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UMI®
AN EXAMINATION OF PARENTAL AND PEER ATTACHMENT
RELATIONSHIPS AND SOCIAL SKILLS OF
ADOLESCENT SEXUAL OFFENDERS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of the Ohio State University

By
Jennifer Kristan Holmberg, M.A.

* * * * *

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ABSTRACT

Sexual Offending is a critical problem, affecting thousands of children every year. Juvenile offenders commit a substantial portion of sexual crimes, accounting for almost 20% of all arrests related to sexual offenses (Office of Juvenile Justice and Delinquency Prevention, 1997). Further, the fact that a majority (i.e., 60–80%) of adult sexual offenders began offending as adolescents (Abel & Rouleau, 1990; Groth, Longo, & McFadin, 1982) highlights the importance of exploring environmental factors that may contribute to the etiology and maintenance of adolescent sexual offending. The current study was designed to investigate a number of specific elements in Marshall's (1989; 1993) model of adult sexual offending as this model relates to adolescent sexual offending. Parental and peer attachments and social skills were examined in a sample of incarcerated, adolescent sexual offenders. Results indicated significant correlations between attachment to parents and peers, as well as significant relationships between parental/peer attachments and social skills. Results did not, however, confirm hypotheses with regard to variability with the offender population on measures of attachment and social skills based on offense characteristics (i.e., victim/offender age difference; use of overt coercion/force). Findings do provide
preliminary support for a similar model to Marshall's (1989; 1993) theory of adult sexual offending for adolescent offenders. Future research directions regarding specific variables relevant to adolescent populations within Marshall's model as well as prevention and treatment implications are discussed.
This dissertation is dedicated to my sister, Sandy. I am extremely proud of her for her commitment to helping others through service in the Peace Corps. She is the most courageous, selfless, and spirited young woman I know. I love and miss her very much.
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I also wish to thank my friend and fellow graduate student, Darrin Rogers, and the many undergraduate students who helped with data collection and data entry.

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CHAPTER 1

INTRODUCTION

Juvenile sexual offending constitutes a serious problem in today’s society. In fact, between 1994 and 1995 juvenile violent sexual assaults increased by 17% (Sickmund, Snyder, Poe-Yamagata, 1997). In 1996, there were 17,200 arrests of juveniles for sexual offenses. In the same year juveniles accounted for almost 20% of all arrests for sexual offenses (Office of Juvenile Justice and Delinquency Prevention, 1997). Additionally, it has been shown that a majority (i.e., 60–80%) of adult sexual offenders began offending as adolescents (Abel & Rouleau, 1990; Groth, Longo, & McFadin, 1982), suggesting that patterns of sexual offending begin in adolescence and often continue into adulthood (Davis & Leitenberg, 1987; Fehrenbach, Smith, Monastersky, & Deisher, 1986; Seghorn, Prentky, & Boucher, 1987). In fact, Abel & Rouleau (1990) indicated that over 50% of a sample of adult sexual offenders each reported an average of 380.2 sexual offenses before the age of 18 years. Thus, research in the areas of etiology, prevention, and treatment of adolescent sexual offending is imperative.
In contrast to the recent interest in studying adolescent sexual offenders, the broad topic of juvenile delinquency has been studied for decades. Early interest in examining factors related to juvenile delinquency has provided an extensive literature with great historical depth. The following literature review will provide background information on the relationship between parent-child attachment and juvenile delinquency, before more closely examining recent theories of parent-child attachment and sexual offending.

Research has frequently focused on aspects related to parenting and the family environment of juvenile delinquents. Early, exploratory investigations of juvenile delinquents often noted the maladaptive nature of parent-child relationships, describing mothers and fathers as neglecting and rejecting of their offspring (e.g., Glueck & Gleuck, 1950; McCord, McCord, & Zola, 1959; Simons, Robertson, & Downs, 1989). This broad based research generated considerable interest in examining more specific aspects of the family environment which may contribute to juvenile delinquency.

**Family Relationships**

Family relationships represent an important domain of family environment. These relationships play a significant role in a child’s capacity to become a caring and responsible young adult (Chase-Lansdale, Wakschlag, & Brooks-Gunn, 1995). For example, social concern is taught in the context of early family relationships. Children typically learn qualities of caring for others, empathy, and prosocial
behavior within the family. Parents' modeling of empathetic and prosocial behavior toward their own children/adolescents and other members of the community influence their subsequent display of caring behavior. Research has demonstrated that adolescents who are emotionally close to their parents are more likely to show increased social competence, self esteem, responsibility and decreased problems such as delinquency and extreme parent-child conflicts as compared to those adolescents who are not close to their parents (Kobak & Scerey, 1988; Steinberg, 1990).

Conversely, parental rejection of and hostility toward children has been associated with delinquency (Andry, 1960; Blakely, Stephenson, & Nichol, 1974; Brown, 1984; Glueck & Gleuck, 1950; Imperio & Chabot, 1980; Jenson, 1972; McCord et al. 1959; Simons, Conger, & Whitbeck, 1988; Simons et al., 1989). Children who are rejected are socialized in an environment lacking in love, trust, warmth, or concern for others, and this interpersonal context is likely to foster interactions with others which are characterized by hostility and aggressiveness (Ainsworth, Blehar, Waters, & Wall, 1978; Rohner, 1975; Rhoner, 1986; Rutter, 1972). Some have suggested that rejected children do not develop healthy attachment to their parents, precluding exposure to positive parental influences (e.g., parents' prosocial opinions, values, and beliefs; Glueck & Glueck, 1950; Hirschi, 1969; Wilson & Herrnstein, 1985). Thus, a lack of exposure to positive parental influences may be one path to delinquency. On the other hand, Conger
(1976) has suggested that a healthy bond and positive interactions between parent and child will enhance the reinforcement value of parental approval, thus increasing the probability that the child will emulate conventional behaviors valued by the parent and society.

Parent-Infant Attachment

Parent-child relationships begin in infancy with parent-infant attachment. These early bonds impact the individual’s behavior and interpersonal relationships in childhood and adolescence. Bowlby described attachment as a relationship that evolves between an infant and caregiver in the first year of life (Bowlby, 1982). In his view, attachment behavior (e.g., orienting, smiling, crying, clinging, signaling) results in an individual attaining proximity to a figure who is perceived to be better able to cope with a stressful environment (Bowlby, 1988). When an attachment figure is responsive and comforting, the child will feel secure and value the relationship with the attachment figure. Ainsworth and her colleagues (1978) expanded this notion proposing that the purpose of the attachment system is to maintain felt security.

Bowlby suggested that differences in the quality of a caregiver’s interactions with the infant lead to notable differences in the quality of attachment, and that differences in attachment patterns influence personality development and behavior (Carlson & Sroufe, 1995). Following experiences with varying levels of caregiver responsiveness, a child builds an internal working model of the
attachment figure, which represents the attachment figure's ability to reduce the child's distress (Bowlby, 1973b). Sensitive and loving care results in children who possess confidence that others will be helpful when appealed to and demonstrate sympathy and the desire to help others in distress (Bowlby, 1988). On the other hand, when an attachment figure is insensitive to a child's wants and needs and/or rejects the child outright, the child is likely to become insecurely attached (i.e., apprehensive that the caregiver will not be available and unhelpful when he/she is needed). Insecurely attached children are likely to be unhappy, anxious, difficult, angry, and unconcerned about the troubles of others (Bowlby, 1988). Availability and responsiveness of the caregiver is central to the quality of attachment. In general, these early experiences result in working mental models of how the child views himself and how others around him will respond to him.

Thus, the nature of attachment relationships and the way the parent figure responds to his/her child during infancy, childhood, and adolescence is theorized to influence the child's later personality development and functioning (Bowlby, 1973a; 1973b; 1988; Sroufe & Fleeson, 1986). More specifically, a child develops ideas about how others will behave in future relationships from representational models of his/her parents that have been built and solidified during childhood (Bowlby, 1988). Working models of the self and an attachment figure are influenced by interactions between the infant and the caregiver. If an attachment figure responds to the child's need for comfort and protection while at the same
time respecting the infant's need for independent exploration of the environment, the child is likely to develop an internal working model of the self as valued and self-reliant. On the other hand, if the parent has often rejected the child's need for comfort or exploration, the child will construct internal working model of self as unworthy or incompetent (Bowlby, 1973b).

Attachment relationships also impact the nature of future relationships. Attitudes, expectations, and understanding of roles are internalized from early relationships and carried forward into new relationships (Sroufe & Fleeson, 1986). For example, a child who is unsure about the availability of his/her attachment figure or has experienced rejection or unpredictable reactions will internalize attitudes about how to behave in relationships and come to expect these characteristics in future relationships. On the other hand, a child who has experienced a more positive attachment relationship will be influenced by this healthy relationship and act empathically toward other individuals.

Significant contributions to the field of attachment have also been made by Mary Ainsworth who developed a methodology and classification system of attachment types to empirically test Bowlby's theory. The methodology, known as the "Strange Situation," entails a number of tasks in which the behavioral and emotional responses of an infant and mother are observed. Patterns of behavior revealed through this observational process led to a classification system of mother-infant attachment styles (Ainsworth et al., 1978). Originally, Ainsworth and her
colleagues identified three main attachment patterns: secure, anxious-avoidant, and anxious-resistant. Typical infant and caregiver behavior patterns associated with these attachment categories are described below.

Secure Attachment

When observed in the Strange Situation, securely attached infants typically explore the environment freely, but seek contact with their caregiver when wary of a stranger and/or when distressed. Contact with the caregiver reduces these infants’ level of distress, and they are eager to re-engage with their caregiver upon reunion. If not threatened, these infants do not necessarily require physical contact from their caregiver, but do seek interaction. Secure infant attachment is the result of positive interactions with the caregiver in which the infant experiences that: a) the caregiver is available and responsive when the infant is overaroused; b) stimulation in the context of the caregiver is seldom overarousing; and c) the caregiver effectively calms the infant when he/she is overaroused. Caregivers of securely attached children are sensitive to their children’s signals and respond appropriately to relieve their distress.

Anxious-Avoidant Attachment

When confronted with the Strange Situation, anxious-avoidant infants explore the environment freely, but demonstrate little affective interaction with their caregiver. These infants are not fearful of strangers and typically become upset only when left alone. Further, anxious-avoidant infants do not show
preference for their caregiver over a stranger nor do they initiate contact with the
caregiver following a separation. Anxious, avoidant attachment patterns are
associated with caregivers that often ignore the child’s expression of distress.
These infants often build internal working models of their caregiver as unavailable
and unresponsive in times of distress.

Anxious-Resistant Attachment

Anxious-resistant infants do not venture from their caregiver to explore the
environment. In fact, they are extremely wary of strangers and novel
environments, seeking constant physical contact with a caregiver, even before
separation. Upon reunion, these infants are not easily comforted by their caregiver
and often demonstrate conflicting behaviors (e.g., active contact-seeking, stiffness,
struggling). Both the resistant and avoidant infants are thought to be uncertain
about caregiver availability. However, anxious resistant children have experienced
caregivers that respond sporadically to the child’s signals of distress. These
children may express increasing levels of distress to elicit a caregiver’s response.

Disorganized/Disoriented Attachment

A fourth attachment classification was more recently identified, describing
an array of disorganized/disoriented behavioral response to the Strange Situation
(Main & Solomon, 1990). Infants whose behavior did not fit an identifiable pattern
were classified as Disorganized/Disoriented. Infants categorized as
disorganized/disoriented exhibit bizarre behaviors such as, freezing, stilling, hand
flapping, and other stereotypies. It has been suggested that this behavior may be a result of frightening caregiver behavior (e.g., physical abuse, yelling at the child) that has interfered with attachment (Main & Hesse, 1990).

**Outcomes of Secure and Insecure Attachment**

In general, securely attached infants go on to demonstrate increased levels of empathy, self-confidence, and better conflict management skills, along with lower levels of anti-social behavior as compared to insecurely attached infants (Grossmann & Grossmann, 1990). Securely attached infants show advantages over insecurely attached infants in numerous areas including, emotion and self regulation, affect, self-esteem, self-reliance, problem solving, and social skills (see Carlson & Sroufe, 1995). Securely attached children also demonstrate more competence in interacting with peers (LaFreniere & Sroufe, 1985; Sroufe, 1983; Sroufe, 1990; Waters, Wippman, & Sroufe, 1979) and greater empathy toward peers (Kestenbaum, Farber, & Sroufe, 1989; Sroufe 1983).

On the other hand, insecure attachment patterns have been associated with various externalizing problems in toddlers (Shaw & Vondra, 1995), preschool aged children (Erickson, Sroufe, & Egeland, 1985; Lyons-Ruth, Alpern, & Repacholi, 1993), and school aged children (Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe, 1989). Specifically, avoidant children have been described as hostile, aggressive, emotionally isolated, and disconnected from experience and resistant attachment histories are associated with children who are easily frustrated,
impulsive, anxious, or dependent (Sroufe, 1983). Others have noted that unhealthy attachment relationships are likely to lead to various forms of undesirable behavior, including aggression, hostility, and anti-social behavior (Cicchetti, Lynch, Shonk, & Manly, 1992; LaFreniere & Sroufe, 1985; Loeber, 1990; Sroufe, 1990; Troy & Sroufe, 1987).

Additionally, social information processing theory (e.g., Dodge, 1993) has also posited insecure attachment relationships as one of many factors influencing the development of conduct disorder. Dodge (1993) suggested that early experiences such as physical abuse, aggressive models, and insecure attachment result in characteristic knowledge structures that include constructs such as, a hostile world schema and an aggressive response style. Social information processing (e.g., the way a child interprets and responds to the world) is then characterized by hyper-vigilance to hostile cues, a hostile attributional bias, rapid accessing of aggressive responses, and an anticipation of positive outcome for aggressive responses. According to Dodge, these social information processing styles lead to aggressive behavior and conduct disorder. In general, findings related to the development of aggression in children are important to the study of juvenile delinquency and sexual offending, as the presence of childhood aggression and misconduct has been established as a significant predictor of aggression and delinquency in adolescence (Huesmann, Eron, Lefkowitz, & Walder, 1984; Loeber, 1982; Loeber & Stouthamer-Loeber, 1987; Olweus, 1979).
Parent-Adolescent Attachment

The parent-adolescent relationship has also been examined in regard to adolescents’ functioning and deviant behavior. Hirschi’s original Social Control theory (1969) proposed an underlying process by which parent-child attachment directly influences juvenile delinquency. Attachment and affective bonds are one aspect of Hirschi's 1969 theory. Social Control theory posits that appropriately attached children desire parental acceptance and experience internal incentives to conform to parental expectations. According to Hirschi (1969), this desire for parental acceptance as well as experiencing the psychological presence of the parent motivates adolescents to behave conventionally. Alternatively, adolescents who are not appropriately attached to parents will not be motivated to conform to parental expectations, and will be more likely to engage in delinquent behaviors than securely attached adolescents.

More recently Gottfredson and Hirschi (1990) have emphasized the role of self-control in explaining criminal behavior. Specifically, individuals who lack self-control are more likely to be impulsive, insensitive, risk-taking, and short-sighted (Gottfredson & Hirschi, 1990). They often fail to consider the long-term consequences of their actions, and are often only concerned with their immediate desires. Interestingly, Gottfredson & Hirshi (1990) state that the “major cause of low self-control thus appears to be ineffective child-rearing” (pp. 97). To teach a child self-control, parents must monitor the child’s behavior, recognize deviant
behavior, and punish deviant behavior. Gottfredson and Hirschi (1990) also emphasize the need for parental affection and investment in the child as a precursor to the more direct parental behaviors of supervision and discipline. Thus, parent-child attachment plays an important role in teaching children self-control.

Empirical research has consistently noted an inverse relationship between positive parent-child attachment/bonding and adolescents’ anti-social and delinquent behavior (Benda & Whiteside, 1995; Cernkovich & Giordano, 1987; Conger, 1976; Glueck & Gleuck, 1950; Hirschi, 1969; Hoge, Andrews, Leschied, 1994; Marcus & Betzer, 1996; Sampson & Laub, 1994; Simons, Whitbeck, Conger, & Rand, 1991; Sokol-Katz, Dunham, & Zimmerman, 1997; Van Voorhis Cullen, Mathers, & Garner, 1988; Wilson & Herrnstein, 1985). As illustrated in the large body of research conducted in this area, extensive work has been undertaken in building and evaluating models, which specify mediating variables and paths of influence from parent-child attachments to juvenile delinquency. In contrast, while theorists have implicated the role of unhealthy childhood attachment relationships in sexual offending (Marshall, 1989; 1993; Marshall, Hudson, & Hodkinson, 1993; Ward, Hudson, & Marshall, 1996; Ward, Hudson, Marshall, & Siegert, 1995), only a paucity of literature and research exists examining the attachment relationships of adolescent sexual offenders. However, the study of adult romantic and peer
attachment relationships has shed a new light on the attachment literature and has highlighted the link between childhood parental attachment and adaptive, fulfilling relationships in adulthood.

**Adult Romantic Attachment**

While interest in childhood attachment dates back to the 1940s with Bowlby's study of juvenile thieves, the study of adult attachment relationships has only recently emerged in the literature. Developmental theory suggests that during adolescence, attachment bonds are transferred from parents to peers (Hazan & Shaver, 1994). While the parent is not completely deserted as an attachment figure, peers become the more central attachment figure in the adolescent and young adult's life. A number of theorists have suggested that romantic love and adult relationships have roots in and are modeled after relationships experienced in early childhood with parents (e.g., Bartholomew, 1990; Hazan & Shaver, 1987; 1994). Attachment, though, is only one factor influencing adult love. Shaver, Hazan, & Bradshaw (1988) have conceptualized adult love as a function of attachment, caregiving, and sexual mating systems. This review will focus on adult attachment patterns, their influence on adult romantic relationships, and their roots in childhood attachment experiences.

Close relationships (e.g., marriage) are theorized to play a significant role in an individual's subjective well-being (Freedman, 1978; Veroff, Douvan, & Kukla, 1981). Secure relationships, as in childhood, are characterized by trust and the
belief that a partner will be responsive to one's needs. Additionally, successful
relationships meet basic needs for comfort, care, and sexual gratification (Hazan &
Shaver, 1994). In contrast to secure attachment, Hazan and Shaver (1987, 1994)
have described less healthy adult attachment patterns corresponding to the
childhood attachment styles identified by Ainsworth and her colleagues (1978).

**Hazan & Shaver's Model**

The anxious/ambivalent attachment style is proposed to result from
inconsistent responsiveness of a caregiver and/or romantic partner (Hazan &
Shaver, 1994). Anxious/ambivalent individuals are characterized by a lack of
confidence in responsiveness of others. They are often preoccupied with trying to
keep others close. They tend to fall in love easily; may demonstrate extreme
jealousy; and are characterized by fear, anxiety, and loneliness. This style of
attachment has also been termed *preoccupied attachment*.

The avoidant adult attachment style is proposed to result from consistent
unresponsiveness. Avoidant individuals often maintain their own felt security by
avoiding intimate relationship. These individuals are likely to fear intimacy and
maintain distance in their relationships (Hazan & Shaver, 1994).

To study attachment patterns in adult romantic relationships, Hazan and
Shaver (1987) designed a “love quiz” that was printed in a local newspaper. Two
hundred and five (205) men and 415 women between the ages of fourteen and 85
years (mean of 36 years) responded to the “love quiz” from the newspaper. The
quiz included descriptions of the three main attachment styles (i.e., secure, anxious/ambivalent, avoidant). Respondents were asked to indicate which of the descriptions best described their own feelings. Fifty-six percent of the participants identified with the passage describing secure attachment, “I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don’t often worry about being abandoned or about someone getting too close to me.” Twenty-five percent (25%) indicated that the avoidant passage best described them, “I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.” And 19% identified with the anxious/ambivalent passage, “I find that others are reluctant to get as close as I would like. I often worry that my partner doesn’t really love me or won’t want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away.”

The observed proportions of respondents identifying with the secure, avoidant, and anxious/ambivalent categories were similar to the proportions reported in American studies of childhood attachment (Hazan & Shaver, 1987). Results also indicated that individuals reporting different attachment styles characterized their own love relationships in different ways. For example, the secure participants choose adjectives such as happy, friendly, and trusting to
describe their most important love relationship. They were likely to be accepting
and supportive of their partners, overlooking their partners' faults. In addition their
relationships tended to endure longer than the avoidant and anxious/ambivalent
participants' relationships (Hazan & Shaver, 1987).

In contrast, the avoidant participants reported fears of intimacy, emotional
highs and lows, and jealousy in their previous love relationships. The
anxious/ambivalent participants characterized their relationships as involving
obsession, desire for reciprocation and union, emotional highs and lows, and
extreme sexual attraction and jealousy (Hazan & Shaver, 1987).

The self-identified attachment groups also differed in their “mental models”
or perceptions of love relationships. For example, secure participants indicated that
they believed that romantic feelings wax and wane, but at times reach the intensity
experienced at the start of the relationship and that in some relationships, romantic
love never fades. The avoidant participants, on the other hand, believed that head-
over-heals love does not really exist, romantic love seldom lasts, and that finding
someone to fall in love with is a rare occurrence. Finally, the anxious/ambivalent
group felt that it is easy to fall in love, but that they rarely find real love (Hazan &
Shaver, 1987).

As part of Hazan and Shaver's (1987) study, respondents also
retrospectively described their early relationships with parents. Parental
relationships were found to vary by adult attachment type. Secure participants
reported warmer relationships with both parents and between their parents than did the avoidant and anxious/ambivalent respondents. Avoidant participants described their mothers as cold and rejecting and anxious/ambivalent participants described their fathers as unfair (Hazan & Shaver, 1987).

Hazan and Shaver (1987) also investigated romantic attachment relationships in a sample of undergraduate students (mean age of 18 years). This study was expanded to include participants’ experience of loneliness. Similar proportions of secure, avoidant, and anxious/ambivalent participants were observed in the undergraduate sample as were reported by the older respondents in the first study (newspaper sample). Similar group differences in love experiences were also noted in the undergraduate sample (e.g., secure participants described their love experiences as happy, friendly, and trusting; anxious/ambivalent individuals reported jealousy, emotional highs and lows; and avoidant participants indicated fears of closeness).

However, differences between the undergraduate and newspaper sample were noted in terms of their mental models. For example, the avoidant participants in the first study were distinguished from the secure participants by their denial of the possibility that love can be rekindled after it wanes, but this difference was not observed in the second study. In addition, the results of the second study did not indicate as many group differences in the undergraduate as were noted in the newspaper sample. Hazan and Shaver (1987) attributed these differences to the
lack of relationship experience (i.e., average relationship length of one year) of the
college students compared to the newspaper sample who reported average
relationships of eight years.

When examining parental attachment histories, a slightly different pattern
characterized the undergraduates than the newspaper sample. The avoidant
students described their parental attachment history as more similar to the secure
students on the positive dimensions than did the newspaper respondents. That is, in
the newspaper sample, the secure and avoidant participants indicated very
dissimilar profiles; while the secure and avoidant undergraduates more similar
profiles. For example, the avoidant and secure students differed from the
anxious/ambivalent students by describing their mothers as respectful, accepting,
not rejecting, and not critical and their fathers as fair (Hazan & Shaver, 1987).
However, the anxious/ambivalent students were more likely to report a relationship
between parents that was not good-humored, a mother who was not understanding,
and a father who was cold, not caring, and not confident than the secure students.

Upon further analysis of the differences in findings between the two studies,
it was discovered that the younger avoidant subjects in the newspaper sample, as
well as undergraduate sample, described their relationship with and between their
parents as more positive than the older, avoidant participants. In line with evidence
from Main, Kaplan and Cassidy (1985) and Kobak and Sceery (1988) that avoidant
adults and college students may describe relationships with their parents in overly
positive terms to avoid directly confronting the negative feelings associated with poor relationships, Hazan and Shaver (1987) suggested that the older participants may be better able to acknowledge and come to terms with the poor quality of early relationships as they mature. In terms of loneliness, the anxious/ambivalent participants were found to be the most lonely, suggesting that anxious/ambivalent individuals desire an intimate love relationship, but are largely unsuccessful in finding a partner (Hazan & Shaver, 1987).

The findings of both of these studies (Hazan & Shaver, 1987) provide significant evidence supporting the link and similarities between attachment style in childhood and later adult attachment patterns. Clearly, individuals with different attachment patterns reported different kinds of love experiences and different perceptions and beliefs about romantic love. Interestingly, differences in the quality of parent-child relationships were also noted between the secure, anxious/ambivalent, and avoidant participants. However the differences between the secure and avoidant attachment styles were not as pronounced in the sample of undergraduates compared to the older newspaper sample, possibly a result of greater defensiveness on the part of the younger respondents. While Hazan and Shaver (1987) reported some evidence for the continuity of attachment styles in the significant correlations between parental variables and current attachment styles,
they point out that these correlations were not especially strong, leaving room for attachment styles to change and evolve with distance from the parent child relationship.

Bartholomew's Model

Bartholomew (1990) has expanded on the work of Hazan and Shaver (1987; 1990) and Bowlby’s (1973a; 1973b; 1980) conception of internal working models by proposing a model based on individual’s beliefs about the self and others. Bowlby’s proposed that children build internal working models of themselves and others based on their caregivers’ availability and responsiveness. As such, models of the self and others are the basis of Bartholomew’s (1990) model. Dichotomizing perceptions of the self as either positive (i.e., positive self concept, high self worth) or negative (i.e., negative self concept, self as unworthy) and perceptions of others as either positive (i.e., others as trustworthy, caring) or negative (i.e., others as rejecting, uncaring), generates four attachment prototypes. The secure style is a result of positive perception of self and others. The preoccupied style is characterized by a negative view of self and positive view of others. A positive view of self and negative view of others is associated with the dismissing style of attachment. And finally, a fearful attachment style is said to emerge from a negative view of self and of others.
This model shares many features of Hazan and Shaver's (1987; 1990) conceptualization of adult attachment styles. For example, the preoccupied style shares features (i.e., extreme preoccupation with gaining the approval of others) with Hazan & Shaver's anxious/ambivalent type. Bartholomew's model (1990), however, specifies two different types of "avoidant" attachment, dismissing and fearful. According to Bartholomew (1990) fearful individuals desire social contact, but avoid close relationships because of their fear of rejection. In contrast, dismissing individuals place high value on independence, and view themselves as fully adequate and relationships as unimportant. In general, fearful and dismissing attachment styles are characterized by an avoidance of close relationships and intimacy, but differ in the value individuals place on others' perceptions of themselves (i.e., fearful individuals desire social acceptance).

Bartholomew and Horowitz (1991) investigated their four group model of attachment with pairs of undergraduate psychology students and their friends. They used a semi-structured interview in which participants were asked to describe their friendships, romantic relationships, and feelings about the importance of close relationships. Participants were categorized within one of the four attachment prototypes (i.e., secure, dismissing, preoccupied, and fearful) based on the interview. They also collected self-reports of self-concept, sociability, and interpersonal problems.
The findings of Bartholomew and Horowitz’s (1991) study were consistent with the theoretical basis of the four prototypes based on perceptions of self and others. The secure group was characterized by intimate and warm friendships. The dismissing group obtained high scores on self-confidence and low scores on the dimensions of emotional expressiveness, frequency of crying, and warmth. They obtained lower scores than the preoccupied and secure groups on dimensions reflecting closeness in personal relationships. In contrast, the preoccupied group demonstrated a pattern reflecting the direct opposite of the dismissing group (i.e., they differed significantly on all aspects of friendships, romantic relationships, personal characteristics, and interpersonal characteristics). Further, the preoccupied group evidenced particularly high scores on elaboration, self-disclosure, emotional expressiveness, frequency of crying, and reliance on others. Finally, the fearful group obtained lower scores than the secure and preoccupied groups on self-disclosure, intimacy, level of romantic involvement, and reliance on others. They also obtained low scores of self-confidence and balance of control in friendships and romantic relationships (Bartholomew & Horowitz, 1991).

As predicted, results indicated that membership in the secure and dismissing groups was associated with greater self-esteem and more positive self-concept. Likewise, as the model predicted that secure and preoccupied individuals hold a positive view of others, results indicated a positive relationship between sociability
and these two prototypes. The fearful and dismissing prototypes, however, were negatively correlated with sociability (Bartholomew & Horowitz, 1991).

As expected, the types of interpersonal problems reported by the participants and their friends differed by attachment type. The dismissing prototype was associated with a lack of warmth in social interactions. In contrast, the fearful participants suffered from a lack of assertiveness and social inhibition. While the self-reports of the preoccupied group indicated high scores on the overly expressive scale, the friend reports indicated high levels of dominance in addition to being overly expressive. As the authors suggest, preoccupied individuals are excessively concerned about obtaining the approval of others and may use controlling and dominating interpersonal strategies to secure this approval (Bartholomew and Horowitz, 1991). For example, they may demand that friends/lovers spend time with them to prove their commitment to the relationship.

In a second study, Bartholomew and Horowitz (1991) utilized a semi-structured interview to examine the four attachment prototypes in terms of family and peer relationships. Based on interview responses, each respondent received eight ratings (i.e., one for attachment to family and one for attachment to peers for each of the four attachment types). These ratings reflected the degree to which the subject matched each of the four attachment types in their familial and peer relationships. Results indicated that family and peer ratings for corresponding attachment types were significantly correlated, indicating similar attachment styles.
in peer and family relationships. In addition, similar patterns of interpersonal problems as noted in the first study were also identified in the second study (Bartholomew & Horowitz, 1991).

In conclusion, recent research and theorists have proposed different models of attachment in adult relationships. The models created by Hazan and Shaver (1987, 1994) and Bartholomew (1990) are quite similar to one another and can be conceptualized as extensions of the parent-infant attachment theory formulated by Bowlby and Ainsworth. Studies have indicated that attachment styles are associated with specific experiences in and perceptions of romantic relationships, interpersonal problems, and perceptions of self and others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). In addition, there is some evidence for the consistency of attachment patterns from childhood parental relationships to adult relationships (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987).

The studies discussed above have described characteristics and experiences associated with different attachment styles. While all humans have a basic need for close, intimate relationships (Dahms, 1972), individuals differ in their experiences and goals for romantic relationships. In general, healthy romantic and peer relationships are labeled as secure, and are characterized by happy, friendly, supportive and loving relationships. In contrast, individual’s labeled with less adaptive attachment styles (e.g., avoidant, anxious/ambivalent) tend to experience emotional highs and lows, obsession, and jealousy in their romantic relationships.
and experience more interpersonal problems. As such, adult attachment theory aims to explain both adaptive and maladaptive aspects of interpersonal relationships in terms of attachment style.

Theories of childhood and adult attachment have also been applied to one of the most severe forms of inappropriate and maladaptive interpersonal conduct, sexual offending (Marshall, 1989, 1993; Marshall et al., 1993; Ward et al., 1995; Ward, et al., 1996). These theorists suggest that sexual offenders possess maladaptive attachment styles, resulting in efforts to gain intimacy in interpersonal relationships in inappropriate ways (e.g., use of coercion) and with inappropriate partners (e.g., children).

Sexual Offending and Attachment Relationships - Theory

Marshall’s (1989, 1993) of sexual offending focuses on childhood attachment relationships and intimacy deficits. As discussed above, infant and childhood attachment relationships with caregivers are thought to provide a model for later social relationships (e.g., Bowlby, 1973a, 1973b). Thus, the quality of childhood attachments has considerable impact on one’s capacity to form positive peer relationships in adolescence and emotionally fulfilling, intimate relationships in adulthood. Marshall (1989, 1993) suggests that one pathway to sexual offending may begin early in life whereby future offenders fail to develop secure attachment relationships in childhood. Without appropriate models and a context to experience warmth, empathy, and acceptance, individuals are likely to suffer from low levels
of self-confidence and poor social skills in adolescence. These deficits ultimately result in difficulties in relating to peers and later adult, romantic relationships (Marshall, 1989, 1993).

The experience of poor attachment relationships represents only one of many possible factors (e.g., biological, socio-cultural, exposure to anti-social beliefs, especially pornography) implicated in sexual offending (Marshall, 1993; Ward et al., 1996). While many children and adolescents are exposed to these risk factors, those suffering from a compromised ability to develop emotionally fulfilling peer and adult relations may have an increased vulnerability to media messages glorifying violence, power, and sexual exploitation. Marshall (1989) suggests that the small number of adolescents and adults who actually embrace these anti-social values and engage in sexual offenses are characterized by a specific social skills deficit, the failure to develop intimacy.

Lack of intimacy in adult relationships, then, is a significant factor in the initiation and continuation of sexual offending (Marshall, 1989, 1993). Intimacy has been identified as a basic human need (Dahms, 1972). It includes concepts such as, the sharing of private thoughts, dreams, and beliefs; sexuality; a stable sense of identity; and adequate self-esteem, closeness and interdependence of partners; mutual self-disclosure; and warmth and affection (Perlman and Fehr, 1987). Likewise, Baumeister and Leary (1995) have asserted that the desire for interpersonal attachment is a fundamental human motivation and may account for a
significant portion of human interpersonal behavior. While sexual offenders, like others, seek intimacy, they have immense difficulty developing relationships characterized by closeness, self-disclosure, warmth, and affection. Consistent with Marshall’s theory (1989, 1993), the literature suggests that healthy adult attachment relationships grow out of early parent-child relationships (Bartholomew, 1990; Bowlby, 1973a, 1973b; Weiss, 1982). In fact, Bowlby (1973a) states: “the way attachment behavior becomes organized during a person’s childhood sets a pattern which deeply influences the way that, subsequently, his or her sexual behavior and caretaking behavior become organized” (p. 43).

Individuals who are unable to satisfy their need for intimacy often find themselves in a state of emotional loneliness (Cutrona, 1982; Jones, 1982; Weiss, 1973; 1982). Marshall (1989) suggests that emotional loneliness may lead sexual offenders to seek emotional intimacy in coerced sexual activity, because they do not possess adequate social skills to attain emotional intimacy in a more appropriate manner. In addition, the literature on emotional loneliness has linked this concept to hostile attitudes and aggressive behavior (Check, Perlman, & Malamuth, 1985; Diamant & Windholz, 1981). Thus, failures in the ability to form intimate relationships with appropriate partners and the state emotional loneliness set the stage for sexual aggression.
In summary, children who fail to form healthy attachment bonds will also fail to learn the interpersonal skills needed to achieve intimacy with peers and romantic partners. The resulting inability to gain intimacy and the experience of emotional loneliness represent one set of factors theorized to contribute to sexual offending. Marshall and his colleagues, along with other researchers, have explored the nature of the relationships between social skills, intimacy, loneliness, and sexual offending through empirical investigations.

**Empirical Research with Adult Populations**

While a majority of the research has examined the role of intimacy deficits and loneliness in sexual offending, there is some evidence supporting the links between early family environment, poor parental attachment, social skills deficits, and sexual offending. Marshall (1989, 1993) suggests that deficits in social skills, low self-confidence, and difficulty in forming intimate relationships stem from poor parent-child attachments.

**Early Home Environment, Social Skills & Self-Esteem**

In line with this theory, the early home lives of sexual offenders have been described as violent, hostile, and lacking in emotional attachment, which is hypothesized to inhibit the development of the secure attachment bonds and the self-confidence necessary to develop appropriate social and sexual relationships (Marshall & Barbaree, 1990). In a study of adult sexual offenders, Tingle, Barnard, Robbin, Newman, & Hutchinson (1986) noted that many of the child molesters and
rapists came from broken homes and reported distant relationships with their fathers. Interestingly, while 83% of the child molesters reported a close or very close relationship with their mother, only 23% indicated that they could discuss their problems with their mothers. Parental rejection has also been associated with low self-esteem in a sample of sexual offenders, as well as non-offending adult males (Marshall & Mazzucco, 1995).

As discussed above, a lack of self-confidence and social skills deficits contribute to sexual offending through a negative effect on the ability to engage in emotionally fulfilling relationships. In fact, Tingle and his colleagues (1986) indicated that 75% of the child molesters and 86% of the rapists in their sample reported having no or few friends while growing up. Additionally, child molesters' deficits in heterosexual social skills have been demonstrated in observational studies of child molesters and rapists interacting with female confederates (Overholser & Beck, 1986; Segal & Marshall, 1985). The need to enhance adult offenders' social skills is recognized by the consistent use of social skills components in sexual offender specific treatment programs (e.g., Marshall & Barbaree, 1988; Valliant & Antonowicz, 1992; Witt, Rambus, & Bosley, 1996). However, as Stermac, Segal, and Gillis (1990) point out, empirical research has not consistently found social skill deficits in all sexual offenders (e.g., rapists) when compared with incarcerated non-sexual offenders (e.g., Stermac & Quinsey, 1986).
Intimacy Deficits

A majority of the empirical research on this topic has addressed the role of intimacy deficits in the etiology and maintenance of sexual offending. It is proposed that the inability to form appropriate and emotionally fulfilling intimate relationships results in emotional loneliness and a drive to meet intimacy needs through sexual activity, even if a partner must be coerced (Marshall, 1989, 1993; Ward et al., 1995). In fact, when a group of adult sexual offenders were directly asked to give reasons for their offending, sexual motivations were followed by a need for intimacy or emotional closeness as the most common responses (Ward, Hudson, & France, 1993).

A number of investigations have focused on assessing offenders' capacity for and experience of intimacy in adult, romantic relationships. Child molesters have been found to be more lonely and deficient in intimacy than rapists and offenders convicted of crimes other than sexual offenses (Garlick, Marshall, & Thornton, 1996). Others, however, have not observed differences between child molesters and rapists on these dimensions. For example Seidman, Marshall, Hudson, and Robertson (1994) noted that sexual offenders, including rapists, incest child molesters, non-familial child molesters, and exhibitionists, reported more deficits in intimacy and loneliness than a combined group of wife batterers, non-offender community males, and non-offending university males.
Likewise, Bumby and Hanson (1997) also reported differences in intimacy and loneliness among incarcerated sexual offenders, incarcerated non-sexual offender, and community controls. In fact, on a measure of overall intimacy, rapists and child molesters reported experiencing significantly less intimacy than the non-sexual offenders and community controls. Interestingly, no differences were reported between the child molesters and rapists or between the non-sexual offenders and the community controls. Analysis of the individual scales of the intimacy measure indicated an identical pattern of results for intimacy with male friends and intimacy with female friends. That is, the sexual offenders reported experiencing less intimacy with female and male friends than did the non-sexual offenders and community controls, which did not differ. On the intimacy with family members scale, the rapists reported significantly lower levels of intimacy with family members than the child molesters, non-sexual offenders, and community controls. And surprisingly, a significant group effect was not observed for the intimacy with spouse/significant other scale (Bumby & Hansen, 1997).

In terms of self-reported loneliness, the child molesters and rapists reported greater levels of emotional and overall loneliness than the non-sexual offenders and community controls (Bumby & Hansen, 1997). The rapists did not differ from the child molesters and the non-sexual offenders did not differ from the community controls. Notably, the pattern of results differentiate the sexual offenders from the non-sexual offenders and suggest that the incarcerated, non-sexual offenders
experience similar levels of intimacy and loneliness as do the community controls. This topic deserves further investigation, as not all studies have observed differences in the reported levels of intimacy and loneliness between sexual offenders and non-sexual offenders.

While the above mentioned studies (e.g., Bumby & Hansen, 1997; Garlick et al., 1996; Seidman et al., 1994) utilized questionnaires to assess intimacy and loneliness, Ward, McCormack, and Hudson (1997) interviewed sexual offenders and non-sexual offenders to examine the construct of intimacy on a more detailed level. Child molesters, rapists, violent non-sexual offenders, and non-violent, non-sexual offenders were interviewed about their adult romantic relationships. Twelve categories of intimacy were derived from the interviews: relationship commitment, evaluation of the partner, self-disclosure, trust expression of affection, sexual satisfaction, giving and receiving of support, empathy, conflict resolution, autonomy, and sensitivity to rejection. In general, results indicated that sexual offenders (i.e., child molesters, rapists) experienced intimacy deficits which created problems in their romantic relationships. However, results also indicated that the violent, non-sexual offenders shared these deficits and were more similar to each other than to the non-violent group across a number of intimacy dimensions. These authors suggested that intimacy deficits may be a general risk factor for a variety of offensive behavior, as opposed to as specific risk factor for sexual offending (Ward et al., 1997).
While this study did not demonstrate clear differences in intimacy deficits between sexual and non-sexual, violent offenders, the child molesters differed from the other three groups on a number of features. Child molesters were more sensitive to rejection than the violent and non-violent offenders, and were less satisfied with their sexual relationships than all of the other groups. However, they reported a stronger commitment to their relationship and were more positive about their partners than rapists (Ward et al., 1997). The derived, distinct dimensions of intimacy and observed differences between rapists and child molesters highlights the need to examine different types of intimacy deficits and attachment patterns within the sexual offender population. That is, deficits in different intimacy dimensions may be associated with varying motivations for offending and types of offenses (e.g., rape, intra-familial, extra-familial sexual abuse).

Attachment Styles

Ward and his colleagues (1995) expanded the theory of attachment and intimacy deficits in sexual offenders by developing a comprehensive model relating adult romantic attachment to sexual offending in adulthood. This model is based on Bartholomew’s (1990) four adult attachment styles, Secure, Preoccupied, Fearful, and Dismissing. As discussed above, these styles of attachment are based on the individual’s view of him/herself and others. Ward and his colleagues adopted this model, referring to the Preoccupied style of attachment as Anxious/ambivalent, the Fearful style as Avoidant I, and the Dismissing style as
Avoidant II. They proposed that the three separate categories of insecure attachments (i.e., Anxious/ambivalent, Avoidant I, Avoidant II) each lead to different types of intimacy deficits and relationship problems. This theory is consistent with the literature on adult attachment relationships noted above, indicating that specific attachment patterns are associated with corresponding and particular interpersonal problems (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). Thus, offenders with different attachment styles and intimacy deficits will have different motivations for and patterns of sexual offending.

Ward and his colleagues (1995) make predictions about offenders’ motivations for and patterns of sexual offenders that are based from Bartholomew’s four category conceptualization. Consistent with Bartholomew’s (1990) theory, Ward and his colleagues maintain that offenders with an Anxious/ambivalent attachment style hold a negative view of themselves and a positive view of others. They view themselves as unworthy, constantly seek the approval of others, and are preoccupied with relationships (Bartholomew, 1990; Hazan & Shaver, 1987). Additionally, these individuals desire intimacy, but are anxious about adult relationships. Ward and his colleagues (1995) suggest that a partner who admires and can be controlled by the anxious/ambivalently attached individual (e.g., a child) will be desirable to this person. In addition, they predict that the anxious/ambivalent offender will engage in grooming behavior, attempting to form a “love” relationship with the child. The offender may view the child as a lover,
believing that the child enjoys the sexual involvement. Anxious/ambivalently attached offenders are not likely to use overt force or aggression (Ward et al., 1995).

In contrast, individual’s with an Avoidant I attachment style hold a negative view of themselves and others. They believe that they are unlovable and that others are uncaring and unreliable. These individuals may desire intimacy, but keep their partner at an emotional distance for fear of rejection. Thus, this type of offender may use sex as a way of gaining “intimacy” without the emotional tie or connection they fear. Ward and his colleagues (1995) predict that, unlike the Anxious/ambivalent offender, the Avoidant I offender is unconcerned with the victim’s feelings, and if necessary, will use force and coercion in the offense. As these offenders are concerned only about their own pleasure, the child victim’s gender will be relatively unimportant to the offender.

Avoidant II individuals view themselves in a positive light while others are evaluated negatively. They desire to maintain a sense of autonomy and independence; consequently, their relationships are characterized with aloofness and little personal disclosure. They blame others for their lack of intimacy and this hostility is often directed at the gender of their preferred romantic partner. Thus, avoidant II offenders are likely to be aggressive and physically forceful in their offense (Ward et al., 1995).
Interestingly, the profile of the Avoidant II offender includes a positive view of self. Although this may be somewhat inconsistent with Marshall's model (1989; 1993) which posits low self-esteem and a lack of self-confidence in the offenders own social skills; other theorists (Baumeister, Smart, & Boden, 199) have proposed the role of high self esteem (i.e., egotism, narcissism, arrogance) in the development of antisocial behavior. More specifically, Baumeister and his colleagues (1996) suggest that violence ensues when highly favorable views of self are disrupted or challenged. Aggression, then, will be directed toward the source of threat. This view of high self-esteem playing a causal role in violence and aggression challenges the more traditional assumption that aggression and antisocial behavior are products of low self-esteem. While Marshall's model (19989; 1993) focuses on the low self-esteem and social skills deficits of sexual offenders, the research by Ward and his colleagues highlights the value at examining diverse patterns of and motivations for sexually offending.

It is important to point out that sexual offending is one possible outcome of these insecure attachment styles (Ward et al., 1995). It is when intimacy deficits accompany other factors (e.g., cognitive distortions, substance abuse, media images of sexual violence) that some men may attempt to meet their intimacy needs in inappropriate ways (e.g., coercing a non-consenting partner into sexual activity).
Because their attachment and intimacy deficits are varied, their motivations for and offense related behaviors (e.g., choice of victim, use of force) will differ as well. Recent research efforts have supported such a model (Ward et al., 1996; Ward et al., 1997).

For example, this model is helpful in interpreting results from the study by Ward and his colleagues (1997) described above. The characteristics observed in the child molester group (e.g., positive evaluation of romantic partners, dissatisfaction with their sexual relationships) are consistent with the anxious/ambivalent attachment pattern. It is suggested that the child molesters confuse sexual and intimacy needs, using sex as a way of coping with emotional loneliness and rejection (Ward et al., 1997). In contrast, the rapists in the 1997 Ward study, evaluated their partners negatively, which is consistent with the avoidant II attachment style. In summary, recent research efforts (Ward et al., 1996; Ward et al., 1997) lend support to the model relating specific insecure adult attachment different patterns to sexual offending introduced by Ward and his colleagues in 1995. However, while this model may be helpful in predicting different patterns of adult sexual offending, a similar model has not been developed to describe juvenile sexual offending.
The models and investigations described above have helped to elucidate and support Marshall's theory of sexual offending. However, while this theory was derived in part from the literature on infant and childhood attachment to parents, the proposed link between childhood attachment and the resulting social skills and intimacy deficits has only recently been addressed in the empirical literature.

Smallbone and Dadds (1998) addressed this topic in their study of childhood and adult attachment styles of sexual offenders (n = 48), non-sexual offenders (i.e., property offenders, n = 16), and non-offenders (n = 16). Smallbone and Dadd's (1998) focused their hypotheses on the attachment patterns of stranger rapists and intrafamilial child molesters, predicting that rapists would be characterized by an avoidant attachment style and the intrafamilial child molesters would report an anxious attachment style. These predictions stem from the attachment literature, which notes the hostility and lack of empathy that has been associated with avoidant attachment. In contrast, intrafamilial offenders’ desire for intimacy and “courtship” or grooming behaviors are consistent with an anxious attachment style. Extrafamilial child molesters were also included in the study; however, no specific predictions were made for this group.

To assess childhood attachment, participants read descriptions of the secure, anxious/ambivalent, and avoidant attachment categories, and rated how closely the description described their relationship with their each of their parents. A 30 item questionnaire examined adult attachment style and yielded scores corresponding
with secure, anxious, and avoidant attachment styles. Participants also completed an attachment history checklist by marking adjectives (e.g., responsive, rejecting, violent) that described the attitudes and behaviors of their mothers and fathers.

The retrospective assessment of childhood attachment is an especially interesting and unique aspect of this study. While attachment theory and Marshall’s model infer relative continuity between childhood and adult attachment style, findings in this study (Smallbone & Dadds, 1998) indicated only moderate correlations. For example, a correlation of .35 (p<.01) was observed between secure childhood attachment to mother and secure adult attachment as well as between anxious childhood and adult attachment. Avoidant childhood attachment and avoidant adult attachment were also moderately correlated, r = .28. Surprisingly, none of the paternal childhood attachment styles were significantly related to their corresponding adult attachment styles.

More encouraging results emerged from the comparisons of the adult and childhood attachment styles of the sexual offenders with the non-sex offenders and non-offending controls. The combined group of sexual offenders reported less secure childhood maternal and paternal relationships as well as less secure adult intimate relationships in comparison to the non-offenders. The sexual offenders also reported less secure maternal childhood attachments than the property
offenders did. However, group differences were not observed when comparing sexual and property offenders in their secure paternal, childhood or adult attachments.

With respect to the more specific hypotheses, it was predicted that the intra-familial child molesters would report more anxious attachment than all other groups. Results, however, did not indicate significant differences between the child molesters and the other groups on the continuous measures of maternal anxious, paternal anxious, or adult anxious attachment. Nonetheless, child molesters were significantly more likely to describe their mothers as unloving, unresponsive, inconsistent, rejecting, and abusive than the other groups. Additionally, it was predicted that rapists would be characterized by a more avoidant attachment style than all other groups. Apart from a nonsignificant trend for rapists to report greater avoidant, adult attachment, significant differences between rapists and other groups were not observed on the continuous measures of avoidant attachment. Significant differences between rapists and the other groups, however, were detected in participants' descriptions of their fathers. Rapists were found to be most likely to describe their fathers as not caring, not sympathetic, abusive, and violent than all other groups.

This recent study (Smallbone & Dadds, 1998) represents the first effort to investigate the childhood attachment patterns of adult sexual offenders. While findings indicated less secure child and adult attachment relationships in sexual
offenders than non-offenders did, sexual offenders and property offenders differed only on childhood, maternal attachment. The failure to find significant differences between sexual and non-sexual offenders on their ratings of secure adult attachment style is surprising given the studies mentioned above which have noted significant intimacy deficits of sexual offenders in comparison to non-sexual offenders and non-offender controls (e.g., Bumby & Hanson, 1997; Garlick et al., 1996; Seidman et al., 1994). However, Ward and his colleagues (1997) observed similar findings in terms of violent, non-sexual offenders reporting intimacy deficits similar to the sexual offenders.

On a related note, findings are inconsistent regarding differences in intimacy and attachment between rapists and child molesters. While Smallbone and Dadds (1998) compared a combined group of child molesters and rapists to the non-sexual offenders and non-offenders in their examination of secure attachments, many researchers have attempted to uncover differences between rapists and child molesters. However, findings are mixed. Child molesters have been found to be more deficient in intimacy than rapists in at least one study (e.g., Garlick et al., 1996), while others have not observed these differences (e.g., Bumby & Hansen, 1997; Seidman et al., 1994). In addition, it should be noted that Smallbone and Dadds' (1998) measure of attachment (i.e., a single variable for maternal, paternal, and adult secure attachment) and the more complex measures of intimacy (e.g., detailed interviews) utilized in the other studies may not be comparable constructs.
Predictions by Smallbone and Dadds (1998) that rapists would report more avoidant attachment styles and that intra-familial child molesters would report more anxious attachments were not supported. Nonetheless, findings did indicate that rapists reported more adverse relationships with their fathers than other groups and intra-familial child molesters described more rejecting relationships with their mothers than other groups. The use of a single item to assess each of the attachment relationships may have been an inadequate measure of these variables, contributing to the lack of significant differences in attachment styles between different types of offenders (e.g., rapists, child molesters).

Clearly, the relationship between childhood and adult attachment, intimacy deficits, and sexual offending is deserving of further attention. Intimacy deficits in sexual offenders have received relatively consistent support, and Smallbone and Dadds have provided some evidence for the connection between sexual offending and insecure attachment and early relationships with parents. On the other hand, empirical evidence linking particular childhood attachment styles to the social skill and intimacy deficits proposed to lead to sexual offending is lacking. In addition, the unimpressive correlations between childhood and adult attachment styles observed by Smallbone and Dadds (1998) highlight the need for future investigations to examine the extent to which parental relationships are related to the subsequent development of peer and romantic relationships.
Attachment Relationships of Adolescent Sexual Offenders

Marshall’s model (1989, 1993), highlighting the role of poor childhood attachment relationships in adult sexual offenders, has been applied to the juvenile offender populations as well (Marshall et al., 1993). To review, insecure childhood attachments are theorized to lead to deficits in the areas of self-confidence, social skills and the ability to form intimate, close relationships (Marshall, 1989, 1993). The resulting emotional loneliness experienced by individuals who are not able to form emotionally fulfilling relationships has been linked to aggressive behavior, such as sexual offending (Check et al., 1985; Diamant & Windholz, 1981).

The transferring of attachment bonds from parents as the central attachment figure to relationships with peers represents an especially important part of adolescents’ adjustment into early adulthood. This transition is important because positive peer relationships provide a foundation for developing intimate relationships in adulthood (Marshall et al., 1993). Thus, adolescents who have not experienced secure attachment bonds in childhood are at risk for difficulties in their peer relationships and adjustment to early adulthood.

Issues of sexuality and social-sexual relationships are among the most central and important developmental challenges experienced in adolescence. Consequently, adolescents who have not experienced models for healthy relationships may be at a disadvantage when forming appropriate ideas and enacting healthy behaviors in the social arena. These deficits may become
especially problematic as they encounter confusing and difficult messages regarding their own sexuality and social sexual situations, possibly leading to sexual offending. While this particular model highlights the role of deficient early childhood relationships and social skills deficits in sexual offending, the important influence of other factors (e.g., exposure to pornography, cognitive distortions, inherited dispositions; sexually violent media messages) in the etiology and maintenance of sexual offending must not be discounted (Marshall et al., 1993). In fact, the absence of insecure attachment bonds and fulfilling social relationships may simply result in greater vulnerability to these other societal, biological, and environmental risk factors, as opposed to being a single causal factor.

Nonetheless, examining the dimensions associated with the attachment model of sexual offending may provide valuable insight into the development and maintenance of juvenile sexual offending. Important dimensions of the model include variables such as parent-child/adolescent attachment relationships, social skills, self-confidence, the experience of loneliness, and same- and opposite-sex peer relationships. However, theorized relationships between these variables have not been routinely studied in juvenile samples. Thus, investigating relationships between a number of the variables mentioned above (i.e., social skills, peer relations, parent attachment) would represent a first step for evaluating the model.
that Marshall and his colleagues (1993) have hypothesized. Additionally, variables in the model may also be useful in predicting certain characteristics of the sexual offense (i.e., victim characteristics, use of physical force).

*Family Environment*

Evidence for the deficient parent-child attachment relationships of adolescent sexual offenders can be drawn from descriptive studies of juvenile sexual offenders’ family environments. Resembling the literature on the family environments of juvenile delinquents rejection (e.g., Glueck & Gleuck, 1950; McCord et al., 1959), the studies described below have depicted a familiar picture of parental rejection, high levels of conflict, and low levels of warmth in the lives and families of juvenile sexual offenders.

One study of family environment observed differences between a normative sample of adolescents and the delinquent sample of sexual and non-sexual offenders (Bischoff, Stith, & Whitney, 1995). Results indicated that both sexual offenders and delinquents perceived their families as: less cohesive, expressive, and intellectually-culturally oriented; displaying a lower level of independence among family members and active-recreational orientation; and having higher levels of control than a normative sample of adolescents. However, the authors did not report differences between the sexual offender and delinquent samples of offenders (Bischoff et al., 1995).
Descriptive studies from the 1980s illustrated the disturbed nature of the juvenile sexual offenders' families. Awad, Saunders, & Levene (1984) found that 75% of their sample of juvenile sexual offenders had been separated from at least one parent for prolonged periods of time. One third of the mothers and over half of the fathers were judged to be rejecting, and one half of the fathers and one fourth of the mothers were described as emotionally detached.

Another study (Saunders, Awad, & White, 1986) compared the family environments of three groups of adolescent sexual offenders: 1) offenders who did not physically assault their victim (although brief touching may have occurred; e.g., exhibitionism, obscene phone calls); 2) offenders who sexual assaulted a victim similar to the offender’s age or older; and 3) pedophilic offenders. Non-assaultive offenders tended to come from less dysfunctional family backgrounds than the two other groups of offenders. Sexually assaultive offenders (i.e., group #2) were distinguished from the other two groups by their high rates of long-term parent-child separations. Interestingly, the offenders in group #2 demonstrated better peer relations than the offenders in the other two groups. Lastly, pedophilic offenders were more often described as infants who did not like to be cuddled relative to offenders in the other two groups. Further, few of the juvenile sexual offenders in this sample reported having close friends (Saunders et al., 1986). While the direct
link from parent-child attachment relationships to adolescent peer relationships has not been investigated, the social skills and peer relationships of adolescent sexual offenders have received attention.

Peer Relationships & Social Skills

As noted above, one consequence of insecure parental attachments may be deficits in social skills, leading to the inability to form positive and affectionate interpersonal relationships (Marshall, 1989, 1993; Marshall et al., 1993). The resulting emotional loneliness is theorized to increase the likelihood of sexually offensive behavior (Marshall, 1989, 1993). Poor peer relationships and low levels of emotionally bonding with peers are routinely noted in juvenile sexual offender samples (e.g., Blaske, Borduin, Henggeler, & Mann, 1989; Deisher, Wenet, Paperny, Clark, & Fehrenbach, 1982; Fehrenbach et al., 1986; Groth, 1977). Further, Fagan and Wexler (1988) found that sexual offenders were more socially isolated than chronic delinquents.

Social skills training is recognized as an important component in sexual offender treatment programs for adolescents (e.g., Becker, Kaplan, & Kavoussi, 1988; Kahn & Lafond, 1988; Knopp, Freeman-Longo, Lane; 1997) and adults (e.g., Marshall & Barbaree, 1988; Witt et al., 1996; Valliant & Antonowicz, 1992). Empirical studies have compared the social skills and social behavior of adolescent sexual offenders, non-sexual offending delinquents, and adolescent controls. However, findings in this area are inconsistent. In one study, adolescent child
molesters demonstrated less social competence than non-sexual offending juvenile delinquents, and adolescent controls (Katz, 1990). In another study, Ford and Linney (1995) hypothesized that juvenile rapists would possess more proficient social skills than the other offenders (i.e., child molesters, violent non-sexual offenders, status offenders). However, their findings suggested that the juvenile rapists, child molesters, violent non-sexual offenders, and status offenders did not differ on their perceived ability to establish peer relations and the majority (i.e., 87%) of adolescents in their offender sample believed they had as many friends as most other people. Thus, inept social skills may not characterize all juvenile sexual offenders. In fact, research has shown that some sexual offenders utilize quite sophisticated and pro-social strategies to manipulate and “groom” their victims and their victims’ caretakers (Kaufman et al., 1998).

In summary, Marshall’s model (1989, 1993) of maladaptive attachment styles and frustrated intimacy needs has gained limited direct empirical support with juvenile populations. While the literature has documented the unfavorable, adverse home lives and deficits in social skills of sexual offenders, the link between insecure parental attachment, social skills, intimacy deficits, and juvenile sexual offending has not been extensively explored. In fact, only two empirical studies comprised of juvenile populations have directly examined variables (e.g., parental bonding, attachment style, intimacy deficits) relevant to Marshall’s theory (Bumby & Marshall, 1998; Kobayashi, Sales, Becker, Aurielo, & Kaplan, 1995).
Empirical Research with Adolescent Populations

Bumby and Marshall (1998) utilized questionnaire data to assess the attachment styles, levels of social-sexual anxiety, hetero-social skills, and fear of intimacy in fifteen juvenile child molesters (i.e., all victims were more than three years younger than the perpetrator) and 23 non-sexually offending delinquents. The Relationship Questionnaire (Bartholomew & Horowitz, 1991) was used to categorize adolescents into one of four attachment style categories (i.e., secure, preoccupied, dismissive-avoidant, fearful-avoidant). The adolescents were instructed to read four passages which described the four attachment patterns and rate how well each passage described their relationships, in general.

Results indicated that a majority of the adolescents in both groups were insecurely attached. Of the child molesters, 46.7% had fearful-avoidant attachments (Avoidant I; negative self/negative others) and 33.3% demonstrated pre-occupied (Anxious/ambivalent; negative self/positive others). In contrast, in the non-sexual offending delinquent group, 43.5% showed dismissive-avoidant attachment (Avoidant II; positive self/negative others) and 31.7% had preoccupied attachment styles. The fact that a majority of adolescents in both groups had insecure attachments may suggest that insecure attachment may be related to offending behaviors in general. However, the observed differences in the proportions of specific insecure attachment styles (i.e., fearful-avoidant, dismissive-avoidant) associated with the sexual and non-sexual offenders highlight
the value of a more detailed model (e.g., Ward et al., 1995) relating particular insecure attachment styles to various types of offending (Bumby & Marshall, 1998).

In terms of social skills and social anxiety, as predicted, the child molesters reported less skill in heterosocial interactions and more anxiety in social-sexual situations than did the delinquent sample. A non-significant trend suggested greater fears of intimacy within the child molester group than in the non-sexual offenders. Relationships between attachment style and social skills and social anxiety were also observed. Over the entire group of offenders, those with fearful-avoidant, insecure attachment styles reported less competence in hetero-social interactions and greater levels of anxiety in social-sexual situations than did offenders with secure and the alternative insecure attachment styles (i.e., fearful-dismissive, preoccupied).

This study (Bumby & Marshall, 1998) lends support to the application of Marshall’s theory of sexual offending to juvenile populations. Consistent with the model, intimacy deficits, social skills deficits, and higher levels of social anxiety characterized the child molesters. In addition, particular insecure attachment styles were associated with intimacy and social skills difficulties. Bumby and Marshall’s (1998) study examined attachment patterns in adolescents’ close relationships,
focusing on the intervening factors (e.g., peer relationships, intimacy deficits) stipulated in Marshall’s theory. Thus, the link between parental attachment in childhood and later intimacy deficits remains unclear.

While the topic of adolescent sexual offenders’ childhood and infant attachment to parents remains relatively unexplored, one empirical study has examined how bonding to parents in adolescence may be related to juvenile sexual offending (Kobayashi, et al., 1995). Kobayashi and his colleagues (1995) examined relationships between sexual offenders’ perceptions of their parents’ deviance, offenders’ history of physical and sexual abuse, bonding to mother and father, and level of deviant sexual aggression. These relationships were examined in a sample of adolescent males between the ages of twelve and nineteen years who had been charged with or convicted of a sexual offense.

Parental bonding was measured via two items. Adolescents were asked to rate how important his 1) mother/step-mother/female guardian and 2) father/step-father/male guardian is to him. Ratings were made on a three point scale (1= not important, 2= slightly important, 3= very important). Deviant sexual aggression was assessed according to the following scale: 0= none; 1= verbal aggression; 2= threat of physical force; 3= use of physical force; 4= threat of weapon; 5= use of weapon; and 6= excessively physical force. These weights were multiplied by the number of offenses the adolescent committed against each victim. Sums of aggression scores for all victims were calculated for each offender. Finally, to
measure perceived parental deviance, adolescents were asked about their
perceptions of their parents' attitudes regarding sexual and non-sexual deviant
behaviors (e.g., rape, burglary). A structural equation modeling procedure
indicated a significant path between bonding with mother and adolescents' deviant
sexual aggression score, such that higher bonding scores were associated with less
aggressive sexual offending. However, predicted relationships between perceived
parental deviance and parent bonding, as well as relationships between bonding to
father and sexual aggression, were not observed.

Kobayashi's study (1995) represents a preliminary step in examining the
role of parental attachment in juvenile sexual offending. The significant influence
of maternal, but not paternal bonding, in predicting deviant sexual aggression
highlights the importance of looking at maternal and paternal attachment
relationships separately. Also, the influence of maternal bonding on sexual
aggression within the sexual offender population demonstrates the need identify
varying etiological factors that may influence a given offender's pattern of
offending. Additionally, as the authors point out, assessing attachment to mother
and father with more than one item each would provide a more reliable measure of
attachment.
Summary

In conclusion, a model described by Marshall (1989, 1993; Marshall et al., 1993), linking early parent-child attachment to the development of social skills and the capacity for intimacy in adult relationships has generated much research in recent years. This research has found adult sexual offenders to be characterized by intimacy deficits and loneliness, and report insecure attachment styles in their romantic relationships. In addition, the work of Ward and his colleagues (1995, 1997) have demonstrated how different styles of adult, attachment styles related to specific motivations for offending and offense characteristics.

On the other hand, less research has been conducted with the juvenile sexual offender population. Descriptive studies have traditionally described the parental relationships and home lives of adolescent sexual offenders as rejecting, high in conflict, and low in warmth. Also, a majority of adolescent offenders describe their relationships in general (e.g., peer, romantic) as insecure and report social anxiety and less social skill in hetero-social relationships (Bumby & Marshall, 1998). Finally, maternal bonding has been shown to influence offenders' level of sexual aggression during the offense (Kobayashi et al., 1995). Thus, the small body of research with adolescent offenders suggests that attachment, social skills, and the capacity for intimacy may be significant etiological and maintaining factors in sexual offending.
Future Directions

Continuing to examine the dimensions associated with the attachment model of sexual offending (e.g., Marshall et al., 1993) may provide valuable insight about the development and maintenance of juvenile sexual offending. Important dimensions of the model include variables such as parent-child/adolescent attachment styles, peer attachment, and social skills in same- and opposite-sex peer relationships. One aspect of this model that has received little attention is the connection between parent/adolescent relationships and adolescents’ social skills and capacity to develop and maintain emotionally fulfilling peer relationships.

While Kobayashi and his colleagues (1995) investigated maternal and paternal bonding in adolescence in relation to sexual aggression, a model including social skills as a mediator between parental bonding and physical aggression and threats might offer one explanation for the observed relationship between maternal bonding and sexual aggression. One hypothesis would be that sexual offenders who have experienced poor attachment relationships with their parents do not learn appropriate social skills. Consequently, sexual offenders who are more socially inept may utilize more physically aggressive, threatening, and coercive strategies to engage their victims in sexual activity and maintain silence after the offense. To test this hypothesis, the present study will examine relationships between parental attachment, social skills, and offenders’ use of physical force and threatening strategies.
Likewise, juvenile offenders adjudicated for more serious offenses that are categorized as a felony one crime may report more impaired attachment relationships and more deficient social skills than offenders adjudicated for less serious, felony three or four offenses. This hypothesis provides a non-self report variable (felony classification) to the study. Similar to the prediction involving offenders' use of overt force, physical coercion, and/or threats of physical force, offenders adjudicated for more severe and atrocious offenses may have never experienced the attachment relationships and interpersonal social skills that transmit empathy and a value for human life.

The felony distinction is based upon variables such as use of overt physical force or violence, extent of injury to the victim, age of the victim, and occurrence of penetration. As such, the most egregious crimes which involve overt force, young victims, and any type of penetration, such as rape, attempted murder, and kidnapping are considered more severe offenses and are labeled, felony one. On the other hand, crimes considered to be less severe (e.g., domestic violence, gross sexual imposition, and sexual battery) are more likely to be categorized as felony three or four.

Finally, attachment quality and social skills may also differ in terms of the offenders' choice of a similar age or much younger victim. Saunders and his colleagues (1986) noted a number of differences in the family and social histories of offenders who assaulted young victims, offenders whose victims were closer to
the offender's own age, and no-assault offenders. Inconsistent findings with regard to offenders' social skills and lack of conclusive research on the quality of offenders' peer relationships highlight the need for more research to clarify how these variables influence adolescent sexual offending. The present study will consider differences in parental attachment, peer attachment, and social skills, based on the victim's age, proposing the hypothesis that offenders who choose victims much younger than themselves will demonstrate less attachment to parents and peers and more deficient social skills than offenders who choose victims closer to their own age. This hypothesis follows from Marshall's (1989, 1993) theory that the inability to form relationships and the lack of emotionally fulfilling relationships in adolescence may result in attempts to gain intimacy through coerced sexual activity with inappropriate partners. Consequently, an adolescent who lacks social skills and positive relationships with same-aged peers may be more likely to offend against younger victims, who he perceives as less likely to recognize his interpersonal deficits, than an offender who can successfully engage and relate to same-aged peers.

Study Hypotheses

1) Adolescent sexual offenders' reports of their attachment to their mother and father will be positively related to their reports of peer attachment and social skills.
2) Adolescent sexual offenders’ reports of their peer attachment will be positively related to their social skills.

3) Offenders with victims four or more years younger than the offender will demonstrate lower scores on measures of attachment to parents, attachment to peers, and social skills than offenders whose victims are within two years of the offender’s age or older than the offender.

4) Offenders who report the use of overt force or physical violence and/or threats of violence to gain victims’ compliance in the sexual activity and prevent disclosure will demonstrate lower scores on measures of attachment to parents, attachment to peers, and social skills than offenders who do not report the use of physical aggression or threats.

5) Offenders who were adjudicated for a felony one offense will demonstrate lower scores on measures of attachment to parents, attachment to peers, and social skills than offenders adjudicated for a felony three or four offense.
CHAPTER 2

METHOD

Participants

Participants in this study included 183 incarcerated, adolescent sexual offenders from the Department of Youth Services' Riverview Correctional Facility in Delaware, Ohio. Offenders were between the ages of twelve and 21 years at the time of data collection and had been adjudicated for a sexual offense committed before the age of eighteen years. See table 1 for the demographic characteristics of the sample.

This study utilized a portion of data gathered as part of a larger treatment evaluation project sponsored by the Office of Criminal Justice Services (grant # 96-JJ-SI1-0681). The larger project involved pre-testing offenders with a large number of measures to assess a broad array of variables (e.g., attachment to parents and peers, details of their offense, trait anger, social skills, parental supervision, abuse history, family functioning, family structure) before entering a recently developed
treatment program. Because this pre-testing occurred as part of the treatment program, parental consent for participation is not required. Human subjects approval was gained for the use of archival data from the Children’s Hospital Institutional Review Board (protocol #99HSE014).

Measures

Inventory of Parent and Peer Attachment (IPPA, Armsden & Greenberg, 1989)

The IPPA is a 75 question instrument consisting of three scales for each parent and peers (9 scales total). The scales include Trust, Communication, and Alienation, which were derived from factor analysis of the original version of the questionnaire which assessed mother and father together (Armsden & Greenberg, 1987). The trust scale is represented by items such as, “My mother/father/friends respect(s) my feelings.” Communication items such as, “I like to get my mother/father/friends’ point of view on things I’m concerned about,” reflect the amount of spoken communication between the respondent and his/her mother, father, and close friends. The alienation scale reflects the respondent’s feelings of anger and interpersonal isolation about his/her parents and friends (e.g., “I wish I had a different mother/father/friends”). Respondents rate each of the items on a five point Likert scale (almost never or never true to almost always or always true).

The reliability and validity data is reported for the 1987 version of the IPPA (Armsden & Greenberg, 1987), which did not assess attachment to mother and father separately. The intercorrelations of the six scales (trust, communication, and alienation for parents and peers) ranged from .22 to .76 (Armsden & Greenberg,
A composite score was computed by summing the trust and communication scales and subtracting the alienation scale. Internal consistency coefficients of .91, .91, and .86 were reported for the trust, communication, and alienation parent scales. Peer subscales demonstrated alpha coefficients of .91, .87, and .72 for the trust, communication, and alienation scales (Armsden & Greenberg, 1987). Papini, Roggman, and Anderson (1991) reported Cronbach alphas of .89 and .88 for the mother and father subscales with for the version of the measure assessing mother and father attachment separately.

Three week test-retest reliabilities of .93 and .86 were reported for the parent and peer attachment composite scores (Armsden & Greenberg, 1987). Armsden and Greenberg (1987) found evidence of validity in significant correlations between IPPA parent attachment scores and levels of family support, conflict, and cohesiveness. Parent and peer attachment as measured by the IPPA was also significantly predictive of self-esteem, life satisfaction, depression and anxiety.

Social Skills Rating System (SSRS; Gresham & Elliot, 1990)

The SSRS includes 39 self-report items which form four scales, cooperation, assertion, empathy, and self control. Participants respond to each item (e.g., I make friends easily) by reporting how often they do the behavior described (Never, Sometimes, or Often) and how important the behavior is to their relationships with others (Not important, Important, Critical). Ratings of how often participants engage in the behavior is used in the scoring of this measure.
The cooperation scale includes behaviors such as helping others, sharing, and complying with rules. Assertion is represented by items such as asking others for information, introducing oneself, and responding to the actions of others appropriately. Empathy assesses the extent to which the respondent engages in behaviors that show concern and respect for others. Lastly, self-control focuses on behaviors that emerge in conflict situations (e.g., responding to teasing appropriately) and non-conflict situations (e.g., sharing, compromising).

The SSRS student form was standardized on a national sample of 4,170 children in 1988. The sample of 1,770 seventh through twelfth graders demonstrated internal consistency ratings (i.e., coefficient alphas) of .69 (cooperation), .67 (assertion), .77 (empathy), .68 (self-control) and .83 for the total scale. The SSRS manual reports test-retest coefficients and validity information for the only elementary sample. Four week reliability coefficients ranged from .52 to .66 for elementary students. Validity was assessed by examining the relationship between the SSRS and the Child Behavior Checklist-Youth Self Report (YSR) as well as the relationship between the SSRS and the Piers-Harris Children's Self-Concept Scale (PHCSCS). The strongest relationships (i.e., inverse relationships) were found between the SRSS scales and the externalizing scale of the YSR. With regard to the PHCSCS, moderate, positive correlations were noted between the SRSS scales and the behavior and intellectual and school status subscales of the PHCSCS (Gresham & Elliot, 1990).
The AMOQ is a self-report questionnaire designed to gather information about sexual offending. It was developed with input from sexual offenders, victims, and professionals in the areas of offender treatment, victim treatment, law enforcement, and sexual abuse prevention. For the present project, the measure was administered in two parts.

The first part contains a demographic section, gathering information about the offenders' criminal history and details about his victims and sexual offenses. The second section of this part constitutes the majority of items and specifically measures offenders' modus operandi (MO). The MO section of the questionnaire assesses behavior along a time continuum that includes targeting and selection of potential victims, gaining victims' trust, gaining compliance with sexual activity, and maintaining victims' silence after the onset of the sexual crime. Participants rate each item on a 7-point Likert scale from 'Never' (0) to 'Always' (6) to describe the frequency with which they engaged in each specific behavior.

Principal axis factor analysis of four of the eight primary content areas in a sample of 350 adolescent sex offenders yielded the scales presented in table 2 (Kaufman, Daleiden, & Hilliker, 1996). Sample items for each of the MO scales are also presented in table 2. Internal consistency estimates (i.e., Cronbach's alpha coefficients) were good to excellent for each of the MO scales in the present sample (see table 2). The second part of the AMOQ contains items regarding the offenders' own victimization and/or sexual involvement with older partners.
**Procedure**

Adolescent offenders completed a broad array of measures as part of a battery of pre-test measures before entering a treatment program. All measures to be utilized in the present study were administered in group format (i.e., 12-18 adolescents in a group). While data collection for the entire project was accomplished in two phases, the present study will examine data collected in the first phase only.

The first phase of data collection included the first part of the AMOQ (i.e., demographics and MO behaviors), the IPPA, the SSRS, and a number of other measures in the pre-test battery. At the start of the data collection session, trained research assistants reviewed the purpose of the testing (i.e., pre-testing) and assured the adolescents of confidentiality by explaining that the staff at Riverview would not have access to their responses. Research assistants explained the instructions for each measure to the offenders before administering each measure. Adolescents were divided into groups based on their reading levels, as rated by their school teachers. Adolescents with estimated reading levels at or above the sixth grade were permitted to complete the questionnaires independently after instructions were reviewed. However, research assistants were available to answer any questions about the measures they arose. For those with reading levels below the sixth grade, offenders with advanced reading skills were identified by the staff at Riverview and read the questionnaires to the low-level readers. Research assistants circulated through the groups, answering questions and insuring appropriate administration of
the measures. This procedure (i.e., advanced offenders reading to non-readers) was recommended by the staff at the facility. The staff indicated that the offenders would be more comfortable and more honest if their peers, as opposed to the research assistants, read the questionnaires to them.

Hypotheses & Data Analysis

1) Attachment to parents will be positively related to attachment to peers and social skills.

   a) Significant positive correlations will be observed between the composite attachment score for mother and

      i. the composite score for attachment to peers.

      ii. the four subscales of the SRSS (i.e., cooperation, assertion, empathy, & self control) and the total social skills score.

   b) Significant positive correlations will be observed between the composite attachment score for father and

      i. the composite score for attachment to peers.

      ii. the four subscales of the SRSS (i.e., cooperation, assertion, empathy, & self control) and the total social skills score.

2) Attachment to peers will be positively related to social skills. Significant positive correlations will be observed between the composite attachment score for peers and the four subscales of the SRSS (i.e., cooperation, assertion, empathy, & self control) and the total social skills score.
3) Offenders with victims four or more years younger than the offender will
demonstrate lower scores on measures of attachment to parents, attachment to
friends and social skills than offenders whose victims are older than the
offender or within two years of the offender's age.

a) Multivariate Analysis of Variance (MANOVA) will be conducted utilizing
two groups of adolescents (based on age difference between victim and
offender) as the independent variable and the three subscales of the IPPA
(i.e., trust, communication, and alienation) and the composite attachment
score for mother will serve as the four dependent variables.

b) MANOVA will be conducted utilizing two groups of adolescents (based on
age difference between victim and offender) as the independent variable and
the three subscales of the IPPA (i.e., trust, communication, and alienation)
and the composite attachment score for father will serve as the four
dependent variables.

c) MANOVA will be conducted utilizing two groups of adolescents (based on
age difference between victim and offender) as the independent variable and
the three subscales of the IPPA (i.e., trust, communication, and alienation)
and the composite attachment score for peers will serve as the four
dependent variables.
d) MANOVA will be conducted utilizing two groups of adolescents (based on age difference between victim and offender) as the independent variable and the four subscales of the SSRS (i.e., cooperation, assertion, empathy, and self-control) and the total social skills score as the five dependent variables.

4) Offenders who report the use of overt force or physical coercion and/or threats of force to gain victims’ compliance in the sexual activity and prevent disclosure of the abuse will demonstrate lower scores on measures of attachment to parents, attachment to peers and social skills than offenders who do not report the use of overt force and/or threats.

a) MANOVA will be conducted utilizing two groups of adolescents (based on their self-reported use of overt force and threats) as the independent variable and the three subscales of the IPPA (i.e., trust, communication, and alienation) and the composite attachment score for mother will serve as the four dependent variables.

b) MANOVA will be conducted utilizing two groups of adolescents (based on their self-reported use of overt force and threats) as the independent variable and the three subscales of the IPPA (i.e., trust, communication, and alienation) and the composite attachment score for father will serve as the four dependent variables.
c) MANOVA will be conducted utilizing two groups of adolescents (based on their self-reported use of overt force and threats) as the independent variable and the three subscales of the IPPA (i.e., trust, communication, and alienation) and the composite attachment score assessing attachment to peers will serve as the four dependent variables.

d) MANOVA will be conducted utilizing two groups of adolescents (based on their self-reported use of overt force and threats) as the independent variable and the four subscales of the SSRS (i.e., cooperation, assertion, empathy, and self-control) and the total social skills score as the dependent variables.

5) Offenders adjudicated for more severe, felony one offenses will demonstrate lower scores on measures of attachment to parents, attachment to peers and social skills than offenders who were adjudicated on less severe, felony three or felony four offenses.

a) MANOVA will be conducted utilizing two groups of adolescents (based on their felony status) as the independent variable and the three composite scales of the IPPA (i.e., attachment to mother, attachment to father, and attachment to peers) as the dependent variables.

b) MANOVA will be conducted utilizing two groups of adolescents (based on their felony status) as the independent variable and the four subscales of the SSRS (i.e., cooperation, assertion, empathy, and self-control) and total social skills score as the dependent variables.
Group Selection

To examine differences between offenders who assaulted victims much younger themselves and offenders who assaulted victims close to their own age, two groups of offenders were created by selecting participants based on their self-report of their own age and their victims' age(s) at the time of each offense. Two pure groups were created by selecting only participants who indicated that all of their victims were either close to their own age (i.e., within two years, or older than the offender) or four or more years younger than the offender at the time of the offense. A total of 37 offenders met the criteria for having similar aged or older victims; while 70 offenders reported having much younger victims. The remaining offenders reported a mixture of victims, some close to their own age and some much younger. Thirty-seven (37) of the seventy offenders with much younger victims were randomly selected and matched for race with the 37 offenders with similar age and older victims. See figure 1.

The two groups based on the offenders' use of overt force or physical coercion and/or threats of force were formed by examining specific items of the AMOQ. The specific items considered appear in table 3. Offenders reporting 0s (i.e., the strategy was never used) on every item were considered for the no-force/coercion group. Offenders reporting a minimum of 3 (i.e., the strategy was sometimes used) on one or more of the coercion variables were eligible for the force/coercion group. A total of 56 participants indicated a rating of three or higher on at least one force/coercion item, comprising the force/coercion group. A total of
108 offenders reported 0s on all force/coercion variables. Fifty-six offenders were randomly selected from the 108 and matched for race with the fifty-six offenders of the force/coercion group.

To create the two groups based on adjudicated felony status, records provided by the Department of Youth Services were reviewed to determine each offender's felony level for the crime for which he was currently incarcerated. A total of 107 offenders had been adjudicated for felony one offenses, fourteen had been adjudicated for felony two offenses, 38 for felony three offenses, and 23 for felony four offenses. To maximize sample size and compare the most extreme groups, felony three and four offenders were collapsed into one group of 61 offenders to form the felony three/four group. Sixty-one (61) offenders were then randomly selected from the felony one group and matched for race with the felony three/four group.
CHAPTER 3

RESULTS

Data analysis software, SPSS, was used for data analysis. Frequencies, descriptive statistics, normality tests, and plots were used to evaluate the appropriateness of the data for the planned statistical analyses. Values greater or less than one and one half of the interquartile range were identified as outliers by SPSS. Data points recognized as outliers were modified to within one value of the highest/lowest point not identified as an outlier. The Kolmogorov-Smirnov test was used to evaluate normality. This test indicated that a majority of the variables under consideration were skewed in the negative direction. These variables were reflected and a log transformation was performed. It should be noted that the reflection procedure results in a reversal of the scale values (e.g., high values indicate a low score and low values indicate a high score). It should also be noted that normality was evaluated separately for the separate data sets utilized in the specific analyses.

Examination of the data also revealed missing data points for twenty-seven (27) of the one hundred and eighty two (182) offenders on the attachment to father variables. Instead of deleting these participants from the analyses, the missing data were replaced by the lowest reported score in the sample on the composite father
attachment, father trust, and father communication scales. For father alienation, the highest reported score in the sample was substituted. Thus, those who indicated an absence of a father figure automatically received a "low" attachment score.

**Attachment & Social Skills Correlations**

As noted above, many of the scores were reflected and transformed to compensate for the non-normal distribution. For the correlational analyses, all scales except for the Total Social Skills score were reflected and transformed. Note that when two reflected scores are correlated, the sign of the resulting correlation is not affected. However, when correlating a reflected score with a non-reflected score, the observed correlation will actually represent a directional effect opposite to the stated sign (i.e., a positive correlation will indicate a negative relationship and a negative correlation will indicate a positive relationship).

The hypothesized positive relationship between attachment to parents and attachment to peers was supported by the significant Pearson product correlation coefficients. The composite attachment score to mother was significantly correlated to the composite attachment score for peers, $r(182) = .408$, $p = .000$. Likewise, a significant positive correlation was also observed for the composite attachment score for father and attachment to peers of $r(182) = .277$, $p = .000$. Attachment to mother and father were also correlated, $r(182) = .515$, $p = .000$.

Significant correlations between the composite attachment score for mother and three of the subscales of the SRSS were observed: Assertion, $r(181) = .248$, $p = .00$; Empathy, $r(181) = .220$, $p = .001$; and Self Control, $r(181) .200$, $p = .004$. 71
The correlation between the attachment score for mother and the Total Social Skills score was also significant, $r(181) = -0.256, p = .00$. This negative value indicates a positive relationship between attachment to mother and social skills. The Assertion subscale was the only social skills scale to attain statistical significance in relationship to attachment to father $r(181) = .168, p = .012$.

The composite attachment score for peers was significantly correlated to all four subscales of the SRSS, Cooperation, $r(181) = .203, p = .003$; Assertion, $r(181) = .353, p = .000$; Empathy, $r(181) = .434, p = .000$; and Self Control, $r(181) = .189, p = .005$, as well as the non-transformed Total Social Skills score, $r(181) = -0.343, p = .000$.

To further delineate the relationship between parental/peer attachment and social skills, partial correlations were computed. A regression analyses, predicting total social skills from attachment to mother and attachment to peers was computed. Results indicated that both variables had a significant and unique impact on social skills. Attachment to friends, though, demonstrated a stronger relationship with social skills than did attachment to mother, evidenced by the partial correlation coefficients (mother attachment and social skills, $p_r = -0.137$; friend attachment and social skills, $p_r = -0.271$).

**Victim-Offender Age Difference Analyses**

To evaluate the hypotheses based on victim-offender age difference, two groups of participants were formed by selecting a) offenders who reported victims four or more years younger than the offender (younger victim group) and b)
offenders whose victims were either older than the offender or within two years of the offender's age (similar aged victim group). Offenders who reported both victims much younger than themselves, victims similar to their own age, or adult victims (i.e., older than 18 years old) were excluded from the following analyses. A line graph (see figure 1) shows the age victim–offender age difference for each participant in the final sample. Offenders with similar aged victims are shown on the left side of the graph and offenders with younger victims are shown on the right side of the graph.

A MANOVA was used to explore differences between these two groups in terms of their attachment to parents and peers and social skills. Offender group (i.e., younger victims, similar age victims) served as the independent variable for the following MANOVAs. All scales assessing attachment to mother were reflected and transformed, except for Alienation which was not reflected (i.e., it was positively skewed). When the three subscales (i.e., trust, communication, and alienation) assessing attachment to mother and the composite mother attachment score were entered as the dependent variables, a non-significant Wilks’ F resulted, F (4, 69) = .293, p = .88. All scales assessing attachment to father were also reflected and transformed, except for Alienation which was transformed but not reflected. When the three father attachment subscales (i.e., trust, communication, and alienation) and composite father attachment score were entered as the dependent variables, a non-significant Wilks’ F resulted, F (4, 69) = .69, p = .60. For attachment to friends, only the trust and alienation scales were transformed. A
MANOVA also indicated a non-significant, Wilks' F (4, 69) = .18, p = .95. Group means and standard deviations of the transformed and non-transformed variables are presented in table 4.

A MANOVA was also used to assess group (i.e., younger victims, similar age victims) differences in social skills. The Cooperation and Empathy subscales were reflected and transformed. Entering the four subscales of the SRSS as the dependent variable yielded a non-significant Wilks' F (5, 67) = .97, p = .446. Means for these variables are presented in table 5.

Use of Overt Physical Force/Coercion Analyses

A second set of MANOVAs was undertaken to examine relationships between offenders' use of physical force/coercion and/or threats in the offense and attachment to parents and peers and social skills. Two groups of offenders were formed by selecting offenders who reported the use of physical force and/or threats of force to gain their victims' compliance in the sexual activity and/or to prevent disclosure of the abuse (see Group Selection section of Method above) and offenders who did not report the use of overt aggression or threats toward their victims. The two groups (i.e., force/coercion, no-force/coercion) served as the independent variable in the following MANOVAs. All attachment to mother and father variables were transformed for the following analyses. In terms of attachment to friends, the Trust, Communication, and Alienation subscales were transformed.
When the three subscales and the composite attachment score to mother were entered as dependent variables, a non-significant Wilks' F (4,107) = 1.63, p = .173 was observed. A non-significant Wilks' F was also observed for the father attachment variables, F (4,107) = .393, p = .813. A MANOVA was also used to examine group differences (i.e., force/coercion, no-coercion) with respect to attachment to peers on the three attachment subscales and the attachment composite. A non-significant Wilks' F was observed, F (4, 107) = .802, p = .526. Means for the attachment variables are displayed in table 6.

A MANOVA utilizing the force/coercion, no-force/coercion independent variable was used to detect group differences on the four subscales of the SSRS. A non-significant Wilks' F was observed, F (5, 105) = .967, p = .441. These means are displayed in table 7.

Felonv Level Analyses

Finally, group differences on attachment and social skills based on the severity of the crime for which the offender was prosecuted were examined. Information regarding the offenders' level of felony (e.g., felony one, two, three, or four) was used to divide the sample into two groups. The severe offense group was included offenders who had been adjudicated for a felony one offense. The less severe offense group was consisted of offenders who had been adjudicated for either a felony three or felony four offense. Two MANOVAs were undertaken to assess group differences (i.e., more severe offense, less severe offense) in attachment to mother, father, and friends and social skills. In the first MANOVA,
the reflected and transformed attachment to mother and father composites and the attachment to friends composite was entered as the dependent variable. A marginally significant F statistic was observed, F (3,116) = 2.406, p = .071. The univariate tests indicated significant group differences for attachment to friends, F (1,118) = 4.77, p = .031. To interpret, the less severe offenders demonstrated better attachment relationships to their friends than did the offenders prosecuted with more serious offenses.

All of the social skills subscales, except for Assertion, were reflected and transformed; the total social skills score was not. When the social skills variables were entered as the dependent variable, a marginally significant Wilks' F emerged, F (5, 114) = 2.12, p = .068. Examination of the univariate tests indicated group differences for the Assertion, F (1, 118) = 6.30, p = .013; Empathy, F (1, 118) = 6.40, p = .013; and Total Social Skills scale, F (1, 118) = 5.10, p = .026. All effects were in the predicted direction, suggesting that offenders convicted of more serious offenses demonstrated lower levels of social skills than those convicted of less serious offenses. See table 8 for the means of the social skills and attachment variables.

**Normative Comparisons**

In addition to the planned analyses, a number of one sample t-tests were undertaken to examine differences in the current offender sample's self-report of attachment and social skills to that of non-sexual offenders self report of these variables. A study by Marcus and Betzer (1996), reporting means on the composite
attachment scores for mother, father, and friends for a sample of 72 sixth, seventh, and eight grade boys (mean age of 12.7 years) was used to compare scores on the IPPA. The sample in the Marcus and Betzer (1996) study was chosen for the one sample t-test because of the availability of separate means for boys and girls and the presentation of all three attachment composite scores (i.e., father, mother, friends). Three one sample t-tests were used to compare the sexual offender sample to the non-offender sample (Marcus & Betzer, 1996) on the composite attachment to mother, father, and friends scores. The two tailed t-tests revealed significant effects for attachment to mother, \( t(1, 181) = 3.05, p = .003 \) and attachment to father \( t(1, 181) = -4.70, p = .00 \). A marginally significant effect was found for attachment to friends, \( t(1, 181) = -1.84, p = .067 \). The means indicated lower attachment scores for the sexual offenders on the father and friends scales, but higher attachment to mother scores when compared with the sample reported in Marcus and Betzer (1996). Table 9 presents the mean attachments scores for the total sample of sexual offenders as well as non-offender samples reported in the Marcus & Betzer (1996) study and two additional studies of adolescent populations.

A one sample t-test was also employed to examine differences between the current sample of sexual offenders and a non-offender sample. The sexual offenders were compared to the normative sample reported by Gresham and Elliot (1990) in the SRSS manual. The SRSS manual presents separate means for girls and boys in each grade level. As 93% of the current sample was either in high
school or had completed high school, the means for boys in the ninth, tenth, eleventh, and twelfth grades were averaged to compare with the sexual offender sample. The t-test indicated a non-significant effect, $t (1, 180) = 1.034, p = .302$.

The means for the normative and sexual offender samples are presented in table 10.
CHAPTER 4

DISCUSSION

The present study was designed to examine the attachment relationships and social skills of incarcerated adolescent sexual offenders. One hypothesis of this study, that quality of attachment relationships to parents and peers would be positively correlated with offenders’ self-report of social skills, was based upon Marshall’s theory (1989, 1993; Marshall et al., 1993), linking parent-child attachment to sexual offending. In addition, it was hypothesized that attachment quality and social skills would be related to specific offense characteristics (e.g., victim-offender age difference, use of overt force). The following discussion includes interpretation of results in relationship to previous research, limitations of the current study, and implications for treatment, prevention, and future research.

The Relationship Between Attachment and Social Skills

The results of this study provide some support for Marshall’s model (1989, 1993; Marshall et al., 1993) of sexual offending. The significant correlations observed between attachment to parents and peers, as well as the significant relationship between parental/peer attachment and social skills are consistent with Marshall’s model, which suggests that inadequate parent-child attachment relationships lead to deficits in developing close peer relationships and deficits in
social skills during adolescence. Likewise, it was hypothesized that poor parental attachment relationships would be associated with lower levels of peer attachment and impaired social skills. As expected, attachment to mother was significantly correlated with attachment to father and friends, three of the four social skills subscales (i.e., empathy, assertion, self control), as well as the social skills composite. Attachment to friends demonstrated significant relationships with attachment to father, all four of the social skills subscales (i.e., empathy, assertion, self control, cooperation), and the social skills composite. In contrast, attachment to father was significantly related only to the assertion subscale of the social skills measure. In all cases, the direction of the correlations suggested that positive parental attachments accompanied positive peer attachment and greater social skills.

While significant correlations do not imply causality or a directional influence of attachment to parents on social skills, these findings represent an initial effort to establish a relationship between parent-adolescent relationships and adolescents' capacity to develop meaningful interpersonal relationships. These results are consistent with previous research which has shown associations between more secure attachment relationships and a number of variables including: greater self-esteem and sense of well-being (Armsden & Greenberg, 1987; Meyers, 1998), less depression and social anxiety (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Papini et al., 1991), the effective management of stress and anxiety (Meyers, 1998), academic motivation (Learner & Kruger, 1997), greater coping
resources (Brack, Gay, & Matheny, 1993), low levels of anti-social behavior (Marcus & Betzer, 1996), and healthy adjustment to college in undergraduate populations (Lapsley, Rice, & Fitzgerald, 1990).

Interestingly, while attachment to mother and father demonstrated a positive relationship, attachment to father was related to only one subscale of the social skills measure (i.e., assertion). Reflecting recent changes in family composition, the absence of a father figure was evident in the sample. While only one offender indicated that he had never had contact with a mother figure or female caregiver, 27 (15%) participants indicated the absence of a father or male caregiver in their lives. Instead of deleting these participants from the analyses, the missing data were replaced by the lowest reported score in the sample on the composite father attachment, father trust, and father communication scales. For father alienation, the highest reported score in the sample was substituted. Thus, those who indicated an absence of a father figure automatically received a "low" attachment score. In general, attachment to father was not substantially related to social skills. A somewhat similar finding was reported by Kobayashi and his colleagues (1995), suggesting that while bonding to mother was inversely related to sexual aggression, the same hypothesized relationship between bonding to father and sexual aggression was not observed. Likewise, the non-significant correlations in the present analyses suggest that social skills are more influenced by attachment to mother rather than the absence of the father.
It should be noted that the strategy of replacing father absent data with "low" attachment scores may have been partially responsible for the non-significant correlations. However, when father absent participants were deleted from the analyses, a similar pattern of non-significant correlations resulted. Thus, replacing father absent data with "low" attachment scores did not have a substantial effect on the findings and interpretation of results. At the same time, however, more research is certainly needed regarding the outcomes of a father absent home. This topic will be addressed once more in the limitation section of this paper.

In contrast to attachment to father, attachment to friends and attachment to mother showed a more substantial relationship with social skills (e.g., total social skills & mother, r = .256; total social skills & friends, r = .343). Partial correlations indicated that both mother and friend attachment contribute independently to the variance in social skills. In addition, friend attachment (r = .271) demonstrated a larger partial correlation with total social skills than did attachment to mother (r = .137). This relationship can be interpreted in terms of attachment to friends mediating the relationship between attachment to mother and social skills. The mediated model is consistent with attachment theory (Bowlby, 1973a, 1973b, 1988) as well as Marshall's theory (1989, 1993; Marshall et al., 1993), which stipulate that the quality of parental relationships will influence an adolescent's ability to develop and maintain meaningful peer relationships.
The specific scales tapped by the SSRS (i.e., empathy, assertion, self-control, cooperation) are of interest with regard to sexual offending theory. Adolescents’ self-report of empathy, assertion, and self-control was significantly related to attachment to mother and friends. Each of these constructs (i.e., empathy, assertion, self-control) is relevant to sexual offending.

First, the large body of research on offenders’ proposed empathy deficits and the inclusion of empathy training in sexual offender treatment programs has drawn much attention to the notion that empathy deficits may play a role in sexual offending. Research has demonstrated offenders’ deficits in general empathy (Hanson & Scott, 1995; Marshall, Champagne, Brown, & Miller, 1997; Marshall, Jones, Hudson, & McDonald, 1993; Marshall & Maric, 1996), as well as victim-specific empathy (McGrath, Cann, & Konopasky, 1998). Conclusions regarding empathy deficits are far from definitive, though, as some researchers (e.g., Monto, Zgourides, & Harris, 1998) have failed to detect empathy deficits in sexual offenders samples relative to non-offenders. Nevertheless, the observed relationship between empathy and attachment relationships is consistent with the literature on young children and maternal attachment which notes a lack of empathy in children who are insecurely attached (Kestenbaum, Farber, & Sroufe, 1989; Sroufe 1983). While it is beyond the scope of the present study and literature review, future research should examine the relationship between parental and peer attachment and the ability to demonstrate empathy in offender populations as well.
as adolescent, control populations. In conclusion, the results of this study and the previous attachment literature provide some evidence for a pathway to empathy deficits stemming from insecure parent attachment.

Next, the skills of socially acceptable assertive behavior and self-control were also associated with more secure maternal attachment in the current sample of sexual offenders. Rehabilitation of sexual offenders involves replacing maladaptive behaviors and cognitive distortions designed to meet personal needs (e.g., intimacy, sexual gratification) with socially appropriate behaviors. Offenders must learn to control their impulses, sexual and non-sexual (e.g., anger), as well as express their feelings or point of view in a manner that is not harmful to others. While these skills may naturally be developed within healthy family relationships (e.g., secure attachment), sexual offenders may lack exposure to healthy conflict management and the expression of negative feelings. However, the variance in attachment and social skills within the sexual offender population, as evidenced by the significant correlations, may indicate that a number of offenders do acquire some level of social aptitude based, at least in part, on positive attachment experiences.

In light of the observed variance in attachment relationships and social skills, treatment programs must be designed to be flexible, accommodating the needs and deficits of individual offenders. As discussed in more detail below, some offenders may possess well-developed social skills, enabling them to manipulate and deceive victims and caretakers. Additional research is necessary to
reveal alternative pathways to sexual offending taken by offenders who have experienced positive attachment relationships and report appropriate social skills.

Comparisons to Normative Samples

While the observed correlations between attachment and social skills imply at least some variance within the offender sample on these variables, it is also interesting to compare the means of adolescent sexual offender sample to more normative populations. One sample t-tests revealed significant differences on attachment to mother and father, and a trend for attachment to friends when comparing the sexual offenders to a sample of adolescent boys reported in Marcus & Betzer (1996). Surprisingly, the offenders in the current sample reported greater levels of attachment to mother than the adolescents in two of the three non-offender samples (see table 9). On the other hand, the offenders reported less attachment to father and friends than did the non-offender samples. Consistent with Marshall’s theory (1989; 1993; Marshall et al., 1993), we would expect to find impaired attachment father and friend attachment relationships relative to the non-offenders.

However, the finding of more secure attachment relationships with mothers reported by the sexual offenders is puzzling. As displayed in table 9, the mean attachment rating to mother for the sexual offenders was higher than two of the three attachment to mother ratings reported in three comparison samples. The exception is the one study utilizing undergraduate students (mean age of 18.7 years), who reported greater attachment to mother than the present sex offender.
sample (Brack et al., 1993). The mean age of offenders in the current sample (16.09 years) and the results of a study by Papini and his colleagues (1991) may provide one plausible explanation for the puzzling finding. Papini and his colleagues (1991) reported a slight increase in attachment to mother associated with pubertal status for males. That is, as the males approached and passed through puberty, attachment scores to mother increased. The current sample of sexual offenders were approximately three and one half years older than the male adolescents in the Marcus and Betzer study (1996). Thus, the more advanced developmental stage of the offenders in the current study may have contributed to their inflated attachment to mother scores.

In addition, given that attachment to father and friends was relatively lower than the normative samples, the offenders may view their mother as the only responsive figure in their lives and overestimate the quality of their relationship with her. This may be especially true of offenders who completely lack a father figure. Similarly, as Kobak and Sceery (1988) and Main and her colleagues (1985) indicate, some young adults and possibly adolescents have difficulty accepting and coming to terms with tumultuous family relationships. Hence, they may be hesitant to openly report less than ideal relationships with their mothers.

On the other hand, adolescents who lack a father figure may actually become more strongly attached to their mother than adolescents who have two available parents with which to develop relationships. For example, adolescents who have poor or non-existent relationships with their fathers may spend more time
with their mothers and develop a stronger bond. Gathering more objective 
attachment data (e.g., non-self-report, less face valid) would help to elucidate 
whether offenders over-estimate the quality of their maternal relationships or 
whether some offenders accurately report an intense mother-child attachment bond.

With regard to social skills, no differences were observed when comparing 
the sexual offenders to the normative samples of male adolescents in grades nine 
through twelve reported in the SRSS manual (Gresham & Elliott, 1990). This is 
quite surprising given the assumption of deficient social skills in sexual offender 
populations and the emphasis placed on social skills training in treatment programs. 
This finding may imply that sexual offenders are not actually deficient in their 
social skills. On the other hand, offenders may lack social skills, but the specific 
measure utilized to assess social skills (i.e., SRSS) in the present study may not 
have adequately assessed offenders' actual level of social competency. Both of 
these possibilities are discussed in more detail below. In summary, the sexual 
offenders in the sample did not report lower levels of social skills and more 
impaired mother attachment relationships than non-offender population.

Do Attachment Relationships & Social Skills Vary by Offense Characteristics?

In addition to examining the relationships between attachment and social 
skills variables and comparing offender and non-offender samples, this study was 
designed to examine differences within the offender sample. As Ward and his 
colleagues (1995) point out, offenders differ in their attachment and interpersonal 
experiences. Specific attachment and social skills deficits are hypothesized to
result in distinctive patterns of sexually offensive behavior. Similarly, in the present study, it was hypothesized that offenders who sought out younger victims who would be easier to manipulate, engage in the sexual activity, and maintain their silence about the abuse would report the most severely impaired attachment relationships and social skills. On the other hand, more socially skilled offenders might be able to manipulate and engage their peers in sexual activity. It was also predicted that offenders, who employed coercion and threats to force their victim into sexual activity, would report less secure attachment experiences and lower levels of social skills; whereas offenders using less overt coercion and more prosocial grooming strategies with their victims would be more socially adept. Finally, it was hypothesized that offenders adjudicated on more serious, felony one offenses (e.g., rape, attempted murder, kidnapping) would report lower levels of attachment and more deficient social skills than offenders adjudicated on less serious felony three or four offenses (e.g., gross sexual imposition, domestic violence, sexual battery).

Results of this study indicated marginally significant effects for the attachment variables based on offenders’ felony classification. Offenders adjudicated for more serious crimes demonstrated lower attachment to friends scores than did the offenders convicted of less serious crimes. Marginally significant effects were also noted for the social skills variables. Again, offenders convicted of more serious crimes reported lower level of social skills on the assertion, empathy, total social skills scales. The felony distinction is based upon
variables such as use of overt force or violence, extent of injury to the victim, age
of the victim, and occurrence of penetration. As such, the most egregious crimes
which involve overt force, young victims, and any type of penetration, such as rape,
attempted murder, and kidnapping are considered more severe offenses and are
labeled, felony one. On the other hand, crimes considered to be less severe (e.g.,
domestic violence, gross sexual imposition, and sexual battery) are more likely to
be categorized as felony three or four.

While the analyses indicated only marginally significant effects, the pattern
of means suggest that offenders convicted of more violent and atrocious crimes
have greater difficulty engaging in relationships with their peers. These offenders
are likely to be more socially isolated and socially inept than offenders convicted of
less "violent" crimes, which should be an important consideration in treatment and
post-treatment planning. This finding may help to explain how the most violent
offenders come to regard their victims as objects, not living, feeling human beings.
The failure to obtain gratification and positive affect from interpersonal
relationships certainly places one in a situation where objectifying people and
ignoring their pain becomes effortless.

We must be cautious in interpreting these results; however, as the crime of
which an offender is convicted is not necessarily an accurate representation of the
offense he committed. Features of the justice system, such as plea bargaining, prior
legal record, and skill of the defense lawyer often result in official charges that do
not always reflect the actual crime committed. Hence, distinctions made from the
legal record (i.e., felony categorization) may not capture the true construct of offense severity. This may help account for the effect not quite reaching statistical significance (p < .05).

Likewise, a more substantial effect may have been noted in a sample of offenders charged with a more diverse array of sexual crimes. As a juvenile, commitment to an incarceration facility occurs in response to very serious and/or repeat sexual offenses. In comparison, adolescents committing less severe sexual offenses (e.g., fondling, clothed, simulated intercourse) are likely to receive probation and court-ordered, outpatient treatment. Consequently, this study failed to include a large proportion of offenders adjudicated for felony four offenses. This problem is apparent as the majority (107) of offenders in the sample were adjudicated for felony one offenses. While a small proportion of offenders could be classified as felony four, the least severe offenses were probably not represented in the current sample because offenders committing the crimes are not likely to be incarcerated.

Analyses were also conducted to examine group differences based on the age difference between the victim and offender and the use of overt physical force and coercion in the offense. However, the IPPA and the SRSS failed to distinguish offenders choosing younger victims from offenders choosing similar aged or older victims. Likewise, these measures did not differentiate offenders who reported the use of threats and/or overt physical coercion in their offense from those who
reported that they did not use threats or overt force. The absence of group differences may be entangled in a number of statistical, methodological, and theoretical issues.

**Statistical Issues**

First, power analyses indicated that with the number of participants and observed effect size, the likelihood of observing a true effect as statistically significant ranged from .09 to .49. While the relatively small differences in means between the comparison groups cannot be discounted, the modest cell sizes (e.g., 37 in the victim-age analyses and 56 in the coercion analyses) also contributed to diminished statistical power. Thus, it is possible that group differences do exist on the measured variables, but were not revealed as statistically significant differences due to insufficient sample sizes. Replication of this study with larger sample sizes is needed before definitive conclusions can be drawn.

**Methodological Issues**

One methodological concern involves the instruments utilized to assess the constructs of attachment and social skills. The IPPA was used to assess attachment to parents and peers. This measure is based on Bowlby’s (1982) attachment framework and measures the amount of psychological security experienced by the individual in his relationships with parents and peers. The concept of psychological security is reflected in the three dimensions of communication, trust, and alienation, which are all elements of secure attachment. Thus, scores on this measure represent more or less secure attachment relationships (i.e., high scores on
communication and trust reflect more secure attachment and high score on alienation reflect less secure attachment). In contrast, measures used by others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987) differentiated qualitatively distinctive attachment types (e.g., preoccupied, dismissive, fearful), based on respondents view of themselves and others. Previous research with sexual offender populations have found differences in offense characteristics based on these categories of attachment (Bumby & Marshall, 1998; Ward et al., 1995; Ward et al., 1997).

As mentioned in the literature review, Bumby and Marshall used Bartholomew and Horowitz’s Relationship Questionnaire (1991) inquiring about important current relationships. In Bumby and Marshall’s study (1998), the sexual offenders were more likely to endorse the fearful-avoidant style, while the non-sexual offending delinquents were more likely to endorse the dismissive-avoidant style. Over the entire group of offenders, those with fearful-avoidant, insecure attachment styles reported less competence in heterosocial interactions and greater levels of anxiety in social-sexual situations than did offenders with secure and the alternative insecure attachment styles (i.e., fearful-dismissive, preoccupied). Thus, qualitative differences in attachment type (e.g., secure, preoccupied) may be more relevant to offense characteristics than amount or level of secure dimensions (e.g., communication, trust).
Related to the hypotheses regarding offenders' use of coercion in this study, Bookwala and Zdaniuk (1998) demonstrated that undergraduates reporting aggression within their dating relationships more strongly endorsed preoccupied and fearful attachment styles than those not reporting aggression in their relationship. Hence, the resulting schemas (i.e., view of self and others) of insecure attachment may be especially important in differentiating offense characteristics.

The IPPA, on the other hand, taps the amount of psychological security experienced by the adolescent, as opposed to the specific aspects of insecure attachments that may contribute to distinctive patterns of sexual offending.

In addition, a glaring difference between the IPPA and other measures of attachment relationships is the source of attachment on which the instrument focuses. While two of the three major scales of the IPPA examine relationships with parents, respondents completing the Relationship Questionnaire are asked about their romantic relationships or relationships “in general” (Bookwala and Zdaniuk, 1998; Bumby & Marshall, 1998; Ward et al., 1995). While parental attachments are theorized to provide a template for future relationships, it is likely that numerous other environmental factors influence romantic or other types of relationships that develop during adolescence and adulthood. As previous research has demonstrated (Bumby & Marshall, 1998; Ward et al., 1995), it may be that these relationships influence sexual offense characteristics, while parental
relationships do not. And at this time, empirical research directly linking childhood, parental attachment to adolescent and adult attachment relationships is lacking.

While the direct relationship between children’s parental attachments and later adult attachment is unclear, an interview measure developed by George, Kaplan, and Main (1996), the Adult Attachment Interview (AAI) was designed to assess attachment in adults. This measure is based exclusively on retrospective reports of their childhood attachment relationships. Respondents are asked to provide descriptions and evaluations of their childhood attachment relationships, loss of attachment figures, and the influence of these experiences on the individual’s personality (Main, 1996). Unlike other methods (i.e., paper and pencil questionnaire), the interview format allows researchers to probe respondents for specific examples or memories to support their reported descriptions of childhood relationships.

Classification into four categories (i.e., secure-autonomous, dismissing, pre-occupied-entangled, unresolved-disorganized) is based upon the individual’s ability to provide a coherent and internally consistent description of early attachment experiences. Classification, then, is not solely dependent on the quality or evaluation of the relationship the individual presents. For example, an individual providing a description of unfavorable childhood attachment relationships would be judged as secure-autonomous if his/her presentation was internally consistent, relevant, and concise. In contrast, a respondent describing his relationship with
parents in positive terms, but later contradicting the positive evaluation with inconsistent evidence or claiming a lack of memory, is classified as dismissing (Main, 1996). While research has not examined response patterns on the AAI relative to the respondents own attachment classifications in infancy, strong correspondence has been observed in a parent’s AAI classification and that parent’s infant’s Strange Situation response (Beniot & Parker, 1994; Van Ijzendoorn, 1995).

Importantly, the classification criteria used with the AAI preclude the influence of social desirability and circumvent issues of face validity. In contrast, the items on the IPPA are profoundly face valid. Respondents who do not want to divulge or have not come to terms with an unfavorable attachment experience will find it easy to portray their experiences as positive on the IPPA. In comparison to the IPPA, Bartholomew and Horowitz’s Relationship Questionnaire (1991), allows respondents to rate themselves on how well each of the four attachment types (i.e., secure, preoccupied, dismissing, fearful) describe their relationships with others. This format may not be as vulnerable to social desirability because respondents are not asked to make emotionally laden judgments about their relationships with specific and significant people in their lives. Additionally, the descriptions of the attachment categories are phrased such that none of them appear overly negative, partially averting the influences of social desirability. Finally, Bartholomew and Horowitz (1991) provide concurrent validity evidence by demonstrating that
respondents' self-ratings on the Relationship Questionnaire correspond reasonably with semi-structured interview responses about their relationships and friends' reports of the respondent’s personal and relationship characteristics.

In summary, characteristics of the IPPA, namely, inherent face validity and potential for effects of social desirability may have resulted in respondents portraying their attachment relationships in an overly positive light, thereby masking differences between groups. In contrast, measures such as the Relationship Questionnaire (Bartholomew & Horowitz, 1991) and the AAI (George et al., 1996) are constructed to avoid such shortcomings. A future study employing these measures along with more obvious attachment measures (e.g., IPPA) would help determine the extent to which face validity and social desirability influence responding.

The SRSS was utilized to measure the construct of social skills. Similar to the difficulties encountered with the IPPA, the self-report nature of the measure allows for the influence of social desirability on the self-ratings. On the other hand, offender's perceptions of their own social skills and interactions may be overly positive. Without a measure of social desirability it is difficult to determine whether respondents intentionally reported inaccurate information or whether their perceptions of their own social interactions are positively skewed. The use of a multi-method approach, that is, employing a combination of self-report and teacher, parent, and peer reports along with observing adolescents' social interactions would have provided a more reliable index of social skills.
Theoretical Issues

While the failure to detect the hypothesized group differences has been discussed in terms of specific statistical and methodological features of the current study, a number of theoretical issues relevant to Marshall’s (1989, 1993) theory of sexual offending also merit attention. The notion that attachment relationships influence sexual offending is largely based on an assumption of continuity between childhood parental attachment, adolescent parental/peer/romantic attachment, and adult romantic/peer attachment. While contemporary studies (Bumby & Marshall, 1998; Ward et al., 1995; Ward et al., 1997) have elucidated specific patterns of sexual offending corresponding to various peer and romantic attachment classifications, research has yet to demonstrate continuity from infant attachment patterns to parents to adolescent or adult attachment patterns. Additionally, the role of social skill deficits in sexual offending has yet to be definitively clarified.

Attachment Continuity

The research literature is abundant with studies linking secure infant and childhood attachment and positive parent-child relationships with outcomes such as greater displays of social competence, empathy, and ego-resilience in preschool and kindergarten children (Arend, Gove & Sroufe, 1979; Kesterbaum, Farber, & Sroufe, 1989; Pianta, Nimetz, & Bennett, 1997; Suess, Grossmann, & Sroufe, 1992; Wartner, Grossmann, Fremmer-Bombik, & Suess, 1994). Jacobsen and Hofmann (1997) have demonstrated that attachment quality at age seven predicted security about one’s self and grade point average at ages nine, twelve, and fifteen.
Conversely, insecure attachments are routinely associated with disruptive and aggressive behavior problems in later childhood (Erickson et al., 1985; Rothbaum, Rosen, Pott, & Beatty, 1995; Shaw, Owens, Vondra, & Keenan, 1996; Shaw & Vondra, 1995). As far as continuity of attachment patterns, only a handful of studies have demonstrated relatively stable maternal attachment patterns from infancy to up to six years of age (Main & Cassidy, 1988; Main et al., 1985; Wartner et al., 1994). McCormick and Kennedy (1994) provide some evidence for the continuity of infancy attachment into adolescence with retrospective accounts of childhood attachment patterns. Longitudinal studies, however, of the continuity of childhood attachment into adolescence and adulthood are non-existent.

While attachment theory and Marshall’s model infer relative continuity between childhood and adult attachment style, retrospective studies linking adult and childhood attachment patterns do not provide overwhelming evidence for this inference. In their study of adult sexual offenders, Smallbone and Dadds (1998) indicated only moderate correlations between adult and childhood attachment relationships. For example, a correlation of .35 (p<.01) was observed between secure childhood attachment to mother and secure adult attachment as well as between anxious childhood and adult attachment. Avoidant childhood attachment and avoidant adult attachment were also moderately correlated, r = .28. Surprisingly, none of the paternal childhood attachment styles were significantly related to their corresponding adult attachment styles.
Hazan and Shaver (1987) did note some reasonable group differences in participants retrospective descriptions of their childhood parental relationships based on adult attachment categorization. Yet, evidence for continuity was not clear-cut, especially when examining the younger adult sample of undergraduates. It was discovered that the younger avoidant subjects in the newspaper sample as well as undergraduate sample described their relationship with and between their parents as more positive than the older, avoidant sample. This finding is consistent with the notion that avoidant adults and college students may describe relationships with their parents in overly positive terms to avoid directly confronting the negative feelings associated with poor relationships (Kobak and Sceery, 1988; Main et al., 1985). The unintentional and/or deliberate distortion of retrospective reports highlights the complexity of assessing interpersonal relationship characteristics with self-report measures.

It is reasonable to hypothesize that attachment relationships are not set in stone and are malleable to environmental influences. Research is certainly needed to determine how stable attachment relationships are and what specific environmental influences may result in moving from a secure to insecure attachment and vice versa. One group of researchers has investigated the influence of family changes and the availability of important attachment figures on adolescents’ emotional and behavioral functioning (Stein, Marton, Golombek, & Korenblum, 1994). Stein and his colleagues noted emotional and behavioral problems in late adolescence associated with family changes that threatened the
availability of important attachment figures. Thus, we see that family changes
interrupting attachment relationships do indeed have psychological sequel.

In summary, recent investigations involving sexual offenders have noted
differences in offense patterns, emotional, and behavioral functioning based upon
peer and romantic attachment relationships (Bubmy & Marshall, 1998; Ward et al.,
1995; Ward et al., 1997). To strengthen Marshall’s theory and bridge the gap
between childhood and adult attachment, it would be helpful to develop a
framework based upon the childhood and adolescent parental relationships of
individuals identifying with the various categories of romantic/adult attachment.
Generating accurate descriptions of the childhood attachment and the intervening
life experiences associated with the specific categories of adult attachment would
provide support to the theoretical model connecting inept childhood attachment
experiences to later emotional difficulties, social relationship deficits, and
ultimately sexual offending.

*Deficits in Social Skills*

The results of this study failed to confirm the hypotheses concerning
differences in social skills based on victim-offender age difference and offenders’
use of overt coercion/aggression. Even more surprisingly, though, was the
strikingly similar self-reports of social skills for the offender and normative
(Gresham & Elliot, 1990) samples. Descriptive reports describing sexual offenders
as lacking in interpersonal skills, socially isolated, and rejected by their peers (e.g.,
Fehrenbach et al., 1986; Groth, 1977; Kahn & Lafond, 1988; Tingle et al., 1986)
led to the notion that sexual offenders are especially deficient in social skills, and that this deficit may contribute to the etiology of offending. Some empirical studies have maintained the deficient social skills notion. For example, Katz (1990) reported that adolescent child molesters perceived themselves as more socially inadequate than non-sexual offending delinquents. Additionally, behaviorally based studies have indicated deficits in heterosocial skills in adult child molesters (Overholser & Beck, 1986; Segal & Marshall, 1985). Interestingly, Segal and Marshall (1985) reported that the child molesters scored lower on self-ratings of social skill after a hetero-social interaction than rapists. On the other hand, Overholser and Beck (1986) noted deficits in hetero-social skill rated by behavioral observations in both child molesters and rapists. Keltner, Scharf, & Schell (1978) reported that adult rapists demonstrated deficits in appropriate social skills on a behavioral measure in comparison to non-incarcerated control participants. The deficits were most often revealed as shy, passive, and withdrawn behavior.

Mothers' reports of peer relationships have been found to differentiate juvenile sexual offenders from non-delinquent controls (Blaske et al., 1989). In contrast, self-report instruments used with adolescent offenders have failed to discriminate juvenile child molesters, juvenile rapists, non-sexual violent offenders, and non-sexual status offenders on assertiveness, perceived ability to develop peer relationships (Ford & Linney, 1995).
In general, empirical findings are far from conclusive regarding social skills of sexual offenders. The adult literature has recognized and explored theoretical differences in the social skills of rapists as opposed to child molesters. Similarly, Ford and Linney (1995) made specific predictions regarding the social skills of juvenile child molesters and juvenile rapists (i.e., juvenile rapists would report greater social skills). However, statistically significant differences were not noted across any of the offender or control groups.

The implicit assumption that juvenile child molesters are socially isolated and in need of remediation in the area of social skills has led to the widespread inclusion of social skills components in treatment programs (e.g., Becker et al., 1988; Kahn & Lafond, 1988; Knopp et al., 1997). From an etiological standpoint, theories, such as Marshall’s, that include a lack of social skills as one factor influencing the initiation and maintenance of sexual offending seem logical and reasonable. Nevertheless, one could conclude that the lack of consistent results in this area may indicate that juvenile child molesters are not deficient in social skills in comparison to normative and/or non-sexual offender delinquent populations, and that social skills deficits do not play an etiological role. Alternatively, the lack of consistent empirical evidence in support of a social skills deficit model may be a function of methods and measures utilized to measure social skills.

When self-report measures are employed, as in the current study, individuals’ perception of social skills are measured, not the behavioral skill itself. It is possible that offenders are truly are more deficient in social abilities, but don’t
perceive these deficits that are readily observable to others. Perhaps the inability to accurately assess one’s own behavior and the effect of one’s own behavior on others is a major component of sexual offenders’ deficits. Self-report measures, though, can not expose disparities between perceptions and actual behavior.

In contrast to self-report, observational methods of assessing social skills have repeatedly yielded results consistent with the social skills deficit model in other adult populations. Ratings made by trained observers in a contrived social situation may offer a more valid method of assessing skill level than self-report. Parent, teacher, therapist, and peer reports are also valuable sources of information about an offender’s social behavior in a naturalistic setting. The reports of parents, teachers, trained research observers, and others may provide more valid information about the offender’s actual skill level as well as revealing discrepancies in the offenders’ perception of his social behavior and actual performance. Hence, studies employing observational or multi-informant measures of social skills may reveal social skills deficits specific to sexual offenders (i.e., child molesters and/or juvenile rapists) that were not detected by self-report measures.

The interest in identifying etiological factors specific to sexual offending has led to studies designed to isolate variables that exclusively contribute to sexual offending. Thus, researchers have carefully designed their investigations utilizing incarcerated, non-sexual offending delinquents as a control group to determine whether a deficit in social skills is truly specific to sexual offending. However, the finding that incarcerated delinquents also display social skills deficits does not
preclude the notion that social skills deficits play an important role in the etiology and persistence of sexual offending. Sexual offenders may not be more socially inept than other delinquents, but additional factors (e.g., abuse, exposure to pornography or sex; biological influences) may lead some to sexual offending and others to more traditional delinquent acts.

It is also important to consider individual differences within the sexual offender population. While social skills deficits may accurately characterize and contribute to etiology for some offenders, we know that other offenders are socially skilled in manipulating victims, victim's caretaker, and/or his own parents (Kaufman et al., 1998). Hence, social deficits may be offender specific. The lack of a generalized deficit within the offender population certainly does not imply that social skills deficits fail to play a significant etiological role for at least some offenders.

Prevention & Treatment Implications

The results of the present study indicate that parent and peer attachment is significantly related to offenders' social skills. Additionally, offenders who commit the most violent and severe offenses reported the most deficient peer relationships and social skills. While the significant correlations do not imply information about directional causality, this link provides preliminary evidence in support of the role of parent relationships in modeling appropriate and satisfying social relationships within and outside of the family. In terms of preventing the initiation of sexually abusive behavior, educating professionals (e.g., doctors,
nurses, social workers, teachers) and parents about the importance of healthy parent-child relationships for later socially appropriate behavior may lead to increased attention to helping parents develop more secure relationships with their children and adolescents. In addition, identifying insecure parental attachment as a risk factor for sexually offending or anti-social behavior, in general, may give social service agencies cause to intervene even when the physical or sexual abuse of children is not apparent. Moreover, helping parents to develop healthy relationships and to model empathy and responsiveness with their children/adolescents will not only give children models for future relationships, but is also likely to result in parents who are more involved in their adolescents' activities and whereabouts. In a positive parent-child relationship, parents are also likely to be more aware of early warning signs of inappropriate sexual behavior and obtain professional help for the child before he/she sexually offends.

In terms of treating identified offenders, the results of this study highlight the need to evaluate offenders individually to determine their individual deficits and familial relationship histories. The lack of significant differences between the sexual offender and normative samples indicates that not all sexual offenders have experienced inadequate parental relationships and developed inept styles of social interaction. To obtain a thorough assessment of social skills, it is essential to use multi-informants and inquire about multiple situations (e.g., peer relationships,
school behavior, adolescent-adult interactions, heterosocial situations). Parents, teachers, peers, and the offender will all provide valuable and unique information to the assessment.

In addition, social skills treatment should be tailored to meet the individual offender’s needs. Specific goals should be stated, worked toward, and evaluated based on the offenders’ particular deficits. While role playing and observation of behavior in treatment will provide some estimate of treatment effectiveness, the offender’s ability to establish and maintain appropriate and emotionally fulfilling relationships in the community will be the ultimate test of treatment efficacy.

On the other hand, we see that some offenders are socially skilled and may not need traditional social skills training. In fact, teaching offenders social skills may actually make them more effective at engaging with potential victims and their caretakers. However, these offenders need to be assessed to determine whether they used their social abilities to manipulate victims or caregivers to facilitate the sexual offense. They may need more training in empathy and respect for others than spending treatment time learning skills that they have already mastered and may be used to re-offend.

This issue raises questions regarding whether social skill enhancement should be necessarily included in treatment programs. Longitudinal, follow-up studies assessing offenders after treatment would be helpful in determining how offenders use their “new” social skills. If it is discovered that many offenders use
the skills learned in treatment to meet and develop friendships with potential
victims, treatment professionals will need to rethink and modify the traditional
practice of teaching social skills.

Regarding the attachment relationships of adolescent sexual offenders, it
may not be realistic or feasible to mend maladaptive parental attachment patterns.
However, it will be imperative to provide models of appropriate and healthy
interpersonal relationships for the offender throughout and after treatment. If
parents are willing to cooperate with treatment professionals, this could involve
working with parents/guardians before the adolescent’s release. Alternatively, the
treatment team should identify a stable person in the adolescent’s life who can
provide the adolescent with emotional support and hold the adolescent responsible
for behaving responsibly in the community. Either way, the treatment team must
ensure that the environment to which the offender is returning is characterized by
healthy and supportive interpersonal interactions.

Limitations

One purpose of the present study was to investigate the relationship
between parental and peer attachments and social skills in a sample of adolescent
sexual offenders. A second purpose was to examine these variables in relation to
specific offense characteristics (i.e., victim-offender age difference, use of
coercion, felony classification). While the results and interpretation of this study
have met the first purpose by demonstrating that attachment relationships,
especially maternal and peer relationships, are related to offenders’ reports of social skills, limitations in this study preclude definitive conclusions regarding the second purpose of the study.

First, the small sample sizes for the within group comparisons resulted in extremely low levels of power, resulting in a diminished ability to observe statistically significant differences. It is plausible that the group differences based on victim-offender age disparity and use of overt coercion/force may actually be present, but were statistically undetectable due to small cell sizes.

In addition to small cell size, the skewness of the data also hindered the ability to detect group differences. The statistical analyses utilized were designed for use with normally distributed data. When the data is skewed, group differences are less likely to be identified. While efforts were made to transform the data to a more normal distribution, the data remained relatively skewed even after transformation.

Next, the strategy of assigning “low” attachment scores to participants reporting the absence of a father figure may have erroneously attributed the effects of a poor paternal attachment relationship to the absence of a father figure. It could be that an extremely dysfunctional paternal relationship is actually more detrimental than not having a father figure at all. In the future, it would be helpful to collect enough data to compare the effects of extremely positive, average, dysfunctional, and non-existent paternal relationships in terms of social skills and
offense characteristics. Unfortunately, the small sample sizes precluded direct comparisons of groups based on level of attachment and presence of a father figure.

As discussed previously, the use of exclusively self-report measures introduces the problem of response style/set influencing responses. That is, the biases, attitudes, and/or mood each individual brings to the test may influence responding on all measures, along with the underlying construct the instrument was designed to tap. This difficulty is especially problematic for correlational research. We must consider the possibility that the significant correlations observed are a function of a response style. Some participants may have responded in a positive response set on all measures (i.e., reporting healthy attachment relationships and appropriate social skills) and other respondents may have responded negatively to all measures (i.e., reporting poor attachment relationships and inadequate social skills). This is problematic if the response set is a result of a current mood or attitude that is not driven by the underlying construct the measure is assessing. Another type of response set, social desirability, may have influenced the data.

As discussed above, a measure of social desirability would have been a valuable addition to the study. Without a measure of social desirability it is impossible to determine whether the positively skewed data is a result of respondents' desire to portray their attachment relationships and social skills in an overly positive light, or whether sexual offenders actually do not differ from normative samples on social skills and maternal attachments. The constructs measured in this study are personal and emotionally loaded concepts which leaves
them especially vulnerable to the influences of social desirability. The observed significant correlations, however, indicate a reasonable amount of variability. Hence, not all respondents endorsed the items in a manner suggestive of high quality attachment relationships and social skills.

The exclusive use of self-report measures also bring into question the accuracy of the observed responses. While we have measured offenders’ perceptions of their attachment relationships and social skills, the use of other informants (e.g., parents, teachers, treatment staff) would have provided a more complete picture of attachment history and social behavior. Future research will be needed to determine the relative predictive value of adolescents’ perceptions of social skills and attachment relationships in comparison to others’ evaluations of these variables.

Finally, many diverse dimensions and theories of attachment and attachment figures (e.g., parental, romantic, friends) have received recent attention in the literature. However, the current study examined only one basic dimension of parental and peer attachment (i.e., security) based on Bowlby’s model (1988) of parent-infant attachment. Alternative frameworks (e.g., Bartholomew & Horowitz, 1990; Hazan & Shaver, 1987), focusing on relationships in general or romantic relationships, may prove to be more useful for differentiating sexual offenders than the traditional parent-infant attachment model. In addition, interview methods (e.g., AAI; George et al, 1996) of assessing the construct of attachment may offer
more valid information which is less prone to social desirability than paper and pencil measures. As discussed below, future research is needed to clarify the role of attachment styles in sexual offending.

Future Research

A number of issues for future research have been generated by the current study. The current research literature in the area of sexual offending has examined a number of variables central to Marshall's theory (1989, 1993; Marshall et al., 1993) of sexual offending in adult and adolescent populations. However, much of the foundation for this theory is rooted in the influence of childhood attachments on later attachment relationships, social skills, and the ability to develop close, intimate relationships in adulthood. Consequently, longitudinal research is desperately needed to elucidate the extent of influence parent-child attachment relationships exert on later relationships and psychological functioning.

More specifically, longitudinal studies are necessary to explore the stability between parental attachment in childhood and adolescent-parental attachment quality. Additionally, continuous measures of the security of psychological attachment (e.g., IPPA) in adolescence need to be studied in relationship to the categorical measures (e.g., The Relationship Questionnaire) of attachment which assess "relationships in general" and romantic relationships. Following research participants into adulthood and assessing their adult attachment styles in romantic and non-romantic relationships would provide a solid theoretical framework to build models in many areas of psychology based upon attachment theory. Finally,
it would be advantageous to identify resilience factors associated with healthy
adjustment and relationships in adolescence and/or adulthood following insecure
childhood attachment to parents.

A number of research questions are generated particularly in response to the
results and discussion of the hypotheses in the present study of adolescent sexual
offenders. First, it would be interesting to employ a measure that makes qualitative
distinctions between categories of attachment styles (e.g., pre-occupied,
dissmissing) in an investigation of offense characteristics. Perhaps offense
characteristics (e.g., offenders’ choice of victim; use of force/coercion) may be
predicted by these different attachment styles.

In addition, obtaining multiple informant ratings on social skills from
parents, teachers, and peers would help elucidate deficits in social skills that are
likely to exist for many offenders. Comparing and contrasting offenders’ reports of
their own skill level with outside reports may reveal offenders’ perceptual
distortions in evaluating their own behavior. Finally, assessing a complete range of
dimensions of social skills (e.g., with peers, adults, potential romantic partners)
could account for some of the disparate findings regarding the social skills of
sexual offenders. Likewise, particular social skill deficits (e.g., peer, romantic)
may be predictive of sexual offending in general and/or specific offense
characteristics.
Conclusion

The present study represents an initial effort to examine a small set of variables specified by Marshall and his colleagues (1989, 1993; Marshall et al., 1993) in a theory of sexual offending which highlights the role of parental attachment relationships, social skills, and intimacy deficits. The current study focused on the relationship between adolescent attachment to parents and peers and social skills. This hypothesis was based on the notion that secure attachment relationships with parents provide models for peer relationships and proficient social skills. On the other hand, adolescents experiencing insecure attachment relationships do not learn the interpersonal skills necessary to develop meaningful peer relationships and lack social skills.

Further, it was predicted that the adolescent sexual offenders would report different attachment experiences and social skills based upon offense characteristics such as, age difference between the offender and victim, offenders’ use of overt force/coercion, and offenders’ adjudicated felony status. As we expect variation within the sexual offender population on these variables, it was predicted that offenders with the greatest deficits in attachment and social skills would choose victims much younger than themselves as young children would be easier to manipulate and/or force into sexual activity. Offenders with more adequate social skills, on the other hand, would be able to choose victims closer to their own age. It was also predicted that offenders using more overt force and physical coercion in their offense would be less socially skilled than offenders who
might use more manipulative and "pro-social" grooming strategies instead of overt force and physical coercion to engage their victims in sexual activity. Similarly, it was predicted that offenders adjudicated on more severe felony charges would report less secure attachment and social skills than those adjudicated on less severe charges.

As expected, results indicated significant positive relationships between secure parental attachment and attachment to peers. Peer and maternal attachment were also significantly related to social skills. A mediated model such that attachment to peers mediates the relationship between attachment to mother and social skills was revealed. These results provide preliminary support for the notion that maternal relationships may influence the capacity to develop meaningful peer relationships and adequate social skills. Attachment relationships with father, however, do not appear to strongly influence adolescents’ social skills. It is important, though, to remember that correlational research does not provide information about direction of influence. Thus, longitudinal research is needed to illustrate temporal relationships from childhood attachment to adolescent attachment and social skills.

Results failed to indicate significant differences in attachment and social skills based on victim-offender age difference or use of overt force and physical coercion. Analyses did indicate that felony one offenders reported more impaired social skills and less secure attachment with peers than did felony three and four
offenders. A lack of peer attachment and social skills, then, may be important factors contributing to offenders’ capacity to commit the most heinous and atrocious crimes.

In conclusion, the results of this study are reasonably consistent with Marshall’s (1989, 1993) theory of sexual offending. However, the observed variability in the sample indicates that not all sex offenders suffer from insecure attachment and tremendous social skills deficits. In addition, it is a fact that many children’ and adolescents experience maladaptive attachment relationships and evidence inept social skills who do not go on to sexually offend or exhibit any type of antisocial behavior. Accordingly, it is likely a combination of risk and resiliency factors, together with attachment experiences which determine the behavioral and emotional outcomes (e.g., sexual offending, delinquency, depression) of attachment history. For example, risk factors such as offenders’ own sexual/physical victimization history and exposure to pornography or inappropriate attitudes about sex are also likely to play an etiological role in sexual offending along with attachment history and social skills. Individual differences and resilience factors, such as social support from extended family or social service agencies or a child’s ability to generate self-worth through academic or athletic success, may counteract insecure attachment to parents.

The relatively recent interest in attachment styles and social skills adds to our knowledge of the numerous potential risk factors, but does not undermine the significance of other previous identified etiological influences. That is, there are
likely to be countless pathways to the complex behavior of sexual offending.

Attachment relationships and social skills represent two of many agents that may lead some offenders down the destructive path of sexual offensive behavior. As we learn more about significant risk factors, it is essential to determine how the knowledge can be applied to primary prevention efforts as well as individualized treatment programs to prevent future offending.
LIST OF REFERENCES


<table>
<thead>
<tr>
<th>Total Sample (n = 183)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age in Years: 16.09</td>
</tr>
<tr>
<td>Mean Number of Male Victims: 1.25</td>
</tr>
<tr>
<td>Mean Number of Female Victims: 1.99</td>
</tr>
<tr>
<td><strong>Race</strong></td>
</tr>
<tr>
<td>Caucasian: 49.7%</td>
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<tr>
<td>African-American: 24%</td>
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<tr>
<td>Other/Multi-racial: 26.2%</td>
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<tr>
<td><strong>Sexual Orientation</strong></td>
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<tr>
<td>Heterosexual: 89.1%</td>
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<tr>
<td>Homosexual: 1.6%</td>
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<tr>
<td>Bisexual: 8.7%</td>
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<tr>
<td>Not reported: .5%</td>
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<tr>
<td><strong>Highest Grade Completed</strong></td>
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<tr>
<td>Grade School: 7.7%</td>
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<td>Middle School: 28.4%</td>
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<td>Some High School: 57.9%</td>
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<tr>
<td>High School Graduate or GED: 5.5%</td>
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Table 1: Demographics
### Table 2: Scales & Sample Items from the Adolescent Modus Operandi Questionnaire

<table>
<thead>
<tr>
<th>Cooperation Scales</th>
<th>Example Questions</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying victims clothes</td>
<td>Buying them underwear or sleepwear</td>
<td>.88</td>
</tr>
</tbody>
</table>
| Alcohol and Drugs             | How often did you get your victim(s) to take part in sexual activity by giving them something just before or just after the sexual contact, such as:  
                                   - Beer or liquor, Drugs                                                            | .78   |
| Exposure to Pornography      | How often did you get your victim(s) to take part in sexual activity by showing them magazines, pictures, or videotapes with:  
                                   - Naked adults in them                                                              | .73   |
| Engage in Pornography        | How often did you get your victim(s) to take part in sexual activity by:           | .84   |
|                               |   - Having them do sexual things with other children                               |       |
|                               |   - Taking photographs or videos of your victim(s) with their clothes off          |       |
| Desensitizing Victim          | How often did you get your victim(s) to take part in sexual activity by:           | .93   |
|                               |   - Talking more and more about sex                                               |       |
|                               |   - Touching them sexually more and more from one time to the next                |       |
|                               |   - Wearing less clothing and telling them to do the same                          |       |
| Giving Gifts                  | How often did you get your victim(s) to take part in sexual activity by giving them something just before or just after the sexual contact, such as:  
                                   - Candy or their favorite food; Money                                               | .87   |
Table 2 continued

<table>
<thead>
<tr>
<th>Threat Scales</th>
<th>Example Questions</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpless</td>
<td>How often did you get your victim(s) to take part in sexual activity by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Making them feel like there was nothing they could do to stop it.</td>
<td>.83</td>
</tr>
<tr>
<td>Harm Others</td>
<td>How often did you get your victim(s) to take part in sexual activity by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Saying you will kill their mother/father/siblings/friends</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>--Saying you will hurt their mother/father/siblings/friends</td>
<td></td>
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<tr>
<td>Psychopathy</td>
<td>How often did you get your victim(s) to take part in sexual activity by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Getting them drunk with beer or liquor</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>--Hurting a pet in front of them</td>
<td></td>
</tr>
<tr>
<td>Use a Weapon</td>
<td>How often did you get your victim(s) to take part in sexual activity by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Saying you will hurt them with a knife or gun</td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>--Putting a weapon where they could see it so they would be scared</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quiet Scales</th>
<th>Example Questions</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threaten Others</td>
<td>How often did you keep your victim(s) from telling about the sexual contact by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Saying you would hurt their mother/father/siblings/friends</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>--Saying you would kill their mother/father/siblings/friends</td>
<td></td>
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<tr>
<td>Threat/Harm Victim</td>
<td>How often did you keep your victim(s) from telling about the sexual contact by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Hurting them as a warning</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>--Saying you will hurt them with a knife or gun</td>
<td></td>
</tr>
<tr>
<td>Give/Withdraw Benefits</td>
<td>How often did you keep your victim(s) from telling about the sexual contact by:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--Saying that you would not love them anymore if they told anyone</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>--Giving them special privileges or rewards if they didn’t tell anyone</td>
<td></td>
</tr>
</tbody>
</table>
How often did you use the following ways to get your victim to take part in the sexual activity?

Saying you will hit them if they don’t do it
Saying you will tie them up
Saying you will hurt them with a gun
Saying you will hurt them with a knife
Saying you will hurt them with another object
Saying you will kill them
Tying them up
Using physical force to make them do sexual things

How often did you use the following to keep your victim from telling about the sexual contact?

Saying you would hit them
Saying you would tie them up
Saying you would hurt them with a gun
Saying you would hurt them with a knife
Saying you would hurt them with another object
Hurting them as a warning.

Table 3: Overt Physical Force/Coercion Items
Participants responded to each item on a Likert scale of 0 to 6 (i.e., 0 = Never, 3 = Sometimes, 6 = Always).
<table>
<thead>
<tr>
<th></th>
<th>Group with Young Victims</th>
<th>Group with Victims Close to their Own Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-Transformed Mean (SD)</td>
<td>Non-Transformed Mean (SD)</td>
</tr>
<tr>
<td></td>
<td>Transformed Mean (SD)</td>
<td>Transformed Mean (SD)</td>
</tr>
<tr>
<td>Attachment to Mother</td>
<td>98.00 (20.73)</td>
<td>99.43 (20.33)</td>
</tr>
<tr>
<td></td>
<td>1.30 (.40)</td>
<td>1.25 (.45)</td>
</tr>
<tr>
<td>Trust</td>
<td>41.59 (8.03)</td>
<td>41.81 (10.06)</td>
</tr>
<tr>
<td></td>
<td>.78 (.47)</td>
<td>.68 (.54)</td>
</tr>
<tr>
<td>Communication</td>
<td>33.81 (9.69)</td>
<td>35.57 (8.34)</td>
</tr>
<tr>
<td></td>
<td>.87 (.51)</td>
<td>.84 (.45)</td>
</tr>
<tr>
<td>Alienation</td>
<td>13.38 (5.17)</td>
<td>13.57 (5.41)</td>
</tr>
<tr>
<td></td>
<td>1.10 (.17)</td>
<td>1.10 (.17)</td>
</tr>
<tr>
<td>Attachment to Father</td>
<td>77.16 (35.23)</td>
<td>84.84 (32.92)</td>
</tr>
<tr>
<td></td>
<td>1.49 (.50)</td>
<td>1.42 (.48)</td>
</tr>
<tr>
<td>Trust</td>
<td>30.81 (16.26)</td>
<td>34.76 (15.29)</td>
</tr>
<tr>
<td></td>
<td>1.05 (.57)</td>
<td>.91 (.59)</td>
</tr>
<tr>
<td>Communication</td>
<td>25.70 (14.01)</td>
<td>28.73 (12.94)</td>
</tr>
<tr>
<td></td>
<td>1.09 (.54)</td>
<td>1.05 (.47)</td>
</tr>
<tr>
<td>Alienation</td>
<td>16.32 (9.39)</td>
<td>15.14 (7.78)</td>
</tr>
<tr>
<td></td>
<td>1.14 (.26)</td>
<td>1.13 (.22)</td>
</tr>
<tr>
<td>Attachment to Friends</td>
<td>91.41 (18.24)</td>
<td>92.92 (17.71)</td>
</tr>
<tr>
<td>Trust</td>
<td>38.51 (9.77)</td>
<td>39.16 (8.88)</td>
</tr>
<tr>
<td></td>
<td>.91 (.49)</td>
<td>.87 (.50)</td>
</tr>
<tr>
<td>Communication</td>
<td>28.03 (8.26)</td>
<td>29.30 (8.85)</td>
</tr>
<tr>
<td>Alienation</td>
<td>16.97 (4.38)</td>
<td>17.38 (4.57)</td>
</tr>
<tr>
<td></td>
<td>1.21 (.12)</td>
<td>1.23 (.11)</td>
</tr>
</tbody>
</table>

Table 4: Means & Standard Deviations of Victim-Offender Age Difference Groups on Attachment Variables
<table>
<thead>
<tr>
<th></th>
<th>Non-Transformed Mean (SD)</th>
<th>Transformed Mean (SD)</th>
<th>Non-Transformed Mean (SD)</th>
<th>Transformed Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills Total</td>
<td>50.33 (13.02)</td>
<td>49.92 (10.78)</td>
<td>12.75 (3.81)</td>
<td>13.68 (2.89)</td>
</tr>
<tr>
<td>Assertion</td>
<td>12.53 (4.05)</td>
<td>12.14 (3.46)</td>
<td>12.75 (3.81)</td>
<td>13.68 (2.89)</td>
</tr>
<tr>
<td>Cooperation</td>
<td>12.53 (.27)</td>
<td>12.14 (.19)</td>
<td>12.75 (.27)</td>
<td>13.68 (.19)</td>
</tr>
<tr>
<td>Empathy</td>
<td>13.58 (3.71)</td>
<td>13.03 (4.37)</td>
<td>13.58 (.28)</td>
<td>13.03 (.26)</td>
</tr>
<tr>
<td>Self Control</td>
<td>11.47 (4.49)</td>
<td>11.08 (3.36)</td>
<td>11.47 (4.49)</td>
<td>11.08 (3.36)</td>
</tr>
</tbody>
</table>

Table 5: Means & Standard Deviations of Victim-Offender Age Difference Groups on Social Skills Variables
<table>
<thead>
<tr>
<th>Group</th>
<th>Force/Coercion Group</th>
<th>No-Force/Coercion Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N = 55$</td>
<td>$N = 56$</td>
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<td></td>
<td>Non-Transformed Mean (SD)</td>
<td>Non-Transformed Mean (SD)</td>
</tr>
<tr>
<td></td>
<td>Transformed Mean (SD)</td>
<td>Transformed Mean (SD)</td>
</tr>
<tr>
<td>Attachment to Mother</td>
<td>95.16 (20.33)</td>
<td>97.27 (19.64)</td>
</tr>
<tr>
<td></td>
<td>1.35 (.40)</td>
<td>1.31 (.41)</td>
</tr>
<tr>
<td>Trust</td>
<td>40.55 (8.94)</td>
<td>40.68 (8.47)</td>
</tr>
<tr>
<td></td>
<td>.78 (.53)</td>
<td>.83 (.45)</td>
</tr>
<tr>
<td>Communication</td>
<td>33.73 (8.35)</td>
<td>34.18 (9.33)</td>
</tr>
<tr>
<td></td>
<td>.93 (.43)</td>
<td>.86 (.51)</td>
</tr>
<tr>
<td>Alienation</td>
<td>14.63 (4.51)</td>
<td>13.66 (5.65)</td>
</tr>
<tr>
<td></td>
<td>1.14 (.15)</td>
<td>1.10 (.18)</td>
</tr>
<tr>
<td>Attachment to Father</td>
<td>74.88 (34.27)</td>
<td>83.04 (30.17)</td>
</tr>
<tr>
<td></td>
<td>1.55 (.45)</td>
<td>1.49 (.42)</td>
</tr>
<tr>
<td>Trust</td>
<td>30.48 (15.84)</td>
<td>34.32 (13.76)</td>
</tr>
<tr>
<td></td>
<td>1.06 (.57)</td>
<td>1.01 (.49)</td>
</tr>
<tr>
<td>Communication</td>
<td>25.59 (13.27)</td>
<td>28.98 (12.26)</td>
</tr>
<tr>
<td></td>
<td>1.14 (.48)</td>
<td>1.05 (.47)</td>
</tr>
<tr>
<td>Alienation</td>
<td>17.98 (8.29)</td>
<td>16.71 (7.79)</td>
</tr>
<tr>
<td></td>
<td>1.20 (.22)</td>
<td>1.17 (.21)</td>
</tr>
<tr>
<td>Attachment to Friends</td>
<td>91.29 (18.96)</td>
<td>89.46 (17.14)</td>
</tr>
<tr>
<td>Trust</td>
<td>38.73 (9.74)</td>
<td>38.34 (8.64)</td>
</tr>
<tr>
<td></td>
<td>.86 (.54)</td>
<td>.94 (.44)</td>
</tr>
<tr>
<td>Communication</td>
<td>28.68 (7.84)</td>
<td>28.14 (8.28)</td>
</tr>
<tr>
<td></td>
<td>.95 (.43)</td>
<td>.96 (.43)</td>
</tr>
<tr>
<td>Alienation</td>
<td>17.89 (4.76)</td>
<td>18.70 (4.34)</td>
</tr>
<tr>
<td></td>
<td>1.24 (.13)</td>
<td>1.26 (.10)</td>
</tr>
</tbody>
</table>

Table 6: Means & Standard Deviations of Groups Based on Physical Force Distinction on Attachment Variables
Table 7: Means & Standard Deviations of Groups Based on Physical Force Distinction on Social Skills Variables
<table>
<thead>
<tr>
<th></th>
<th>Felony 1 Offenders</th>
<th>Felony 3 &amp; 4 Offenders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N = 60$</td>
<td>$N = 60$</td>
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<tr>
<td></td>
<td>Non-Transformed Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td></td>
<td>Transformed Mean (SD)</td>
<td>Transformed Mean (SD)</td>
</tr>
<tr>
<td>Attachment to Mother</td>
<td>98.52 (19.79)</td>
<td>97.03 (21.85)</td>
</tr>
<tr>
<td></td>
<td>1.29 (.41)</td>
<td>1.30 (.43)</td>
</tr>
<tr>
<td>Attachment to Father</td>
<td>76.28 (35.37)</td>
<td>83.25 (30.11)</td>
</tr>
<tr>
<td></td>
<td>1.52 (.48)</td>
<td>1.46 (.48)</td>
</tr>
<tr>
<td>Attachment to Friends*</td>
<td>88.38 (17.91)*</td>
<td>95.20 (16.26)*</td>
</tr>
<tr>
<td>Social Skills Total*</td>
<td>48.80 (12.36)*</td>
<td>53.72 (11.48)*</td>
</tr>
<tr>
<td>Cooperation</td>
<td>12.52 (3.90)</td>
<td>12.97 (3.71)</td>
</tr>
<tr>
<td></td>
<td>.87 (.26)</td>
<td>.84 (.26)</td>
</tr>
<tr>
<td>Empathy*</td>
<td>12.98 (3.69)</td>
<td>14.57 (3.44)</td>
</tr>
<tr>
<td></td>
<td>.85 (.23)*</td>
<td>.73 (.28)*</td>
</tr>
<tr>
<td>Self Control</td>
<td>10.97 (4.19)</td>
<td>12.27 (3.61)</td>
</tr>
<tr>
<td></td>
<td>.95 (.22)</td>
<td>.89 (.23)</td>
</tr>
<tr>
<td>Assertion*</td>
<td>12.33 (3.57)*</td>
<td>13.95 (3.49)*</td>
</tr>
</tbody>
</table>

*p < .05

Table 8: Means & Standard Deviations of Felony Groups on Attachment & Social Skills Variables
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>182</td>
<td>72</td>
<td>231</td>
<td>60</td>
</tr>
<tr>
<td>Mean Age</td>
<td>16.09 years</td>
<td>12.7 years</td>
<td>12.8 years</td>
<td>18.7 years</td>
</tr>
<tr>
<td>Percent Male</td>
<td>100%</td>
<td>100%</td>
<td>42%</td>
<td>20%</td>
</tr>
<tr>
<td>Attachment to Mother</td>
<td>95.70**</td>
<td>91.0**</td>
<td>91.48</td>
<td>98.0</td>
</tr>
<tr>
<td>Attachment to Father</td>
<td>77.47**</td>
<td>88.7**</td>
<td>85.87</td>
<td>92.0</td>
</tr>
<tr>
<td>Attachment to Friends</td>
<td>90.84*</td>
<td>93.3*</td>
<td>Not reported</td>
<td>105.0</td>
</tr>
</tbody>
</table>

\(^a\) The test value for the one sample t-test was taken from this study.

\(**p < .01\)

\(+p < .10\)

Table 9: Normative & Current Sample Attachment Means
<table>
<thead>
<tr>
<th></th>
<th>Sexual Offender Sample</th>
<th>Gersham &amp; Elliot (1990)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>182</td>
<td>425</td>
</tr>
<tr>
<td>Mean Age/Grade Level</td>
<td>Age = 16.09</td>
<td>Grade Level = 9.7</td>
</tr>
<tr>
<td>Percent Male</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Social Skills</td>
<td>50.50</td>
<td>49.55</td>
</tr>
</tbody>
</table>

Table 10: Normative & Current Sample Social Skills Means
APPENDIX B: FIGURE
Figure 1: Victim-Offender Age Difference Graph. Offenders with victims four or more years younger appear on the left and offenders with victims within two years of their age or older appear on the right.