The Impact of Child Abuse on Patterns of Attachment, Capacity for Empathy, and Externalizing Behaviors for Hospitalized Adolescents

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THE IMPACT OF CHILD ABUSE ON PATTERNS OF ATTACHMENT, CAPACITY FOR EMPATHY, AND EXTERNALIZING BEHAVIORS FOR HOSPITALIZED ADOLESCENTS

by

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A Dissertation Submitted to the Faculty of the Graduate School of Loyola University of Chicago in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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This work is dedicated to the loving memory of my parents, James and Marie (Higgins) Norton, whose lives and teachings inspired me to pursue my dreams.
VITA

The author, Nancy A. Norton, received the degree of Bachelor of Science in psychology from Loyola University of Chicago in 1985. She continued her studies at Loyola University in the graduate program of clinical psychology, and was granted research and teaching assistantships throughout her academic training there. She pursued her clinical training at the North Chicago Veterans Administration Hospital, the Chas. I. Doyle Child and Family Center, Lutheran General Hospital, and the Loyola University Counseling and Developmental Services Center. She received the Master of Arts degree in 1988 when she completed her first research investigation of psychoanalytic theories regarding early patterns of attachment and other developmental sequelae of early object relations phenomena.

Ms. Norton’s strong bent for contemporary psychoanalytic thought continued in her clinical internship at Northwestern University Medical School in 1991, where she also held the position of chief psychology resident following this in 1992. She completed the Doctorate of Philosophy in Clinical Psychology in 1992.
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CHAPTER I

INTRODUCTION

The examination of the relationship between early childhood experience and later developmental outcomes has dominated the literature in human development (Kagan, 1979; Sroufe, 1988; Stern, 1985). A variety of theories have emanated from these observed relationships and have subsequently served to direct and guide continued research. Among the most comprehensive and interesting of these theories is attachment theory (Bowlby, 1969; 1973; 1982). Attachment theory, as Bowlby (1969) formulated and refined it, views the early infant-caregiver interactions as forming the foundation for a pattern of attachment between child and mother which will subsequently influence how the child comes to view him/herself and others. More specifically, Bowlby postulated that the quality of the infant-caregiver attachment will influence the "inner working models" of the child, which are based on the child's daily experiences and provide a framework with which the child comes to know what to expect from the caregiver, the self, and the relationship (Bowlby, 1973). These "working models", though subject to change, are thought
to be relatively well-formed by the end of the infant's first year. They will be the early precursors for such things as the development of self-confidence, efficacy, and self-worth, as well as the capacity for involvement in intimate personal relationships (Sroufe, 1988).

Bowlby (1969; 1973), as well as other object relations theorists (e.g., Mahler, Pine, & Bergman, 1975; Stern, 1985), postulate that these early interactional attachment patterns will continue to exert their influence, though probably not in a linear fashion, on later development in general, and social and emotional development in particular. Because of the time span involved, longitudinal data in support of this claim are sorely lacking. Instead, the major extension of Bowlby's (1969) theory in the research literature has remained in the area of early childhood development. Ainsworth (1973; 1979; 1984) has demonstrated the development of patterns of attachment in infancy and early childhood and the close association of those patterns with developmental functioning, particularly social and emotional functioning. However, the longer-term effects of early patterns of attachment remain in the theoretical realm, though recent research concerned with adult attachment has begun (see Cassidy & Kobak, 1988 for a review; Main & Goldwyn, 1984).

According to Cicchetti & Rizley (1981), a useful
means of contributing to the precision of a developmental theory and validating the claim of universality of a developmental sequence is to study populations where one might anticipate finding differing patterns. A number of researchers have done this by studying maltreated and high-risk infants and the disordered attachments often found between them and their caregivers (Egeland & Sroufe, 1981; Lamb, Gaensbauer, Malkin, & Schultz, 1985; Lyons-Ruth, Connell, Zoll, & Stahl, 1987). Indeed, the literature provides clear evidence that these attachments are different than those anticipated based on normal developmental theory. In fact, what is often seen in these relationships is what Bowlby (1969) referred to as anxious attachment. Longitudinal research with these children has demonstrated that an early anxious attachment continues to have impact on the child's functioning through middle childhood, i.e., approximately ages 8 - 9 years. More specifically, poor peer relations at this age were found to be related to earlier anxious attachment between mother and child (Sroufe, 1988).

In a recent retrospective study conducted by this author (Norton, 1988), it was demonstrated that college students sharing a history of childhood physical abuse also showed marked anxious attachment patterns, i.e.,
separation anxiety, engulfment anxiety, and dependency denial, when compared to their non-abused counterparts, suggesting that a presupposed early anxious attachment pattern does indeed continue to impact later relational patterns into adulthood. In addition, there is some evidence for the hypothesis that abusive caregivers are anxiously attached as well (DeLozier, 1982). This information, taken in tandem with observations that abusive caregivers typically have experienced a history of abuse during their own childhoods (Spinetta & Rigler, 1972), suggests that the quality of early attachment patterns may indeed be a significant factor in predicting later relational and parenting behaviors, and may also shed light on the intergenerational pattern of physical abuse now so commonly noted. However, little is known about what factors may serve to mitigate the intergenerational pattern of abuse and/or early anxious attachment patterns.

With the knowledge that much remains unknown about the continued impact or sequelae of these patterns, the present study will attempt to replicate the study previously mentioned (Norton, 1988), which examined attachment patterns in abused and non-abused young adults, and found that anxious attachment patterns were evident in relatively high-functioning college students with a history of abuse. The current study will examine
the same hypothesis with younger adolescents who are hospitalized in a psychiatric setting in order to determine if a history of childhood abuse will distinguish those with anxious attachment patterns from those with more secure attachment patterns. Another question to be addressed by this study concerns the characteristic defense mechanisms (internalizing vs. externalizing) used by disturbed adolescents who share a history of abuse, and whether these differ from those who do not. In addition, an attempt will be made to determine whether mitigating factors, such as a capacity for empathy, can help to distinguish between those who will continue to operate under the "working model" of anxious attachment (presumed to exist because of the experience of abuse) from those who manage to overcome it. That is, will a capacity for empathy differentiate between anxious and secure attachment regardless of abuse history? Or, will a capacity for empathy differentiate between those who tend to internalize their distress (via depression and somatic complaints) and those who tend to externalize it (via aggressive and delinquent behaviors).

Needless to say, there are a great many questions that remain unanswered about the lasting effects of early attachment patterns, and even fewer questions have been answered about potential mitigating factors.
Therefore, in spite of the limitations inherent in a retrospective study of this kind, it is hoped that some contribution can be made to advance our knowledge about the possible long-term effects of early attachment patterns. In addition, some light may be shed on potential goals for intervention if mitigating factors can be shown to influence later developmental outcomes, e.g., the inter-generational cycle of physical abuse and maltreatment.
Developmental theorists, such as Mahler et al. (1975) and Bowlby (1969, 1982), assert the importance of the mother’s emotional availability to her child. This maternal availability, coupled with the child’s responsivity, results in interactions which determine the quality of attachment between mother and child. Attachment, as defined by Bowlby (1969) and extended by Ainsworth, Blehar, Waters, & Wall (1978), is the enduring affective tie between the infant and his/her caregiver, the true relationship, so to speak. Winnicott (1960), in fact, would go so far as to say "there is no such thing as an infant" (p. 586), meaning, of course, that an infant cannot exist alone, i.e., there is no infant without maternal care. In other words, Winnicott (1960) views the infant and his/her mother as a distinct unit; a relationship. Though the capacity for attachment is thought to be present from very early on, the behavioral manifestations of the quality and nature of the attachment relationship become easily observable in the infant between the ages of 6
and 12 months (Sroufe, 1979). Stern (1985) also points out that this period marks an increase in the infant’s attention and attunement to interpersonal relationships. Theory holds that the infant’s successful adaptation during this crucial developmental phase will result in the formation of basic trust in maternal availability (Erikson, 1965), and a secure attachment between mother and child (Bowlby, 1969). On the other hand, it is thought that deficiencies in the emotional availability of the mother most often result in what Bowlby termed an anxious attachment between mother and child. That is, if the mother/caregiver is unpredictable and/or more concerned with her own needs than those of the child, the child’s basic trust in his/her ability to depend on mother will be compromised, and the quality of the infant/caregiver attachment will be colored with anxiety.

Though Bowlby’s (1969) original conceptualization of attachment was of a specific developmental milestone, or the endpoint of a specific developmental phase, the contemporary view is of attachment as an organizational construct (Ainsworth, 1979; Bowlby, 1982; Sroufe, 1979, Sroufe & Waters, 1977). That is, based on the quality of early mother-child interactions, an attachment pattern will result, and, in turn, will influence the proximity-seeking behavior and the exploratory behavior
of the child. The implications of this refinement in attachment theory for development over the life span are innumerable, and provide a clearer understanding of the coherence of individual development (Sroufe, 1979). In particular, the theory holds that mental representations of the self and others formed within the primary dyadic relationship will have influence on the security with which the developing child explores his/her environment and others within it. Experiences with these initial explorations will affect subsequent developmental issues and their resolution. That is not to say, however, that the quality of the infant’s attachment to his/her mother is the only causal factor for subsequent developmental outcomes. As Cicchetti (1987) points out in his transactional model of child maltreatment, there are numerous potentiating and compensatory factors which serve to increase or reduce the child’s vulnerability to maladaptive developmental outcomes. However, the quality of the early attachment relationship may be the single most important determinant of the adaptive resolution of future developmental issues.

This point is clearly illustrated in Mahler’s (Mahler et al., 1975) theory of the separation-individuation phase of early development, which holds that between birth and three years of age the child gradually emerges from a total dependence/fusion with
the mother to an increasingly differentiated, separate, autonomous self. Mahler et al. (1975) observed infants and toddlers moving through these stages, i.e., differentiation, practicing, and rapprochement, and the most important factor noted, which determined the child's successful achievement of true individuation, was the degree to which the mother was empathically attuned to her child's needs at any given time. Ainsworth (1984), in her observations of infants and toddlers, agreed that maternal responsivity to the infant's signals was the most important determinant of the success of the attachment process. This implies that for the maltreated child, the mother's lack of attunement to the child's needs will result in a compromised attachment pattern in which the child will be unable to individuate and function autonomously. This is not to say, of course, that brief lapses in the empathic bond between mother and child will cause deleterious effects; however, it is postulated that a consistent lack of empathy will, and that this early tenuous mother-child attachment will influence the manner in which the child relates to others as well, both in terms of the child's attachment pattern and his/her capacity for empathy with others.

Bowlby's (1982) attachment theory suggests a similar line of development for maltreated children,
which he characterizes as an anxious-avoidant attachment pattern. He postulates that physical maltreatment of the child results in unmet dependency needs, which keep the child attached to the mother in spite of the negative valence to the relationship. In other words, when a child's behavior is responded to tardily, unwillingly, and/or unpredictably, i.e., unempathically, he/she is likely to become anxiously-avoidantly attached; anxious because maternal availability is doubtful, and avoidant in case emotional displays cause active rejection by the mother. Cassidy and Kobak (1988) identify avoidant attachments as defensive maneuvers which serve to mask negative affect, thereby protecting the attachment relationship from disintegration, i.e., maternal rejection.

For Bowlby (1980), avoidance serves to "deactivate" the attachment system, which inhibits the processing of information that may lead to anxiety or distress, which in turn typically elicits attachment behavior. In addition, the avoidantly attached child may be able to deny or minimize the importance of giving and receiving care through the selective processing of information which would typically result in affective distress, e.g., separation from the caregiver (Bowlby, 1980). In fact, the research conducted with maltreated children clearly supports the theories discussed. In
anticipation of a discussion of these findings, it will be useful to understand the most common method currently used to assess the attachment relationship between infants and their mothers.

**Assessment of Attachment**

The quality of infant attachment is typically assessed using Ainsworth's "Strange Situation" standardized laboratory procedure (Ainsworth et al., 1978). In this procedure the infant is taken through eight 3-minute episodes with varying degrees of related stress. The assessment includes the infant's reactions to an unfamiliar room, toys, a female stranger, and two separations and reunions with the mother. By examining the infant's exploratory and proximity-seeking behavior, particularly the infant's response upon reunion with the mother, the quality of the attachment relationship between mother and child can be assessed.

Based on observations of the infant's organized behavioral patterns, Ainsworth and colleagues (1978) were able to discriminate three basic types of attachment patterns which are closely related to the patterns of caregiver/infant interactions. Two of these, Groups A and C, are characterized as anxious and insecure forms of attachment, while Group B infants are characterized as securely attached. In particular,
Group B infants were classified as securely attached on the basis of their proximity-seeking behavior upon reunion with their mothers, and their frequent return to exploratory behavior shortly thereafter. In addition, these infants reacted positively and seemed to experience pleasure when mothers reentered the room. Those infants classified in Group A (anxious/avoidant), on the other hand, tended to avoid their mothers during reunion, or mixed their avoidance with proximity-seeking behaviors. These infants behaved in a similar fashion to the female stranger in the room. In effect, there was little differentiation for the infant between his/her primary caretaker and a total stranger. Finally, Group C (anxious/resistant) infants were characterized by their mixed proximity-seeking behavior and resistant, angry behavioral fluctuations. Though these children tended to stay close to their mothers during the pre-separation period, thereby showing fewer exploratory behaviors, they were not comforted by maternal contact, and frequently pushed their mothers away during physical contact, only to pursue it again when not in contact. These children appeared angry, yet fearful that their mothers may have left them if contact was not maintained. In contrast, the Group A children appeared to be disengaged from their mothers and very self-reliant, as if they did not need maternal
availability. Ainsworth and colleagues (1978) found that approximately 70% of all nonclinical samples of infants were securely attached (Group B), while 30% were insecurely attached (20% from Group A and 10% from Group C). In studies of maltreated infants, estimates of those insecurely attached range from 70% to 100%, with most of these attachments being classified as anxious/avoidant (Group A; Cicchetti, 1987).

According to Cicchetti (1987), recent developments in the classification of attachment systems have resulted in the addition of a fourth pattern of attachment (Group D) which is characterized as disorganized and disoriented (Main, Kaplan, & Cassidy, 1985). These infants show fear and are very tentative in their relationships with their mothers, and they exhibit a combination of attachment behaviors typically belonging to other distinct categories, i.e., Groups A and C behaviors. Approximately 10% to 15% of the infants who cannot be classified appropriately into any of the other groups fit the Group D pattern (Cicchetti, 1987). According to Crittenden (1988), prior to the development of the Group D category, some maltreated infants had been incorrectly classified as belonging to Group B.

It is important to point out that caution must be exercised in making connections between attachment
classifications and more general mother-child interactions (Gaensbauer & Harmon, 1982). Therefore, evidence will be presented concerning both, i.e., attachment-related studies and mother-child interactional studies.

Attachment Patterns of Maltreated Infants

In 1981, Egeland & Sroufe conducted the first study designed specifically to determine the quality of attachments between abused/neglected children and their mothers. Since this research was done prior to the development of the Group D Category (Main et al., 1985), it is necessary to take into consideration that some misclassifications may have occurred. With that in mind, Egeland & Sroufe (1981) found that of the 12 month-old infants receiving inadequate or improper care, i.e., abuse and/or neglect, 24% were classified as having anxious/avoidant attachments (Group A), 38% were classified as securely attached (Group B), and 38% as having anxious/ resistant attachments (Group C). Of these children, approximately 57% of those who had been abused were classified as Group A attachments, while the remainder (43%) fell into the Group B category. This is in contrast to observed children who received "excellent care", of whom 16%, 76%, and 9% were classified as having Groups A, B, and C attachments, respectively.
Interestingly, observations were repeated when these children reached 18 months of age, at which time 75% of the abused children were classified as securely attached, and 25% were classified as having anxious/avoidant attachments. Similar shifts from the anxious attachment categories, i.e., Group A and C, to the secure attachment category, i.e., Group B, were seen for the neglected children as well, though these shifts were not as dramatic as those for the abused children. Egeland and Sroufe (1981) explained these shifts through anecdotal examinations of family case histories. They offered the hypothesis that in cases where a shift to a more secure form of attachment took place, the lives of the mothers were described as more stable. This was frequently due to the presence of a supportive family member, usually the grandmother. In spite of these shifts, however, the data in support of the Bowlby-Ainsworth hypothesis remain compelling. For abused and/or neglected infants, avoidant attachments were more common than they were for those infants who received care described as "excellent".

In a more carefully controlled study (Lamb et al., 1985), the attachment patterns of abused and neglected children were compared with those of well-treated children who were matched on such characteristics as age, sex, ethnic background, maternal
and paternal occupation, and parental education. Similar results were obtained, with 86% of the abused children, and 63% of the neglected children being classified as having anxious/avoidant attachments. In contrast, only 14% and 25%, respectively, of their matched well-treated counterparts were classified as avoidantly attached.

These data suggest that the environmental and other demographic variables used for matching are extraneous to the development of the attachment between mother and child. Furthermore, it is the negative interaction between mother and child which is implicated as a causal factor in a controlled study of this type. Lamb et al. (1985) also observed children who had been maltreated by adults other than their primary caregiver, and they found no elevation in the incidence of anxious attachment patterns. Consequently, it is not maltreatment per se which is implicated in the formation of anxious attachments. Rather, it is maltreatment experienced within the primary dyadic relationship which appears to be closely associated with the development of anxious/avoidant attachment patterns, although the direction of the relationship cannot be determined from these data (Lamb et al., 1985). That is, it is not clear whether these infants develop an avoidant attachment with their mothers as a result of maltreatment, or whether they are maltreated due to
specific high-risk characteristics which may lead to an avoidant attachment pattern which then elicits the maltreatment.

Partially in response to this question, Lyons-Ruth and colleagues (1987) compared infants considered to be at high-risk for maltreatment, but who had not been physically maltreated, with maltreated infants and non-maltreated infants from the community. Subject groups were matched on per-person family income, mother's education and race, and the child's age, sex, and birth order. "High risk" status was determined by referring professionals on the basis of "social and psychiatric risk owing to poor mother-infant relationship and to economic and social stresses within the family" (p. 225). Again, using Ainsworth's Strange Situation paradigm, and incorporating a fourth category, i.e., Group A/C - evidence of a mixture of avoidant and resistant behaviors, Lyons-Ruth and colleagues found that 80% of the maltreated infants were classified within either Group A or Group A/C, and the remaining 20% were classified as Group C. There were no significant differences in attachment behaviors between infants in the "high risk" sample and those in the matched community sample. Furthermore, when unstable avoidant behavior, or early avoidance behavior which diminished to the point that the second reunion is
classified as secure, is classified as an anxious attachment pattern rather than a secure one, 90% of the maltreated infants were classified as anxiously attached, while 44% of the non-maltreated "high risk" infants, and 39% of the community infants were classified in the same category. These data would seem to suggest that it is the dyadic-caregiver maltreatment itself which is a primary influence on the development of anxious attachments, as opposed to the "high risk" characteristics which are often present in these families as well.

Lyons-Ruth and colleagues (1987) included an analysis of maternal behaviors at home in order to assess the relationship between these behaviors and infant attachment patterns. By collapsing all three groups of infants, i.e., maltreated, non-maltreated "high risk", and community samples, they demonstrated that 100% of infants whose mothers were covertly hostile showed avoidant/resistant behaviors. A specific association between maternal covert hostility and infant avoidance only was demonstrated, whereas mothers of infants who showed a mixture of avoidance and resistance were more likely to be uncommunicative and less likely to be covertly hostile. Interestingly, some of the most highly interactive mothers were those rated high on covert hostility and interfering manipulation.
As Lyons-Ruth et al. (1987) point out, the rate of mother-child interaction is not as critical as is the appropriateness and affective tone of the interaction. This is in agreement with the findings of Wasserman, Green, and Allen (1983), who observed abusing mothers and control mothers engaged in free play with their infants. Though these authors did not assess the quality of attachment between infants and their caregivers, they did find that abusive mothers were significantly more likely to demonstrate more negative behavior and less positive affect toward their infants than were their matched control counterparts. In addition, abused infants tended to avoid their mothers' attempts to engage them in activities other than those they had chosen themselves. Abusive mothers were also more likely to make physical contact with their infants, as opposed to verbal contact, but less likely to initiate contact overall. In general, these mothers lacked positive involvement with their infants, and their children seemed to respond with passive and active avoidance as well as significantly lower scores on the Bayley Mental Developmental Scale (Wasserman et al., 1983).

The infant's avoidance of the mother probably contributes to continued maternal emotional unavailability. In fact, in their analysis of infants'
affective communications with their mothers, Gaensbauer and Sands (1979) delineated six "affective distortions" not typically seen in normal infants: affective withdrawal, lack of pleasure, inconsistency and unpredictability, shallowness, ambivalence/ambiguity, and negative affective communications. It is thought that these affective communications result from the experience of abuse and the unpredictable relationship with the mother, but they also serve to maintain maternal emotional unavailability via the provocations of the mother's sense of inadequacy and frustrated dependency needs (Gaensbauer & Sands, 1979). It should be remembered that avoidant attachment is thought to be a defensive maneuver on the child's part, which allows for information processing biases that serve to minimize affective distress (Bowlby, 1980).

As can be seen, the maladaptive and negative interaction between abusive mothers and their children goes beyond situations which are stressful, i.e., Ainsworth's Strange Situation. In fact, these negative interactions can be observed and are extended to include family interactions in general (Burgess & Conger, 1977; 1978). In home observations, abusive mothers directed 20% fewer verbal contacts and 40% fewer positive responses to other family members, than did mothers in a control sample. Burgess and Conger (1977) observed
other interesting characteristics in abusive families. For example, the parents together directed 28% fewer physical contacts of any kind to their children, and these children, in turn, responded negatively toward their siblings 28% more often than did their matched controls, tending to be less reciprocal and more coercive in their interactions with others. This pattern was also observed to occur within the parents’ relationship as well. Burgess and Conger (1978) were able to replicate most of these results with in-home observations of abusive, neglectful, and control families from rural areas, though the interactions between parents and between children were not markedly different from those of normal families for this sample. The parent-child interactions, however, were similar in that lower rates of interactions and higher negative behaviors characterized abusive parent-child interactions.

In light of the findings described thus far, it appears that families in which child abuse and maltreatment occur are fraught with negative and unbalanced interactions between members, and between mother and child in particular. Because such findings make intuitive sense, a common tendency is to ignore them as not particularly important in furthering our understanding of the causes and consequences of abuse.
However, this would be an unwise omission because, as Bowlby's (1982, 1984) hypothesis suggests, we would expect the quality of early attachments and interactions to influence later development via the child's "working models". This is what makes the aforementioned findings so disturbing. Beyond the evidence which indicates that modeling plays an important role in the etiology of aggressive behavior (Bandura, 1973), it has been demonstrated that anxious patterns of attachment are frequently associated with deficient social skills and problem-solving behavior as much as three years later (Arend, Gove, & Sroufe, 1979; Matas, Arend, & Sroufe, 1978; Sroufe, 1983).

Unfortunately, because longitudinal studies in this area are so difficult to conduct, we have little information beyond this which connects later developmental outcomes with earlier patterns of attachment and interaction for abused children. Evidence that the anxious attachment patterns seen in maltreated infants do persist into adulthood is beginning to accumulate (Delozier, 1982; Main & Goldwyn, 1984; Norton, 1988), but there is still too little to guide postulation about other developmental sequelae related to the anxious attachment itself. We do, however, have information regarding common personality characteristics of abusive mothers and older abused
children. From this information, we can hopefully posit a connection between anxious-avoidant attachment due to physical abuse and later developmental outcomes.

**Personality Characteristics of Abusive Mothers and Abused Children**

A review of all of the data collected to date concerning the personality characteristics of abusive mothers and abused children is beyond the scope of this paper (for a review, see Maden & Wrench, 1977; Spinetta & Rigler, 1972). However, an overview of those characteristics most salient to developing an understanding of the emotional and relational aspects of personality as they pertain to early patterns of attachment will be attempted. It must be appreciated beforehand that most investigators have found that abusing parents often report a history of abuse during their own childhoods (Blumberg, 1974; Spinetta & Rigler, 1972; Steele & Pollack, 1974; Wasserman et al., 1983). Consequently, the boundaries between the characteristics of each of the two groups seem to blur considerably, which, as we shall see in the next section, seems to be at the crux of the problem of multi-generational abuse.

To begin, the most notable and least unexpected findings in the literature are that abusive mothers have been found to lack empathy and to have low self-esteem
(Disbrow, Doerr, and Caulfield, 1977; Melnick & Hurley, 1969). Further, the lack of empathy found in these mothers is generalized and not restricted to their relationships with their children. Melnick and Hurley (1969) also found that abusing mothers had more frustrated dependency needs and showed less need to be nurturant than control mothers on several personality measures. In a compelling study conducted as part of the 6-year follow-up in the Berkeley Social Development Project, Main and Goldwyn (1984) interviewed parents of infants who had been classified via Ainsworth’s Strange Situation procedure 5 years earlier. They were interested in the parents’ abilities to recall their own childhood attachment experiences and reflect on the meaning these experiences held for them. The semi-structured interview (Adult Attachment Interview, George, Kaplan, & Main, 1984; as cited by Main & Goldwyn, 1984) included such topics as memories of being upset or ill, memories of separations and losses, early feelings of rejection, and general descriptions of their relationships with their parents. Main and Goldwyn (1984) identified three patterns of organizations/attachments used by these parents: secure/autonomous, preoccupied, and dismissing.

When these results were compared with the attachment classifications of infants done 5 years
earlier, Main and Goldwyn (1984) found that the majority of parents of children classified as avoidant (Group A) were in the dismissing group. These individuals dismissed the importance of attachment relationships, and denied any painful affect associated with memories of distressing events. Instead, they claimed to be unaffected by them, although they were unable to remember many specific events related to attachment during childhood. The fact that parents of avoidant infants tend to "deactivate" and deny thoughts and feelings about their own early attachment experiences suggests that their own avoidant stance has been pervasive and long-lasting, and, in fact, will probably continue on in the next generation since it is likely to impact so strongly on their children's "working models". This avoidant approach to interpersonal relationships also explains the lack of empathy typically found in abusive mothers (Melnick & Hurley, 1969), and the continuing unmet dependency needs (Green, Gaines, & Sandgrund, 1974). In a related study investigating empathy as a function of distressing childhood experiences, Barnett and McCoy (1989) found lower levels of empathy in those who tended to dismiss, or downplay, the impact of distressing early experiences. Although this study did not include abusive mothers, it is in keeping with the results of Main and Goldwyn (1984), and
suggests that it is one's coping style and avoidant stance that is related to capacity for empathy, rather than the experience of abuse itself. More of the empathy-related literature will be reviewed later in this paper.

Merrill (1962) made the first major attempt at a typology of abusive parents, which included three distinct clusters. The first group was composed of individuals with pervasive hostility and aggressiveness, and very poor impulse control. The second group included those who were rigid, compulsive, and lacked warmth, often rejecting their children, while the third group of parents showed strong feelings of dependence and passivity, and were generally depressed, moody, unresponsive, and immature. Though she did not use a typological structure, Oates (1986) also found many of these characteristics in abusive mothers. In particular, the abusive mothers were found to be more assertive, demanding, jealous, and suspicious, and more likely to act impulsively than comparison mothers. Ratings of superego strength were also significantly lower for abusive mothers (Oates, 1986). Impaired impulse control is a common and expected finding in much of this research (Green et al., 1974). Inadequate defenses, unmet dependency needs, and a lack of identity have also been found to characterize abusive mothers.
(Green et al., 1974). Furthermore, these mothers are prone to reverse roles with their children, thereby expecting them to gratify the dependency needs which their own parents had failed to gratify (Green et al., 1974).

In general, abusive mothers tend to have unrealistic expectations of their children, frequently expecting more from them than is appropriate, while feeling that they will not perform as adequately as a "normal" child would (Twentyman & Plotkin, 1982). Twentyman and Plotkin (1982) posit that these parents suffer from an informational deficit in the area of child development. However, it seems possible that projective identification may be responsible for this dynamic, insofar as the parent may tend to project her own sense of inadequacy onto the child. In fact, in a path analysis conducted by Engfer & Schneewind (1982), the main predictors of harsh parental punishments were found to be, in order of their importance, a child perceived as difficult to handle, maternal anger-proneness, rigid power assertion, and family conflicts. Abusive mothers also have been found to be more aggressive and defensive and less succorant than highly stressed non-abusive mothers (Egeland, Breitenbucher & Rosenberg, 1980).

The impact of these maternal personality factors
on the personality and emotional development of children can be assumed to be considerable. Although it has been difficult to determine cause-effect relationships in the research literature, it seems that this difficulty is methodological, rather than logical. Research examining the emotional development of abused children seems to clarify this point well. For example, Ounsted, Oppenheimer, and Lindsay (1974) point out that abused children sometimes show a behavior termed "frozen watchfulness", which is characterized by silence and an almost vigilant stance when in the presence of adults, e.g., they will gaze-fixate without smiling. This is naturally indicative of the limited degree to which these children are able to achieve "basic trust" in others within their environment (Erikson, 1965; Kinard, 1980), a stance which apparently endures. In a study of 9 year-old abused and non-abused children, Oates (1984) found abused children to be significantly more serious, cautious, and subdued than their non-abused peers. Although these children were rated approximately the same on a measure of social maturity, abused children had significantly fewer friends, lower ambitions, and lower self-esteem (Oates, 1984).

Kinard (1980) found that abused children (5 to 12 years old) depicted themselves as "bad" in many ways, e.g., unpopular, disobedient at home, wanting their own
way too much, doing many bad things, and believing their parents expected too much from them. Though Reidy (1977) found abused children to be significantly more aggressive in fantasy, play, and classroom behavior than non-abused and/or neglected children, Kinard (1980) found that abused children were only more extrapunitive than non-abused and/or neglected children when child-child interactions were in question, as opposed to adult-child interactions. In a later study, Kinard (1982) found that measures of aggression were related to the severity of injuries experienced by the child. More specifically, those children who experienced more severe injuries were more likely to have impunitive, or non-aggressive responses to an adult as the frustrating agent, and less likely to have extrapunitive responses than those experiencing less severe forms of abuse. These findings suggest that abused children internalize their perceptions of the reasons for the aggression directed toward them, i.e., "I’m bad", and that the effects of this internalization are determined by the severity of the abuse. This mechanism of defense in the face of harm and the threat of annihilation is what Anna Freud (1966) termed "identification with the aggressor".

Furthermore, it has also been demonstrated that abused children are more likely to have unsuccessfully resolved the developmental task of basic trust in others.
than are non-abused children (Kinard, 1980). Older abused children have also been found to experience more difficulty with tasks assessing the ability to separate from a mother figure (Kinard, 1980; 1982). Interestingly, abused children who had been placed in a foster home and/or referred for psychiatric services were found to experience less difficulty with this task when compared with abused children who had remained in the family home. This finding seems to suggest that it is developmentally beneficial to these children to be removed from their families and placed in foster care, although there is no conclusive evidence regarding this issue.

General findings for abused children up to the age of 12, which indicate the lack of establishment of basic trust in others, and difficulty with the developmental task of emotional separations from the mother, necessitate consideration of the possibility that the anxious-avoidant attachment seen in abused infants may simply continue through latency and into early adolescence and adulthood. It seems that the basic avoidant stance taken toward others during infancy continues to have impact on future relationships, and through its negative impact on relationships to have an impact on the child's self-esteem, self-concept, and level of aggressive behavior. And the degree of impact
is thought to be related to the severity of abuse (Kinard, 1982). In addition, it is suggested that if failures to resolve these basic early developmental tasks can be detected in children 12 years of age, then they will likely be detectable during adolescence and adulthood, possibly contributing to future disordered marital relationships and parent-child attachments (Main & Goldwyn, 1984). Chan (1983; as cited by Friedrich & Einbender, 1983), in fact, compared college students with a history of abuse to students with no history of abuse and found significantly lower self-esteem for the abused group, and a significantly higher score on a child abuse potential screening measure.

In the precursor to the present study, Norton (1988) investigated patterns of attachment in college students with and without a history of physical maltreatment and found that those who had experienced abuse approached significant interpersonal relationships with significantly higher levels of separation anxiety, engulfment anxiety, and dependency denial. These characteristics fit closely with how the anxious-avoidant attachment might manifest itself in adulthood. The central features are likely to be separation anxiety, which is frequently associated with fears of rejection and abandonment, and engulfment anxiety and dependency denial, which themselves characterize the
essence of an avoidant stance in interpersonal relationships.

Another component of the Norton (1988) study investigated the characteristic defense mechanisms used by young adults with histories of childhood abuse. It was demonstrated, not unexpectedly, that abused individuals used higher level defenses, e.g., intellectualization and rationalization, significantly less often than did their nonabused counterparts. However, it was also discovered that the abused subjects scored higher on measures of intrapunitive and extrapunitive defenses. As Kinard (1982) points out, it may be the severity of the maltreatment which determines whether intrapunitive (self-blaming), or extrapunitive (identification-with-the-aggressor) defenses will be used. Although there is insufficient evidence to illuminate the factors which differentiate those who tend to internalize vs. externalize as a coping style, it is clear that there is an intervening variable, or a cluster of variables, which, if found, could explain the differences in developmental outcomes. In a longitudinal study of non-abused children, early peer rejection and aggression against peers and social isolation and withdrawal were found to predict later externalizing and internalizing behaviors, respectively (Hymel, Rubin, Rowden, & LeMare, 1990), suggesting that
these coping styles tend to persist through childhood. However, it remains unclear which factors influence this early defensive posture.

The present study will attempt to explore one possible mitigating factor, i.e., capacity for empathy, since it has been suggested in the literature that "dismissing", or avoidant coping styles are related to reduced empathic responsiveness (Barnett & McCoy, 1989; Main & Goldwyn, 1984). Other literature indicates an inverse relationship between empathy and aggression (Howes, Feshbach, Gilly, & Espinosa, 1985; cited in Miller & Eisenberg, 1988; Letorneau, 1981; Main & George, 1985; Miller & Eisenberg, 1988; Straker & Johnson, 1981), suggesting that empathy may be the mitigating factor which differentiates those who internalize their distress from those who externalize. In order to assess how this factor, i.e., empathy, contributes to an understanding of the complex developmental sequelae of childhood abuse, a brief review is warranted.

Capacity for Empathy and its Relation to Internalizing/Externalizing Behaviors

Several studies have been conducted with the goal of assessing the relationship between empathic responsiveness and the expression of aggression. For
example, Howes, et al. (1985) found that, not only are abusive parents deficient in their capacity for empathic responsiveness, but there exists an inverse relationship between the extent of their abusive behavior and their capacity for empathy. However, other studies differ from one another methodologically thereby making comparisons somewhat difficult. Straker and Jacobson (1981) found that abused children between the ages of 5 and 10 years old were significantly less empathic and more emotionally maladjusted than their matched non-abused counterparts. They also found that abused children did not differ from nonabused children on measures of aggression despite their differences in empathic responsiveness. They attributed this null finding to the fact that the aggression measures used were "fantasy aggression" measures, (i.e., Rosenzweig Picture Frustration Test and the Children's Apperception Test), rather than behavioral measures of aggression. They posited that abused children are not exposed to fantasy aggression as they are to actual aggression, and so only measures of actual aggression would illuminate the true relationship between empathy and aggressive behavior.

In an attempt to explore the true relationship between empathy and externalizing behaviors, Miller and Eisenberg (1988) conducted a meta-analysis of 48
studies, including 72 samples, by grouping the studies according to how empathy was measured. Several methods of measurement were reviewed, including 1) picture/story methods, 2) facial affect/gestural reactions, 3) self-report questionnaires, and 4) experimental induction procedures (see Miller & Eisenberg, 1988 for full review of each procedure). Another grouping used in the meta-analysis concerned how aggression was measured, i.e., via Achenbach & Edelbrock's (1979) system of classifying externalizing behaviors or via the presence of problematic social behaviors, such as acting-out behavior. The final grouping of analyses included individuals who either had been the victims or perpetrators of physical abuse.

The Miller and Eisenberg (1988) meta-analysis found instrumentation in the measurement of empathy to be the crucial factor in determining the degree of the relationship of empathy to aggression, while the methods used to measure aggression were found to be less important. That is, when self-report questionnaires were used to assess empathic responsiveness, negative correlations with aggression and aggressive behavior were highly significant. All other methods of assessing empathy, when meta-analyzed, proved to be non-significant, although a negative relationship was found.

Several explanations may account for the discrepant
findings. Among them, perhaps the age differences which determine the method used have an impact on these results, since only the self-report measures are used with adolescents and adults, while all types of measures are used with children as well. An explanation related to the age difference hypothesis is the notion that self-reflection, which is required to complete a self-report measure of this type, may also account for the discrepancies. Since it is less affected by extraneous variables, such as interaction with an examiner, self-report questionnaires requiring self-reflection may be truer measures of empathic responsiveness as a trait rather than a state-related response. Finally, results of the Miller and Eisenberg (1988) meta-analysis of the third grouping, i.e., studies involving abusive parents and abused children, indicated that both groups are deficient in their capacity for empathic responsiveness, scoring significantly lower than their nonabusive or nonabused counterparts.

In other related observational studies designed to assess how children might respond to peers in distress, Main and George (1985) found that abused children tended to respond with aggression, while nonabused children tended to respond with prosocial behaviors, such as attempts to soothe and comfort. Howes and Eldredge (1985) found similar results in free and structured play
situations. In general, as has already been reviewed, abused children tend to display significantly more aggression in fantasy and play than do nonabused children (Kinard, 1982; Reidy, 1977), and evidence is accumulating to suggest that one's capacity for empathy is a very important factor in understanding this dynamic.

The present study attempted to move this area of research one step further by determining whether deficits in the capacity for empathy can be found in adolescents with a history of abuse, and if so, whether one's capacity for empathy will differentiate between the coping styles of internalizing and externalizing. Also, the present work attempted to explore whether anxious-avoidant attachment patterns differentiate those with a history of abuse from those with no history of abuse regardless of current psychological functioning, i.e., with a psychiatrically hospitalized population. First, however, an effort will be made to derive from psychodynamic theory a framework in which the existing literature can be organized, and the thrust of the current research can be developed and explicated. Within this explication the intergenerational pattern of abuse will be highlighted.
psychodynamic Formulation of Child Abuse

As discussed earlier, many researchers and theoreticians believe that the most critical aspect of successful emotional development is the quality of the attachment between a mother and her child (Ainsworth et al., 1978; Bowlby, 1969). At the risk of oversimplification, when this attachment relationship is jeopardized due to the emotional unavailability of the mother, or as a result of physical abuse, an anxious-avoidant attachment between mother and child frequently results (Egeland & Sroufe, 1981). The child, therefore, is unable to establish basic trust in the mother and is confronted with the threat of annihilation and/or abandonment (Green, 1981). In addition, because of the avoidant stance generally taken by the child, in order to maintain some form of attachment to the caregiver, the developing child remains unable to have these dependency needs gratified (Cassidy & Kobak, 1988). Because the mother-child relationship remains unrewarding, an empathic bond between mother and child never develops, or develops in a distorted manner, such that the child must be sensitive to the mother’s needs, i.e., role reversal, rather than vice versa (Green et al., 1974; Yates, 1981). In order to survive, many of these children develop what is referred to as a false self (Winnicott, 1960), through which they attempt to
conform and comply with parental expectations while failing to develop close relationships, and consequently increase their sense of isolation, "badness", and subsequent anger (Yates, 1981).

Because these children remain developmentally delayed emotionally (though Bowlby (1980) would disagree that they are delayed, preferring to conceptualize them as having developed along a "deviant pathway"), they are forced to rely on primitive defenses as well, i.e., denial, splitting, and projection (Green, 1981). Through identification, some of these children incorporate the destructive qualities of the abusing parent, thereby intensifying their own sense of "badness". In order to avoid awareness of the sense of "badness", internalized representations of the abusive parent are denied and projected onto others. This projection allows the child to maintain the fantasy of having a good parent (Green, 1981). The denial and projection, therefore, serve to maintain the child's avoidant stance and to avoid the pain associated with the unresponsive parent (Crittenden, 1988).

When these children grow up and become parents themselves, it is believed that they are at increased risk to treat their children in the same manner they were treated. Because of their deficient capacity for empathy (Howes et al., 1985; Letourneau, 1981), and
because of their early identification with a hostile, rejecting parent, and the denial and projection of their deep-seated "bad" sense of self, they become vulnerable to repeating the abusive relationship with their own child (Green, 1976). This identification can shift rapidly to an identification with the child-victim, at which times abusive parents will seek to gratify their still unmet dependency needs through the child, thereby completing the cycle of role reversal. When the parent is then frustrated in these attempts, due to inability on the child's part to meet his/her parent's overwhelming needs, and compounded by the avoidant attachment relationship as well, the parent reexperiences the intolerable rejection, and the role reversal ceases. The parent shifts to an identification with his/her aggressive parent at this point, and projects his/her painful feelings of rejection and "badness" onto the child. By abusing the child, the parent is able to soothe his/her punitive super-ego and attempts to actively control the abuse he/she passively experienced as a child (Green, 1976), all the while able to justify the punishment due to his/her own denial of the painful affect associated with the experience of parental hostility and rejection.

Bowlby (1984) stresses the importance of the anxious-avoidant attachments frequently found in abusive
mothers and in women who are abused by their husbands. The critical point he makes, which is related to the pervasive use of denial and projection for these individuals, as well as never having experienced an empathic bond with a caregiver, is the observation that they frequently perceive others as "needing" them much more than they "need" others. As Bowlby (1984) suggests, this is a continuation of the anxious-avoidant attachment pattern, and evidence of a projected, lasting, intense need for a caregiver.

The psychodynamic formulation of the causes and consequences of child abuse provides the single most comprehensive framework with which to understand intergenerational patterns of child abuse. It is believed that the critical factor within this formulation is the manner in which the child develops patterns of relating to others, especially significant others. These patterns appear to be directly related to the child’s mental representations of self and others; the "working models" (Bowlby, 1982), so to speak, which have as their foundation the primary dyadic relationship between the child as an infant and his/her mother/caregiver.
Statement of the Problem and Hypotheses

Attachment theory, as proposed by Bowlby (1969, 1973, 1980), has proved to be quite impressively supported in the research literature. Ainsworth et al. (1978), via the Strange Situation paradigm, have enabled researchers to assess the quality of attachment relationships between infants and their mothers, and several longitudinal studies have illuminated the effects of early attachment patterns on later childhood development (Arend et al., 1979; Matas et al., 1978; Sroufe, 1983). More extensive longitudinal studies, however, are difficult to conduct, and retrospective studies with adults give us little information about the early infant-mother relationship. Consequently, it is difficult to assess the significance of early attachment patterns on later development, and their impact on characteristic ways of relating to others during adulthood. Perhaps this is where the growing body of research with maltreated children becomes most significant.

As we have already presented, there is a great deal of evidence to suggest that many physically maltreated children develop relationships with their mothers that are characterized as anxious-avoidant attachments (Egeland & Sroufe, 1981; Gaensbauer & Harmon, 1982; Gaensbauer & Sands, 1979; Lamb et al.,
1985; Lyons-Ruth et al., 1987; Main et al., 1985; Sroufe, 1988). Given this body of research, and the evidence that these early relationships continue to have impact on the ongoing emotional development of the growing child (Green, 1981; Kinard, 1980, 1982; Matas et al., 1982; Sroufe, 1979, 1983, 1988), logic suggests that the long-term effects of early avoidant attachments will be continued patterns of avoidance and detachment in significant relationships into adulthood. The most compelling evidence for this sequence was supplied by Main and Goldwyn (1984), who demonstrated that parents of infants classified as having avoidant attachments tend to dismiss the importance of attachment relationships experienced during their own childhoods. This piece of evidence suggests that early patterns of attachment do seem to continue through adulthood, but since little information was provided about the early childhood experiences of these parents, it is difficult to say with certainty that their present behavior is a continuation of early behavior, though it does seem likely that this is the case.

The present study attempted to clarify this point by linking early experiences with current functioning in interpersonal relationships. That is, by utilizing the information we already have about the attachment relationships of maltreated children, and by assessing
the relationship patterns of adolescent victims of parental physical abuse in early childhood, we attempted to evaluate whether early childhood attachment relationships have a lasting impact on adolescent development. Specifically, an attempt was made to determine the degree to which these individuals have managed to achieve a healthy separation from their parents. This information may also allow us to anticipate the direction other significant relationships may take. The Separation-Individuation Test of Adolescence (SITA; Levine, Green, & Millon, 1986) will be used as the primary measure to assess these phenomena.

Recall Mahler's (Mahler et al., 1975) theory of separation-individuation during the first three years of life outlined earlier. Blos (1967) refers to adolescence as a "second individuation process" insofar as the adolescent is on a threshold between "an overwhelming regressive pull to infantile dependencies, grandiosities, safeties, and gratifications", and mature, autonomous functioning (Blos, 1967, p. 167). He compares this to the wish for reunion and the fear of reengulfment experienced during the rapprochement subphase of childhood separation-individuation.

In keeping with this theoretical model of the importance of the mother-child relationship in
determining how these various phases of childhood separation will be resolved, Levine et al. (1986) designed the SITA to assess the degree to which adolescents have managed to separate and individuate from their parents on the basis of how they function in interpersonal relationships in general. Though this measure originally consisted of six subscales, modifications to the original form have resulted in the inclusion of eight scales, which include Separation Anxiety, Engulfment Anxiety, Self-Centeredness, Need Denial, Nurturance Seeking, Enmeshment Seeking, Symbiosis Seeking, and Healthy Separation (a more extended description of these scales is offered later in this paper). In the present research with adolescents who experienced a history of early childhood maltreatment, and therefore probable anxious-avoidant attachment with their mothers, it is expected that they will obtain significantly higher scores on the scales measuring separation anxiety, engulfment anxiety, and dependency denial than will the nonabused control subjects. It is thought that the latter two scales would most closely approximate the pattern of attachment typically characterized as avoidant. Separation anxiety scaled scores are expected to be significantly higher for the abused group of adolescents because this type of anxiety is frequently associated with extreme fears of
rejected and abandonment. Given the psychodynamic formulation already discussed, and the findings indicating that these individuals have many unmet dependency needs (Green et al., 1974), it is expected that attachment patterns will tend to vacillate between separation anxiety and engulfment anxiety with an accompanying denial of dependency needs.

In addition, the Youth Self Report questionnaire (YSR, Achenbach & Edelbrock, 1979) was administered in order to assess the internalizing vs. externalizing behaviors of the abused and nonabused inpatient adolescents. As previous research has shown, children with a history of physical abuse tend to be more aggressive than their nonabused peers (Howes & Eldredge, 1985; Main & George, 1985; Reidy, 1977). However, other research examining the characteristic defenses of adolescents with a history of abuse found that internalizing and externalizing defenses were significantly higher for this group. Therefore, in an attempt to seek out a possible mitigating or differentiating factor, capacity for empathy will also be assessed in order to determine whether those low in empathy will be more prone to use externalizing defenses, while those high in empathy will tend toward more internalizing defenses. Toward that end, the Index of Empathy for Children and Adolescents (Bryant, 1982)
was also administered in order to assess the adolescents' capacity for empathy. This measure is a paper-pencil 22-item self-report questionnaire, and is a downward extension of the often used Mehrabian & Epstein (1972) adult measure of emotional empathy. Although the Bryant (1982) measure is relatively new, its validity and reliability are well documented, and given its applicability for an adolescent population, it was considered the most appropriate measurement to use. It is hoped that the present study will move us one step closer to more fully understanding some of the long-term effects of child abuse and the avoidant attachments that frequently develop as a result.

In summary then, the following experimental hypotheses are presented for this study.

1. Those who were abused as children obtain significantly higher scaled scores than the non-abused group on the SITA scales of Separation Anxiety, Engulfment Anxiety, and Need Denial, which would indicate fears of abandonment and rejection, fears of closeness/intimacy, and a denial of dependency needs.

2. Abused subjects overall score significantly higher on the Youth Self-Report Externalizing scale than their non-abused counterparts.

3. For abused subjects, empathy scores differentiate the extent to which externalizing behaviors manifest
themselves as coping mechanisms, i.e., those high in empathy use fewer externalizing behaviors, while those low in empathy use more externalizing behaviors.

4. The same pattern described above is expected for the nonabused subjects. That is, those who have a high capacity for empathy use fewer externalizing behaviors as a coping mechanism, and those with lower levels of empathic capacity report greater use of externalizing behaviors.
CHAPTER III

METHOD

Subjects

The subjects (N = 65) for this study were inpatients at the Illinois State Psychiatric Institute (ISPI). ISPI's Adolescent Program receives direct admissions from the community, as well as referrals for adolescent inpatient care from a variety of sources. These referrals include transfers from for-profit institutions due to absence or exhaustion of insurance coverage, transfers from other local hospitals due to need for high-security locked units, referrals from the Department of Corrections (DOC) due to suspected psychiatric involvement in delinquent and/or criminal behavior, and referrals from the Department of Children and Family Services (DCFS). The average length of stay at ISPI ranges from 2 months to 2-3 years, depending upon the reason for referral and type of intervention planned. As can be gathered from the variety of referral sources and varying lengths of stay, the adolescents present with a multitude of different symptom pictures.

Sixty-five subjects agreed to participate in the
study, and of these only one was excluded due to the paucity of background information available, which made it impossible to determine abuse history. The average age for the 64 subjects who were included was 15.17 years ($\text{S.D.}=1.21$). This group included 26 females (Mean age 14.88, $\text{S.D.}=1.10$), and 38 males (Mean age 15.36, $\text{S.D.}=1.26$). The ethnic backgrounds of the participants was as follows: Caucasian-American (23), African-American (27), Hispanic (8), other (6).

All measures of interest for this study were administered to the 64 subjects except the Youth Self-Report questionnaire (Achenbach & Edelbrock, 1978), which was only available for 54 of these subjects (22 females and 32 males). This questionnaire is administered as part of the typical screening assessment at ISP! and not as a research measure. Therefore, if subjects did not undergo the "typical" screening assessment as part of their hospital admission evaluation, they did not receive the YSR. This was true for 10 subjects in the study. Level of intelligence was the only exclusion criterion used for the study, and this was used in order to facilitate the ease of administration of the self-report questionnaires. Consequently, only those adolescents who scored 70 or above on the Slosson Test of Intelligence were approached for participation in the study.

Abuse history was determined via examination of the
Social Assessment section of the adolescent's inpatient hospital chart, as well as the Discharge Summary when available. The Social Assessment for each patient was conducted by the unit social worker, who typically schedules several meetings with the parent and/or legal guardian, as well as the patient, in order to gather a thorough developmental history, including the history of the presenting problem. Information regarding family background and the quality of family relationships usually comprises the bulk of information gathered. In addition, information about DCFS and/or DOC involvement is documented.

The rating form (see Appendix A) used was designed to organize the information gleaned from the Social Assessments, and included questions concerning the following areas: demographic information, reasons for admission, previous psychiatric history of patient and family, as well as material necessary to establish or rule-out a history of physical abuse. Judgments regarding abuse history were based on items 35 thru 38 on the rating form. Interrater reliability for these items was high, $r = .92$.

Physical abuse was rated as present or absent depending upon whether it was noted in the Social Assessment portion of the patient's hospital chart. This notation was found in various forms depending upon the patient's history. That is, if DCFS had confirmed a
complaint of physical abuse and/or had removed the child from his/her home, the raters' judgments were clear and unquestioned. In some cases the history of abuse was less clear, however. For example, it may have been noted that a patient's mother had sought out authorities due to her fear that she would hurt her child "as she had done in the past", or a foster mother may note that when she gained custody of her foster child, she noted that "cigarette burns were found all over his back". Consequently, specific abuse history was difficult to obtain using this method of information gathering and categorization, and most importantly, information concerning the severity of abuse experienced could not be acquired via this method. Therefore, global ratings of abuse history, i.e., present or absent, were used to compose the groups under study. When no reference was made in the Social Assessment to physical abuse and/or harsh parental punishments, the adolescent was categorized as nonabused.

Because the experience of early childhood physical abuse was the main topic of interest for this study, two groups were of primary interest: those with a history of physical abuse, and those with no known history of physical abuse. Unfortunately, the histories of these adolescents were not so easily divided. Instead, the following five groups were initially formed based on the ratings from the Social Assessments: 1) physical abuse
history (n=14); 2) sexual abuse history (n=12); 3) physical and sexual abuse history (n=11); 4) neglect and/or abandonment history (n=8); and 5) no known history of physical or sexual abuse or neglect/abandonment (n=19). For the purposes of data analysis, groups 1 and 3 above, were combined to form the experimental group of those with a history of physical abuse (n=25). This group was composed of 7 females and 18 males (Mean age = 15.28, S.D.=1.27). The non-abused control group included 7 females and 12 males (Mean age = 14.84, S.D.=1.30). The average age for the sexual abuse and neglect groups were 15.33 (S.D.=.88) and 15.37 (S.D.=1.30), respectively. Nevertheless, data from the latter two groups were not included in the main analyses since no hypotheses were put forth regarding their performance. Results from post-hoc analyses will be reported for these secondary groups.

Materials

The screening measure used for the detection of childhood abuse was described above and a copy can be found in Appendix A. The questionnaires administered to the 65 participants included the Separation-Individuation Test for Adolescents (SITA; Levine et al., 1986), the Youth Self-Report questionnaire (YSR; Achenbach & Edelbrock, 1979), and the Index of Empathy for Children and Adolescents (Bryant, 1982).
As stated earlier, the SITA (Levine et al., 1986) is a device designed to assess the degree to which healthy separation has been achieved. It is a 103-item Likert-type questionnaire with a selection of five responses for each question, ranging from "strongly agree" to "strongly disagree". Although initially designed to have six scales representing the six stages of psychological separation, i.e., autism, symbiosis, differentiation, practicing, rapprochement, and consolidation of individuality and beginning object constancy (Mahler et al., 1975), procedures conducted to validate the measure led to the creation of eight dimensions. It is assumed that studies are in progress which will further validate this measure, and hopefully norms will soon be established. At present, neither of these are available.

As Levine and his colleagues (1986) reported, a sample of 305 adolescents was used in the original validation study of the SITA so that each of the six original scales could be subjected to three stages of validation: theoretical-substantive, internal-structural, and external-criterion. A brief description of each of the original six scales is provided below:

**Nurturance-Symbiosis** - The contents of this scale were designed to describe those "...who have strong dependency needs, who anticipate gratification of these
needs, and who associate positive feelings with this expectation. Intimate, enmeshed, interpersonal relationships often characterize their interactions with other people..." (Levine et al., 1986, p. 125).

**Engulfment Anxiety** - These individuals are defined as those "...who are particularly fearful of close interpersonal relationships and who tend to view them as threatening to their sense of independence and selfhood. Often they feel controlled, overpowered, or enveloped by other people whom they perceive as impinging upon their autonomy." (Levine et al., 1986, p. 125).

**Separation Anxiety** - This scale "...describes individuals with strong fears of losing emotional or physical contact with an important other. Associated feelings are of rejection, abandonment, or desertion by another person (usually idealized), as well as anxiety or depression due to an actual, anticipated, or perceived separation" (Levine et al., 1986, p. 125).

**Need Denial** - High scores on this scale are thought to be characteristic of "...individuals who deny or avoid dependency needs. Such individuals are probably defending against anxiety associated with separation and will respond by rejecting or failing to understand feelings of closeness, friendship, or love" (Levine et al., 1986, p. 125).

**Self-Centeredness** - This scale "...describes individuals
who possess a high degree of narcissism and self-centeredness which is often simultaneously reinforced by another person’s feedback, praise, or admiration (mirroring)." (Levine et al., 1986, p. 126).

Healthy Separation - This scale was designed to describe "...individuals who have made significant progress toward resolution of the conflicts associated with separation-individuation, e.g., appreciation of both dependency and independence needs, similarities with and differences from others" (Levine et al., 1986, p. 126). (See Levine et al., 1986, for a complete description of validity procedures and scale descriptions.)

Since the publication of the validity data for these scales, modifications to the original item pool have resulted in the creation of eight scales (Levine, 1987, personal communication). Apparently, the authors experienced the most difficulty with the original Nurturance-Symbiosis scale, which subsumed three of the new scales: Nurturance Seeking, Symbiosis Seeking, and Enmeshment Seeking. Since these scales are not of particular interest to the present investigation, no further discussion of them is necessary. It is sufficient to say that the particular scales of interest (i.e., Separation Anxiety, Engulfment Anxiety, and Need Denial) proved to be valid measures of the constructs they were designed to assess.
The second measure of interest, the YSR (Achenbach & Edelbrock, 1979), is a 112-item questionnaire which asks the respondent to reply to short self-referent statements by circling 0, 1, or 2, to indicate 'false', 'sometimes true', or 'often true'. The YSR is a well-used measure with established reliability and validity. The profile consists of 8 scales for males, and 7 scales for females. These scales are as follows: Depressed, Unpopular, Somatic Compaints, Thought Disorder, Delinquent, Aggressive, Other Problems, (and for males only) a Self Destructive/ Identity Problem scale. Two broad-band scales, and those of primary interest for the purposes of the present study, are those measuring Internalizing Behavior and Externalizing Behavior. Although different items comprise each of these scales for females and males, the use of T-scores for each make the scales comparable for both genders.

The final measure of interest is the Index of Empathy for Children and Adolescents (Bryant, 1982). This is also a self-report questionnaire with 22-items and a 9-point Likert-type scale of "agreement" versus "disagreement" for each item. These items are also self-referent, and ask the adolescent to indicate how strongly he/she agrees or disagrees with statements such as the following: "Seeing a girl who is crying makes me feel like crying", or "Kids who have no friends probably
don't want any". As mentioned previously, this measure is a downward extension of the well-known Mehrabian & Epstein (1972) adult measure of empathy. It was constructed in an effort to develop a comparable measurement of empathy for children and adolescents, and has good reliability and validity. Like the Mehrabian & Epstein (1972) measure, items are scored in the direction which indicates the highest degree of empathy, so that strong agreement with a positively phrased item, e.g., "Seeing a girl who is crying makes me feel like crying", would score a 9, while strong agreement with a negatively phrased item, i.e., "Kids who have no friends to play with probably don’t want any", would score a 0. Empathy scores for each subject were obtained by averaging the total of responses (range = 0 - 9) with higher scores indicating greater capacity for empathy.

Procedure

Prior to data collection, informed consent was requested of the parent and/or legal guardian. This was usually done by the social worker who collected the data for the Social Assessment. However, for some it involved separate application to representatives of DCFS who were the acting legal guardians of the adolescent.

For the majority of subjects, data collection occurred during their initial screening procedure conducted as part of their diagnostic evaluation
immediately following admission. During this procedure, patients are interviewed by a psychology extern for the purpose of gaining diagnostic information to aid in treatment planning. The Diagnostic Interview Schedule for Children-Revised (DISC-R), a structured interview, is followed by the administration of several self-report questionnaires including those mentioned above. A Slosson Intelligence Test is also administered at this time. Prior to the administration of the self-report questionnaires, patients were asked to consent to participate in the research study, and to sign the same form which had already been signed by their parent and/or legal guardian. Patients were informed that the study was primarily concerned with gaining information about how adolescents think and feel about different situations and relationships. They were also informed that no repercussions would occur if they chose not to participate. Once consent was obtained, instructions for completing each questionnaire were given and the subjects were asked to answer each question as honestly as possible. They were allowed to complete the questionnaires at their leisure, and were asked to return them to the examiner within one week.

For some subjects, data collection proceeded a little differently since some had either already undergone their initial screening at the inception of
the study, or did not undergo a "typical" screening. For these subjects, the research was presented as a distinct entity apart from their treatment at ISPI. That is, although they were given the same instructions, (i.e., that gaining information about adolescents' thoughts and feelings about different situations and relationships was the primary goal), these patients were already receiving treatment and acclimated to the hospital environment.

Once the questionnaires were returned to the researcher, the Social Assessment portion (and Discharge Summary when available) of the patient's hospital chart was obtained, and used to complete the rating form (Appendix A), and group membership, i.e., abused versus nonabused, was determined.
CHAPTER IV

RESULTS

In order to test the first stated hypothesis that the abused subjects would score significantly higher than the non-abused subjects on measures of Separation Anxiety, Engulfment Anxiety, and Need Denial, multiple t-tests on the data were computed. Because F values for homogeneity of variance indicated that one of the SITA scales was not homogeneous, values for the separate variance estimates will be reported for all analyses for the sake of consistency.

Analysis of the SITA Separation Anxiety scale indicated no difference between abused and non-abused subjects, t(1,30.11) = .79, n.s., one-tailed. In addition, no difference was found between groups on the Engulfment Anxiety scale, t(1,37.53) = .77, n.s., one-tailed. And finally, no difference was found between abused and non-abused subjects on the Need Denial scale, t(1,41.69) = -.10, n.s., one-tailed. Thus, these results failed to confirm the hypothesis that attachment patterns would differ between adolescents with and without a history of childhood abuse. Post-hoc
analyses of the other sub-scales on the SITA, i.e., Self-Centeredness, Nurturance Seeking, Enmeshment Seeking, Symbiosis Seeking, and Healthy Separation, detected no significant differences between groups. The SITA mean scaled scores and standard deviations for each group can be found in Table 1.

A t-test analysis of the Youth Self Report questionnaire (Achenbach & Edelbrock, 1978) was used to test the second hypothesis that abused subjects would externalize more than non-abused subjects. Analysis revealed that abused subjects (M = 61.15, S.D. = 10.51) scored higher than non-abused subjects (M = 56.00, S.D. = 11.46) on the Externalizing scale, although only a non-significant trend in the predicted direction was obtained, t(1,32.89) = 1.41, p = .08, one-tailed. Thus, the findings concerning the second hypothesis yielded equivocal results, suggesting the need for further research. No statistically significant difference was found between the abused (M = 56.36, S.D. = 9.62) and the non-abused (M = 54.94, S.D. = 15.37) groups on the Internalizing scale.

Finally, in order to test the third and fourth stated hypotheses, i.e., that capacity for empathy would distinguish between the amount of externalizing behavior used by abused and non-abused subjects, a 2 x 2 x 2 ANOVA (type of defensive behavior x level of empathy x
Table 1.
SITA mean scaled scores and standard deviations (S.D.) for abused and non-abused groups.

<table>
<thead>
<tr>
<th>SITA scales</th>
<th>Abused (n=25)</th>
<th>Non-abused (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>Separation Anxiety</td>
<td>27.96</td>
<td>7.54</td>
</tr>
<tr>
<td>Engulfment Anxiety</td>
<td>31.48</td>
<td>7.70</td>
</tr>
<tr>
<td>Self-Centeredness</td>
<td>32.97</td>
<td>8.59</td>
</tr>
<tr>
<td>Need Denial</td>
<td>21.41</td>
<td>6.04</td>
</tr>
<tr>
<td>Nurturance Seeking</td>
<td>33.87</td>
<td>9.44</td>
</tr>
<tr>
<td>Enmeshment Seeking</td>
<td>29.13</td>
<td>6.60</td>
</tr>
<tr>
<td>Symbiosis Seeking</td>
<td>32.20</td>
<td>7.48</td>
</tr>
<tr>
<td>Healthy Separation</td>
<td>36.13</td>
<td>5.97</td>
</tr>
</tbody>
</table>
abuse status) was used on the data. A median-split was used to divide the subjects' scores into 'low-empathy' and 'high-empathy' categories within the abused and non-abused groups. Internalizing and externalizing T-scores functioned as the within-subjects dependent variable. A 3-way interaction between abuse status and empathy was significant for the internalizing/externalizing variable, i.e., "Defense", $F(1,33) = 4.22$, $p = .04$. The ANOVA summary table is presented in Table 2.

The Student Newman-Keuls procedure was used to investigate the nature of the interaction found. Level of empathy was found to interact with externalizing behavior for the non-abused group only. That is, as predicted in Hypothesis 4, those with higher levels of empathic responsiveness used fewer externalizing behaviors than those with lower levels of empathic responsiveness in the non-abused group only, $R^e_{\text{exp}} = 12.17$, $R^e_{\text{obs}} = 12.63$, $p < .05$. Furthermore, the non-abused high-empathy group also used fewer externalizing behaviors than the abused low-empathy group, $R^e_{\text{exp}} = 12.55$, $R^e_{\text{obs}} = 13.53$, $p < .05$, but the differences between non-abused and abused high-empathy groups only approached significance on the externalizing variable ($R^e_{\text{exp}} = 11.73$, $R^e_{\text{obs}} = 11.63$). Consequently, level of empathy did not interact with internalizing or externalizing behaviors for the abused subjects, thereby
Table 2.

2 x 2 x 2 (Type of defensive Behavior x Level of Empathy xPhysically abused vs Non-abused Status) ANOVA Summary table

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITHIN CELLS</td>
<td>2238.61</td>
<td>33</td>
<td>67.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFENSE</td>
<td>93.20</td>
<td>1</td>
<td>93.20</td>
<td>1.37</td>
<td>.25</td>
</tr>
<tr>
<td>ABUSE X DEFENSE</td>
<td>115.50</td>
<td>1</td>
<td>115.50</td>
<td>1.70</td>
<td>.20</td>
</tr>
<tr>
<td>EMPATHY X DEFENSE</td>
<td>218.59</td>
<td>1</td>
<td>218.59</td>
<td>3.22</td>
<td>.08</td>
</tr>
<tr>
<td>ABUSE X EMPATHY X DEFENSE</td>
<td>285.94</td>
<td>1</td>
<td>285.94</td>
<td>4.22</td>
<td>.04</td>
</tr>
</tbody>
</table>
failing to confirm the third hypothesis. However, level of empathy was a significant factor for non-abused subjects, confirming the fourth hypothesis. A summary table of means and standard deviations for the internalizing and externalizing scores for each group can be found in Table 3.

Finally, in order to assess whether differences could be found in capacity for empathy based on whether individuals are primarily 'internalizers' or primarily 'externalizers' (regardless of abuse history), difference scores were computed for all subjects, (i.e., including the sexually abused and neglected groups as well as the physically abused group and the non-abused control group) such that T-scores on the Externalizing scale were subtracted from T-scores on the Internalizing scale. This allowed the creation of one continuous variable, i.e., Coping, in which positive scores indicated more internalizing behavior and negative scores indicated more externalizing behavior. This variable was split such that those with positive scores were labelled 'internalizers', and those with negative scores were labelled 'externalizers'. A $t$-test was used on the data, and as expected 'internalizers' had higher absolute empathy scores ($M = 6.42$, $S.D. = 1.11$) than did 'externalizers' ($M = 5.99$, $S.D. = .73$). However, this difference was merely indicative of a trend in the
### Table 3.
YSR Internalizing and Externalizing mean scaled T-scores and standard deviations (S.D.) as a function of physical abuse vs. non-abuse and capacity for empathy.

<table>
<thead>
<tr>
<th>Abuse Status</th>
<th>Internalizing</th>
<th></th>
<th></th>
<th>Externalizing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Physically Abused</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Empathy</td>
<td>57.80</td>
<td>9.57</td>
<td>62.10*</td>
<td>10.96</td>
<td></td>
</tr>
<tr>
<td>High Empathy</td>
<td>54.90</td>
<td>9.96</td>
<td>60.20*</td>
<td>10.52</td>
<td></td>
</tr>
<tr>
<td>Non-abused</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Empathy</td>
<td>54.00</td>
<td>14.89</td>
<td>61.20*</td>
<td>8.21</td>
<td></td>
</tr>
<tr>
<td>High Empathy</td>
<td>56.28</td>
<td>17.15</td>
<td>48.57*</td>
<td>11.81</td>
<td></td>
</tr>
</tbody>
</table>

* differs from * at p < .05, and from * at p < .10.
predicted direction, $t(1,29.30) = 1.52, p = .07$, one-tailed.

Since some sensitivity may have been lost due to the conversion of a continuous variable into a dichotomous variable, a correlational analysis of the coping variable and the empathy variable was also conducted in order to restore sensitivity. This resulted in a statistically significant positive correlation between empathy and coping, $r(54) = .247, p = .034$. That is, higher scores on the Empathy questionnaire were correlated with scores in the positive direction on the coping variable, which indicates higher levels of internalizing behavior. Conversely, lower scores on the Empathy questionnaire were correlated with scores in the negative direction on the coping variable, which indicates higher levels of externalizing behavior.

**Post-hoc Analyses**

Although no hypotheses were put forth regarding the performance of the other groups included in the study, i.e., subjects with a history of sexual abuse or neglect, it was of interest to note whether these groups differed in any way from the non-abused group. Analyses were performed on these data with the hope that some clarification would emerge regarding the lack of significant differences on the SITA scales between the
physically abused and non-abused groups. Consequently, a series of one-way ANOVA tests were used to compare the groups (i.e., abused, sexually abused, neglected, and non-abused) on the 8 SITA scales. None of these reached statistical significance except for the "Healthy Separation" scale, $F(3,60) = 2.86, p = .04$. Post-hoc analyses (using the Newman-Keuls procedure) indicated that the neglect group scored significantly higher on this scale than either the abused group or the non-abused group, $p < .05$, indicating that adolescents with a history of neglect endorse more items indicative of having achieved "healthy separation". Caution should be exercised in interpreting this result, however, due to the small sample size of the neglect group, i.e., $n = 8$.

The SITA scale means, reported earlier (Table 1) for the abused and non-abused groups, will be presented again, together with the means for the sexually abused and neglected groups, for the purposes of comparison in Table 4.

A oneway ANOVA was also conducted comparing all groups on the YSR externalizing variable, and again, only non-significant differences between groups were found, $F(3,50) = 1.30, p = .28$, n.s. In addition, a second $2 \times 2 \times 2$ (type of defensive behavior x level of empathy x abuse status) ANOVA with repeated measures on the first factor, was used to compare the sexually
Table 4.
SITA mean scaled scores and standard deviations (S.D.) for physically abused, sexually abused, neglected, and non-abused groups.

<table>
<thead>
<tr>
<th>SITA scales</th>
<th>Physically Abused (n=25)</th>
<th>Sexually Abused (n=12)</th>
<th>Neglected (n=8)</th>
<th>Non-abused (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (S.D.)</td>
<td>Mean (S.D.)</td>
<td>Mean (S.D.)</td>
<td>Mean (S.D.)</td>
</tr>
<tr>
<td>Separation Anxiety</td>
<td>27.96 (7.54)</td>
<td>27.50 (10.14)</td>
<td>28.28 (8.83)</td>
<td>25.62 (11.11)</td>
</tr>
<tr>
<td>Engulfment Anxiety</td>
<td>31.48 (7.70)</td>
<td>34.58 (8.22)</td>
<td>35.00 (6.61)</td>
<td>29.60 (8.21)</td>
</tr>
<tr>
<td>Self-Centeredness</td>
<td>32.97 (8.59)</td>
<td>27.83 (7.10)</td>
<td>35.50 (3.5)</td>
<td>29.52 (8.32)</td>
</tr>
<tr>
<td>Need Denial</td>
<td>21.41 (6.03)</td>
<td>22.37 (6.19)</td>
<td>23.55 (4.95)</td>
<td>21.57 (4.96)</td>
</tr>
<tr>
<td>Nurturance Seeking</td>
<td>33.87 (9.44)</td>
<td>29.04 (10.67)</td>
<td>32.32 (5.00)</td>
<td>31.64 (8.83)</td>
</tr>
<tr>
<td>Enmeshment Seeking</td>
<td>29.13 (6.60)</td>
<td>27.66 (5.71)</td>
<td>31.50 (5.01)</td>
<td>29.67 (9.82)</td>
</tr>
<tr>
<td>Symbiosis Seeking</td>
<td>32.20 (7.48)</td>
<td>29.73 (6.16)</td>
<td>33.83 (3.92)</td>
<td>31.90 (7.73)</td>
</tr>
<tr>
<td>Healthy Separation</td>
<td>36.13* (5.97)</td>
<td>38.40 (7.41)</td>
<td>42.81* (4.17)</td>
<td>35.64* (6.72)</td>
</tr>
</tbody>
</table>

*significantly different from *, p < .05.
abused group with the non-abused group regarding the hypothesis that empathy would have a differential effect on externalizing behavior, and a two-way interaction was found between level of empathy and internalizing/externalizing behavior, \( F (1,24) = 4.44, \ p = .04 \). All main effects were non-significant. The ANOVA summary table for this analysis can be found in Table 5, and a summary table of mean standard scores for each group, i.e., sexually abused and non-abused, on the internalizing and externalizing variables can be found in Table 6.

Probing the nature of this interaction (with the Newman-Keuls procedure) indicated that the non-abused high empathy group endorsed significantly fewer externalizing behaviors than did the sexually abused high empathy group, \( R_{exp} = 14.11, R_{obs} = 15.09, \ p < .05 \). The non-abused high empathy group also endorsed fewer externalizing behaviors than the sexually abused low empathy group, \( R_{exp} = 14.55, R_{obs} = 17.09, \ p < .05 \). The differences within the sexually abused group were nonsignificant at the .05 level. That is, empathy did not interact with externalizing behavior for the sexually abused group, just as it did not interact with externalizing behavior for the physically abused group in an earlier analysis. Furthermore, in this analysis, the predicted interaction between empathy and
Table 5.

2 x 2 x 2 (Type of defensive behavior x Level of empathy x Sexually abused vs. Non-abused Status) ANOVA Summary

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITHIN CELLS</td>
<td>1552.91</td>
<td>24</td>
<td>67.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DEFENSE</td>
<td>70.73</td>
<td>1</td>
<td>70.73</td>
<td>1.09</td>
<td>.30</td>
</tr>
<tr>
<td>ABUSE X DEFENSE</td>
<td>87.27</td>
<td>1</td>
<td>87.27</td>
<td>1.35</td>
<td>.25</td>
</tr>
<tr>
<td>EMPATHY X DEFENSE</td>
<td>287.29</td>
<td>1</td>
<td>287.29</td>
<td>4.44</td>
<td>.04</td>
</tr>
<tr>
<td>ABUSE X EMPATHY X DEFENSE</td>
<td>101.33</td>
<td>1</td>
<td>101.33</td>
<td>1.57</td>
<td>.22</td>
</tr>
</tbody>
</table>
Table 6.

YSR Internalizing and Externalizing mean scaled T-scores and standard deviations (S.D.) as a function of sexual abuse vs non-abuse and capacity for empathy.

<table>
<thead>
<tr>
<th>Abuse Status</th>
<th>Mean</th>
<th>S.D.</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internalizing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually Abused</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Empathy</td>
<td>58.40</td>
<td>13.16</td>
<td>65.20*</td>
<td>17.86</td>
</tr>
<tr>
<td>High Empathy</td>
<td>60.66</td>
<td>17.03</td>
<td>63.66*</td>
<td>13.75</td>
</tr>
<tr>
<td>Non-abused</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Empathy</td>
<td>54.00</td>
<td>14.89</td>
<td>61.20</td>
<td>8.21</td>
</tr>
<tr>
<td>High Empathy</td>
<td>56.28</td>
<td>17.15</td>
<td>48.57*</td>
<td>11.81</td>
</tr>
</tbody>
</table>

* differs from * at p < .05.
externalizing behavior also did not reach statistical significance for the non-abused group as it did in the earlier analysis. However, examination of the means for the non-abused group on the externalizing variable suggests that empathy is having a powerful effect for this group, but the overall spread of scores in this step-wise analysis probably contributed to the lack of a significant difference for this group, as did the small sample size of the sexually abused group.

Although it would be of interest to determine whether similar findings would result with the neglected group, similar analyses were not conducted given the small sample size of this group, (i.e., n = 6).
One of the purposes of this study was to assess the long-term effects of early attachment on emotional development in general, and on the capacity to form healthy interpersonal relationships in particular. As we have discussed, there is a great deal of evidence to suggest that many physically maltreated children develop relationships with their mothers that are characterized as anxious-avoidant attachments (Egeland & Sroufe, 1981; Gaensbauer & Harmon, 1982; Gaensbauer & Sands, 1979; Lamb et al., 1985; Lyons-Ruth et al., 1987; Main et al., 1985; Sroufe, 1988). Since theory holds that these early mother-child attachments have their greatest impact on the child's "working models" (Bowlby, 1982), and therefore, on future attachment relationships, the present study attempted to determine if, indeed, the patterns of attachment observed between maltreated children and their mothers could also be observed in adolescents with a history of physical maltreatment.

As reviewed earlier, the Norton (1988) study found that college-age adolescents with a history of physical
abuse did show the expected anxious-avoidant attachment pattern when compared with their non-abused counterparts. That is, given their hypothesized unmet dependency needs (Green et al., 1974), and their early experiences of parental rejection and hostility, when their fear of closeness and fears of rejection and abandonment accompanied by denial of dependency needs were found, it made inherent sense, and was widely accepted in clinical lore, though never directly evaluated by empirical study. The present study attempted to replicate that finding with a different population, i.e., psychiatrically hospitalized adolescents, and the hypothesis was not supported by the data. That is, there were no differences in attachment patterns found between adolescents with a history of physical abuse and those with no history of abuse. Further, those with a history of sexual abuse or neglect did not show marked differences from non-abused adolescents either in their manner of forming attachments.

The only difference discovered in the SITA data, in fact, was an anomalous one; that is, the finding that those with a history of neglect show higher levels of "healthy separation" when compared with physically abused and non-abused adolescents. This finding is seen as anomalous because one hardly expects to find those
who have been neglected and/or abandoned early in their lives to reach a degree of healthy separation that would distinguish them from those who have no experiences of abuse and/or neglect. One possible explanation for this finding is that these adolescents have not necessarily reached a stage of healthy separation, but instead have precociously detached themselves from the attachment process in general, thereby diminishing any distress associated with overwhelmingly frustrated dependency needs (Bowlby, 1982). Bowlby (1982) characterizes this detachment process as one in which a child will appear to attach to anyone in his/her environment regardless of who the person is, and how close the person is to the child. In this manner, the child attaches him/herself to many people who will not necessarily be available for very long, thereby increasing the potential for repeated losses. Thus, loss almost becomes an expected outcome, rather than a traumatic one. Thus, the attachment process itself becomes distinctly different, and what Bowlby would term "detachment". If this is the process being used by the neglected group, the "healthy separation" scale on the SITA may be a better measure of disavowal of conflicts related to separation and individuation, rather than a measure of clear resolution of these same conflicts. In this way, these findings would be more in keeping with what would be expected
from one who has early experience with neglect and/or abandonment.

A different but related explanation for the significant difference between the neglected group and their abused and non-abused counterparts is gleaned from an examination of the specific items making up the "healthy separation" scale. For the most part, these items are related to the adolescent's ability to detect and accept differences between him/herself and others, while still seeing the relationship as viable, (i.e., "I am comfortable with some degree of conflict in my close relationships", "My friends and I have some common interests and some common differences", "Although I'm like my close friends in some ways, we're also different from each other in other ways"). It is possible that neglected children have more cause to find these differences acceptable, as well as more reason to seek them out. That is, the "working model" for these adolescents may include an internal sense of being different from others in order to explain the neglect they have experienced. As such, this "working model" would also be influenced by the individual's need to have contact with others, and so to accept the differences that members of this group are sure to find given the internal sense of self they carry with them. To be sure, this finding requires replication and
further exploration before a more certain explanation can be offered. The sample size alone of the present neglected group (i.e., n=8), makes any conjecture as to the meaning of the findings circumspect and tentative.

Notwithstanding the above finding that neglected adolescents show greater degrees of "healthy separation" (however that is defined), the fact remains that in general, the abused and non-abused adolescents in this study did not show differences in their patterns of attachment and approaches to relationships. Several explanations may account for the absence of significant differences between these two groups. One possibility is that methodological issues prohibited accurate group identification. As you will recall, abused and non-abused groups were created via examination of the social assessment portion (and the discharge summary when available) of the patient's hospital chart. If abuse history was not explored at the time of intake, or if it was denied by the family and/or child, either because they wanted to cover up actual abuse or because they held different definitions as to what constitutes abusive behavior, accurate group identification could not occur. The likely result of this omission is that some adolescents in the non-abused group may have experienced physical abuse, but it has never come to the attention of authorities. So, what may have been simply
unavailable information was used as a group identifier. That is, if abuse was not mentioned in the chart, it was assumed that no abuse occurred, which is a potentially spurious conclusion given what is known about secrets in abusive families.

In the future, one possible alternative would be to gather information directly from the adolescent and/or family about types and frequency of parental punishments, which could be coded by objective raters to indicate whether actual abuse has occurred. This method of group identification would permit more certainty about abuse history, although it would not provide absolute certainty since it would still be dependent on the honesty of those providing information.

The ironic issue at hand is that it is not that difficult to find adolescents who have been abused. One could use only those individuals who have been identified by the Department of Children & Family Services as having been physically abused and have a clearly defined group to study. The difficulty instead is in identifying the non-abused group. Adolescents who have never experienced some form of abuse do not often come into contact with mental health professionals or state agencies unless there has been at least some important form of parent-child conflict. Gathering data from those who have no contact with these professionals,
e.g., from adolescents in local high schools or involved in other local organizations, necessitates comparing groups who share few common experiences. Consequently, it would be difficult to say with any degree of certainty that potential differences between groups, i.e., abused vs. non-abused, could be attributed to the experience of abuse, rather than to the many other different experiences between them. So, some form of matching would be necessary to make this form of group identification fruitful, which brings us to another possible explanation for the results found in this study in terms of attachment behavior.

If one were to assume that group identification in this study was accurate for the most part, it is necessary to take into consideration the life experiences that these adolescents share in order to understand why differences were not found in attachment patterns. In order to understand these similarities, it is necessary to understand the nature of the institution in which they were living, i.e., the Illinois State Psychiatric Institute (ISPI). ISPI, as its name implies, is a state institution, which represents the "last stop" for many individuals. As described earlier, the adolescent units at ISPI are locked high-security units, and as such, ISPI attracts referrals of youths who are acting-out and not containable within other
psychiatric inpatient settings. ISPI also receives referrals of adolescents who have made the circuit, so to speak, of mental health facilities, and represent the most difficult to treat individuals. Therefore, in light of this setting and the types of individuals treated there, it is likely that they share backgrounds more dysfunctional and chaotic than their abuse status may indicate. Put simply, perhaps attachment patterns are not discernibly different between abused and non-abused adolescents in this setting because the background characteristics they share are more influential on their internal "working models" than any difference in abuse history.

Although there is no way to compare the attachment patterns found in this study with the patterns of a securely attached group, it is possible that both groups surveyed have anxious attachment patterns, and this may be due to factors other than the experience of physical abuse. Factors which may be shared between groups, and those which could potentially lead to the development of anxious attachment patterns include, among others, a chaotic or unpredictable home life, long inpatient stays, presence of parental psychiatric disturbance and/or substance abuse, and a general paucity of stable, securely-attached adults with whom to interact.

Consequently, a fundamental error may have occurred in
the present study insofar as it was assumed that a history of early physical abuse could be isolated as a singular cause of anxious attachment patterns. Future research could potentially avoid this erroneous leap by gathering more extensive historical information and family information on each participant in order to rule-out high-risk characteristics which may indicate the existence of anxious attachment due to causes other than physical abuse.

One will recall that the initial and primary reason put forth for the current study was to investigate whether Bowlby’s (1982) hypothesis about "working models", i.e., that early attachment patterns continue to influence later relational patterns, could be validated. Given that much research has been done with physically abused children and anxious attachment patterns, this group was used in an effort to demonstrate that early patterns (found in other research) would be similar to attachment patterns found during adolescence. However, if anxious attachment patterns have been internalized due to other causes, then abuse status is not serving the goal of the original intentions, which included isolating one group thought to have a history of anxious attachment.

Clearly, the findings related to the second hypothesis, i.e., that abused adolescents would show
more externalizing behavior than non-abused adolescents, suggest that, behaviorally at least, there are no significant differences between the groups studied. This finding may also be related to the type of institution, since it attracts referrals of acting-out adolescents who are in need of containment. The fact that a trend in the predicted direction was indicated seemed to be more closely related to the empathy variable rather than to any observable behavioral difference between the groups.

Capacity for empathy, and its relationship to externalizing behavior, was examined in the third and fourth hypotheses. It was theorized that level of empathy would be negatively related to externalizing behavior for abused and non-abused alike. That is, higher levels of empathy were thought to be associated with lower levels of externalizing behavior regardless of abuse status. However, this was not borne out in the data. In fact, a history of physical abuse was found to negate the impact of empathy on externalizing behavior.

Previous research has found abused children and abusive parents to be deficient in their capacity for empathy, and more aggressive toward peers (Howes et al., 1985; Main & Goldwyn, 1984; Main & George, 1985; Straker & Jacobson, 1981). The present study found no overall differences between abused and non-abused adolescents on
measures of empathy or aggression. However, a high level of empathy was found to be related with less externalizing, or aggressive, behavior for the non-abused group. Conversely, high levels of empathy were not associated with decreased aggressive behavior for abused adolescents. That is, the amount of externalizing behavior was the same for abused adolescents high in empathy or low in empathy.

Since it does not seem to be the case that abused adolescents suffer from a relative deficiency in empathy, i.e., there were no significant differences between groups on overall capacity for empathy (nor were there significant differences between either group and the group mean for 7th graders in the original validation study (Bryant, 1982), the results suggest that something interferes with the seemingly influential function of high empathy on behavior for the abused group. One possible explanation for this finding is that abused children, although they can put themselves in someone else's shoes, so to speak, are not as in touch with their own negative emotions, and so cannot fully understand the experiences of someone else and respond appropriately. As psychodynamic formulations of the experience of abuse describe, the abused child must be more attuned to the moods and desires of his/her abuser in order to make the environment more predictable
and safe (Green et al., 1974; Yates, 1981). This heightened state of awareness and attunement to the needs of others must deflect, by its very nature, from the distressing aspects of the experience itself. Consequently, attunement to others, or "empathy", may exist in the absence of self-awareness, because awareness of the internal distress is overwhelming, and because the pain associated with the unresponsive parent must be avoided (Crittenden, 1988). Therefore, this form of empathy may not be related to a real understanding of the impact his/her behavior has on others (because the impact of his/her own experience of abuse is denied or disavowed). Rather, it may be that it is more closely related to a need to be attuned to the moods and desires of others in a more general manner in order to make the environment more predictable.

If this explanation is valid, then attempts to increase empathic responsiveness with abused children would have no effect on their aggressive behavior toward others, but increasing their own self-awareness concerning the experience of abuse may. It may be that a lack of this type of self-awareness is the obstacle that serves to inhibit empathy from having an impact on behavior for these youths. If it can be assumed that the non-abused adolescents do not have a history of traumatic and/or overwhelmingly distressing experiences
which require some form of denial and disavowal, then it also can be assumed that this defensive posture would not interfere with the impact of empathy on their behavior, which the present study supports. To be sure, further research is required to investigate the possible interrelationship of defensive denial and empathic responsiveness and its potential impact on aggressive behavior.

Although the present study indicates that there are no differences in attachment patterns for abused and non-abused adolescents, not enough data is available to determine whether both groups are anxiously attached, or neither group is. All that can be said is that attachment patterns for these groups are not discernibly different from one another. As such, further validation of Bowlby's (1982) conceptualization of the "working models" hypothesis is not available in the present study. Future research with similar populations would be well-advised to gather more background information on both groups since a history of physical abuse cannot be assumed to be the only causal factor influencing anxious attachment. Inclusion of control groups known to have more securely-attached relationships may also be useful in terms of comparing groups on this variable.

Despite the lack of differences found in attachment behavior between abused and non-abused groups, these
groups were distinguished from one another in terms of how level of empathic capacity is related to externalizing behavior. Further research investigating the possible obstacles which interfere with the impact of empathy on behavior for those with a history of physical abuse is warranted, especially because much light could be shed on efforts to interrupt the seemingly tenacious pattern of intergenerational abuse so often seen.

If it is the case that a lack of self-awareness is the crucial factor which serves to negate any effect of empathic capacity for those with a history of physical abuse, it is suggested that therapeutic interventions most likely to succeed with these individuals should take the form of in-depth exploration of the experience of abuse with the goal of connecting the negative emotions with the traumatic experience. Only by increasing self-awareness in this manner will true empathy for another's pain be possible. Future research in this area should explore this possibility.
REFERENCES


### Identifying Information and Abuse Screening

1. **ID # ________**

2. **Gender __** *(Male = 2 Female = 1)*

3. **Race __** *(Caucasian-American = 1; African-American = 2; Asian = 3; Hispanic = 4; Other = 5)*

4. **Age ________**

#### Reason for Admission

(Rate #5 - 14 below: Absent = 0; Present = 1)

5. Assultive or homicidal behavior __

6. Psychotic or bizarre behavior __

7. Suicidal behavior __

8. Other self-damaging behavior __

9. Delinquency __

10. Firesetting __

11. Chronic runaway __

12. Inappropriate sexual behavior __

13. Severe depressive symptoms __

14. Other (list) __________________________

15. **# of previous psychiatric hospitalizations __**

16. **With whom does the child currently live? __** *(Who is primarily responsible for the child’s welfare?)*

   1 - Both parents
   2 - Mother only (can include other family members and/or friends)
   3 - Mother & Step-father
   4 - Father only
   5 - Father & Step-mother
   6 - Other relative, e.g., grandmother, aunt, etc.
   7 - Foster family
   8 - Residential treatment facility
   10 - Shelter
   11 - Correctional facility
   12 - Other institutional placements
   13 - Other______________________________

17. **For how long? __**

   1 - less than 6 months
   2 - 6 months to 1 year
   3 - 1 to 5 years
   4 - 5 to 10 years
   5 - since early childhood/infancy, i.e., 1-3 years old
   6 - life
18.) What living situation existed before this?  
(Rate all that apply: 0 - Never; 1 - Yes)

18a. - Both parents  
18b. - Mother only  
18c. - Mother & Step-father  
18d. - Father only  
18e. - Father & Step-mother  
18f. - Other relative  
18g. - Foster family  
18h. - Residential treatment facility  
18i. - Shelter  
18j. - Correctional facility  
18k. - Other institutional placements  
18l. - Other___________________________  

19.) Has DCFS ever removed the child from his/her home?  
0 - No  
1 - Yes  
9 - Insufficient Information  

20.) If the child was removed from the home (family of origin), at what age did this occur? ___ ___  

21.) Reason for DCFS investigation  
(Rate 0 = absent; 1 = present)

21a. suspected physical abuse  
21b. confirmed physical abuse  
22a. suspected neglect  
22b. confirmed neglect  
23a. suspected sexual abuse  
23b. confirmed sexual abuse  
24. parent's request for removal  
25. child's request for removal  
26. parental loss via death/separation  
27. court finding of "inadequate control by parent"  
28. other___________________________  

29. Was the child involved in any trauma  
within the year prior to admission?  
(0 - no; 1 - Yes; 9 - II)  

30. If so, how long ago? (in mos.) ___ ___  

31. What was the nature of the trauma?  
__________________________________________
32. Has the child experienced a recent (within past year) loss/death? (0 - No; 1 - Yes)
   32a. - Father died ____________
   32b. - Father left family ______
       (If yes, how long ago? ______)
   32c. - Mother died ____________
   32d. - Mother left family ______
       (If yes, how long ago? ______)
   32e. - Both parents died ______
   32f. - Other __________________

33. Did either or both parents die prior to last year? (0 - No; 1 - Yes) __________

34. If a death occurred, did child witness this? (0 - No; 1 - Yes) __________

35. Does the Social Assessment/Discharge Summary indicate that the child is/was a victim of abuse? ______
   0 - No
   1 - Yes
   9 - Insufficient Information

36. If so, what type(s) of abuse is (are) indicated?
   36a. - Physical abuse __________
   36b. - Sexual abuse ______
   36c. - Neglect ______
   36d. - Other emotional abuse ______
       (Describe____________________)

37. At what point in the child's life did this begin? (circle one)
   1 - current & ongoing since childhood
   2 - during past year only
   3 - during adolescence, i.e., 13 - 17 y/o
   4 - during latency, i.e., 8 - 12 y/o
   5 - during early childhood, i.e., 3 - 7 y/o
   6 - during infancy, i.e., birth - 2 y/o
   7 - discrete one-time only event

38. Who was responsible for inflicting the abuse? (Rate 0 - No; 1 - Yes - for each of the following)
   (If more than one form of abuse occurred, note in margin the responsible party for each form.)
   38a. - Natural Mother ______
   38b. - Natural Father ______
   38c. - Step-Mother ______
   38d. - Step-Father ______
   38e. - Other relative ______
   38f. - Foster parent ______
   38g. - Friend of family ______
   38h. - Stranger ______
39. Briefly list any abusive incidents mentioned in chart.


(For the following 2 questions, rate:
0 - No; 1 - Suspected; 2 - Yes; 9 - II)

40. Any natural family history of alcohol/substance abuse?
Mother
Father
Siblings
Other primary caregiver

41. Any natural family history of mental illness?
Mother
Father
Siblings
Other primary caregiver

DSM-III-R or ICD-9 Diagnoses (please list when available)
Axis I -
Axis II -

According to the diagnoses in chart, rate the following major diagnostic categories as, 0 if absent; 1 if present; and 9 if diagnoses is deferred or unavailable.

Conduct Disorder

Major Affective Disorder

Psychosis or Psychotic features

Borderline Personality Disorder

Personality Disorder NOS
(i.e., incl. only Borderline, Schizoid, Narcissistic, or Paranoid traits)
DISSERTATION APPROVAL

The dissertation submitted by Nancy A. Norton has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctorate of Philosophy in Clinical Psychology.

10-5-92
Date

[Signature]
Director's Signature