

UTILITY OF THE INTERPERSONAL REACTIVITY INDEX
IN MEASURING DIFFERENCES IN EMPATHY AMONG
ADOLESCENT MALE SEX OFFENDERS

by

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for the degree of Master of Arts,
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Abstract

Utility of the Interpersonal Reactivity Index in Measuring Differences in Empathy among Adolescent Male Sex Offenders

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The Interpersonal Reactivity Index (IRI) has become a popular measure of empathy with sex offenders; however, little is known of its reliability and validity in clinical populations. The purpose of the study was to determine the IRI's utility with adolescent sex offenders and to examine differences in empathy among groups of offenders based on characteristics of their offenses. Offenders completed measures including the Assessing Environments III; the Buss-Durkee Hostility Inventory; the Multiphasic Sex Inventory; the Family-of-Origin scale; the Rape Myth Acceptance Scale; the Acceptance of Interpersonal Violence Scale; and the Tennessee Self-Concept Scale. Therapist ratings of victim empathy, level of violence, and denial were collected. Moderate internal consistency was established for the IRI, and scores from 123 adolescent offenders were examined. Age and socially desirable responding contributed significantly to IRI scores, and victim empathy was not related to IRI scores. Group differences in empathy were not found when offenders were contrasted with respect to a history of sexual or physical victimization, or when offenders were compared with respect to the age or gender of their victims. Extrafamilial offenders reported more Empathic Concern and Perspective-Taking when compared to offenders who assaulted both within and outside the family. Justifications for sexual

violence were related to Empathic Concern and Personal Distress. Violent offenders reported more Empathic Concern and Perspective-Taking, and a generally hostile temperament was related to Empathic Concern, Perspective-Taking, and Fantasy. Family environment and relationship variables were not related to IRI scores. Researchers using the IRI with sex offenders should be cautious of the influence of age and socially desirable responding. IRI scores seem to be affected by the social desirability response bias and are unrelated to ratings of victim empathy; therefore, these results suggest that the IRI may not elicit adequate knowledge about the empathy of adolescent male sex offenders.

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Chapter 1

Introduction

Literature Review

One of the most frequently mentioned traits of sex offenders is their inability to empathize (Hanson & Scott, 1995; Hayashino, Wurtele, & Klebe, 1995; Hobson, Boland, & Jamieson, 1985; Hudson, et al., 1993; Lakey, 1994; Malamuth, Heavey, & Linz, 1993; Monto, Zgourides, Wilson, & Harris, 1994; Perry & Orchard, 1992; Pithers, 1993, 1994; Salter, 1988, 1995; Seto & Barbaree, 1993; Williams & Finkelhor, 1989). It is, therefore, not surprising that the majority of treatment models for sex offenders contain an empathy-training or empathy-enhancing component (Bremer, 1992; Hagen, King, & Patros, 1994; Jenkins-Hall; 1989; Lakey, 1994; Perry & Orchard, 1992; Pithers, 1990, 1993, 1994; Salter, 1988; Scavo & Buchanan, 1990; Wills, 1993). Despite the widely held opinion that sex offenders are unable to empathize, and the enormous importance placed on empathy training, it is astounding how little is known about sex offenders' empathy. Empathy has not been included as a variable in studies attempting to predict sexual offending (Monto et al., 1994), and very little is known regarding the exact inadequacies or lack of empathy shown by sex offenders (Hudson et al., 1993). Although most clinicians are adamant that sex offenders need to enhance their capacity to empathize, the basis for this assumption does not appear to be grounded in extensive research.

Unfortunately, many researchers investigating characteristics of sexual offenders tend to group all sex offenders together and compare them to a control group. With this common method of studying sex offenders, it is not surprising that the literature on the empathy of sex offenders does not address distinctions such as the offenders' victimization histories, their victims' age, or the amount of violence used in the offense. Williams and Finkelhor (1989) noted that incestuous fathers are a distinct group of child molesters in need of specialized study;

however, few studies make the distinction between incest offenders and extrafamilial molesters (Hayashino et al., 1995). Hayashino et al. (1995) compared adult male incestuous child molesters, extrafamilial child molesters, rapists, nonsexual offenders, and community volunteers with no known history of sexual offenses. They indicated that all participant groups reported similar levels of empathy.

Sex offenders are not homogeneous in the types of offenses they commit, in their choice of victims, in the number of victims, or in the motivating forces behind their offenses. Differences in reported empathy may exist as a function of the circumstances surrounding the offense. In a study of rapists, for example, Marshall, Hudson, and Jones (cited in Seto & Barbaree, 1993) stressed that the type of rapist being studied, the nature of the empathy deficit, and the reliability and validity of the empathy measure may all contribute to the relationship between empathy and rape. To learn more accurate information regarding character traits of sex offenders, it is necessary to differentiate them (Davis & Leitenberg, 1987; Worling, 1995a,b), especially when investigating potential deficits such as the ability to empathize.

The Construct of Empathy

Internal discomfort in reaction to another's pain, sympathy, role-taking, and experiencing emotions similar to another have all, at one time or another, been intertwined in definitions of empathy. Unfortunately, there is not a consistent definition of empathy (Eisenberg & Strayer, 1987). Simply stated, empathy is the reaction of one individual to the experiences of another individual (Clark, 1980; Davis, 1983). Much of the disagreement in the literature is based on whether empathy entails personally experiencing the emotions of another or placing oneself into the role of another (Chlopan, McCain, Carbonell, & Hagen, 1985). In more recent literature, empathy has been described as comprising both affective and cognitive components (Davis, 1980,

1983; Feshbach, 1987; Hoffman, 1987; Gladstein, 1983; Underwood & Moore, 1982; Zahn-Waxler & Radke-Yarrow, 1990). Affective components of empathy involve internalized emotional replication of another's feelings, whereas cognitive empathy entails intellectualized knowledge of another's emotions.

There are a limited number of studies on the role of empathy in any category of maltreatment (Feshbach, 1989), let alone sexual offending. Empathy is considered a component necessary for altruism (Eisenberg & Miller, 1987; Zahn-Waxler & Radke-Yarrow, 1990) and empathy has been noted to inhibit aggression (Feshbach, 1989; Zahn-Waxler & Radke-Yarrow, 1990). Moreover, experiencing pleasure from the pain of others, a disregard for others, and the inability to feel remorse, are all indicative of antisocial behaviour (Zahn-Waxler & Radke-Yarrow, 1990) and suggest limited empathic abilities. Therefore, it is often assumed that sex offenders are deficient in empathy because their offenses are deemed nonaltruistic and antisocial.

Measuring Empathy

Two of the most popular measures of empathy assess very different aspects of the ability to empathize. The Empathy Scale (EM) (Hogan, 1969) purports to measure the ability to understand the mental state of another. In contrast, Mehrabian and Epstein's (1972) Questionnaire Measure of Emotional Empathy (QMEE) measures the involuntary reaction of one individual to the emotional state of another. Although these measures of empathy are designed to elicit an individual's sensitivity to the feelings of another, separately they fail to discriminate between cognitive and affective empathy (Cholpan, McCain, Carbonell, & Hagen, 1985). Recognizing the multidimensionality of empathy, Davis (1980) developed the Interpersonal Reactivity Index (IRI) as a measure of both affective and cognitive aspects of empathy. The initial factor analysis was completed on male and female college students, and a four-factor

structure was established. There are two scales related to affect: the Empathic Concern scale assesses the extent respondents experience warmth, compassion, and concern for another, and the Personal Distress scale assesses the respondents own negative emotions after witnessing the unpleasant experiences of another. Although Empathic Concern is considered a positive reaction to another's feelings, Personal Distress is an undesirable response as its focus is on the observer's feelings and not the victim's. Cognitive components of empathy are also measured with two scales; the Fantasy scale assesses the respondents proclivity to place himself or herself into the role of a fictitious character, and the Perspective-Taking scale measures the tendency to consider the viewpoint of another in real life circumstances.

Davis (1983) hypothesized relationships of each IRI scale with different aspects of an individual's functioning and tested his theories with male and female introductory psychology students. He found that the Empathic Concern scale should not be associated with self-centeredness, but should be strongly related to concern for others. Those with high scores on the Empathic Concern scale were characterized as having a desirable interpersonal style. Perspective-Taking scores were negatively related to measures of social dysfunction and positively related to social competence. Davis also noted that the Perspective-Taking scale was associated with less verbal aggression. Those with high Perspective-Taking scores reported lower anxiety, nervousness, and insecurity. This scale was also associated with sensitivity to others. The Fantasy scale was believed to be associated with measures of emotionality, but not with measures of social functioning. Although the scale did not correlate with all measures of social functioning, Davis (1983) noted that modest Fantasy scores in males were associated with increased shyness, loneliness, and anxiety in social settings. Therefore, Davis concluded that high scores on the Fantasy scale may be associated with increased emotional reactions. The Personal Distress scale was consistently associated with interpersonal functioning. High levels

of personal distress were associated with high levels of social dysfunction. Those with high Personal Distress scores also reported more fearfulness, uncertainty, emotional vulnerability, shyness, and social anxiety. This group was characterized by their concern with how others evaluate them and with lowered concern for others.

The IRI has become a popular measure of empathy in studies of nonoffending populations and results from these investigations support the validity of this measure. For example, Hatcher et al. (1994) reported post-treatment differences in IRI scores amongst high school and college students after receiving cognitive and behavioural instruction in empathy skills. Day and Chambers (1991) investigated burnout in 60 male and 58 female rehabilitation counsellors and reported no differences in scale scores between the genders. However, they indicated that those less likely to experience symptoms associated with burnout reported higher levels of Empathic Concern and Perspective-Taking. Davis and Franzio (1991) reported that IRI responses of highschool students increased over a three year time frame, consistent with developmental changes in empathy. Confirmation of the IRI's factor structure was provided by Carey, Fox, and Spraggins (1988) using 365 female clinical dietitians and dietetic interns with a mean age of 30.8 years. Results of the analysis replicated the original four factor structure previously determined by Davis (1980). It is not known, however, whether this factor structure is consistent within a clinical population where individuals are referred for behaviours potentially involving empathy deficits.

In their review of empathy measures, Chlopan et al. (1985) note that the IRI scales correlated well with Hogan's EM and Mehrabian and Epstein's QMEE. These correlations support the IRI as a multidimensional measure of empathy. Each scale on the IRI consists of questions that are obviously related to the meaning of empathy as opposed to other questionnaires with seemingly irrelevant questions, such as the EM (Johnson, Cheek, & Smither, 1983).

However, a consequence of good face validity is that the measure may be susceptible to the social desirability response bias.

Despite its growing popularity, the IRI has not been thoroughly investigated with populations who have committed antisocial behaviours that suggest a lack of concern for others. Although the research noted above indicates that the IRI is a valid measure of empathy, these studies were all conducted on nonclinical samples. The IRI has recently been included as a measure of empathy of adult male sex offenders; however, further investigation is necessary to determine the reliability and validity of this questionnaire. Furthermore, the information available on this measure with adolescents is limited and there are no data in the literature regarding empathy deficits of adolescent sex offenders.

Child vs. Peer/adult Victims

In his research using the IRI, Pithers (1993) found that adult male pedophiles reported higher empathy levels than adult male rapists on the Perspective-Taking, Empathic Concern, and Fantasy scales. He suggested that these results should not be surprising given the necessity of perspective-taking and empathy in grooming behaviours, which are actions taken by pedophiles to entice and establish trusting relationships with potential victims. When male pedophiles were compared to an adult male nonoffending sample, Chaplin, Rice, and Harris (1995) found that the pedophiles reported lower levels of empathy. These results indicate that adult male pedophiles have higher empathy levels than adult male rapists, but less tendency to empathize when compared to adult male nonoffenders. The social desirability response bias was not controlled in these studies; therefore, some participants may have reported higher empathic tendencies.

Salter (1988) indicated that child molesters are often able to empathize, but that this ability is more prominent in areas of their lives not associated with their sexual behaviour. To

determine if empathy deficits in sex offenders are specific to their offenses, Hanson and Scott (1995) assessed empathy for a child using questions specific to incest. They found that incestuous offenders made more errors in recognizing sexually abusive situations and attempted to portray themselves in a positive manner, when compared to nonoffenders. On the contrary, no difference was found between rapists, nonsexual offenders, a community sample of men, and incestuous child molesters on questions assessing empathy for children in general. These results suggest that there were no differences in general empathy between groups; however, incest offenders were guarded and less empathic in response to questions specific to their crime.

In a study investigating the ability to recognize emotional states in others, Hudson et al. (1993) reported that this ability is positively related to scores on the Empathic Concern, Perspective-taking, and Fantasy scales of the IRI in a sample of sexual offenders and nonoffenders. Furthermore, when compared to a nonoffending control group, child molesters were less accurate at identifying emotions of both children and adults, suggesting lower empathy abilities in general. The researchers also found that sex offenders tended to confuse fear and surprise more often than nonsexual offenders. Pithers (1994) used the IRI with 20 convicted adult male sex offenders (10 pedophiles and 10 rapists) to detect group differences in empathy before and after treatment. Compared to rapists, pedophiles had significantly higher Perspective-Taking and Fantasy scores at both pre- and post-treatment. Unfortunately, the social desirability response bias was not controlled; therefore, it is difficult to determine if the higher scores by pedophiles were a function of socially desirable responding.

Research on differences in empathy based on the victims' age has been conducted with adult sex offenders only. As previously mentioned, researchers have discovered that child molesters report lower empathy when questions are specific to their crime; however, their general empathy is similar to other sex offenders and nonoffenders. Researchers have yet to

explore empathy in adolescent sex offenders; therefore, it is not known whether there is a similar relationship between the victims' age and empathy of adolescent sex offenders.

Justification, Rape Myths, and Interpersonal Violence

A strong belief in rape myths may contribute to the offenders rationalizations for committing assaults. Rape myths are false beliefs about rape which place blame on the victim and suggest the sexual contact was desired or provoked (Briere, Malamuth, & Check, 1985; Burt, 1980). Rape myths have been connected to sexual violence in a number of studies. For example, Scully and Marolla (1984) found that convicted rapists who denied the offense described the victim in a manner that placed blame on her for the assault. Furthermore, Acully (1983) reported that rapists denying the offense were more likely to agree with rape myths when compared to those who were admitting. With the endorsement of these beliefs, the sex offender is justifying assaultive behaviours (Marshall, 1993) and normalizing this type of conduct.

Another distortion made by some sex offenders is the notion that interpersonal violence is acceptable in sexual interactions. The acceptance of interpersonal violence, according to Burt (1980), suggests that violence is justified as a means of obtaining compliance. Not surprisingly, convicted rapists tend to express fairly violent attitudes toward women (Acully, 1983). Sexual offenders who report a high tolerance of interpersonal violence may believe that their actions were acceptable and warranted. By endorsing interpersonal violence, offenders have rationalized and accepted violence as a means of obtaining compliance.

There is limited research regarding the relationship between empathy and attitudes towards sexual violence. It would be interesting to determine if offenders who endorse rape myths or the use of interpersonal violence experience differences in empathy when compared to offenders who do not report these attitudes. Perhaps those offenders who endorse violence in relationships have

less regard for the feelings of others.

Denial and Minimization

Adult and adolescent sex offenders tend to deny that they committed their offenses, minimize the extent to which the victim suffered, and provide rationalizations for why their actions are not criminal (Davis & Leitenberg, 1987; Jenkins-Hall, 1989; Perry & Orchard, 1992; Salter, 1988). Though many admit to some involvement in deviant behaviour, most sex offenders tend to minimize the seriousness of their offenses (Salter, 1988). These cognitive strategies used by sex offenders to distort their view of the offense may impact on the amount of empathy they feel for others. On the other hand, sex offenders with limited empathic ability may be more prone to blame others. Researchers have indicated that common cognitive distortions include devaluing and blaming the victim, justifying and reframing the abuse to show it benefitted the victim, and drawing comparisons to minimize the seriousness of the behaviour (e.g., "At least I didn't kill her.") (Jenkins-Hall & Marlett, 1989; Murphy, 1990). According to Salter (1995), these common "thinking errors" occur both before and during the offense and offenders tend to project their own desires onto victims while overlooking the victims' perspective.

It has been found that extrafamilial child molesters used more cognitive distortions in discussing their offenses when compared to other sex offenders and nonoffenders (Hayashino et al., 1995). Chaplin et al. (1995) reported that child molesters endorsed more justifications and rationalizations for adult-child sexual contact when compared to a male nonoffending comparison group. Conversely, Pithers (1994) found no significant difference between convicted rapists and pedophiles with respect to the number of cognitive distortions used. These findings indicate no differences between rapists and pedophiles regarding the number of cognitive distortions used;

however, discrepancies may exist when the relationship of the offender to the victim (e.g. intrafamilial versus extrafamilial) is considered. Perry and Orchard (1992) speculate that sex offenders' empathy can only be increased if denial and minimization are reduced. On the other hand, Langevin, Wright, and Handy (1994) compared offenders in complete denial to those acknowledging their offense and found a positive relationship between denial and empathy. Similarly, Pithers (1993) found that child molesters indicated more cognitive distortions than other sexual offenders (e.g. rapists), and report higher levels of empathy. These findings indicate that when blame for the offense is externalized, sex offenders tend to report more empathy. On the other hand, these results may simply be attributable to the social desirability response bias. The studies reviewed above included adult offenders only; therefore, the relationship between denial, minimization, and empathy in adolescent sex offenders remains to be determined.

Sexual Violence and General Hostility

Researchers indicate that individuals who are more empathic are also less aggressive (Feshbach, 1989; Milner, Halsey, & Fultz, 1995). Empathy has a refining effect on aggression and it is an important component in the control and management of habitual anger problems (Feshbach, 1989). Zahn-Waxler and Radke-Yarrow (1990) state that individuals will be less likely to continue to cause pain to another if they experience the others' distress. Therefore, those who are able to empathize will experience the distress of another and will avoid causing pain intentionally.

The previously reported relationship between aggression and empathy was not confirmed in a study of aggressive versus nonaggressive adult male sex offenders. Langevin, Wright, and Handy's (1988) investigation failed to reveal differences in empathy between these groups. Moreover, their analysis did not reveal a relationship between empathy and history of violence.

The researchers speculated that failure to discriminate groups and the low correlation were likely a result of the inadequacy of the scale used to measure empathy in a clinical setting (Langevin et al., 1988). In their research comparing aggressive and nonaggressive adult sex offenders, Hanson and Scott (1995) hypothesized that for offenders motivated to cause pain, knowledge of the victims' suffering will not act as an inhibitor. Their analyses revealed that violent offenders reported more tendency to take the perspective of another. The researchers concluded that there are adult male sex offenders who can comprehend their victims' suffering, but are either attracted or indifferent to the pain they are inflicting. Nonsexual violent offenders have reported the tendency to take the perspective of others on the IRI (Hudson et al. 1993), suggesting that they understand and are driven by the victims' feelings. However, aggressive acts may often be driven by the aggressor's feelings instead of by the victim's (Eisenberg, 1988).

Individuals who wish to cause harm to another may rely on their empathic ability to determine their success (Eisenberg, 1988). It has been reported that many child molesters do not tend to commit violent assaults, but are, instead, inhibited by pain in their victim (Salter, 1995). This suggests that child molesters may experience more negative feelings when they recognize pain in their victims and, therefore, discontinue causing harm. On the other hand, Chaplin et al. (1995) indicated that, when compared to nonoffending males, male child molesters became more sexually aroused to depictions of harm in an adult-child sexual interaction. Although this finding was not victim specific, it challenges commonly held beliefs about child molesters and their inhibition by pain in children.

Adolescent sex offenders who commit aggressive assaults may be motivated by the victims' pain and, therefore, use more violence, whereas nonviolent offenders may be inhibited by knowing their victims are suffering. Empathy in violent and nonviolent adolescent sex offenders has not been researched and all studies in this area have been completed on adult

populations.

History of Victimization

In an overview of studies regarding the prevalence of sexual abuse within a nonoffending population, Peters, Wyatt, and Finkelhor (1986) concluded that between 3% and 31% of males are victims of sexual abuse. The sexual victimization rates among mixed samples of sex offenders, as a whole, varies between 28% and 46% in adult populations (Hanson & Slater, 1988; Groth, 1979; Seghorn, Prentky, & Boucher, 1987) and has been reported as 43% in an adolescent population (Worling, 1995b). Therefore, compared to nonoffending males, the rate of prior sexual victimization is more prevalent within male sexual offending populations. There are discrepancies in sex offenders' victimization histories based on their own assaultive behaviours. For example, Seghorn, Prentky, and Boucher (1987) found that child molesters were twice as likely to be victims of childhood sexual abuse than rapists. Moreover, when compared to other adolescent male sex offenders, child molesters who assault males have higher rates of past victimization (Davis & Leitenberg, 1987; Worling, 1995b).

Although studies have not been conducted to determine if differences in empathy exist between males who were sexually abused versus those who were not, research has been conducted comparing physically abused and nonabused children. Differences have been noted between physically abused and nonabused children for behaviours considered to be consistent with empathy (Cicchetti, 1989; Klimes-Dougan & Kistner, 1990; Straker & Jacobson, 1981). Feshbach (1989) reported that children with physically abusive backgrounds tend to exhibit difficulties socializing when compared to those with nonabusive backgrounds. She suggests that difficulties are also observed in the physically abused child's abilities to assess social cues and to take the role of another.

Deficits in empathy have not been determined for adolescent male sex offenders with a history of victimization. It has been suggested that victims of physical abuse have lower empathy; however, this has not been investigated in sexually victimized populations. As in the case of physical abuse, perhaps those offenders with a history of sexual victimization display deficiencies with regard to empathy.

Family Environment

Empathy and role-taking abilities in children are influenced by nurturance and modelling provided by parents (Yussen & Santrock, 1982). The ramifications of early childhood maltreatment are extensive and can affect many realms of one's life (Cicchetti, 1989; Graziano & Mills, 1993). Among other things, a history of physical abuse is related to aggressive behaviour and social difficulties. Researchers have found that physically abused children are less empathic and display fewer empathic behaviours (Cicchetti, 1989; Klimes-Dougan & Kistner, 1990; Straker and Jacobson, 1981). It seems that many children from physically abusive backgrounds have poor social skills and, therefore, difficulty interacting appropriately with peers. Social deficits may have resulted from limitations in empathic concern and perspective-taking abilities. Researchers have suggested a relationship between positive interpersonal relationships and empathic, affective, and emotional responding (Costin & Jones, 1992; Feshbach, 1989). Therefore, children who are not capable of empathizing will, in turn, experience difficulties in peer relationships and social interactions. One study found that abused children cause more distress in others when compared to a nonabused comparison group (Klimes-Dougan & Kistner, 1990).

Family environments and relationships may influence sex offenders' empathy. Early relationships of sex offenders are often marked with physical punishment and family conflict

(Barbaree et al. 1993; Davis & Leitenberg, 1987; Marshall & Barbaree, 1990). Furthermore, the childhoods of sex offenders are often characterized by emotionally negative atmospheres (Blaske et al., 1989; Marshall & Barbaree, 1990) and emotional isolation (Marshall, 1989). Moreover, sex offenders often experience problematic relationships with their parents (Marshall & Barbaree, 1990; Marshall, 1993; Williams & Finkelhor, 1990; Worling, 1995a). Given their histories and social incompetence (Blaske et al., 1989; Davis & Leitenberg, 1987; Lakey, 1994; Marshall & Barbaree, 1990; Marshall et al., 1995), it is not surprising that adolescent sex offenders are reported to have empathy deficits. Empathy development may be affected by aversive parenting styles and relationships. Descriptions of sex offenders usually incorporate many elements likely to impede the development of empathy. However, it is not known whether physical abuse, family environment, or conflictual family relationships contribute to empathy in adolescent male sex offenders.

Hypotheses

1. The IRI is a measure of general empathy and, therefore, the questions are not geared to empathy for a specific age group. Individuals who assault children were reported to be more empathic when questions are not related to sexual assaults against children; *therefore, it was predicted that offenders who assault children and peer or adult aged victims will report the lowest amount of general empathy. Furthermore, it was hypothesized that offenders who assault children would report higher Empathic Concern than offenders who assault peer or adult aged victims.* Child molesters were reported in previous studies to experience difficulty in distinguishing emotional states in others; *therefore, it was predicted that child molesters would report lower levels of Perspective-Taking than offenders against peers and adults. Offenders*

assaulting within both age groups should report the least amount of Personal Distress, as they are less likely to be distressed by the emotions of others.

2. Individuals who minimize, deny, or justify sexual offenses are not accepting full responsibility for their actions. Offenders who place blame on the victim or who do not classify abusive actions as offensive are likely unable to experience compassion for individuals in distress. A belief in rape myths or an acceptance of interpersonal violence may be used to justify assaults and prevent offenders from feeling the victims' emotions. *Therefore, it was hypothesized that offenders who endorse rape myths, accept interpersonal violence, or justify assault would report lower levels of Empathic Concern and Perspective-Taking. These offenders were also expected to report more Personal Distress, as they experience personal discomfort in emotionally negative circumstances.*

3. Offenders who deny involvement in a sexual offense, or deny that the experience was an offense, are not accepting responsibility for their actions. By externalizing blame, the offender releases himself of guilt. Those who are not dwelling on their own feelings may be more emotionally available to experience concern for others. Previous studies of adult sex offenders have revealed a positive relationship between denial and empathy. *Therefore, it was hypothesized that those offenders who denied committing the offense would report higher Empathic Concern for others. Deniers were also expected to report lower Perspective-Taking and Personal Distress, as it is unlikely that they are able to imagine the perspective of others and experience discomfort after committing an offense.*

4. When a violent and aggressive act is committed, many violent offenders are intentionally

causing harm. These offenders likely experience a sense of accomplishment in knowing that the victim has been harmed. Aggressive offenders are intentionally causing the victim to suffer by acting violently and, therefore, likely commit offenses while both experiencing and understanding the victims' pain. These same offenders do not experience enough distress in these circumstances to discontinue. *Therefore, it was predicted that violent offenders would report higher levels of Perspective-Taking and Empathic Concern and lower levels of Personal Distress.*

5. There was support for the idea that victims of physical abuse experience more egocentric concern than nonvictims and are, therefore, less able to consider the feelings of others. Physically abused children are also reported to experience deficiencies in socializing and other behaviours which require empathy. *Therefore, it was predicted that offenders who were victims of sexual assault would report lower levels of Empathic Concern and Perspective-Taking than those with no known history of sexual victimization.*

6. The development of empathy is known to be influenced by interactions with caregivers and by family relationships. Physical abuse, parental relationships, and parenting strategies have all been reported to contribute to the development of empathy. *It was predicted that levels of Empathic Concern and Perspective-Taking would be related to early family experiences and the quality of family relationships.*

Chapter 2

Method

Participants

Responses from a total of 187 males and 94 females who completed the IRI during an assessment were incorporated into the initial scale analyses. From this sample, 96 respondents were sex offenders aged 12 to 69 ($M=21.00$, $SD=11.34$); 61 were both offenders and victims of sexual abuse aged 12 to 44 ($M=17.08$, $SD=5.62$); 56 were nonoffending victims aged 11 to 46 ($M=24.66$, $SD=11.06$); and 68 were family members of the above, aged 12 to 58 ($M=35.69$, $SD=11.79$). The participants were obtained from the SAFE-T (Sexual Abuse: Family Education and Treatment) Program which is an outpatient, community based program in the Greater Metropolitan Toronto area. The participants included only those whose intelligence was borderline or above (participants below borderline intelligence are referred elsewhere). Many of these participants were included in previous studies by Worling (1995a,b).

To address hypotheses specific to sex offenders, data from 123 male adolescent sex offenders aged 12 to 19 years ($M=15.61$, $SD=1.52$) were selected from the original male sample. The adolescents were all charged with, or accused of, at least one sexual assault. At the time of assessment, the offenders were living at home ($n=59$, 48%), in custody ($n=37$, 30.1%), in group homes ($n=13$, 10.6%), in foster homes ($n=8$, 6.5%), with other relatives ($n=3$, 2.4%), with a friend ($n=2$, 1.6%), or on their own ($n=1$, 0.8%). Referrals were made by probation officers ($n=58$, 47.2%), other agencies ($n=47$, 38.2%), child welfare ($n=14$, 11.4%), family members ($n=3$, 2.4%), and lawyers ($n=1$, 0.8%).

Instruments

The **Interpersonal Reactivity Index (IRI)** (Davis, 1980) was designed to measure cognitive and affective empathy on four scales. The Perspective-Taking scale (PT) measures the tendency to take the viewpoint of another in real life situations, (e.g. "I sometimes try to understand my friends better by imagining how things look from their perspective."). The Fantasy scale (FS) measures the tendency to imagine being in the role of a fictional character, (e.g. "After seeing a play or movie, I have felt as though I were one of the characters."). The Empathic Concern scale (EC) measures the tendency to feel emotions in response to another's negative situation (e.g. "I often have tender, concerned feelings for people less fortunate than me."). The Personal Distress scale (PD) measures the tendency to feel distress after witnessing a negative situation (e.g. "In emergency situations, I feel apprehensive and ill-at-ease."). Responses are rated on a 5 point scale ranging from 1 (does not describe me very well) to 5 (describes me very well).

The internal consistency coefficients for the four scales by gender were reported by Davis (1980) to be .68 (males) and .73 (females) on the EC scale, .71 (males) and .75 (females) on the PT scale, .78 (males) and .79 (females) on the FS scale, and .77 (males) and .75 (females) on the PD scale. Test-retest reliability was established over 60 to 75 days and ranged between .61 and .79 for males, and between .62 and .81 for females. Information regarding validity and the factor structure of the scale was previously discussed in the introduction (see *Measuring Empathy*, pg. 3). Although formal hypotheses were based solely on the EC, PT and PD scales, exploratory analyses were also conducted with the Fantasy scale.

The **Assessing Environments Scale III, (AEIII)** (Berger, Knutson, Mehm, & Perkins, 1988) was designed to tap punitive parental behaviours and a range of family characteristics

related to disciplinary practices. There are 164 self-report true/false questions which result in 15 scales regarding family environment. The scales used in the present study included the 12 item Physical Punishment scale, which assess the extent of physical discipline the respondent received, (e.g. "I received cuts from the discipline used by my parents."); the 14 item Perception of Physical Abuse scale, which determines whether respondents believed the punishment they received was fair, (e.g. "My parents' use of discipline was reasonable."); the 8 item Negative Atmosphere scale, which assess whether the tone of the household was unpleasant (e.g. "We had lots of arguments in our family."); and the 10 item Positive Parental Contact scale, which assesses the amount of positive contact received from parents (e.g. "My parents used to hug me when I was a child."). The authors reported internal consistency ranging between .65 and .79 and test-retest reliabilities over 60 days were above .75 for each of the scales.

The **Buss-Durkee Hostility Inventory (BDHI)** (Buss & Durkee, 1957) is a self-report measure that assesses a number covert and overt hostile feelings and behaviours. There are a total of 66 true/false items which constitute seven scales (Indirect Aggression, Irritability, Negativism, Suspicion, Resentment, Physical Assault, Verbal Aggression), and a Total score. The Total score was used in this study as a measure of overall hostile feelings and behaviours. Researchers have reported acceptable convergent validity between the Total score of the BDHI and other measures of hostility (Biaggio et al., 1981; Selby, 1984)). Internal consistency has been reported at .93 in an adolescent sex offender population for the Total score (Worling, 1993). Test-retest reliability for the Total score has been reported at .78 and the Total score has been found to discriminate antisocial personalities (Haertzen, 1990).

The **Multiphasic Sex Inventory, (MSI)** (Nichols & Molinder, 1977) is a self-report

measure that identifies characteristics of sex offenders including denial and victim blame. The inventory has 300 true/false items which constitute 20 scales and a sexual history. Although the MSI is still undergoing improvements, it is useful in detecting information valuable for both research and clinical work. Test-retest reliability is reported by the authors at .89 over an average of 21 days. The scale included in this study was the Justification scale which assesses the amount an offender attempts to justify or excuse assaultive behaviour.

The Family of Origin Scale, (FOO) (Hovestadt, Anderson, Piercy, Cochran, & Fine, 1985) is a self-report measure of an individual's perceived level of emotional health within the family. Ten scales are derived from the 40 questions, and respondents are asked to rate their family environment on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Test-retest reliability on the Total score was reported above .90 over a two-week period for adolescents (Manley, Searight, Skitka, Russo, & Schudy, 1990; Schudy et al., 1992). Internal consistency has been reported at .96 with an adolescent sample for the Total score (Manley, Searight, Skitka, Russo, & Schudy, 1990). Scales used in this study included the Range of Feelings scale which assesses the extent family members expressed a variety of feelings (e.g. "In my family, certain feelings were not allowed to be expressed."); the Empathy scale which assesses the sensitivity of family members to one another (e.g. "In my family, no one cared about the feelings of other family members."); and the Clarity of Expression scale which assesses how clearly the thoughts and feelings of family members were communicated (e.g. "I found it easy to in my family to express what I thought and how I felt.").

The Rape Myth Acceptance Scale, (RMA) (Burt, 1980) is a 19-item self-report measure designed to assess an individual's acceptance of rape-supportive attitudes, which place blame on

the victim (e.g. "In the majority of rapes, the victim is promiscuous or has a bad reputation."). Worling (1993) reported internal consistency at .90 in an adolescent sex offending population. Researchers have reported correlations between the RMA and self-reported sexually assaultive behaviours and fantasies (Malamuth, 1989). Most questions are answered on a 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree).

The **Acceptance of Interpersonal Violence Scale, (AIV)** (Burt, 1980) is a self-report measure which assesses acceptance of violence as a means of attaining compliance in sexual relationships (e.g. "Being roughed up is sexually stimulating to many women."). Respondents are asked to rate their level of acceptance on a 7 point scale ranging from 1 (strongly agree) to 7 (strongly disagree). Internal consistency for this scale is reported at .59 and the author found a strong relationship between the AIV and rape myth acceptance in males ($r=.52$).

The **Tennessee Self-Concept Scale, (TSCS)** (Roids & Fitts, 1988) is a standardized self-report measure using 100 items to assess the respondent's level of self-esteem. Fourteen clinical scales and 15 research scales are provided. Numerous studies have established acceptable reliability, validity, and internal consistency in various populations (see Roids & Fitts, 1988 for a review). The authors established internal consistency for the Self-Criticism scale with an adolescent sample at .71, and test-retest reliability at .75. Respondents are required to rate their responses on a 5 point scale ranging from 1 (completely false) to 5 (completely true). The Self-Criticism scale was used to assess an individual's tendency to respond in a socially desirable manner.

Therapist Ratings: Therapist ratings of their clients were obtained from staff at the SAFE-T program. Victim empathy of clients was rated on a scale from 1 (no empathy) to 10 (complete empathy). Aggression used in the commission of the offense was rated from 1 (coaxing and convincing) to 10 (death threats, extreme violence). Inter-rater reliability was established at $r=.55$, $p<.05$ for victim empathy, and $r=.72$, $p<.01$ for aggression. Information regarding denial and minimization was collected and scored as a dichotomous variable; however, minimization was separated into three categories: amount of force, number of assaults, and number of victims.

Procedure

Participants completed a battery of psychological tests, randomly administered, as part of a clinical assessment. They were encouraged to ask questions of either the test administrator or the supervising psychologist. Participants were informed that they were not obligated to answer any question that bothered them and were free to discontinue at any time. Although completion of the forms was voluntary, no participant refused. Standardized instructions were provided for each questionnaire and each participant was allowed privacy to complete the forms. For those participants who experienced difficulty reading, items were read aloud.

Data concerning victim age and victimization history were obtained through clinical data and police reports. An offense was considered to be against a child if the offender was at least four years older than the victim, and the victim was under 12 years of age. Offenders were considered victims of sexual assault if they reported an assailant who was at least four years older, and/or reported experiencing any unwanted sexual contact. These criteria have been used previously with adolescent male offenders (Awad & Saunders, 1989; Stermac & Mathews, 1987; Worling, 1993).

Chapter 3

Results

Internal Consistency

The results of the internal consistency analyses for the four IRI scales are presented in Table 1.

Table 1

Internal Consistency Coefficients for the IRI scales (n=281)

Scale Name	Internal Consistency
Empathic Concern	.719
Fantasy	.661
Perspective-taking	.697
Personal Distress	.693

Note. Chronbach's Alpha was used for all internal consistencies. All scales have 7 items.

Correlations with Social Desirability and Age

Correlation coefficients were computed for age and social desirability with each of the IRI scales to determine if these variables should be controlled in subsequent analyses (see Table 2). There was a significant relationship between Empathic Concern and age, suggesting that older participants tended to report more Empathic Concern. The Personal Distress scale correlated with socially desirable responding indicating that those participants who responded in a socially desirable manner tended to report less Personal Distress. There was a positive relationship

Table 2

Correlation Coefficients for the IRI with Age and Social Desirability

Variable	<i>n</i>	Empathic Concern	Fantasy	Personal Distress	Perspective Taking
Age	123	.190*	-.009	-.086	.235**
Self-Criticism	111	-.101	-.014	.207*	-.320**

Note. A lower self-criticism score denotes higher socially desirable responding (Roids & Fitts, 1988).

* $p < .05$ ** $p < .01$

between Perspective-Taking and both age and social desirability indicating that older participants and those who responded in a socially desirable manner reported more tendency to take the perspective of others. There was no relationship between the Fantasy scale and age or socially desirable responding. As a result of the significant correlations in three of four scales, age and social desirability were controlled in all subsequent analyses.

Victim Empathy

Therapist ratings of victim empathy for 60 adolescent male sex offenders were available. Partial Pearson Product-Moment correlations, controlling age and socially desirable responding, were conducted on IRI scales with victim empathy. There were significant negative correlations ($p < .01$) between victim empathy and Empathic Concern ($r = -.35$); and victim empathy and Perspective-Taking ($r = -.37$). These negative relationships indicate that therapist ratings of victim empathy were greatest for those offenders reporting the least Perspective-Taking and Empathic Concern. There was no significant relationship ($p > .05$) between victim empathy and the Fantasy scale ($r = .03$); or victim empathy and Personal Distress ($r = -.13$).

Internal Consistency of the Measures

The results of internal consistency analyses for additional variables used in the analyses are presented in Table 3.

Table 3

Internal Consistency Coefficients for the Variables used in Analyses

Source	Scale Name	Number of Items	<i>N</i>	Internal Consistency
AEIII	Physical Punishment	12	209	.824 ^a
AEIII	Perception of Discipline as Unfair	14	209	.848 ^a
AEIII	Negative Family Atmosphere	6	209	.804 ^a
AEIII	Feelings of Parental Rejection	7	209	.600 ^a
FOO	Empathy	4	270	.785 ^b
FOO	Range of Feelings	4	271	.703 ^b
FOO	Clarity of Expression	4	270	.708 ^b
BDHI	General Hostility	66	201	.930 ^a
MSI	Justifications	24	88	.829 ^d
RMA	Rape Myth Acceptance	19	202	.905 ^c
AIV	Acceptance of Interpersonal Violence	6	225	.552 ^b
TSCS	Social Desirability	10	204	.752 ^c

Note. AEIII = Assessing Environments III; FOO = Family of Origin Scale; BDHI = Buss-Durkee Hostility Inventory; MSI = Multiphasic Sex Inventory; RMA = Rape Myth Acceptance Scale; AIV = Acceptance of Interpersonal Violence Scale; TSCS = Tennessee Self-Concept Scale.

^a Kuder-Richardson-20, taken from Worling (1993)

^b Chronbach's Alpha

^c Chronbach's Alpha, taken from Worling (1993)

^d Kuder-Richardson-20

All internal consistency coefficients were above .70 except Feelings of Parental Rejection and Acceptance of Interpersonal Violence which were both above .55.

Child vs. Peer/adult Victims

A total of 63 male adolescents committed offenses against children only, 44 male adolescents assaulted only peer aged or older victims, and 11 adolescents committed offenses against both child and peer/adult victims. Table 4 presents the offenders' mean scores and standard deviations on IRI scales for each group.

Table 4

Offenders' Mean IRI Scores Based on Victims' Age

Variable	Child only		Peer and Adult		Child, Peer, and Adult	
	<i>n</i> =59		<i>n</i> =38		<i>n</i> =11	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern	15.93	4.76	16.42	3.69	15.91	6.44
Fantasy	14.97	5.02	13.76	5.01	14.91	7.75
Perspective-Taking	13.12	4.30	13.26	3.24	11.09	5.26
Personal Distress	10.79	5.17	9.79	4.24	9.81	7.77

Note. All means are unadjusted.

It was hypothesized that those offenders assaulting peer/adult aged victims would report less Empathic Concern and more Perspective-Taking than those offenders who assault children only. The results of the MANCOVA indicated that based on the age of the victim, there were no significant differences between groups for the Empathic Concern, Perspective-taking, Personal

Distress, or Fantasy scales.

Further exploratory analyses were conducted to determine other victim characteristics that could possibly differentiate adolescent male sex offenders with respect to empathy. Participants were grouped based on their relationship to the victim and their victims' gender. The mean scores and standard deviations of IRI scales for offenders categorized by their relationship to their victims are presented in Table 5.

Table 5

Offenders' Mean IRI Scores Based on the Relationship to their Victims

Variable	Intrafamilial <i>n</i> =33		Extrafamilial <i>n</i> =62		Intra and Extra <i>n</i> =15	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern**	15.57	4.74	17.16 _a	4.52	13.13 _a	3.64
Fantasy	14.84	5.73	14.03	4.87	16.40	5.47
Perspective Taking*	12.39	4.38	13.90 _a	3.84	10.93 _a	4.57
Personal Distress	8.67	4.84	10.66	5.31	11.80	4.66

Note. Means having the same subscript on the same line are significantly different. All means are unadjusted.

* $p < .05$ ** $p < .01$

A MANCOVA, controlling age and socially desirable responding, revealed significant differences in empathy based on the offenders' relationship to the victim, $F(2,50)=3.13, p < .01$. Results of univariate analyses indicated significant differences between the groups for Empathic Concern, $F(2,105)=4.97, p < .01$, and Perspective-Taking, $F(2,105)=3.77, p < .05$. Using Scheffe's post-hoc analysis, significant differences on the Empathic Concern and Perspective-Taking scales were found between offenders who assault victims' outside the family and offenders who assault both

within and outside the family. Those offenders who assault both within and outside the family reported significantly lower mean Empathic Concern and Perspective-Taking scores than offenders who assault outside the family. There were no significant differences between the groups for Fantasy scores.

Analyses were also conducted with respect to the gender of victims. Three groups were compared: those who assaulted males only, those who assaulted females only, and offenders against both males and females. The means and standard deviations for offenders' empathy scores are presented in Table 6. No significant differences were found between the groups.

Table 6

Offenders' Mean IRI Scores Based on Victims' Gender

Variable	Male		Female		Male and Female	
	<i>n</i> = 18		<i>n</i> = 63		<i>n</i> = 24	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern	15.67	4.86	16.60	4.12	14.79	5.48
Fantasy	13.50	4.45	14.95	5.54	14.29	5.51
Perspective-Taking	14.27	4.71	13.11	3.56	11.58	4.68
Personal Distress	9.89	5.40	10.48	5.32	10.37	4.91

Note. All means are unadjusted.

Justification, Rape Myths, and Interpersonal Violence

Table 7 presents the results of partial Pearson Product-Moment Correlations, controlling age and socially desirable responding, between the IRI scales and offenders' endorsement of rape myths, interpersonal violence, and justifications for offending. It was hypothesized that offenders

reporting more justifications for offenses would report less Empathic Concern, less Perspective-Taking, and more Personal Distress than offenders reporting fewer justifications. Offenders reporting more acceptance of interpersonal violence and a belief in rape myths were also expected to report less Empathic Concern, less Perspective-Taking, and more Personal Distress than those endorsing less acceptance of these beliefs.

Table 7

Partial Correlation Coefficients for the IRI Scales and Justifications, Rape Myths, and Acceptance of Interpersonal Violence

	Justification <i>n</i> = 74	Rape Myth Acceptance <i>n</i> = 106	Acceptance of Interpersonal Violence <i>n</i> = 106
Empathic Concern	-.23*	-.23**	-.15
Fantasy	.13	.01	.02
Perspective-taking	-.13	-.12	.03
Personal Distress	.39***	.63***	.30***

Note. P-values are 1-tailed.

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

As predicted, offenders who excused violence by endorsing rape myths, accepting interpersonal violence, and justifying sexual assault tended to report less Empathic Concern for others. Acceptance of Rape Myths ($p < .05$) and the use of justifications ($p < .01$) were significantly correlated with Empathic Concern. The relationship between Empathic Concern and Acceptance of Interpersonal Violence did not attain statistical significance (see Table 7).

Partial correlations, controlling age and socially desirable responding, revealed positive and significant relationships between Personal Distress scores and the variables supporting violence. These correlations were all significant, $p < .001$, indicating strong relationships between experiencing distress in an emotional situation and accepting socially unacceptable, assaultive treatment of others. Contrary to the hypothesis, there were no significant relationships between Perspective-Taking and variables excusing violence, although the relationships were in the predicted direction.

Denial and Minimization

Table 8 presents the means and standard deviations of offenders who denied, minimized, or admitted their assaultive behaviour. It was predicted that deniers would report significantly more Empathic Concern, and less Personal Distress and Perspective-Taking than admitters or minimizers.

Table 8

Mean IRI Scores Based on the Offenders' Acknowledgment of their Offense

Variable	Denying <i>n</i> = 13		Admitting <i>n</i> = 18		Minimizing <i>n</i> = 31	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern	16.69	5.70	14.83	5.11	16.90	4.72
Fantasy	13.92	3.45	14.83	7.06	15.64	5.52
Perspective-Taking	14.69	4.27	11.89	3.82	12.61	4.51
Personal Distress	9.84	5.18	10.77	6.11	9.51	3.76

Note. All means are unadjusted.

The results of the MANCOVA, controlling age and socially desirable responding, revealed no significant differences on any of the IRI scales when offenders were grouped by their level of denial or minimization.

Sexual Violence and General Hostility

It was hypothesized that offenders who committed more violent offenses would report more empathy and report less Personal Distress. The partial Pearson Product-Moment Correlation coefficients, controlling age and socially desirable responding, between the IRI scales, general hostility, and level of sexual violence are presented in Table 9.

Table 9

Partial Correlation of General Hostility and Sexual Violence with the IRI Scales

Variable	General Hostility ^a	Sexual Violence ^b
	<i>n</i> = 103	<i>n</i> = 59
Empathic Concern	- .23**	.36**
Fantasy	.20 ⁺	- .04
Perspective-Taking	- .33***	.28*
Personal Distress	.12	- .01

Note. ^a from the Buss-Durkee Hostility Inventory; ^b from therapist ratings of sexual violence. A 2-tailed test was conducted on Fantasy as no predictions were made.

* $p < .05$, 1 tailed

** $p < .01$, 1 tailed

*** $p < .001$, 1 tailed

+ $p < .05$, 2-tailed

As predicted, those offenders who used the most violence in the commission of their assaults also reported a greater tendency to experience another's emotions. Similarly, these same violent offenders reported that they are more likely to understand the feelings of another, as

measured by the Perspective-Taking scale. Neither the Personal Distress or the Fantasy scales were significantly correlated with offenders' level of sexual violence.

Results of partial correlations indicated that general hostility is significantly related to Perspective-Taking and Empathic Concern. Those offenders who reported having more general hostility also indicated less Empathic Concern for others and less Perspective-Taking. The Fantasy scale also had a significant relationship with the measure of general hostility indicating that offenders who reported higher levels of general hostility also tended to imaginatively transpose themselves into the roles of fictional characters.

History of Victimization

Means and standard deviations for IRI scores of offenders with versus without a history of sexual victimization are presented in Table 10.

Table 10

Offenders' Mean IRI scores Based on a History of Sexual Victimization

Variable	Victimized		Not Victimized	
	<i>n</i> =56		<i>n</i> =55	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern	15.91	4.92	16.42	4.37
Fantasy	14.75	5.60	14.29	4.97
Perspective-Taking	12.89	4.63	13.18	3.74
Personal Distress	9.84	5.33	10.62	4.96

Note. All means are unadjusted.

A total of 56 adolescents reported at least one incident of childhood sexual victimization. It was hypothesized that offenders with a history of sexual victimization would report lower Empathic Concern and Perspective-Taking. Results of a MANCOVA, controlling age and socially desirable responding, indicated that there were no differences between groups.

Further analyses were conducted to determine if offenders with a history of physical abuse would report less empathy. Table 11 presents the means and standard deviations of the IRI scales for offenders with versus without a history of physical abuse. Physical abuse was coded if the offender's score on the Physical Punishment scale of the AEIII was greater than three. This criterion has been used to differentiate physically abused from nonabused participants in previous studies (Bower & Knutson, 1996; Zaidi, Knutson, & Mehm, 1989)

Table 11

Offenders' Mean IRI Scores Based on a History of Physical Abuse (n=115)

Variable	Abused		Not Abused	
	<i>n</i> =45		<i>n</i> =70	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Empathic Concern	15.91	4.51	16.31	4.69
Fantasy	15.84	5.23	13.51	5.15
Perspective-Taking	12.89	3.62	13.07	4.24
Personal Distress	10.98	5.82	10.16	4.63

Note. All means are unadjusted.

The results of a MANCOVA, controlling for age and socially desirable responding, indicated no significant differences in empathy between offenders who were and were not

physically abused.

Family Environment

Simultaneous regression analyses were conducted to test the hypotheses relating to family variables and offenders' empathy. The results of a simultaneous multiple regression of family environment variables, age, and social desirable responding on Empathic Concern are presented in Table 12. Age was the only variable that contributed significantly to Empathic Concern scores of offenders.

Table 12

Simultaneous Multiple Regression of Family Variables on Empathic Concern

Variable	<i>r</i>	<i>B</i>	<i>SE B</i>	β
Age	.190	.635	.317	.203*
Social Desirability	-.101	.021	.085	.027
Negative Atmosphere	-.224	-.177	.309	-.088
Perception of Punishment	-.030	.208	.202	.149
Physical Punishment	-.087	-.108	.283	-.049
Positive Parental Contact	.138	-.150	.234	-.076
Clarity of Expression	.264	.861	.698	.166
Empathy for others	.234	.791	.815	.144
Range of Feelings	.280	1.114	.758	.195
(Constant)		-3.087	7.118	

$R^2 = .21$, adjusted $R^2 = .13$, $R = .46$, $F = 2.462$, $p < .05$

* $p < .05$

Results of a simultaneous multiple regression analysis of family variables, age, and

socially desirable responding on Perspective-Taking are presented in Table 13. Socially desirable responding was the only variable to contribute significantly to the regression.

Table 13

Simultaneous Multiple Regression of Family Variables on Perspective-Taking

Variable	<i>r</i>	<i>B</i>	<i>SE B</i>	β
Age	.235	.512	.264	.189
Social Desirability	-.320	-.175	.071	-.261*
Negative Atmosphere	-.275	-.158	.258	-.091
Perception of Punishment	-.079	.135	.168	.112
Physical Punishment	-.057	.144	.237	.076
Positive Parental Contact	.112	-.121	.195	-.071
Clarity of Expression	.275	.910	.583	.203
Empathy for others	.216	1.267	.680	.267
Range of Feelings	.144	-.485	.633	-.098
(Constant)		5.730	5.941	

$R^2 = .27$, adjusted $R^2 = .19$, $F = 3.306$, $p < .01$

* $p < .05$

Table 14 presents the results of a simultaneous multiple regression analysis of family environment variables, age, and socially desirable responding to explain scores on the Fantasy scale. The variables did not explain scores on the Fantasy scale.

Table 15 presents the results of a simultaneous multiple regression analysis of family variables, age, and socially desirable responding on Personal Distress scores. The results suggest that offenders who do not experience distress in emotional circumstances reported being raised

in families where a wide range of feelings were communicated, ($t=-2.14, p<.05$).

Table 14

Simultaneous Multiple Regression of Family Variables on Fantasy

Variable	<i>r</i>	<i>B</i>	<i>SE B</i>	β
Age	-.009	-.152	.389	-.043
Social Desirability	-.014	-.023	.104	-.026
Negative Atmosphere	.092	-.316	.381	-.138
Perception of Punishment	.142	-.049	.248	-.031
Physical Punishment	.216	.414	.349	.164
Positive Parental Contact	-.236	-.616	.287	-.273
Clarity of Expression	-.010	.165	.859	.028
Empathy for others	-.076	-.860	1.002	-.138
Range of Feelings	-.009	.870	.932	.134
(Constant)		21.959	8.756	

$R^2 = .08$, adjusted $R^2 = -.02$, $R = .28$, $F = .796$, $p > .05$

Table 15

Simultaneous Multiple Regression of Family Variables on Personal Distress

Variable	<i>r</i>	<i>B</i>	<i>SE B</i>	β
Age	-.086	.079	.355	.023
Social Desirability	.207	.237	.095	.277*
Negative Atmosphere	-.062	-.624	.348	-.282
Perception of Punishment	.092	.423	.226	.277
Physical Punishment	.067	-.095	.318	-.039
Positive Parental Contact	-.086	-.371	.262	-.170
Clarity of Expression	.058	.834	.784	.146
Empathy for others	.039	1.327	.915	.220
Range of Feelings	-.171	-1.817	.851	-.289*
(Constant)		2.859	7.993	

$R^2 = .17$, adjusted $R^2 = .09$, $R = .42$, $F = 1.998$, $p < .05$

* $p < .05$

Chapter 4

Discussion

Empathy is often cited as a deficit among sex offenders. Therefore, it is not surprising that there is an empathy training component in the majority of treatment programs for sex offenders. Previous studies on empathy of sex offenders have utilized either an affective or cognitive measure of empathy; however, the Interpersonal Reactivity Index has, more recently, become a popular measure of the multidimensionality of empathy with sex offenders. The results of this study indicate modest internal consistencies for each of the IRI scales within a clinical population. Although most studies using the IRI do not account for age or the social desirability response bias, the results of this investigation indicate that, at least for adolescent male sex offenders, empathy scores are significantly related to these variables. Therefore, previous studies utilizing the IRI with sex offenders should be interpreted with caution.

Victim Empathy

The negative relationship between offender empathy, as measured by the IRI, and therapist ratings of victim empathy was unexpected. It seems reasonable that offenders who understand and feel concern for the feelings of others would also express empathy for their victims. The findings in this study provide evidence to the contrary, as victim empathy was not related to any of the IRI scales. This finding suggests that empathy deficits of adolescent male sex offenders may be specific to their victims or to specific situations. Similar results were noted by Abel et al. (1989) and Hanson and Scott (1995), who found that child molesters demonstrate a clear lack of empathy only when questions are specific to their offenses. Other studies have found that sex offenders and nonsexual offenders are similar with respect to general empathy

(Beckett, Beech, Fisher, & Fordham 1994; Hanson & Scott, 1995; Hayashino et al., 1995).

By acknowledging negative feelings of the victim, the offender must take responsibility for causing harm to another. In circumstances such as these, sex offenders may be motivated to inaccurately perceive the emotions of others, especially those of their victims. Ickes (1993) found that under specific circumstances, individuals may be motivated to incorrectly perceive the thoughts and feelings of another. Motivated inaccuracy is a process of consciously avoiding information that is not in the best interests of the observer (Ickes, 1993). If an offender is able to understand and feel the emotions of another, then he may intentionally avoid his victim's feelings in order to commit the assault. On the other hand, offenders may believe they are empathic, as measured by the IRI; however, when questioned as to how their victims felt during or after the offense, they may be unable to respond. In a university sample of men and women, Ickes, Stinson, Bissonnette, and Garcia, (1990) found no relationship between accurate empathy and Empathic Concern and Perspective-Taking on the IRI. This finding suggests that scores on the IRI are not necessarily reflective of actual empathic tendency. As such, therapist ratings of offenders' victim empathy may be a more precise reflection of offenders' tendency to empathize.

These findings indicate that offenders' self-reported empathy is not a predictor of their victim empathy and may also inaccurately reflect general empathic tendencies. Therefore, the IRI should not be utilized as a measure for obtaining victim empathy of adolescent sex offenders. Furthermore, researchers and clinicians should not rely solely on IRI scores to assess empathy.

Child vs. Peer/adult Victims

There were no differences in self-reported empathy when offenders were contrasted with respect to the age of their victims. This finding is contrary to recent results reported by Pithers (1993, 1994) that child molesters had more empathy than rapists. As previously mentioned,

Pithers did not control for the social desirability response bias, and this factor may explain these disparate results. On the other hand, differences in empathy of sex offenders have been established when the measure of empathy has age and relationship specific questions (see Hanson & Scott, 1994). If adolescent male sex offenders have specific empathy deficits for children, adolescents, or adults, they will not be measured using the IRI.

Relationship to Victim

Extrafamilial offenders report more empathy than offenders who assaulted both within and outside the family. Becker (1993) describes offenders who assault victims both within and outside the family as the highest risk and the most difficult to treat. Therefore, it is not surprising that these offenders reported less Empathic Concern and Perspective-Taking.

Offenders who select victims outside the family have defined limits as to their choice of victims; however, offenders who have not established confines with respect to victim choices are generally less concerned for others and do not take the perspective of others. These offenders are more opportunistic and may have less internalized attributes assisting in limiting victim choices. Davis (1983) reported that social competence is related to Empathic Concern and Perspective-Taking; therefore, offenders who assault both within and outside the family may experience difficulty interacting appropriately with others. These offenders are, therefore, less discriminant with victim choices. Although extrafamilial offenders report more empathy, they may require empathy training specific to victims. Offenders who assault victims both within and outside the family likely require more generalized empathy training.

Victim Gender

There was no difference in empathy between offenders when contrasted according to the

gender of their victims. This finding was not surprising given that questions on the IRI are not gender specific. If clinicians could acquire knowledge of the offenders' tendency to feel and understand the emotions of males and females, then treatment could focus specifically on these deficits. The IRI does not assess the tendency to empathize with one gender over another; however, this information is important to those utilizing empathy training with sex offenders.

Justification, Rape Myths, and Interpersonal Violence

Individuals who endorse or justify the use of violence could be considered callous or unable to understand the victim's feelings. Regardless, there is an obvious lack of consideration for the experiences of victims. The results of this study indicate that offenders who endorse rape myths and justify sexual assault also report less tendency to feel the emotions of others. The results also indicate that those offenders who report feeling distressed in emotional situations also tend to endorse rape myths, justify sexual assault, and accept interpersonal violence. These findings suggest that offenders who justify sexual violence may be attempting to reduce internal discomfort caused by offending behaviours. If an offender is unable to feel the emotions of another, then blaming the victim would be easy. Therefore, it is not surprising that offenders who endorse rape myths and who justify sexual assault reported less tendency to feel the emotions of others. Rape myths are generalized beliefs about rape victims, and by endorsing these myths little concern for the experiences of victims is demonstrated.

Offenders who have been caught may be justifying the offense in order to abolish guilt or alleviate emotional discomfort. Guilt often results from blaming oneself for the distress of another (Hoffman, 1982); however, it is important to note that guilt feelings do not constitute empathy (Pithers, 1993). Justifications allow offenders to find reasonable explanations for committing offenses while reducing internal inhibitors (Lane, 1991). In order to justify

committing sexual assaults, offenders either believe that the victim is responsible or that there was no alternative. Interestingly, the amount of personal discomfort the offender experiences in emotional situations increased with more reported justifications, with more endorsement of rape myths, and with increased acceptance of violence between partners. An easy way to reduce guilt would be to place blame elsewhere and, with little empathic concern, this is likely not hard to accomplish.

Offenders who justify sexual assaults and place blame on victims do not tend to feel the emotions of others but, instead, experience emotional discomfort in negative situations. If these offenders began to feel concern for others, they may reduce rape myth beliefs and accept responsibility for their offenses. Furthermore, offenders may need to accept their own emotional responses in negative situations before being able to take blame for their assaultive acts.

Denial and Minimization

Significant differences in empathy were not found between the groups based on denial or acceptance of their offenses; however, the directions of the findings are consistent with previous studies (see Langevin, Wright, & Handy, 1994; Pithers, 1993). It is unknown if offenders in this study believe their assault was not an offense or if they are attempting to portray innocence. Socially desirable responding cannot be discounted altogether, even though it was considered in each analyses. Deniers may respond as though they are caring and concerned individuals who could not commit such acts, or they may truly believe they are empathic. Therapist ratings of deniers were based on contact throughout the assessment process only. Empathy of deniers who continue to deny their offenses should be assessed and compared to both admitters and those who eventually acknowledge some responsibility.

Sexual Violence and General Hostility

Hypotheses were confirmed regarding empathy of violent adolescent male sex offenders. Those offenders who were generally more hostile reported less tendency to feel empathic concern and take the perspective of others. Moreover, as predicted, offenders who committed more violent sexual assaults tended to report more empathic concern and more tendency to take the perspective of another when compared to less violent offenders. The findings of this study support similar research with adult male sex offenders (see Hanson & Scott, 1995; Hudson et al., 1993). Perhaps some offenders may desire to harm their victims and require empathy to know they succeeded. Empathy is considered a positive attribute; however, it could be utilized for nonaltruistic behaviours. Although empathy encompasses experiencing another's feelings and taking another's perspective, it does not require the desire to change the emotions of another. The idea that violent offenders may become more violent in response to the negative emotions' of victims cannot be discounted. Furthermore, empathy may enhance the offenders' sexual arousal and violent urges.

Marshall, Hudson, Jones, & Fernandez (1995) recently postulated four stages of empathy. Their first stage, Emotional Recognition, necessitates accurately reading the emotions of others. The second stage, Perspective-Taking, is similar to Davis' (1980) and requires the observer to view the world through another's eyes. The third stage, Emotional Replication, suggests that after accurately recognizing another's emotion and taking their perspective, there should be a tendency to experience the other's feelings. Their final stage of empathy is Response Decision. In this stage, the observer responds to the emotional information processed to this point. In the present study, violent offenders may accurately move through the first three stages; however, it seems plausible that violent offenders decide to act regardless of their knowledge of the victims' emotions. Although this is contrary to the abundance of literature suggesting empathy inhibits

aggression, these findings suggest otherwise for violent adolescent male sex offenders.

On the other hand, violent offenders may not empathize while committing a sexual assault. Empathic processes may differ for violent offenders when compared to nonviolent offenders. Violent offenders may recognize the emotions of their victims; however, choose to continue their assaultive behaviours; they may think they can empathize, but may actually misread the emotions of others; or they may experience emotions very different from the victim's but assume they are similar. Moreover, violent offenders may actually become more aroused by the negative emotions of victims.

Interestingly, those offenders who reported more general hostility also noted more tendency to place themselves into the roles of fictional characters. Increased Fantasy scores are reported to have a relationship with social anxiety (Davis, 1980). Offenders who are generally hostile may experience difficulty in social situations and when dealing with others. Therefore, this result should be investigated further with hostile offenders who do and do not experience interpersonal and social difficulties.

It is important to determine if violent offenders do empathize during their offenses and for their victims. Empathy of violent offenders should be accurately determined in order for them to benefit from empathy training. With regard to offenders who are generally hostile, they may benefit from empathy training employing books or movies as they tend to take the role of fictional characters more often than offenders who are not generally hostile.

History of Victimization

Contrary to the hypothesis that victims of sexual assault would report less empathy than nonvictims, there were no differences between the groups. These findings are surprising in light of the number of studies reporting differences in empathy between physically victimized and

nonvictimized children (see Feshbach, 1989). With previous findings on the relationship between empathy and victimization the results of the present study raises questions regarding the utility of the IRI. Researchers have concluded that a history of violence hinders the development of empathy; however, the IRI is not detecting differences between victims and nonvictims.

Family Environment

Although numerous studies have found a relationship between family environment and empathy development, variables of family environment were not significant predictors of empathy in this study. It is surprising that the negative and punitive childhood experiences examined in this investigation were not significantly related to empathy. With age and socially desirable responding incorporated into the analyses, the effects of family variables did not significantly contribute to understanding empathy. However, offenders who lived in families that did not express a wide range of feelings tended to report more emotional distress in negative situations. These offenders may have learned to suppress their feelings and are, therefore, uncomfortable dealing with emotional circumstances.

It may be necessary to assess other family variables which contribute to the development of empathy. For example, a positive relationship with at least one parent may assist in nurturing empathy. Alternatively, close sibling relationships may also significantly contribute to the development of empathy. These variables should be included in future research addressing the development of empathy in sex offenders.

Limitations

This study revealed valuable clinical and research information; however, there are a number of limitations to the findings. The results can only be generalized to adolescent male sex

offenders who have been identified. Many offenders are undetected and it is, therefore, unknown how representative this sample is to all adolescent male sex offenders. These findings are also not applicable to female offenders or adult offenders as these two groups were not represented in this study.

Therapist ratings of victim empathy of adolescent male sex offenders had poor interrater reliability. This highlights the need to assess empathy through more than one method. Assessments of adolescent sex offenders should include both self-report measures of empathy and clinical interviews. Furthermore, offenders were grouped and compared according to therapists' knowledge of their offenses. Many times there are undetected sexual assaults committed by the offenders who are in treatment for a specified crime. For example, offenders classified as intrafamilial offenders may have also assaulted extrafamilial victims.

Conclusions

Differences on the IRI were found when adolescent male sex offenders were grouped according to their relationship to the victim, their level of sexual violence and general hostility, and their acceptance and endorsement of sexual violence. However, the internal consistencies of the IRI scales were only modest in a clinical population, and both age and socially desirable responding accounted for a significant proportion of variance in empathy. It was demonstrated that, within this adolescent sample, the IRI's questions do not differentiate offenders based on the gender and age of victims or history of victimization. Furthermore empathy, as measured by the IRI, is not indicative of the offenders' victim empathy as rated by clinicians. These findings raise questions regarding the utility of the IRI with adolescent male sex offenders and stress the importance of further investigation with this scale.

Researchers need to develop an empathy measure which will assess empathy for all

genders, ages, and relationships. Victim empathy measures should determine where empathy deficits exist. For example, empathy of child molesters may be very different for intrafamilial and extrafamilial children. General empathy and victim empathy need to be clearly defined for consistency in the assessment and treatment of adolescent sex offenders.

References

- Abel, G. G. & Rouleau, J. L. (1990). The nature and extent of sexual assault. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories and treatment of the Offender* (pp.9-21). New York: Plenum Press.
- Abel, G. G., Mittelman, M. S., & Becker, J. V. (1985). Sexual offenders: Results of assessment and recommendations for treatment. In M. H. Ben-Aron, S. J. Hucker, & C. G. Webster (Eds.), *Clinical criminology. The assessment and treatment of criminal behaviour* (pp.189-205). Toronto: M & M Graphics Ltd.
- Acully, D. (1983). *Incarcerated rapist: Exploring a sociological model*. Rockville, MD: National Institute of Mental Health.
- Awad, G. A. & Saunders, E. B. (1989). Adolescent child molesters: Clinical Observations. *Child Psychiatry and Human Development*, 19, 195-206.
- Barbaree, H. E., & Cortoni, F. A. (1993). Treatment of the juvenile sex offender within the criminal and mental health systems. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The juvenile sex offender* (pp. 243-263). New York: The Guilford Press.
- Barbaree, H. E., Hudson, S. M., & Seto, M. C. (1993). Sexual Assault in society: The role of the juvenile offender. In H. E. Barbaree, W. L. Marshall, & S. M. Hudson (Eds.), *The Juvenile Sex Offender* (pp. 1-24). New York: The Guilford Press.
- Beckett, R., Beech, A., Fisher, D., & Fordham, A. S. (1994). *Community-based treatment for sex offenders: An evaluation of seven treatment programmes*. London: Home Office Publications.
- Becker, J. V. (1993, February). *The adolescent sex offender: Assessment and treatment issues*. Paper presented at Sex Offenders & Their Victims III, Toronto.
- Berger, A. M. & Knutson, J. F. (1989). *The Assessing Environments III: A questionnaire for assessing punitive and abuse-related childhood histories*. Unpublished Manuscript. University of Iowa.
- Bernstein, W., & Davis, M. H. (1982). Perspective-taking, self-consciousness, and accuracy in person perception. *Basic and Applied Social Psychology*, 3, 1-19.
- Biaggio, M., Supplee, K., & Curtis, N. (1981). Reliability and validity of four anger scales. *Journal of Personality Assessment*, 45, 639-648.
- Blaske, D. M., Borduin, C. M., Henggeler, S. W., & Mann, D. J. (1989). Individual, family, and peer characteristics of adolescent sex offenders and assaultive offenders. *Developmental Psychology*, 25, 846-855.

- Bower, M. F. & Knutson, J. F. (1996). Attitudes toward physical discipline as a function of disciplinary history and self-labeling as physically abused. *Child Abuse and Neglect*, 20, 689-699.
- Bremer, J. F. (1992). Serious juvenile sex offenders: Treatment and long-term follow-up. *Psychiatric Annals*, 22, 326-332.
- Briere, J., Malamuth, N., & Check, V. P. (1985). Sexuality and rape-supportive beliefs. *International Journal for Women's Studies*, 8, 398-403.
- Briggs, F., & Hawkins, M.F. (1996). A comparison of the childhood experiences of convicted male child molesters and men who were sexually abused in childhood and claimed to be nonoffenders. *Child Abuse and Neglect*, 20, 221-233.
- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38, 217-230.
- Carey, J. C., Fox, E. A., & Spraggins, F. E. (1988). Replication of structure findings regarding the Interpersonal Reactivity Index. *Measurement and Evaluation in Counseling and Development*, 21, 102-105.
- Chaplin, T. C., Rice, M. E., & Harris, G. T. (1995). Salient victim suffering and the sexual responses of child molesters. *Journal of Counseling and Clinical Psychology*, 63, 249-255.
- Chlopan, B. E., McCain, M. L., Carbonell, J. L., & Hagen, R. L. (1985). Empathy: Review of available measures. *Journal of Personality and Social Psychology*, 48, 635-653.
- Cicchetti, D. (1989). How research on child maltreatment has informed the study of child development: Perspectives from developmental psychopathology. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp.377-431). Cambridge: Cambridge University Press.
- Clark, K. B. (1980). Empathy: A neglected topic in psychological research. *American Psychologist*, 35, 187-190.
- Costin, S. E., & Jones, D. C. (1992). Friendship as a facilitator of emotional responsiveness and prosocial interventions among young children. *Developmental Psychology*, 28, 941-947
- Day, H. I., & Chambers, J. (1991). Empathy and burnout in rehabilitation counsellors. *Canadian Journal of Rehabilitation*, 5, 33-44.
- Davis, G. E., & Leitenberg, H. (1987). Adolescent sex offenders. *Psychological Bulletin*, 101, 417-427.

- Davis, M. H. (1980). The multidimensional approach to individual differences in empathy. *JSAS Catalogue of Selected Documents*.
- Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, *51*, 167-184.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*, 113-126.
- Davis, M. H., & Franzoi, S. (1991). Stability and change in adolescent self-consciousness and empathy. *Journal of Research in Personality*, *25*, 70-87.
- Dhawan, S. & Marshall, W.L. (1996). Sexual abuse histories of sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, *8*, 7-15.
- Eisenberg, N. The development of prosocial and aggressive behavior. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental Psychology: An Advanced Textbook* (pp. 461-495). New Jersey: Lawrence Erlbaum Associates.
- Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, *14*, 131-149.
- Eisenberg, N., & Miller, P. (1987). Empathy, sympathy, and altruism: Empirical and conceptual links. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 292-316). Cambridge: Cambridge University Press.
- Feshbach, N. D. (1987). Parental empathy and child adjustment/maladjustment. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 271-289). Cambridge: Cambridge University Press.
- Feshbach, N. D. (1989). The construct of empathy and the phenomenon of physical maltreatment of children. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp.349-373). Cambridge: Cambridge University Press.
- French, D. D. (1988). Distortion and lying as defense processes in the adolescent child molester. *Journal of Offender Counseling, Services, & Rehabilitation*, *13*, 27-36.
- Gladstein, G. A. (1983). Understanding empathy: Integrating counseling, developmental, and social psychology perspectives. *Journal of Counseling Psychology*, *30*, 467-482.
- Groth, A. N. (1979). Sexual traumas in the life history of rapists and child molesters. *Victimology*, *4*, 10-16.
- Graziano, A. M., & Mills, J. R. (1992). Treatment for abused children: When is a partial solution acceptable. *Child Abuse and Neglect*, *16*, 217-228.

- Haertzen, C. A., Hickey, J. E., Rose, M. R., & Jaffe, J. H. (1990). The relationship between a diagnosis of antisocial personality and hostility: Development of an antisocial hostility scale. *Journal of Clinical Psychology, 46*, 679-686.
- Hagan, M. P., King, R. P., & Patros, R. L. (1994). Recidivism among adolescent perpetrators of sexual assault against children. *Young victims, young offenders* (pp.127-137). New York: Haworth Press, Inc.
- Hanson, R. A., & Mullis, R. L. (1985). Age and gender differences in empathy and moral reasoning among adolescents. *Child Study Journal, 15*(3), 181-187.
- Hanson, R. K., & Scott, H. (1995). Assessing perspective taking among sexual offenders, nonsexual criminals, and nonoffenders. *Sexual Abuse: A Journal of Research and Treatment, 7*, 259-277.
- Hanson, R. K., & Slater, S. (1988). Sexual victimization in the history of sexual abusers: A review. *Annals of Sex Research, 1*, 485-499.
- Hatcher, S., Nadeau, M., Walsh, L., Reynolds, M., Galea, J., & Marz, K. (1994). The teaching of empathy for high school and college students: Testing Rogerian methods with the Interpersonal Reactivity Index. *Adolescence, 29*, 961-974.
- Hayashino, D.S., Wurtele, S.K., & Klebe, K.J. (1995). Child molesters: An examination of cognitive factors. *Journal of Interpersonal Violence, 10*, 106-116.
- Herman, J. L. (1990). Sex offenders: A feminist perspective. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of Sexual Assault: Issues, Theories, and Treatment of the Offender* (pp. 177-193). New York: Plenum Press.
- Hovestadt, A. J., Anderson, W. T., Piercy, F. P., Cochran, S. W., & Fine, M. (1985). A family-of-origin scale. *Journal of Marital and Family Therapy, 11*, 287-297.
- Hobson, W.F., Boland, C., & Jamieson, D. (1985). Dangerous sexual offenders. *Medical Aspects of Human Sexuality, 19*, 104-119.
- Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology, 33*, 307-316.
- Hoffman, M. L. (1982). Development of prosocial motivation: Empathy and guilt. In N. Eisenberg (Ed.), *The development of prosocial behavior* (pp. 218-231). New York: Academic Press.
- Hoffman, M. L. (1987). Empathy: Justice and moral judgement. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 47-80). Cambridge: Cambridge University Press.

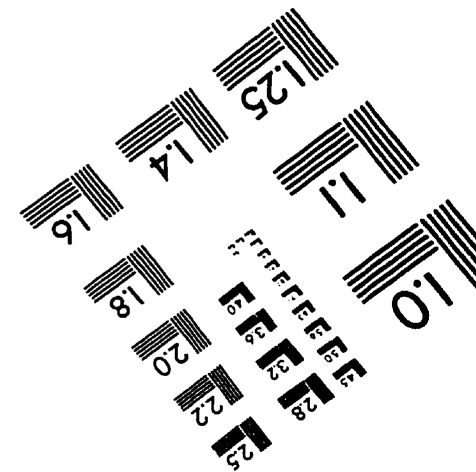
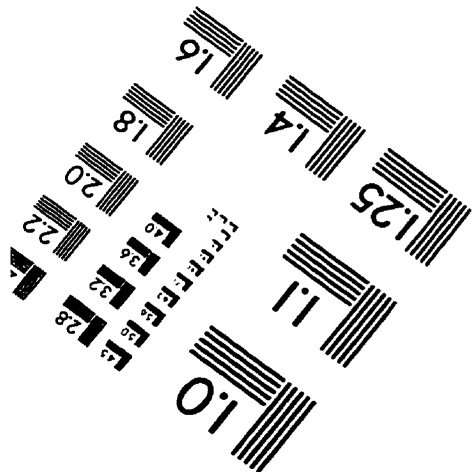
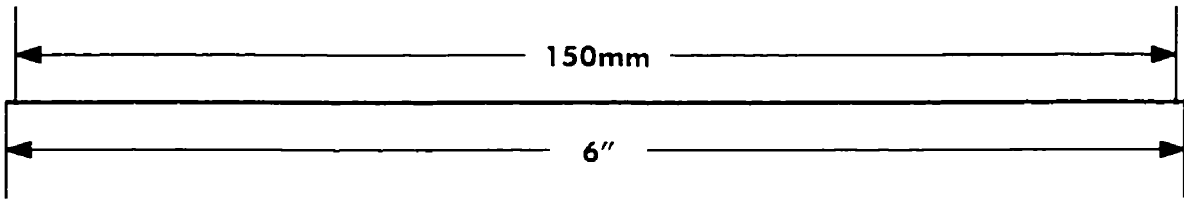
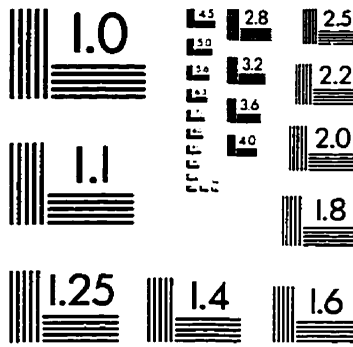
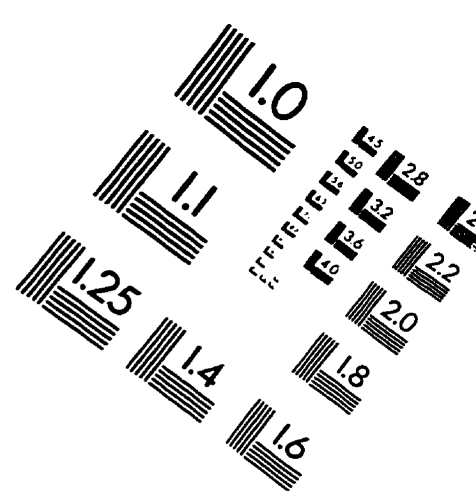
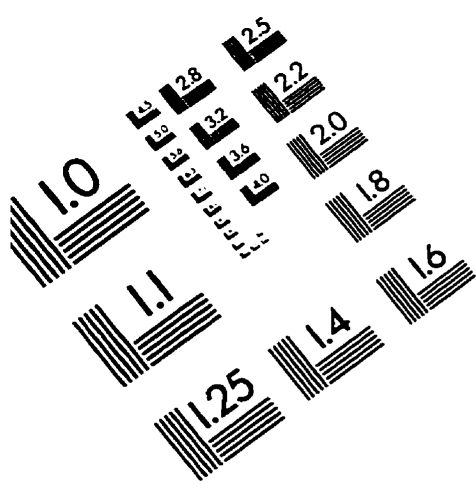
- Hudson, S. M., Marshall, W. L., Wales, D., McDonald, E., Bakker, L. W., & McLean, A. (1993). Emotional recognition skills of sex offenders. *Annals of Sex Research, 6*, 199-211.
- Ickes, W. (1993). Empathic accuracy. *Journal of Personality, 61*, 587-609.
- Ickes, W., Stinson, L., Bissonnette, V., & Garcia, S. (1990). Naturalistic social cognition: Empathic accuracy in mixed-sex dyads. *Journal of Personality and Social Psychology, 5*, 730-742.
- Jenkins-Hall, K. D. (1989). Enhancing offender empathy for sexual-abuse victims. In D. R. Laws (Ed), *Relapse Prevention with Sex Offenders* (pp. 236-243). New York: The Guilford Press.
- Jenkins-Hall, K. D. & Marlatt, G. A. (1989). Apparently irrelevant decisions in the relapse process. In D. R. Laws (Ed), *Relapse Prevention with Sex Offenders* (pp. 47-55). New York: The Guilford Press.
- Johnson, J.A., Cheek, J.M. & Smither, R. (1983). The structure of empathy. *Journal of Personality and Social Psychology, 45*, 1299-1312.
- Kaufman, K. L., Hilliker, D. R., Lathrop, P., & Daleiden, E. L. (1993). Assessing child sexual offenders' modus operandi: Accuracy in self-reported use of threats and coercion. *Annals of Sex Research, 6*, 213-229.
- Katz, R. L. (1963). *Empathy its nature and uses*. London: Collier-Macmillan Ltd..
- Klimes-Dougan, B., & Kistner, J. (1990). Physically abused preschoolers' responses to peers' distress. *Developmental Psychology, 26*, 599-602.
- Lakey, J. (1994). The profile and treatment of male adolescent sex offenders. *Adolescence, 29*, 755-761.
- Lane, S.L. (1991). The sexual abuse cycle. In G.D. Ryan & S.L. Lane (Eds.) *Juvenile sexual offending: Causes, consequences, and correction* (pp. 103-141). Lexington, MA: Lexington books.
- Langevin, R., Wright, P., & Handy, L. (1988). Empathy, assertiveness, aggressiveness, and defensiveness among sex offenders. *Annals of Sex Research, 1*, 533-547.
- Lennon, R., & Eisenberg, N. (1987). Gender and age differences in empathy and sympathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 195-217). Cambridge: Cambridge University Press.
- Malamuth, N. M. (1989). The attraction to sexual aggression scale: Part one. *Journal of Sex Research, 26*, 26-49.

- Malamuth, N., Heavy, C., & Linz, D. (1993). Predicting mens antisocial behaviour against women: The interaction model of sexual aggression. In G. Nagayama Hall, R. Hirschman, J. Graham, & M. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment and treatment* (pp.63-97). Washington D.C.: Taylor and Francis.
- Manley, C. M., Searight, H. R., Binder, A. F., & Russo, R. J. (1990). The Family-of- Origin scale: Factorial validity for adolescents. *Family Therapy, 17*, 75-82.
- Marshall, W. L. (1989). Intimacy, loneliness and sexual offenders. *Behaviour, Research, and Therapy, 27*, 491-503.
- Marshall, W. L. (1993). A revised approach to the treatment of men who sexually assault adult females. In G. Nagayama Hall, R. Hirschman, J. Graham, & M. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment and treatment* (pp. 143-165). Washington D.C.: Taylor and Francis.
- Marshall, W.L. & Barbaree, H.E. (1990). An integrated theory of the etiology of sexual offending. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp.257-275). New York: Plenum Press.
- Marshall, W. L., Barbaree, H. E., & Fernandez, Y. M. (1995). Some aspects of social competence in sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 7*, 113-137.
- Marshall, W. L., Hudson, S. M., Jones, R., & Fernandez, Y. M. (1995). Empathy in sex offenders. *Clinical Psychology Review, 15*, 99-113.
- Mehrabian, A., & Epstein, M. (1972). A measure of emotional empathy. *Journal of Personality, 40*, 525-543.
- Milner, J.S., Halsey, L.B., & Fultz, J. (1995). Empathic responsiveness and affective reactivity to infant stimuli in high-and low-risk for physical child abuse mothers. *Child Abuse and Neglect, 19*, 767-780.
- Monto, M., Zgourides, G., Wilson, J., & Harris, R. (1994). Empathy and adolescent male sex-offenders. *Perceptual and Motor Skills, 79*, 1598.
- Murphy, W. D. (1990). Assessment and modification of cognitive distortions in sex offenders. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 331-342). New York: Plenum Press.
- Nichols, H. R., & Molinder, I. (1977). *Multiphasic Sex Inventory*. Taucoma, WA.
- O'Donohue, W. & Letourneau, E. (1993). A brief group treatment for the modification of denial in child sexual abusers: Outcome and follow-up. *Child Abuse and Neglect, 17*, 299-304.

- Perry, G., & Orchard, J. (1992). *Community based treatment. Assessment and treatment of adolescent sex offenders* (pp.67-97). Sarasota, FL: Professional Resource Press.
- Peters, S. D., Wyatt, G. E., & Finkelhor, D. (1986). Prevalence. In D. Finkelhor (Ed), *A sourcebook on child sexual abuse* (pp. 15-59). Beverly Hills, CA: Sage Publications.
- Pithers, W. (1990). Assessment and modification of cognitive distortions in sex offenders. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 331-361). New York: Plenum Press.
- Pithers, W. (1993). Treatment of rapists: Reinterpretation of early outcome data and exploratory constructs to enhance therapeutic efficiency. In C. Nagayama Hall, R. Hirschman, J. Graham, & M. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment and treatment* (pp.167-196). Washington D.C: Taylor and Francis.
- Pithers, W. (1994). Process evaluation of a group therapy component designed to enhance sex offenders' empathy for sexual abuse survivors. *Behaviour, Research, and Therapy*, 32, 565-570.
- Roid, G. H. & Fitts, W. H. (1988). *The Tennessee Self-Concept Scale*. Los Angeles: Western Psychological Services.
- Ryan, G. D. (1991). Incidence and prevalence of sexual offenses by juveniles. In G.D. Ryan & S.L. Lane (Eds.), *Juvenile sexual offending: Causes, consequences, and correction* (pp.9-15). Lexington, MA: Lexington books.
- Salter, A. (1988). *Treating child sex offenders and victims*. Newbury Park, CA.: Sage Publications.
- Salter, A. (1995). *Transforming trauma: A guide to understanding and treating adult survivors of child sexual abuse*. Newbury Park, CA.: Sage Publications.
- Scavo, R., & Buchanan, B. D. (1990). Group therapy for male adolescent sex offenders: A model for residential treatment. *Residential Treatment for Children & Youth*, 7, 59-74.
- Schudy, K. L., Searight, H. R., Russo, J. R., Rogers, B. J., Manley, C. M., Capps, S. C., & Skitka, L. J. (1992). The Family-of-Origin scale for young adolescents: Reliability and preliminary norms. *Family Therapy*, 16, 123-130.
- Scully, D., & Marolla, J. (1984). Convicted rapists' vocabulary of motive: Excuses and justifications. *Social Problems*, 31, 530-544.
- Seghorn, T. K., Prentky, R. A., & Boucher, R. J. (1987). Childhood sexual abuse in the lives of sexually aggressive offenders. *Journal of American Academic Child and Adolescent Psychiatry*, 26, 262-267.

- Selby, M. J. (1984). Assessment of violence potential using measures of anger, hostility, and social desirability. *Journal of Personality Assessment*, 48, 531-544.
- Seto, M. C., & Barbaree, H. E. (1993). Victim blame and sexual arousal to rape cues in rapists and nonoffenders. *Annals of Sex Research*, 6, 167-183.
- Stermac, L., & Mathews, F. (1987). *Adolescent sex offenders: Towards a profile*. Toronto: Central Toronto Youth Services.
- Straker, G., & Jacobson, R. S. (1981). Aggression, emotional maladjustment, and empathy in the abused child. *Developmental Psychology*, 17, 762-765.
- Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bulletin*, 91, 143-173.
- Wills, L. B. (1993). Introduction: Treatment of sexual aggression. In G. Nagayama Hall, R. Hirschman, J. Graham, & M. Zaragoza (Eds.), *Sexual aggression: Issues in etiology, assessment and treatment* (pp. 135-141). Washington: Taylor and Francis.
- Williams, L. M., & Finkelhor, D. (1989). The characteristics of incestuous fathers. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault* (pp. 231-255) New York: Plenum Press.
- Wispe, L. (1987). History of the concept of empathy. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 17-37). Cambridge: Cambridge University Press.
- Worling, J. R. (1993). *Adolescent male sexual offenders: Individual and family characteristics based on victim's age, gender, and relationship to the offender*. Unpublished Doctoral Dissertation, University of Toronto, Toronto.
- Worling, J. R. (1995a). Adolescent sibling-incest offenders: Differences in family and individual functioning when compared to adolescent nonsibling sex offenders. *Child Abuse and Neglect*, 19, 633-645.
- Worling, J. R. (1995b). Sexual abuse histories of adolescent male sex offenders: Differences on the basis of the age and gender of their victims. *Journal of Abnormal Psychology*, 102, 610-613.
- Yussen, S. R., & Santrock, J. W. (1982). *Child Development: An Introduction*. Dubuque, IA: Wm. C. Brown Company Publishers.
- Zahn-Waxler, C., & Radke-Yarrow, M. (1990). The origins of empathic concern. *Motivation and Emotion*, 14, 107-129.
- Zaidi, L. Y., Knutson, J. F., & Mehm, J. B. (1989). Transgenerational patterns of abusive parenting: Analog and clinical tests. *Aggressive Behavior*, 15, 137-152.

IMAGE EVALUATION TEST TARGET (QA-3)



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