Assessing Perspective-Taking Among Sexual Offenders, Nonsexual Criminals, and Nonoffenders¹

R. Karl Hanson^{2,3} and Heather Scott²

Lack of victim empathy is often cited as a factor in sexual offending. Empathy is a complex reaction that requires both perspective-taking skills and sympathetic feelings. Some treatment programs for sexual offenders provide victim empathy training based on the assumption that increased awareness of victim suffering should inhibit further offenses. Perspective-taking deficits, however, may be irrelevant to certain offenders who are indifferent or even attracted to the suffering of their victims. In the present study a diverse group of sexual offenders and comparison subjects were administered two new measures of perspective-taking ability. The sexual offenders, in general, showed greater deficits than did the comparison subjects. As expected, deficits were most noticeable in those offenders who were not known to have used overt force and those who were not intoxicated during the commission of their offenses. The present study supports the utility of using perspective-taking measures with sexual offenders.

KEY WORDS: alcohol-related offending; cognitive deficits; perspective taking; sexual offenders; victim empathy.

INTRODUCTION

As sexual offending is increasingly recognized as a serious social problem, there has been increased attention to treatment programs for sexual

¹The views expressed are those of the authors and do not necessarily reflect the views of the Ministry of the Solicitor General.

²Ministry Secretariat, Solicitor General Canada, and Carleton University, Ottawa, Ontario, Canada.

³To whom correspondence should be addressed at Ministry Secretariat, Solicitor General of Canada, 340 Laurier Avenue, West, Ottawa, Ontario, Canada, K1A 0P8.

offenders (Grubin & Thornton, 1994; Laws, 1989; Knopp, Freeman-Longo, & Stevenson, 1992; Wormith & Hanson, 1992). Almost all of these treatment programs devote some effort to increasing the offenders' empathy for their victims (e.g., Hildebran & Pithers, 1989). This focus on empathy is not based on strong research evidence documenting the effectiveness of this type of treatment. In fact, the research evidence is equivocal concerning the effectiveness of treatment with this population (Marshall & Pithers, 1994; Quinsey, Harris, Rice, & Lalumière, 1993). The interest in empathy training for offenders seems to be based primarily on the plausible assumption that victim empathy should inhibit offending and the observation that sexual offenders often appear callous toward their victims. Sexual offenders often claim that their victims were not harmed by, and even enjoyed, the assault, despite clear evidence to the contrary (Abel, Becker, & Cunningham-Rathner, 1984; Snowdon, 1984).

A variety of different meanings has become associated with the concept of empathy (Eisenberg & Fabes, 1990; Eisenberg & Strayer, 1987). In this paper, empathy is considered to be comprised of three major components: (a) perspective-taking ability, (b) emotional responding to others, and (c) caring. Perspective-taking ability refers to the capacity to accurately identify the emotional state of other people and perceive how they are likely to respond to particular situations. Perspective taking is primarily a cognitive, intellectual ability that need not be accompanied by an appropriate emotional response, the second component of empathy. Empathic emotional responses typically mirror the emotions perceived, although there is a range of complementary feelings that may be considered empathic. For example, witnessing a child in distress may evoke feelings of sadness or compassion.

The third component, care, is not included in some definitions of empathy, but it is important when considering the contribution of victim empathy deficits to sexual offending. Although accurately perceiving and emotionally responding to the suffering of others often leads to a desire to help, awareness of others suffering can also lead to nonconstructive responses, such as escape and anger (Eisenberg & Miller, 1987). Similarly, sexual offenders may accurately perceive the emotional state of their victims, and emotionally respond to their victims, but choose to manage such emotions in ways that further contribute to their offenses. For example, a man sexually assaulting a woman could try to minimize any discomfort caused by his perception of the woman's distress by degrading his victim ("She is just a slut, it does not matter what she feels.") Sexual offenders may also take enjoyment in the accurately identified suffering of their victims. Victim suffering can be perceived as an empowering victory, as a demonstration of an offender's mastery over another person. Such sadistic

motivations are obvious in many of the most brutal sexual offenders, but may be present to a lesser degree in a broad range of offenders.

Sexual offenders may have empathy deficits in any or all of the above three components: they may lack understanding, lack feelings, and lack caring. These deficits may be general or they may be specific to their victims, or to the groups to which their victims belong, such as prepubescent boys or women in dating situations. As well, these deficits may be stable or situational characteristics. Offenders may always have trouble empathizing or they may lose their empathic abilities only in certain circumstances, such as when angry, drunk, or sexually aroused.

The research to date has been insufficient to articulate clearly the nature of the empathy deficits in sexual offenders or even to demonstrate the existence of such deficits. Sexual offenders are a difficult population to assess. Even if they fully admit to their offenses (which is rare), there is strong social pressure for them to generate acceptable explanations for their transgressions (Hanson & Slater, 1993; Taylor, 1972). Offenders may feign ignorance of their victims' suffering to hide their own sadistic motivations. A rapist who admits how he enjoyed hurting his victim is likely to be less well received than one who can convince others that he thought the victim consented.

Given the difficulties in getting accurate accounts from the offenders themselves, a starting point for assessing sexual offenders' empathy deficits is to target stable attributes that are difficult to fabricate. Of the three components of empathy, the one that seems most amenable to assessment is perspective taking. Several studies have been conducted using videotapes of heterosocial interactions to assess perspective taking deficits in sexually aggressive men (Lipton, McDonel, & McFall, 1987; McDonel & McFall, 1991; Murphy, Coleman, & Haynes, 1986). Lipton et al. (1987), in a study involving videotaped vignettes of dating situations, found that convicted rapists, in comparison to nonsexual criminals, had significantly greater difficulty identifying the women's level of interest. The rapists' greatest weakness was in recognizing the women's negative signals. Similarly, Murphy et al. (1986) found that problems identifying women's hostility were correlated with selfreported sexually coercive behavior. As well, McDonel and McFall (1991) found that difficulty identifying women's negative affect correlated with selfreported likelihood of raping. In the above studies, the recognition deficit tended to be specific to women's negative cues during dating situations.

Questionnaires have also been used to assess perspective-taking deficits in sexual offenders. Davis' (1980, 1983) Interpersonal Reactivity Index (IRI), for example, contains a Perspective Taking subscale that has been administered to sexual offenders (Marshall, Jones, Hudson, & McDonald, 1993). Rather than directly assessing perspective-taking ability, the scale

measures the respondents' assessment of the extent to which they habitually consider other people's perspectives. Sexual offenders' scores on the IRI Perspective Taking measure, however, have not differed from those of various comparison groups (Marshall *et al.*, 1993; Hayashino, Wurtele, & Klebe, 1995).

A more promising use of questionnaire materials involves asking of-fenders to interpret written vignettes. Stermac and Segal (1989), for example, asked child molesters, rapists, and control subjects to read a series of vignettes describing adult-child sexual interactions. After each vignette, the subjects were asked to rate the harm/benefit caused by the offense. They found that child molesters minimized the harm caused in those situations in which the child victims showed no overt signs of struggle or distress. A similar procedure was used by Beckett, Beech, Fisher, and Fordham (1994). They found that a mixed group of sexual offenders minimized the harm depicted in a series of vignettes describing sexual offenses (mostly child molestations). The differences between the groups was most noteworthy for the least serious offense descriptions.

The purpose of the present project was to evaluate two new questionnaires for assessing perspective-taking deficits in sexual offenders. These measures were constructed with the recognition that many offenders are motivated to deny their sexual offenses and to deny any attributes that might make them appear likely to commit sexual offenses. Consequently, the present study attempted to circumvent self-presentation biases by using skill or competency measures, as was done in the videotape studies previously described (Lipton et al., 1987; McDonel & McFall, 1991; Murphy et al., 1986). On skill measures, offenders are not asked to disclose; instead, they are asked to provide their best responses. Such tests aim to identify deficits rather than simply differences.

Since there may be different types of deficits for child molesters and rapists, two measures were created: the Child Empathy Test and the Empathy for Women Test. These measures each ask the respondent to read a vignette describing a social/sexual interaction and rate how the child or woman would likely feel in the situation. The situations were selected to represent situations associated with child sexual abuse or rape. Some of the situations were constructed to be clearly abusive, whereas others were constructed to be clearly nonabusive. Most of the vignettes, however, were ambiguous, and required weighing the relative importance of various factors that might have influenced how the woman or child would have felt. Positive, nonabusive situations were included so that offenders could not appear empathic simply by rating all the vignettes as abusive.

Given the ambiguity of vignettes, special care was needed to construct the scoring systems. For the Empathy for Women test, the norms were

based on women's own responses. The scoring for the Child Empathy Test was based on the response of experts in the field of child sexual abuse.

The present study involved administering a standard battery of measures to a diverse group of sexual offenders, nonsexual criminals, and community nonoffenders. Participants were then grouped according to their self-reported offense history and file information (where available; see below). The measures included the two new measures of perspective taking (the Empathy for Women Test and the Child Empathy Test), a measure of attitudes tolerant of adult-child sex (Abel et al., 1989), a measure of socially desirable responding (Crowne & Marlowe, 1960), and a measure of verbal intelligence (Paitich, 1977).

It was expected that men who had committed a sexual offense against a child would show an overall deficit on the Child Empathy Test and that rapists would show a deficit on the Empathy for Women Test. For sexual offenders admitting to their offenses, their errors would be in the direction of failing to recognize victims' distress. For offenders denying their offenses, it was expected that they would attempt to appear empathic by *overestimating* the distress of the victims in the vignettes. This overestimation would be based on a desire to communicate that they know sexual abuse is harmful and that they would not engage in such behavior. Similarly, it was expected that the measure of social desirability should correlate with overestimating distress, but social desirability should not correlate with the total scores on the perspective-taking tests.

Although the total group of sexual offenders was expected to make more errors on the perspective-taking tests than were the control subjects, these deficits were expected to be associated with certain offender characteristics. Since perspective taking is a cognitive skill, it was expected that low intelligence would be associated with high levels of errors.

The use of overt force was also expected to be positively associated with perspective-taking ability. In general, the perception of, and identification with, the victim's suffering should inhibit sexual offending. The perception of victim suffering, however, would not be expected to inhibit sadistic offenders—those motivated to inflict suffering. Consequently, perspective-taking deficits would be more important for nonsadistic offenders than for sadistic offenders. No direct measure of motivations was available for this study, but sadistic motivations would be the most likely in those offenders who used overt force. This suggests that perspective-taking deficits should be most common in offenders who do not use overt force.

A further prediction was that alcohol use should be positively related to perspective-taking ability. Since the offenders were assessed when they were sober, it was expected that the perspective-taking deficits would be greatest in those who had offended at least once when they were sober.

The men who offended only when they were intoxicated may, when sober, have recognized the harmfulness of sexual assaults but have been able to detach themselves from victim suffering when they were under the influence of alcohol.

METHOD

Subjects

Participants in the present study included samples of community males, university males, incarcerated sexual offenders, and nonsexual offenders. These groups were further subdivided into those who admitted to sexual assault and those who did not.

Convicted Sexual Offenders. A sample of 149 charged and/or convicted sexual offenders was drawn from correctional institutions or from centers involved in the clinical assessment and treatment of sexual offenders (located in Quebec, Ontario, Nova Scotia, New Brunswick, and Newfoundland). Twenty-one of the convicted sexual offenders admitted to sexual assault against an adult female (16 or older), 66 to child molestation, 39 to both, and 23 denied any sexual offending. Seventy men were currently in treatment and 26 were not (missing data for 53). Of the 111 sexual offenders for whom file information was available, 30 had at least one incident of overt force, and 38 were intoxicated during one or more offenses. Estimates of coding reliability for the file information were not available.

Community Sexual Offenders. The comparison groups included men who admitted to sexual offenses but who had never been charged or convicted for a sexual offense (although many were convicted for nonsexual offenses). In the community sample, 26 men admitted to engaging in sexual activities with an adult female against her will, 14 admitted to sex with children 15 years old or younger when they were at least 5 years older than the child, and 9 men admitted to sexual offenses against both women and children. The community sexual offenders comprised 28% of the initial community comparison group. The rate of admitted sexual offending was not significantly different between the nonsexual criminals and the community nonoffenders.

Community Nonoffenders. The community comparison group was recruited through public notices placed in the same communities as those from which the samples of sexual offenders were drawn. They typically were employed, married men in their thirties (see Table I). The 85 men in this group did not admit to any sexual offenses.

Table I. Descriptive Information on the Sexual Offender and Comparison Groups

	n	Age (SD)		Single (%)	Education (%)	
Group					≤10	>12
Convicted sexual offenders						
Rapists	21	31.5	(7.4)	60.0	33.3	20.0
Child molesters	66	38.9	(10.9)	28.5	50.0	25.9
Both	39	36.7	(7.8)	37.9	51.0	27.3
Deny	23	43.1	(12.2)	25.0	47.5	34.4
Community sexual offenders						
Rapists	26	36.4	(9.0)	37.5	6.2	68.5
Child molesters	14	36.3	(14.5)	25.0	8.3	16.6
Both	9	31.2	(7.9)	75.5	20.0	0.0
Community nonoffenders	84	35.5	(7.9)	26.2	4.8	65.1
Nonsexual criminals	41	31.2	(10.4)	· · · ·	_	
Student nonoffenders	76	20.7	(2.4)	-	0.0	100.0

Nonsexual Criminals. This group comprised 42 men who were serving a prison sentence (or who were recently paroled) for a nonsexual crime and who reported no prior sexual offenses.

Student Nonoffenders. These 76 men were drawn from a subject pool of first-year psychology students at Carleton University (Ottawa). Sixteen men were eliminated from the original sample because they admitted to sexually coercive behavior on the Sexual Experience Scale (Koss & Oros, 1982). Item 5 of the scale, however ("said things that were not true"), was not used to classify the students as sexually coercive.

Descriptive information on the subjects is given in Table I. Due to an administrative oversight, the same demographic information was not collected on all participants. Overall, 5.5% of the sample identified themselves as belonging to an identifiable minority group.

Measures

Child Empathy Test (CE Test). This test consisted of 16 vignettes. Some of the vignettes described clear instances of sexual abuse, whereas others described clearly nonabusive interactions. Most were ambiguous. After reading each vignette, participants were asked to rate how the child felt on a 7-point scale ranging from "1, very upset, unhappy, or scared" to "7,

very good, happy, cheerful." Two examples of the vignettes are presented in the Appendix.

The scoring key was based on the responses of 15 experts (both males and females, from three provinces) who were actively involved in the assessment and treatment of sexual abuse victims. The agreement between the judges was high [intraclass correlation of .85, using Eqs. (2, 1) from Shrout and Fleiss (1979)]. There were no differences between the male and the female experts.

The ranges of correct responses were determined to capture at least 80% of the responses of the experts. On 8 of the 16 vignettes, the correct range captured all of the experts' responses. Responses outside the acceptable range were considered to be errors. Respondents could make errors by either underestimating or overestimating the children's distress. Both types of errors (Deviant and Fake) were recorded separately and then combined into a total score.

Empathy for Women Test (EFW Test). The perspective-taking skill targeted in this test was the ability to distinguish between sexually abusive and nonabusive interactions between men and women. As with the CE Test, 15 vignettes were developed to represent a range from clearly abusive to clearly nonabusive. The response format was the same as for the CE Test. Two sample vignettes are included in the Appendix.

The range of correct answers was determined by the responses of the combined sample of community (n = 127) and university women (n = 100). The level of agreement among the women on the EFW Test was low [intraclass correlation of .38, using Eqs. (2, 1) from Shrout and Fleiss (1979)]. This low agreement indicated that, as intended, many of the items were ambiguous and lent themselves to alternate interpretations. Any answers that were endorsed by at least 20% of the sample of women were considered correct, with the provision that the range of correct responses had to include at least 60% of the female sample (average of 73.5%).

Abel/Becker Cognition Scale. Attitudes tolerant of adult-child sexual relationships were assessed using Factor 1 of the Abel/Becker Cognition Scale (Abel et al., 1989). The six items in this scale were internally consistent ($\alpha = .81$). Higher scores on this scale indicated less deviant attitudes. The following is a sample item from this scale: "Sex between a 13 year old (or younger child) and an adult causes the child no emotional problems," which is rated on a 5-point scale from "strongly disagree" to "strongly agree." For the French-speaking participants, the six items were embedded in the full 26-item French version of the scale (Hanson, Pronovost, & Scott, 1994).

Clarke Vocabulary Scale. Verbal intelligence/reading ability was assessed using this 40-item multiple-choice questionnaire. Norms and IQ equivalents are presented by Paitich (1977).

Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). This 33-item scale assesses the tendency to perceive and present oneself in an unrealistically positive manner. A summary of reliability and validity information is given by Crowne and Marlowe (1964).

Procedure

After signing informed consent forms indicating that their responses would remain anonymous and confidential, the participants were given a package of questionnaires, including those that were the focus of this study (for information on the other measures see Hanson & Scott, 1994; Hanson et al., 1994). The questionnaires were in English or in French, depending on their language preference; however, the Marlowe-Crowne Social Desirability Scale and the Clarke Vocabulary Scale were administered only to the English-speaking participants (n = 172). The student nonoffenders completed only the EFW Test as part of a separate study (Bewer, 1992). All of the men from the community sample were paid for their participation (\$20 Canadian), as were some of the sexual offenders (depending on the policy at their setting). The measures were read aloud to those offenders who had difficulty reading the measures on their own.

RESULTS

The first set of analyses examined the internal consistency and discriminant validity of the new perspective-taking measures. As shown in Table II, the internal consistencies of the measures were moderate to low (.50 range). The internal consistency of the total scores was lower than when the Fake and Deviant subscales were examined separately. One reason that the total scores could have lower reliabilities than the component scores was that some items could contribute to either the Fake or the Deviant scores but not both; consequently, the Fake and Deviant scales were negatively correlated with each other (-.29 for the CE Test and -.32 for the EFW Test). The low reliabilities, particularly for the CE Test ($\alpha = .30$), would be expected to restrict the magnitude of the observed correlations between the empathy measures and the other measures used in this study.

As predicted, both empathy measures were significantly correlated with verbal intelligence as measured by the Clarke Vocabulary Scale. Those respondents with greater verbal knowledge made fewer errors on the empathy measures. The Fake items from the EFW Test correlated with social desirability, as expected. The predicted correlation between the Fake items

Table II. Psychometric Properties of the Child Empathy and Empathy for Women Tests

				Correlation with			
Scale	Mean (SD)		α	Clarke Vocabulary	Social Desirability	Abel/Becker Cognition Scale	
Child Empathy							
Fake	1.7	(1.7)	.48	01	.02	.02	
Deviant	2.6	(1.8)	.50	15*	.02	.20**	
Total	4.5	(2.1)	.30	15*	.03	.19**	
Empathy for Wo	men						
Fake	0.8	(1.1)	.50	02	.22**	09	
Deviant	3.9	(2.4)	.59	28**	08	.20**	
Total	4.8	(2.4)	.49	31**	.03	.17**	

p < .05.

from the CE Test and social desirability, however, was not found. The deviant and total items from both empathy measures correlated significantly with the Abel/Becker Cognition Scale.

The next set of analyses examined the capacity of the CE Test to distinguish between the samples used in this study. These samples included four groups of charged/convicted sexual offenders (rapists, child molesters, both, deniers), three groups of self-admitted community offenders (rapists, child molesters, both), and two comparison groups (community men, prisoners). One-way analysis of variance failed to identify differences between these nine groups on the CE Test Fake items, the Deviant items, or the Total items [F(8,316) < 1 ns, for all three comparisons]. The predicted contrast between the admitting and the denying charged/convicted sexual offenders was also nonsignificant.

The convicted sexual offenders who were currently in treatment made fewer errors (4.2) on the CE Test than did the sexual offenders not in treatment [5.2; t(93) = 2.13, p < .05]. The comparison between the untreated sexual offenders and the combined comparison group was marginally significant [t(151) = 1.56, p = .06, one-tailed]. There were no significant differences between the comparison groups and the treated sexual offenders.

There were also no significant correlations between the CE Test scores and the number of known offenses involving overt force or the number of known offenses in which the offender was intoxicated.

Although the lack of overall group differences between the child molesters and the other groups may indicate that these offenders had adequate perspective-taking skills, it is also possible that child molesters may have had deficits highly specific to their offenses. To explore this possibility, the

^{**}p < .01.

incest offenders were compared to the other groups on the six incest items on the CE Test. The incestuous child molesters (n = 50) made more errors on the incest items than did the nonsexual offender comparison group [t(175) = 2.22, p < .05]. Interestingly, most of those errors were in the direction of faking good on the item. As well, for the convicted sexual offenders, there was a significant correlation between the number of errors on the incest items from the CE Test and the number of victims who were immediate family members (r = .18, df = 113, p < .05). On the total 16-item CE Test, however, the incestuous offenders were not significantly different from the other groups.

In contrast to the mixed results from the CE Test, there were strong differences between the groups on the EFW Test. Ten groups were included in these analyses: the nine groups previously mentioned plus the group of nonoffending male university students. The comparison among the groups on the EFW Fake items was not significant [F(9, 391) = 1.15, ns], nor was the expected contrast between the admitting and the denying sexual offenders. There were, however, overall group differences for both the Deviant items [F(9,391) = 3.29, p = .0007] and the Total items [F(9,388) = 3.50, p = .0004]. Since the Deviant and Total scores were highly correlated (r = .86), only the results of the analyses on the Total score are reported. For each comparison, the same effects were significant or nonsignificant for both the Deviant and the Total item scores.

The combined group of rapists (prison and community) made more errors on the EFW Test than did the combined nonoffender groups [t(294) = 2.89, p < .005]. The community rapists made more errors than did the community nonoffenders [t(117) = 1.91, p < .05]; a comparison between the charged/convicted rapists and the nonsexual criminals was not significant [t(99) = .89, ns]. There were no significant differences between the rapists and the child molesters.

There was a significant correlation between the numbers of errors on the EFW test and the frequency of offenses involving overt force (r = -.28, df = 109, p < .001). As expected, those sexual offenders who never used overt force showed greater perspective-taking deficits than did the sexual offenders who used overt force. Also as predicted, alcohol use during the commission of the offenses was inversely related to perspective taking deficits (r -.24, df = 109, p = .006). The average numbers of errors on the EFW Test for the various groups are presented in Table III.

Those offenders who were not known to use either alcohol or overt force during their offenses made significantly more errors than did the non-sexual criminals [t(94) = 3.16, p < .005], the community nonoffenders [t(137) = 2.99, p < .005], and the student nonoffenders [t(129) = 5.55, p < .001]. The offenders who used alcohol or overt force, however, were not

Table III. Group Differences on the Empathy For Women Test

Group	n	Average number of errors	SD
Charged sexual offenders			
No overt force & no alcohol	56	6.0	2.6
Alcohol but no overt force	9	5.3	2.9
Overt force but no alcohol	21	5.1	2.3
Overt force & alcohol	22	3.8	2.4
Missing data	41	5.2	2.7
Community			
Sexual offenders	49	5.6	2.8
Nonoffenders	84	4.8	2.1
Nonsexual criminals	41	4.4	2.1
Student nonoffenders	7 6	3.8	1.9

significantly different from the combined nonoffending comparison groups [t(251) = .84, ns]. Within the charged/convicted sexual offender groups, those offenders who used neither alcohol nor force made more errors than did the sexual offenders who used both alcohol and overt force (post hoc tests using Tukey's and Scheffé's procedures).

The sexual offenders in treatment did not significantly differ from the sexual offenders not in treatment on the EFW Test.

DISCUSSION

The results of this study suggest that the newly developed tests hold promise as measures of perspective-taking ability among sexual offenders. Despite their low internal consistencies, the measures showed a meaningful pattern of relationships with other measures and supported an important distinction between types of sexual offenders. Being skill measures, both the EFW Test and the CE Test significantly correlated with a measure of verbal intelligence. As well, the Fake items of the EFW Test correlated as expected with a measure of social desirability (although the equivalent effect was not found for the CE Test). The CE Test did not distinguish between the broadly defined groups of sexual offenders and nonsexual offenders. The incest offenders, however, made more errors on the incest items than did the comparison groups. As well, the offenders in treatment made fewer errors on the CE Test than did those not currently in treatment.

The EFW Test, in contrast, significantly differentiated the broadly defined groups of sexual offenders from the comparison subjects. As predicted, these perspective-taking deficits were restricted to those offenders who neither used overt force nor were intoxicated at the time of their offenses.

The interest in empathy deficits in sexual offenders is motivated by the belief that victim empathy should inhibit the infliction of harm onto others. When considering victim empathy, however, it is important to distinguish between the ability to recognize other people's feelings and the responses made to these perceived feelings. Some sexual offenders may fail to recognize the serious harm they are causing their victims. To the extent that these offenders care about the well-being of their victims, they may be inhibited from future offending as they overcome their perspective-taking deficits. For other sexual offenders, however, perspective-taking deficits are irrelevant to their offense cycle. These sexual offenders may accurately perceive the suffering of others but be either indifferent or attracted to their victims' fear and pain. The present finding that only the offenders who were not known to use overt force showed perspective-taking deficits supports the important distinction between uncaring or sadistic and non-sadistic motivations for sexual assault.

A considerable body of research has linked attitudinal measures (such as rape myths) to self-reported sexual offending in university and community samples (Briere & Malamuth, 1983; Koss, Leonard, Beezley, & Oros, 1985). These measures, however, rarely distinguish convicted rapists from comparison groups (Hanson, Cox, & Woszczyna, 1991). One explanation for the variation across settings is the different demand characteristics (and different consequences) experienced by convicted prisoners in comparison to anonymous community research subjects. Another possible explanation, however, is that there are real differences between these offender groups: the convicted sexual offenders are more likely to have committed violent, sadistic offenses than are the admitted sexual offenders in the community. The admitted community offenders may hold beliefs that block the perception of victim harm (e.g., some women like to be raped; "no" means "yes"). In contrast, the overtly violent offenders might know the wrongfulness of their offenses and attempt to excuse themselves in other ways, such as loss of control, drunkenness, denial, or reconstruction of the offense. In the present study, the degree of overt force in the community offenders was not assessed but it is reasonable to expect that most of their offenses were not overtly violent or sadistic. This assumption is consistent with the equivalence in the perspective-taking deficits shown by the community sexual offenders and the convicted sexual offenders who were not overtly violent.

Victim empathy need not be a stable characteristic. Even though offenders may have the capacity to recognize their victims' emotional states,

they may not routinely exercise this ability. Offenders' responses in detached assessment contexts may be different from their responses in situations where they have the opportunity to offend. As well, perspective-taking ability could be temporarily suspended due to factors such as intense emotions (rage, lust) and intoxication. In the present study, those men who offended while sober were the most likely to show perspective-taking deficits. The men who committed offenses only while intoxicated may usually understand the harmfulness of their actions but suspend their better judgment while under the influence of alcohol. Since most of the information about the level of intoxication was based on the offenders' self-report, however, an alternate explanation is that the men who recognized the harmfulness of their actions were the ones most likely to appeal to alcohol use as an excuse for their transgressions.

Although the CE Test generated some meaningful findings, it did not differentiate between the broadly defined groups of sexual offenders and the comparison subjects. There are several possible reasons for this. The first is that the perspective-taking deficits targeted in the CE Test might have borne little relationship to sexual offending. The low reliability of the scale, however, might have restricted the magnitude of possible findings. As well, it could be that the items were sufficiently obvious that sexual offenders were able to identify the correct answers with even minimal exposure to treatment. The expected differences, however, between the community child molesters, who were never caught, convicted, or treated, and the community nonoffenders was not found. Another possibility is that the perspective-taking deficits of child molesters were highly specific to their offenses.

The present results were equivocal concerning the extent to which sexual offenders have deficits specific to their offenses. For the incest offenders, the perspective-taking deficits tended to be highly specific. Their deficits were not found for all types of deviant sexual interactions, but only for those situations that closely resembled their own offense pattern. On the other hand, the child molesters (as a total group) made as many errors on the EFW Test as did the rapists. Until clarified by further research, it seems reasonable to assume that both child molesters and rapists had difficulties empathizing with adult women (perhaps for different reasons) and that they may also have some perspective-taking deficits that are specific to their offense patterns. Consequently, it may be possible to construct vignettes specifically tailored to the offense patterns of individual offenders.

The internal consistencies of both the CE Test and the EFW Test were low. Part of the low reliability is attributable to the negative correlation between the Fake and the Deviant items, which were then combined into a Total score. It would, nevertheless, be desirable to improve the internal con-

sistencies of both measures. One way of increasing reliability is to increase the number of items. Assuming that the reliability estimates are accurate, the Spearman-Brown formula (Mehrens & Lehmann, 1984) suggests that a total of 35 items would be needed for the EFW Test and 105 items would be needed for the CE Test to increase their internal consistencies to .70. This number of items would be prohibitive for most settings, since it takes offenders 40-60 min to complete each of the current versions (with 15 or 16 items). Consequently, increasing the reliabilities would require changing the presentation and response format of the measures.

In the current versions, respondents made a single rating on a 7-point scale for each item (very distressed to very happy). Increasing the number of responses to each item may be one way of increasing the reliability without significantly increasing the number of scenarios. After each vignette, for example, respondents could be asked to rate the child or woman on a number of different feeling states, such as fear, anger, excitement, and pleasure. The number of vignettes could also be increased if they were presented in a manner to which it was easier for the offenders to respond. For example, a large number of short items could be presented with audio or video recordings.

Perspective taking is only one aspect of empathy. Consequently, it may be useful to expand the range of questions following each vignette to address other important components, such as emotional responses to the victim, and the extent to which respondents are concerned about the welfare of this type of victim. Such self-reports would be more vulnerable to self-presentation biases than the perspective-taking component of empathy but could, nevertheless, provide useful information about the role of empathy in sexual offending.

Phallometric assessments could also be used to examine the role of perspective-taking deficits among sexual offenders. A stimulus set could be divided into those items without victim suffering, those with overt victim suffering, and those that are ambiguous. Those offenders with perspective-taking deficits would be expected to show relatively greater arousal to the consenting and ambiguous items than to the items depicting overt victim suffering. Conversely, those offenders who show the greatest relative arousal to depictions of overt victim suffering would be unlikely to have perspective-taking deficits. Instead, their empathy problems would involve their deviant reactions to accurately perceived suffering. The frequency of these different types of empathy deficits is unknown, but a failure to be inhibited by salient victim suffering is common in at least some groups of rapists (Rice, Chaplin, Harris, & Coutts, 1994). Interventions aimed at increasing the salience of victim suffering would not be expected to reduce the recidivism rate of such offenders.

There are several factors that need to be considered when interpreting the results of the current study. The information was collected under conditions of confidentiality; it is not clear that offenders would provide the same responses in clinical settings in which they could face serious consequences if given a negative assessment. The lack of correlations with social desirability or denial, however, suggests that the measures may be at least somewhat protected from self-presentation biases. The background and offense history information used in the present study were also of unknown reliability, having been collected through a variety of sources at several sites. More comprehensive background information (with demonstrated reliability) would increase the confidence that could be placed in our finding of a relationship between perspective-taking deficits and nonsadistic/nonintoxicated sexual offending. Nevertheless, the results suggest that perspective-taking measures have potential for differentiating between types of sexual offenders, for identifying targets for treatment, and for evaluating treatment outcomes.

APPENDIX

Example Vignettes from the Child Empathy Test

Vignette 1. A man is walking down the street. An 8-year-old girl approaches the man and asks him directions. They have seen each other in the neighborhood, but they have not met before. They talk briefly. The girl is smiling. Before she leaves, the man gives her a hug and a kiss. As she leaves, the girl is most likely to feel (circle your best guess):

- 1. very upset or unhappy
- 2. moderately upset or unhappy
- 3. slightly upset or unhappy
- 4. cannot tell, neutral
- 5. slightly good, happy, cheerful
- 6. moderately good, happy, cheerful
- 7. very good, happy, cheerful

Why would she feel this way?

Vignette 13. Ashley, age 12, spends a lot of time with her step-father, Luke. She feels really close to him and they talk about all sorts of things together. Ashley rarely sees her mother. Her mother comes home late from work and goes out on the weekends. When her mother does come home, Ashley often hears her arguing with Luke. One night when Ashley was in bed, she heard her door open. Luke walks in, wearing only a loose bathrobe. He climbs into bed with her. He tells her that he loves her more

than he loves her mother. Ashley lies quietly, saying nothing, as he caresses her back and kisses her. Ashley is most likely to feel: (same options as for Vignette 1).

Example Vignettes from the Empathy for Women Test

Vignette 1. A young woman is walking down the street by herself. It is a warm summer day and she is wearing shorts and a T-shirt. Two young men are sitting at the front of a house listening to music and drinking beer. One of the men says, "Great day, isn't it?" to the woman. They have not met before. The woman says, "Yes it is," and keeps walking past. The man then says, "And you look great, too." When she hears this, she is most likely to feel (circle your best guess):

- 1. very upset, unhappy, or scared
- 2. moderately upset, unhappy, or scared
- 3. slightly upset, unhappy, or scared
- 4. cannot tell, neutral
- 5. slightly good, happy, cheerful
- 6. moderately good, happy, cheerful
- 7. very good, happy, cheerful

Why would she feel this way?

Vignette 7. Richard and Wanda have been dating for 3 years and have been living together for 1 year. A few months ago, however, Wanda moved out to go to a university in a different city. Richard feels badly that she is away. She does not have enough time to talk when he calls. She discourages him from coming to stay on weekends, claiming that she has assignments to complete. She then tells Richard that she will be going to the Yukon when school is out and will not be living with him this summer. Richard decides to visit her. She smiles when she sees him and invites him in. She notices that he is carrying his hunting rifle, which he puts on the kitchen table. He tells her that he loves her and that he wants to be able to live with her again. He asks her to make love and directs her into the bedroom. They have sex and talk for an hour or so. He leaves carrying his rifle, stating that he will be back soon. Wanda is most likely to feel: (same options as for Vignette 1).

ACKNOWLEDGMENTS

We would like to thank M. Boutet, R. Konopasky, K. Denton, P. Seymour, and M. Cullen for help in data collection, I. Pronovost for sugges-

tions about items, and R. Laws for encouragement. We would also like to thank C. Bagley, G. Fair, T. Foster, D. Hall, F. Mathews, M. Mian, S. Rich, K. Solomon, V. Wolfe, and the anonymous others who provided the expert ratings.

REFERENCES

- Abel, G. G., Gore, D. K., Holland, C. L., Camp, N., Becker, J. V., & Rathner, J. (1989). The measurement of cognitive distortions of child molesters. *Annals of Sex Research*, 2, 135-152.
- Abel, G. G., Becker, J. V., & Cunningham-Rathner, J. (1984). Complications, consent, and cognitions in sex between children and adults. *International Journal of Law and Psychiatry*, 7, 89-103.
- Beckett, R., Beech, A., Fisher, D., & Fordham, A. S. (1994). Community-based treatment for sex offenders: An evaluation of seven treatment programmes, Home Office Occasional Paper. London: Home Office.
- Bewer, J. (1992). Exposure to and tolerance of sexual coercion, Unpublished honors thesis. Ottawa: Carleton University.
- Briere, J., & Malamuth, N. M. (1983). Self-reported likelihood of sexually aggressive behavior: Attitudinal versus sexual explanations. *Journal of Research in Personality*, 17, 315-323.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Crowne, D. P., & Marlowe, D. (1964). The approval motive. New York: Wiley.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. JSAS Catalog of Selected Documents in Psychology, 10(4), 85.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. Journal of Personality and Social Psychology 44, 113-126.
- Eisenberg, N., & Fabes, R. A. (1990). Empathy: Conceptualization, measurement, and relation to prosocial behavior. *Motivation and Emotion*, 14, 131-149.
- Eisenberg, N., & Miller, P. A. (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.
- Eisenberg, N., & Strayer, J. (Eds.). (1987). Empathy and its development. Cambridge: Cambridge University Press.
- Grubin, D., & Thornton, D. (1994). A national program for the assessment and treatment of sex offenders in the English prison system. Criminal Justice and Behavior, 21, 55-71.
- Hanson, R. K., & Scott, H. (In press). Social networks of sexual offenders. Psychology, Crime, and Law.
- Hanson, R. K., & Slater, S. (1993). Reactions to motivational accounts of child molesters. Journal of Child Sexual Abuse, 2(4), 43-59.
- Hanson, R. K., Cox, B., & Woszczyna, C. (1991). Assessing treatment outcome for sexual offenders. Annals of Sex Research, 4, 177-208.
- Hanson, R. K., Pronovost, I., & Scott, H. (1994). Le comportement de la version canadiennefrançaise de l'Échelle cognitive d'Abel et Becker pour identifier les croyances erronées chez les délinquants sexuels, manuscript submitted for publication.
- Hayashino, D. S., Wurtele, S. K., & Klebe, K. J. (1995). Child molesters: An examination of cognitive factors. Journal of Interpersonal Violence, 10, 106-116.
- Hildebran, D., & Pithers, W. D. (1989). Enhancing offender empathy for sexual-abuse victims. In D. R. Laws (Ed.), *Relapse prevention with sex offenders* (pp. 236-243). New York: Guilford.
- Knopp, F. H., Freeman-Longo, R. E., & Stevenson, W. (1992). Nationwide survey of juvenile and adult sex-offender treatment programs. Orwell, VT: Safer Society Press.

Koss, M. P., & Oros, C. J. (1982). Sexual experiences survey: A research instrument investigating sexual aggression and victimization. *Journal of Consulting and Clinical* Psychology, 50, 455-457.

- Koss, M. P., Leonard, K. E., Beezley, D. A., & Oros, C. J. (1985). Nonstranger sexual aggression: A discriminant analysis of the psychological characteristics of undetected offenders. Sex Roles, 12, 981-991.
- Laws, D. R. (Ed.) (1989). Relapse prevention with sex offenders. New York: Guilford.
- Lipton, D. N., McDonel, E. C., & McFall, R. M. (1987). Heterosocial perception in rapists. Journal of Consulting and Clinical Psychology, 55, 17-21.
- Marshall, W. L., & Pithers, W. D. (1994). A reconsideration of treatment outcome with sex offenders. Criminal Justice and Behavior, 21, 10-27.
- Marshall, W. L., Jones, R., Hudson, S. M., & McDonald, E. (1993). Generalized empathy in child molesters. *Journal of Child Sexual Abuse 2*, 61-68.
- McDonel, E. C., & McFall, R. M. (1991). Construct validity of two heterosocial perception skill measures for assessing rape proclivity. *Violence and Victims* 6, 17-30.
- Mehrens, W. A., & Lehmann, I. J. (1984). Measurement and evaluation in education and psychology (3rd ed.). New York: Holt, Rinehart and Winston.
- Murphy, W. D., Coleman, E. M., & Haynes, M. R. (1986). Factors related to coercive sexual behavior in a nonclinical sample of males. Violence & Victims, 1, 255-278.
- Paitich, D (1977). The Clarke Vocabulary Scale. Toronto, Ontario: Clarke Institute of Psychiatry.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Lalumière, M. L. (1993) Assessing treatment efficacy in outcome studies of sex offenders. *Journal of Interpersonal Violence*, 8, 512-523.
- Rice, M. E., Chaplin, T. C., Harris, G. T., & Coutts, J. (1994). Empathy for the victim and sexual arousal among rapists and nonrapists. *Journal of Interpersonal Violence*, 9, 435-449.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin 86*, 420-428.
- Snowdon, R. (1984). Working with incest offenders: Excuses, excuses, excuses. Aegis, 35, 56-63Stermac, L. E., & Segal, Z. V. (1989). Adult sexual contact with children: An examination of cognitive factors. Behavior Therapy, 20, 573-584.
- Taylor, L. (1972). The significance and interpretation of replies to motivational questions: The case of sex offenders. Sociology, 6, 23-39.
- Wormith, J. S., & Hanson, R. K. (1992). The treatment of sexual offenders in Canada: An update. Canadian Psychology, 33, 180-198.