that if things start out well in the morning it's going to be a good day no matter what you do?
- Y N 9. Do you feel that most of the time parents listen to what their children have to say?
- Y N 10. Do you believe that wishing can make good things happen?
- Y N 11. When you get punished does it usually seem it's for no good reason at all?
- Y N 12. Most of the time do you find it hard to change a friend's opinion?
- Y N 13. Do you think cheering more than luck helps a team win?
- Y N 14. Did you feel that it was nearly impossible to change your parents' minds about anything?

GO TO NEXT PAGE PLEASE

- Y N 15. Do you believe that parents should allow children to make most of their own decisions?
- Y N 16. Do you feel that when you do something wrong there's very little you can do to make it right?
- Y N 17. Do you believe that most people are just born good at sports?
- Y N 18. Are most other people your age stronger than you are?
- Y N 19. Do you feel that one of the best ways to handle most problems is just not to think about them?
- Y N 20. Do you feel that you have a lot of choice in deciding who your friends are?
- Y N 21. If you find a four-leaf clover do you believe that it might bring you good luck?
- Y N 22. Did you often feel that whether or not you did your homework had much to with what kind of grades you get?
- Y N 23. Do you feel that when a person your age is angry with you, there's little you can do to stop him or her?
- Y N 24. Have you ever had a good-luck charm?
- Y N 25. Do you believe that whether or not people like you depends on how you act?
- Y N 26. Did your parents usually help you if you asked them to?
- Y N 27. Have you ever believed that when other people were angry with you it was usually for no reason at all?
- Y N 28. Most of the time do you feel that you can change what might happen tomorrow by what you do today?
- Y N 29. Do you believe that when bad things are going to happen they are just going to happen no matter what you try to do to stop them?
- Y N 30. Do you think that people can get their own way if they just keep trying?
- Y N 31. Most of the time do you find it useless to try to get your own way at home?

GO TO THE NEXT PAGE PLEASE

- Y N 32. Do you feel that when good things happen they happen because of hard work?
- Y N 33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?
- Y N 34. Do you feel that it's easy to get friends to do what you want them to do?
- Y N 35. Do you usually feel that you have very little to say what you get to eat at home?
- Y N 36. Do you feel that when someone doesn't like you there's little you can do about it?
- Y N 37. Do you usually feel it was almost useless to try in school because most other children were just plain smarter than you were?
- Y N 38. Are you the kind of person who believes that planning ahead makes things turn out better?
- Y N 39. Most of the time, do you feel that you have little to say about what your family decides to do?
- Y N 40. Do you think it's better to be smart than to be lucky?

GO BACK AND CHECK YOUR ANSWERS. MAKE SURE YOU HAVE CIRCLED ONLY ONE ANSWER PER QUESTION, THANK YOU.

Developed by S. Nowicki, & B.R. Strickland (1973)

APPENDIX F: ATTACHMENT QUESTIONNAIRE FOR CHILDREN (AQ-C)

The Revised/Simplified version of the Attachment Questionnaire for-Children (AQ-C)

Below you will find three descriptive statements. Read each of the three-descriptions
below (A, B, and C) and then place a checkmark $\sqrt{\ }$ next to the statement that bests
describes how you feel in a close relationship with your friends.
A. I find it easy to become close friends with other children. I trust them and I
am comfortable depending on them. I do not worry about being abandoned or about
another child getting to be close friends with me.
B. I am uncomfortable to be close friends with other children. I find it difficult
to trust them completely, difficult to depend on them. I get nervous when another child
wants to become close friends with me. Friends often come more close to me than I want
them to.
C. I often find that other children do not want to get as close as I would like
them to be. I am often worried that my best friend doesn't really like me and wants to end
our friendship. I prefer to do everything together with my best friend. However, this
desire sometimes scares other children away.

Go on to next page

Next, please indicate how strongly you agree with each statement. To do these please circle one answer for each style.

STATEMENT A

1	2	3	4	5	6	7
Disagree			Neutral/			Agree
Strongly			Mixed			Strongly

STATEMENT B

1	2	3	4	5	6	7
Disagree			Neutral/			Agree
Strongly			Mixed			Strongly

STATEMENT C

1	2	3	4	5	6	7
Disagree			Neutral/			Agree
Strongly			Mixed			Strongly

Thank You

Muris, Meester, et al. (2000).

APPENDIX G: INDIVIDUAL PARENTAL AND PEER ATTACHMENT QUESIONNAIRE – REVISED (IPPA-R)

INVENTORY OF PARENT AND PEER ATTACHMENT – REVISED (IPPA-R)

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

Part

person acting as your parent (e.g. a biological parent and a step-parent) answer the questions for the one you feel has most influenced you. Some of the following statements ask about your feelings about your parent or the person who has acted as your parent. If you have more than one

person acting as your paretit (e.g. a ofological paretit and a step-paretit) answer the questions for the one you feet has most influenced you	wer me duestron	s for the one you i	eet has most influence	ea you.
Please read each statement and circle the ONE number that tells how true the statement is for you now.	ne statement is fo	or you now.		
Parent Scale Items	Never True	Sometimes True	Always True	
1. My parents respect my feelings.	_	2	3	
2. My parents are good parents.	1	2	ω	
3. I wish I had different parents.	1	2	ω	
4. My parents accept me as I am.	1	2	ω	
5. I can't depend on my parents to help me solve a problem.	jumi	2	3	
6. I like to get my parents' view on things I'm worried about.	1	2	3	
7. It does not help to show my feelings when I am upset.	1	2	w	
8. My parents can tell when I'm upset about something.	paral	2	3	
9. I feel silly or ashamed when I talk about my problems with my parents.	lora	2	ω	
10. My parents expect too much from me.	1	2	(J)	
11. I easily get upset at home.		2	3	
12. I get upset a lot more than my parents know about.	pared	2	(J)	
13. When I talk about things with my parents they listen to what I think.	ja-ad	2	w	
14. My parents listen to my opinions.	j-mi	2	3	
15. My parents have their own problems, so I don't bother them with mine.	1	2	3	

Parent Scale Items	Never True Someti	Sometimes True	Always True
16. My parents help me to understand myself better.	_	2	ω
17. I tell my parents about my problems and troubles.	_	2	З
18. I feel angry with my parents.	_	2	ω
19. I don't get much attention at home.	_	2	ω
20. My parents support me to talk about my worries.	1	2	ω
21. My parents understand me.	1	2	3
22. I don't know who I can depend on.	_	2	3
23. When I am angry about something, my parents try to understand.	1	2	3
24. I trust my parents.	_	2	w
25. My parents don't understand my problems.	1	2	3
26. I can count on my parents when I need to talk about a problem.	1	2	3
27. No one understands me.	.1	2	ω
28. If my parents know that I am upset about something, they ask me about it.	_	2	ω

Part II

This part asks about your feelings towards your friends. Answer the questions about the friend you feel has most influenced you.

Peer Scale Items 1. I like to get my friends' opinions on things I'm worried about. 2. My friends can tell when I'm upset about something. 3. When we talk, my friends listen to my opinion. 4. I feel silly or ashamed when I talk about my problems with my friends. 5. I wish I had different friends. 6. My friends understand me.	Never True 1 1 1 1 1	Never True Sometimes True Always T 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3	Always True 3 3 3 3 3 3
The state of the s	1	1	٠
5. I wish I had different friends.	1	2	3
6. My friends understand me.		2	ω
7. My friends support me to talk about my worries.	_	2	w
8. My friends accept me as I am.	_	2	ω

Peer Scale Items	Never True	Sometimes True	imes True Always True
9. I feel the need to be around my friends more often.	1	2	ω
10. My friends don't understand my problems.	1	2	ر بن
11. I do not feel like I belong when I am with my friends.	_	2	ω
12. My friends listen to what I have to say.	1	2	ω ·
13. My friends are good friends.	_	2	_ل ى ا
14. My friends are fairly easy to talk to.	1	2	w
15. When I am angry about something, my friends try to understand.		2	w
16. My friends help me to understand myself better.	<u></u>	2	ω
17. My friends care about the way I feel.	—	2	ω (
18. I feel angry with my friends.	pond	2	Ų,
19. I can count on my friends to listen when something is bothering me.	لمحر	2	ω
20. I trust my friends	1	2	w

Authors: Elenora Gullone & Kim Roninson (2005).

APPENDIX H: PEER RELATIONSHIP QUESTIONNAIRE (PRQ)

THE PEER RELATIONSHIP QUESTIONNAIRE (PRQ) FOR CHILDREN

Show how often the following statements are true of you. To do this circle one of the answers underneath each statement

1. I like playir Never	ng sports. Once in a while	Pretty Often	Very Often
	grades in class. Once in a while	Pretty Often	Very Often
	names by others. Once in a while	Pretty Often	Very Often
	kids a hard time. Once in a while	Pretty Often	Very Often
5. I like to n Never	nake friends. Once in a while	Pretty Often	Very Often
6. I act up in Never	class. Once in a while	Pretty Often	Very Often
7. I feel I can' Never	't trust others. Once in a while	Pretty Often	Very Often
8. I get picked Never	on by others. Once in a while	Pretty Often	Very Often
	a group that goes an Once in a while	round teasing other kids. Pretty Often	Very Often
	p kids that are bein Once in a while		Very Often

GO TO THE NEXT PAGE PLEASE

Show how often the following statements are true of you. To do this circle one of the answers underneath each statement

Fig. 150 and the control of the cont	nake other kids scared of a Once in a while		Very Often
12. Other kid	s leave me out of things o	n purpose.	
Never	Once in a while	Pretty Often	Very Often
** C4* C4* C4* C4* C4* C4* C4* C4* C4* C	fights at school. Once in a while	Pretty Often	Very Often
	ow other kids that I'm the Once in a while	n 06	Very Often
	ngs with other kids. Once in a while	Pretty Often	Very Often
16. I enjoy pio Never	cking on wimpy kids. Once in a while	Pretty Often	Very Often
	get into a fight with some Once in a while		Very Often
	make fun of me. Once in a while	Pretty Often	Very Often
	nd pushed around by othe Once in a while	[8] [1] [8] [8] [8] [8] [8] [8] [8] [8] [8] [8	Very Often
20. I enjoy he Never	lping others. Once in a while	Pretty Often	Very Often

Ken Rigby and Phillip Slee, 1994

APPENDIX I: DEMOGRAPHIC PAGE

Demographic Page

Please Circle One				
AGE: 11 12 13 14				
GRADE: 6 th 7 th 8 th				
GENDER: Male Female				
Family's Ethnic/Cultural Background:				
Mother				
Father				
Please Check All That Apply				
HOUSEHOLD COMPOSITION:	☐ Mother			
	☐ Father			
	☐ Grandmother			
	☐ Grandfather			
	☐ Step-mother			
	☐ Step-father			
	□ Aunt			
	□ Uncle			
	☐ Brother(s) ☐ Sisters(s)			
	☐ Step-brother(s) ☐ Step-sister(s)			
	☐ Cousins			
	☐ Legal Guardian			
	☐ Foster Parent			
	☐ Other Relative			

APPENDIX J: REFERRAL PAGE

WRAP AROUND SERVICE PROVIDERS

Newark Beth Israel Medical Center – Community Health Center 210 Lehigh Avenue Newark, NJ 07112

Telephone #: 973-926-7026/3693

• Provides family and group therapy. There is an intensive outpatient program for children. Medication monitoring is offered.

UMDNJ - University Behavioral Health Center – Dr. Eric Parker – Clinical Supervisor

Children & Adolescents 183 South Orange Avenue Newark, NJ 07102

Telephone #: 973-972-4818

• Provides crisis intervention, psychiatric evaluations, follow-up services of the home and school. Referral and advocacy; outpatient therapy for children ages 1-17. Adult treatment facilities for ages 18+.

Creative Intervention Services – full service outpatient therapy 1149 Bloomfield Ave Clifton, NJ

Telephone #: 973.365.2300

•Provide individual family, child, psychiatry

Carrie Hentz, LCSW – Private Practice Social Worker 280 Bloomfield Avenue

Verona, NJ 07044

Telephone #: 973-600-0399

• Provides individual, group and family counseling. Works with the family, school, and medical providers as a means of supporting the child and the family therapeutically.

APPENDIX K: APPROVAL TO CONDUCT RESEARCH

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"It takes a whole village to raise a child"

September 19, 2008

Doctoral Student: Family Psychology Department of Professional and Family Therapy Seton Hall University 400 South Orange Avenue South Orange, NJ 07079

Dear Ms. Weingold:

This letter confirms our commitment and consent in allowing you to recruit potential participants from Marion P. Thomas Charter School for your research project.

The purpose, duration, procedures and specifications involved with your research that you shared during our meeting were helpful in making us aware of the nature and scope of the research study. I understand that your study will focus on student's social behaviors and how the family dynamic may influence cooperative or uncooperative social behaviors in students enrolled in middle school grade 6 through 8.

With the agreement that participation is voluntary, and anonymity as well as confidentiality will be preserved, I give permission to your recruitment of potential participants from Marion P. Thomas Charter School. Thank you very much and wish you the best!

Sincerely,

Mr. dela Cruz

Vice Principal