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PERSONALITY PATHOLOGY MODERATES THE RELATIONSHIP BETWEEN LENGTH OF TIME IN TREATMENT AND LEVELS OF EMPATHY IN INCARCERATED MALE SEX OFFENDERS

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Abstract

This study examined whether different pathological personality traits (psychopathic, narcissistic, and borderline) moderated the relationship between time in treatment and empathy in a sample of incarcerated male sex offenders (N=58). Empathy was explored on a global level as well as on the level of specific victim groups. Principal components analysis with oblique rotation was conducted using three measures of empathy. A three factor solution for empathy was revealed: general empathy, empathy for children and hostility for women. Hierarchical linear regression analyses demonstrated that certain DSM-IV, Axis II personality traits were significant moderators of the effects of time in treatment on levels of general and victim empathy. There was a positive main effect found for length of time in treatment for victim empathy. This effect was much smaller for general empathy. This effect was moderated by pathological personality traits, such that offenders with higher levels of pathological traits did not exhibit greater empathy with more time in treatment. In contrast, offenders with lower levels of pathological traits exhibited increased empathy as treatment length increased. There are direct implications for clinical practice and treatment planning for sex offenders.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

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certainly not least, I thank the individuals who volunteered to participate in my study. I thank them for their honesty and for their desire to educate others. It is my hope that this type of research will inspire others to examine the heterogeneity that exists among sex offenders. More research in this area will hopefully promote the development of more effective risk assessment measures and treatments.

Personality Pathology Moderates the Relationship Between Length of Time in Treatment and Levels of Empathy in Incarcerated Male Sex Offenders

Why do some sexual offenders respond to treatment while others do not? It is the purpose of this investigation to examine levels of empathy in sex offenders as well as the pathological personality traits which are believed to impact the effectiveness of treatment to increase empathy for victims. Character traits of narcissism, psychopathy and borderline personality are typically associated with reduced capacity for empathy. It is believed that these pathological personality traits moderate the relationship between treatment and self-reported levels of empathy in sex offenders.

To accomplish this, I first review the construct of empathy and the challenges associated with defining and assessing it. I then review the assessment of empathy more specifically in sexual offenders. The literature discussing the use of empathy training in sex offender treatment programs will be reviewed as well as the distinction between global (general) empathy and more victim-specific types of empathy. Following this review of research on empathy in sex offenders, I review the pathological personality traits associated with deficits in empathy. Specifically, I review the current research on psychopathy, narcissism and

borderline personality disorder in relation to the construct of empathy as well as specific to sex offenders.

Empathy: A Conundrum

What is empathy? The construct of empathy is challenging to define. The Random House American Dictionary (1992) defines empathy as "the sensitive awareness of another's feelings." There have been a variety of definitions proposed for empathy and a variety of measures developed by researchers in attempts to capture it over the years. Empathy has traditionally been viewed as having either cognitive or emotional components. The cognitive aspect of empathy (often described as perspective-taking) involves the "ability to intellectually identify the emotions and experiences of another person" (Hanson, 2002, p. 5). An early measure of cognitive empathy was developed by Hogan (The Hogan Empathy Scale; 1969). The emotional component of empathy has been less clearly defined in the literature but some theorists have described it as the "direct mirroring of the perceived emotional responses of others" (Hanson, 2002, p. 5). Mehrabian and Epstein (1972) developed one of the earliest and most cited measures of emotional empathy, known as the Questionnaire Measure of Emotional Empathy (QMEE).

More recently, empathy has been conceptualized as being a multidimensional construct (Davis, 1980; Marshall, Hudson, Jones, & Fernandez, 1995). Davis (1980) proposed a multidimensional

(four-factor) model of empathy in which empathy was conceptualized as possessing cognitive as well as emotional processes. He envisioned empathic responding to result from a combination of perspective taking, fantasy, empathic concern, as well as the accurate perception and tolerance of another's emotional distress. He developed the Interpersonal Reactivity Index (IRI; 1980) to measure the four factors he identified in his research. The Perspective Taking and Fantasy scales assessed an individual's capacity for cognitive empathy while the Empathic Concern and Personal Distress scales assessed emotional empathy. General empathy was examined through the IRI total score (Davis, 1980).

There is a lack of consensus in the research literature regarding what the specific components of empathy are. Researchers do seem to agree however, that the capacity for empathy is associated with emotional health. Empathy is believed by many to serve as an inhibitor of antisocial behaviors including interpersonal aggression (Eisenberg & Strayer, 1987; Ellis, 1982; Miller & Eisenberg, 1988; Richardson, Hammock, Smith, Gardner, & Signo, 1995). At the same time that empathy is thought to encourage positive social interactions and even altruistic behavior, a lack of empathy is believed to "encourage aggressive, antisocial behavior" (Jolliffe & Farrington, 2004; pg 442).

Empathy can be viewed as a dichotomous variable (empathy versus lack of empathy) but also as a continuous variable (i.e. low empathy/high empathy). The latter view is likely to be more practical given the fact that empathy can vary tremendously between individuals, it can change over time, and it can influence behavior (Jolliffe and Farrington, 2004). For the purposes of the present investigation, empathy will be viewed as a continuous variable.

Empathy in Sex Offenders

In recent years, one clinical population that has received a great deal of attention in the empathy literature is the sexual offender. This is driven by the widespread belief that sex offenders lack the capacity for empathy. For how else could we explain the heinous crimes they commit against the most powerless victims? Research continues to explore the nature of such crimes, attempting to better understand how and why they occur. The public's growing interest in these types of crimes can be seen in film, television and even in the increased media coverage of sex offender trials. At the same time, the criminal justice system is struggling to deal with the growing numbers of sex offenders in prisons and psychiatric facilities (Becker & Murphy, 1998).

Sex crimes and sexual abuse occur all over the world and perpetrators along with victims are represented in all

socioeconomic, racial, ethnic and age groups. It has been fairly well documented that the majority of perpetrators of sexual crimes are males (Flowers, 2001). Some recent research on prevalence rates revealed that between the years 1992-2000, an annual average of 131,950 completed rapes were committed against females age twelve or older in the United States (from The National Crime Victimization Survey; NCVS, 2004). Self-report surveys of victimization suggest that sex crimes are widely underreported by victims (Greenfeld, 1997; NCVS, 2004). A recent survey indicated that only a small percentage of rapes (36%) and attempted rapes (34%) were reported to the police between the years 1992-2000 (NCVS, 2004). So it is difficult to assess the accuracy of published prevalence rates. Partly as a result of this, there has been an increase in research examining the characteristics of sexual offenders, predictors of reoffense, and the development of treatment programs hoping to target this population.

Despite the amount of attention they receive in the news, sexual offenders actually constitute a relatively small proportion of prison populations. The Bureau of Justice conducted a survey on rape and sexual assault in 1994 and found that approximately 234,000 inmates were incarcerated for some form of violent sexual offense. Of these offenders, nearly 60% were under some form of community supervision (Greenfeld, 1997).

Since the time that this survey was conducted, these numbers have continued to rise (Becker & Murphy, 1998). Although there have been movements in the judicial system to increase the length of incarceration for convicted sex offenders, many offenders wind up supervised in community settings.

Although relatively small in number, sex offenders are particularly challenging for the criminal justice system due to their apparent proneness to reoffend. It has been quite difficult to accurately assess recidivism (reoffense) rates for sex offenders however. This is due to underreporting of sex crimes as well as the small number of published longitudinal studies examining sexual recidivism in this population. According to one recent meta-analysis of sexual offense recidivism, Hanson and Bussière (1998) found that the rate at which sex offenders recidivate sexually is relatively low. In fact, they found that between 10-15% of offenders recidivated sexually in a follow-up period of 5 years (on average). Findings indicate that these rates vary depending upon the types of offenses that were committed (e.g. rape versus child molestation), criminal history, exposure to treatment, along with a host of other risk factors (Hanson & Bussiere, 1998; Hanson, Scott, & Steffy, 1995; Hanson, Steffy, & Gauthier, 1993; Prentky, Lee, Knight, & Cerce, 1997). There have been inconsistent findings regarding the variables which may indicate more or less

risk for reoffense however a history of prior sexual offenses seems to be consistently predictive of future offenses (Hanson, Steffy, & Gauthier, 1993; Marshall & Barbaree, 1988).

Empathy Training

In an effort to manage this uniquely challenging criminal population, many correctional and state psychiatric facilities across the country are starting to develop specialized treatment programs. This is of course based upon the assertion that "empathic deficits play a significant role in the disinhibition of sexually assaultive behavior" (Covell & Scalora, 2001, p.16). Such treatment programs primarily draw from a cognitive-behavioral model of treatment with the focus on relapse prevention (Covell & Scalora, 2001). Treatment is typically provided in group format and counselors help offenders to learn concepts and develop skills to aid them in managing their deviant sexual impulses. This is often done by identifying offender's deviant behavior cycles, their cognitive distortions, education around relapse prevention and on victim empathy training (Freeman-Longo, Bird, Stevenson, & Fiske, 1995; Freeman-Longo & Pithers, 1992; Marshall, Laws, & Barbaree, 1990; Salter, 1988).

A survey by Freeman-Longo, Bird, Stevenson, and Fiske (1995) of Sex Offender Treatment Programs in the U.S. revealed that as many as 94% of programs employed some form of empathy training. Similar results were found in an earlier survey conducted by the

same research team (Knopp, Freeman-Longo, & Stevenson, 1992). The training of victim empathy has been one of the most difficult to assess in treatment and it has raised considerable debate in the research literature. In a review of the current research on empathy training in sex offenders, it is apparent that many of the programs "fail to provide clear descriptions operationalizing empathic deficits" (Covell & Scalora, 2001, p. 253). These programs also fail to explain how empathy deficits are addressed specifically or how progress in treatment is measured. Evaluating sex offender treatment programs is a relatively new area of research. The available literature suggests that although most treatment programs include victim empathy training components, there is no standard treatment protocol used by such programs and little outcome data to demonstrate the effectiveness of empathy training (Becker & Murphy, 1998; Covell et al., 2001; Hanson, 2002).

This was illustrated in a recent study by a Canadian research team, Looman, Dickie and Abracen (2005), who examined treatment effectiveness for sex offenders. They concluded that treatment did have a positive effect on rates of recidivism. This finding was true with respect to general recidivism (criminal behavior in general) as well as sexual recidivism. Given their findings, Looman et al. (2005) suggest that it may be more fruitful to explore the factors which make sex offenders

more or less responsive to treatment rather than merely focusing on recidivism rates. Looman et al. (2005) suggest that there are both external and internal responsivity factors which affect the results of treatment, either facilitating or impeding it. External factors included both therapist characteristics as well as the setting in which treatment took place. Several of the internal factors affecting treatment responsivity included: treatment readiness/motivation, the presence of psychopathic personality traits as well as the presence of cognitive distortions (specifically denial, minimization and justification).

Another recent meta-analysis of recidivism studies which also explored the dynamic characteristics associated with persistent sexual offenders was conducted by Hanson and Morton-Bourgon (2005). The authors found that an "antisocial orientation" was the best predictor of violent and nonviolent recidivism. Antisocial orientation was defined as an antisocial lifestyle and it was characterized by a rule breaking attitude as well as impulsive and reckless behavior. Hanson and Morton-Bourgon (2005) also identified factors such as emotional instability and sexual preoccupations as warranting further investigation. Most interesting however was the finding that many of the variables commonly addressed in treatment programs (i.e. victim empathy) were not related to violent or sexual

recidivism. This begs the question, why are we putting such an emphasis on empathy training for sex offenders, if empathy has little to do with reoffense?

Levels of Empathy

Perhaps the answer to this question has to do with the level of empathy that is being examined. As mentioned, the construct of empathy has been a challenging one to define. Many of the existing models of empathy have explored cognitive or affective components of empathy or both (Covell & Scalora, 2001; Davis, 1980). In recent years, some theorists have begun to speculate as to whether empathy is still being defined too broadly. In the case of sex offenders, some researchers suggest that it is the assessment instruments that need to be more specific. To explore empathy in a global sense but also to explore empathy for specific people and situations (Jolliffe & Farrington, 2004).

General Empathy in Sex Offenders. One reason that it is important to take a closer look at empathy in sex offenders has to do with the lack of consistent empirical evidence to support the claim that sex offenders are deficient in empathy (Covell et al., 2001; Hanson, 2002; Jolliffe & Farrington, 2004). For the past 10-15 years, the measures that have been used to assess empathy in sex offender samples have been based upon general models of empathy (Covell & Scalora, 2001; Looman et al., 2005). The most popular general empathy measure has been Davis' (1980)

Interpersonal Reactivity Index (IRI) which examines the four factors he believed to comprise the construct of empathy. Of the four factors, the IRI Perspective Taking subscale has been most closely linked to cognitive empathy as measured by the Hogan Empathy Test (Hogan, 1969) while the IRI Empathic Concern subscale has been linked to emotional empathy (Davis, 1983; Jolliffe & Farrington, 2004). Although the IRI has been used most often with sex offender samples, some research has examined the cognitive and affective aspects of empathy separately using the Hogan Empathy Test (Hogan, 1969) or the QMEE (Mehrabian & Epstein, 1972).

Some research has failed to demonstrate any significant differences in the empathy scores of sex offenders when compared to nonoffender control groups. For example, a study by Hayashino, Wurtele, and Klebe (1995) examined empathy by administering the IRI to 103 incarcerated sex offenders and 26 nonoffender controls. The offenders in their sample did not differ significantly from the nonoffender controls on the either cognitive or emotional empathy as assessed by the IRI Perspective Taking and IRI Empathic Concern scales. Similar results were found in a recent study by Bush, Mullis, and Mullis (2000) who administered the IRI to 76 male and 33 female incarcerated adolescent offenders (33 male controls and 33 female nonoffender controls). As in the Hayashino et al. (1995) study, there were

no significant differences found between adolescent offenders and nonoffenders on IRI Perspective Taking or IRI Empathic Concern.

Other research has demonstrated no differences between sex offenders and nonoffender controls on measures of emotional empathy. For example Langevin, Write, and Handy (1988) found no differences between sex offenders and community controls on the QMEE (Mehrabian & Epstein, 1972). In fact, Langevin et al. (1988) found no differences in empathy scores between different types of sex offenders (e.g. rapists, nonincest child molesters, and incest offenders). Interestingly, the authors did find that offenders who denied their guilt (in committing the sex offense for which they were convicted) reported higher levels of empathy than those offenders who admitted their guilt.

Of course, there is a wealth of literature supporting the idea that sex offenders do lack the capacity for empathy. Some research has suggested that sex offenders may be deficient in certain components of empathy. A recent study by Burke (2001) examined empathy in outpatient offenders compared with nonoffender controls on the IRI (23 sex offenders & 23 controls). Burke (2001) found that offenders scored significantly lower on the IRI than nonoffenders but that these scores were driven by low scores on the IRI Empathic Concern subscale. Similar findings were reported by Pithers (1994) who examined general empathy deficits in sex offenders using Davis' IRI (1980). The

results of this study demonstrated that pedophiles scored poorly on the IRI Personal Distress subscale (emotional component), suggesting a difficulty in perceiving the negative emotions of others. Emotional empathy deficits in sexually aggressive men were also reported by Lisak and Ivan (1995). Lisak and Ivan (1995) used the QMEE with a sample of sexually aggressive undergraduate males. They found that these aggressive men manifested lower capacities for empathy and were impaired in their ability to recognize the affects of male faces using the Facial Affect Recognition Task (FAR; Ekman & Oster, 1979).

Contrary to these findings of emotional empathy deficits in sex offenders, a recent study by Fisher, Beech, and Browne (1999) found that child molesters (59 incarcerated & 81 community-based) scored higher on emotional empathy than nonoffender controls (81 prison officers) on the IRI Empathic Concern scale. Furthermore, Fisher et al. (1999) found that there were no significant differences between child molesters and nonoffenders on cognitive empathy as measured by IRI Perspective Taking.

Other studies have demonstrated inconsistent findings. An early study by Marshall, Jones, Hudson, and McDonald (1993) examined empathy in incarcerated child molesters as well as in outpatient child molesters and compared them with a sample of nonoffender controls on the IRI. Marshall et al. (1993) found that only the outpatient child molesters demonstrated empathy

deficits when compared to the nonoffender controls when looking at empathy in general (IRI total score). Interestingly, only the IRI Fantasy subscale differentiated the child molesters from the nonoffenders. These findings suggest that child molesters may not be deficient in empathy in general but rather for cognitive components of empathy. These deficits would be reflected as an inability to take the perspective of others (Marshall et al., 1993).

A follow-up study by Marshall and Maric (1996) further explored the differences in cognitive and affective components of empathy in child molesters. Given the findings with the IRI in their earlier study, the authors elected to use two separate measures of empathy, the Hogan Empathy Scale (Hogan, 1969) and the QMEE (Mehrabian & Epstein, 1972). Unlike their previous findings, Marshall and Maric (1996) demonstrated clear and significant general empathy deficits in incarcerated child molesters. In fact, they found that the child molesters in their sample were deficient in both cognitive as well as emotional aspects of empathy.

As can be seen from this review, there is a great deal of inconsistency in the literature as to whether sex offenders do in fact lack the capacity for empathy. Some researchers have argued that empathy is a far more complex construct than can be assessed

from the currently used general empathy instruments (Hanson & Scott, 1995; Marshall et al., 1995).

Victim Empathy in Sex Offenders. One of the recent shifts in research on empathy in sex offenders has been an increased focus on victim empathy as opposed to more general concepts of empathy (Covell & Scalora, 2001; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999; Hanson, 2002; Hanson & Scott, 1995; Marshall et al., 1995). Some contemporary theorists such as Marshall et al. (1995) and Abel, Gore, Holland, Camp, Becker, and Rathner (1989) have suggested that the deficits may not be in general empathy but rather for specific groups or individuals (e.g. children or women). For example, a child molester might offend against a child because he lacks the capacity for empathy toward children, not empathy in general.

Some proposals suggest even greater specificity of deficits (e.g. child molesters may lack empathy for female children). Some researchers have even concluded that child molesters may have empathy for some child victims of sexual abuse but just not for their own personal victims (Fernandez et al., 1999). Furthermore, some research has even shown that sex offenders may use cognitive aspects of empathy to select and manipulate their victims (Abel et al., 1989; Covell & Scalora, 2001). In some cases, such as with sadistic rapists, offenders may even become sexually aroused by their recognition of the harm or distress

that they cause their victims (Barbaree, Marshall, & Lanthier, 1979; Rice et al., 1994). These findings have considerable implications for clinical practice and treatment of sexual offenders. They suggest that empathy training would actually be counter-therapeutic for some clients (Marshall et al., 1995).

However, it is believed that these more specific types of empathy deficits would not necessarily be reflected in scores from general empathy measures. In fact, Marshall et al. (1995) warned that only assessing empathy with generalized empathy measures may not address the person-specific empathy deficits observed in some child molesters. This line of thinking has led to the development of several victim empathy measures for both offenders against children (Fernandez et al., 1999; Hanson & Scott, 1995) as well as for offenders against women (Hanson et al., 1995).

These victim empathy measures have moved away from the traditional Likert scale self-report ratings and toward scenario-based instruments which require offenders to read and interpret vignettes depicting sexual interactions between adults and children or adult males with adult females. Some preliminary research with these relatively new victim empathy measures demonstrate that sex offenders show a tendency toward underestimating the harm or distress caused to their victims (Beckett, Beech, Fisher, and Fordham, 1994; Hanson & Scott,

1995). This finding was particularly true when the situation depicted in the vignette was more ambiguous or when there was no clear sign of distress coming from the victim (Beckett et al., 1994). With the emergence of Hanson and Scott's (1995) Child Empathy Test and The Child Molester Empathy Measure (Fernandez, Marshall, Lightbody & O'Sullivan, 1999), there seems to be growing research demonstrating victim empathy deficits in child molesters and pedophiles. Fernandez et al. (1999) also found that child molesters generated lower empathy scores when asked to reflect on their own victim(s) as opposed to a generic child victim.

One of the most comprehensive studies of victim empathy deficits in sex offenders was conducted by Hanson and Scott (1995). Hanson and Scott (1995) developed and then administered two scenario-based measures of victim empathy, the Empathy for Women Test and the Child Empathy Test. They administered these measures to several samples of convicted male offenders: 49 community-based sex offenders, 41 nonsexual criminals, 84 community nonoffenders, and 76 male student nonoffenders. Hanson and Scott (1995) were not able to distinguish the offender from nonoffender groups on the Child Empathy Test. They did however find significant differences between offender and nonoffenders on the Empathy for Women Test. Specifically, the rapists showed an overall tendency to underestimate women's distress (when compared

with nonsexual offender controls) in the vignettes. Not surprisingly, most of the errors that the rapists made on the Empathy for Women Test were in the direction of "faking good." Another very interesting finding of this study was that offenders who were in treatment tended to make fewer errors than those offenders who were not in treatment (Hanson & Scott, 1995).

Developing a better understanding of victim empathy deficits in sex offenders is a promising direction for research. Unfortunately, the current state of affairs is that victim empathy measures are popping up all over, and research teams are creating measures to fit the needs of their studies. Some research teams have created their own victim empathy measures and haven't published them, making it hard to replicate their studies. Additional research needs to be done to validate these measures or to develop and publish new victim empathy measures.

In addition to replication issues associated with victim empathy research, drawing conclusions from the various studies is difficult given the samples used. Much of the available research on sex offenders and empathy has been conducted with samples of child molesters compared with non-offender control groups or with rapists and non-offender control groups (e.g. Hanson & Scott, 1995; Langevin et al., 1988; Lisak & Ivan, 1995; Pithers, 1994). Other studies have merely utilized general samples of incarcerated sex offenders without specifying the types of

offenses committed and compared them to non-offender controls. There has rarely been a distinction made between child molesters and pedophiles. Instead, they have been grouped together into a category of offenders against children. Pedophilia is considered a clinical disorder (paraphilia) and describes adults who are sexually attracted to prepubescent children. These individuals may or may not be attracted to other adults as well (Salter, 2003). A child molester is a more general term and includes adults who engage in any number of sexual behaviors with children under the age of 16 yrs. Even more generally, sex offenders can include any individuals who have been convicted of a sexually related crime. Therefore the term sex offender could be used to describe an individual who had sex with his underage girlfriend who was 15 years old when he was 20 years old. The same term would also describe the man who has a long history of sexual violence against boys around the age of 10 years. Another example would be the man who flashes children on the playground but who has never had physical contact with any of his victims. Although all of these sexual offenders would be categorized as perpetrators against children, they are clearly not the same. Given their crimes, should they all be treated the same way?

So we are left with many unanswered questions. We are still left wondering whether sex offenders do in fact possess the capacity for empathy. Some research indicates that sex offenders

may have empathy or at least components of empathy. If sex offenders do have empathy, how do they commit such heinous acts? Also, why are we training sex offenders in empathy if they already have it or may even be using it against their victims? Hilton (1993) argued that in teaching empathy to child molesters, we may be teaching them to fake empathy. There is also the question of whether scoring high on a measure of empathy really means that the person has high levels of empathy? Could it merely mean that these individuals have a good understanding of what empathy is but do not behave empathically because empathic responding involves a different process? We are beginning to see that empathy can be influenced by a number of factors, including levels of antisocial orientation (Hanson & Morton-Bourgon, 2005). In fact, Hanson and Bussière (1998) reported that it was a history of violence and antisocial behavior that best predicted recidivism, not empathy.

Pathological Personality Traits in Sex Offenders

Perhaps one way to begin to understand the nature of empathy deficits in sex offenders is to explore the heterogeneity that exists within this population (i.e. within sample comparisons). Several recent papers have highlighted the considerable variability that exists among offenders with respect to aggression and anxiety (Shechory & Ben-David, 2005), obsessionality (Egan, Kavanagh, & Blair, 2005), levels of

psychopathology (Ahlmeyer, Kleinsasser, Stoner, & Retzlaff, 2003), as well as motivation for and responsivity to treatment (Looman et al., 2005).

Psychopathic Personality

To better understand the individual differences and recidivism among sex offenders, many researchers have recommended examining psychopathy levels in this population (Boer, Wilson, Gauthier, & Hart, 1997; Porter, Fairweather, Drugge, Hervé, Birt, & Boer, 2000). According to Hare (1993), "psychopaths are social predators who charm, manipulate, and ruthlessly plow their way through life...completely lacking in conscience and in feelings for others" (p. xi). In general, psychopaths are thought to lack guilt or remorse for crimes they commit against others (Cleckley, 1982). The extensive research conducted by Hare and his colleagues, has shown that psychopathy is one of the best predictors of criminal behavior (Hanson & Bussière, 1998; Hare, 1996).

Many people confuse antisocial personality with psychopathy, often using the terms interchangeably. Researchers in this field have demonstrated that psychopathy is like an extreme form of antisocial personality. Such that most psychopaths are antisocial however not all antisocial personalities are psychopaths. Hare (1998) estimated that approximately 25% of

incarcerated criminals could actually be classified as psychopaths.

Almost by definition, psychopaths are thought to be egocentric and to lack anxiety or remorse for their behavior (Cleckley, 1982; Hare, 1996). It is believed that the absence of empathy, characteristic of the psychopath, is what allows him to act ruthlessly toward others without remorse or guilt. It seems that although these individuals may have the capacity to appear charming, they are superficial and shallow and will use others for their own personal gain (Hare, 1993).

Psychopaths don't only exist in institutional settings however. Hare (1991; 1993) suggested that there are many individuals with psychopathic personalities who can function within societal norms, living and working in our own communities. Some would even argue that the "psychopaths among us" are the successful psychopaths, who have avoided being caught or perhaps found more socially acceptable ways to control their antisocial impulses (Hare, 1993). Unfortunately, the Hare Psychopathy Checklist – Revised (PCL-R; Hare, 1991) was developed for use in forensic settings where corroborating information was readily available (inmate records). There have been few published studies which examined the PCL-R in nonclinical populations (Zagon & Jackson, 1994).

Lilienfeld (1994) argued that assessing criminal (antisocial) behavior was important but not necessary in the detection of psychopathy. He assumed a more personality-based position in his view of psychopathy assessment. He stressed the importance of exploring the personality features associated with psychopathy (Lilienfeld, 1998). Lilienfeld and Andrews (1996) developed a self-report measure of subclinical psychopathy called the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996). The PPI was designed to assess the personality traits associated with psychopathy. In the preliminary psychometric investigations, Lilienfeld and Andrews (1996) revealed eight sets of character traits associated with psychopathy (e.g. Machiavellian Egocentricity and Coldheartedness). The PPI was initially validated with a nonclinical student population (Lilienfeld & Andrews, 1996).

Support for the use of the PPI to assess traits of psychopathy in nonclinical samples comes from several recent studies (Benning, Patrick, Hicks, Blonigen & Krueger, 2003; Benning, Patrick, Salekin, & Leistico, 2005; Salekin, Trobst, & Krioukova, 2001). For example, a study by Salekin et al. (2001) demonstrated the construct validity of the PPI in a college student sample. Using the PPI, they found a prevalence rate of psychopathy that was approximately 11% in this sample of students. Very different from the 25% prevalence rates typically

found in correctional settings. The statistics do suggest that subclinical psychopathy is an area that warrants more attention in research in this area.

The two-factor solution found for the PCL-R (Hare, 1991), has been well-documented in the research literature (e.g. Hare, 1998). Hare (1991) suggested that the construct of psychopathy was comprised of an interpersonal/affective factor and a behavioral factor. Similar to the PCL-R, some recent factor analyses with the PPI have pointed toward a two-factor structure (Benning et al., 2003; Benning et al., 2005). Of the eight subscales of the PPI, seven have been shown to load on two distinct higher-order factors. Benning et al. (2003) found that PPI Impulsive Nonconformity, PPI Blame Externalization, PPI Carefree Nonplanfulness, and PPI Machiavellian Egocentricity loaded on one factor (interpersonal/emotional) while PPI Stress Immunity, PPI Social Potency, and PPI Fearlessness loaded on the second factor (social deviance). Interestingly, Benning et al. (2003) found that the PPI Coldheartedness scale loaded on neither factor but rather on a third, separate factor. This suggested that PPI Coldheartedness was something different than the construct of psychopathy. These results were replicated in a later study conducted by the same research team (Benning et al., 2005). Both studies were conducted using the PPI in nonclinical college student populations however. It is possible that the PPI

Coldheartedness scale would load differently had criminal samples been used.

To date, there have only been a handful of studies conducted using the PPI (Lilienfeld & Andrews, 1996) in forensic settings (Edens, Poythress, & Watkins, 2001; Poythress, Edens, & Lilienfeld, 1998). An early study by Poythress et al. (1998) examined the criterion validity of the PPI by administering it along with the PCL-R (Hare, 1991) to a sample of 50 youthful offenders (aged 17-21 years). Discriminant function analysis using the PPI total score resulted in the accurate classification of 86% of the cases sampled. Correlational analyses revealed that the PPI total score was significantly related to the PCL-R total score (r = .54). The PCL-R was most strongly related to the Machiavellian Egocentricity subscale of the PPI. This was true for the PPI total score (r = .57) as well as for Factor 1 (r = .56) and Factor 2 (r = .40) (Poythress et al., 1998).

Psychopathy and Empathy. According to Hare (1993), the lack of concern for others is a hallmark feature of the psychopathic personality. In addition, research has consistently demonstrated an inverse relationship between psychopathy and empathy using Hare's (1991) PCL-R (e.g. Burke, 2001; Bush et al., 2000; Harpur, Hakstian, and Hare, 1988; Jolliffe & Farrington, 2004). There is growing research linking empathy to psychopathy, as measured by the PPI (Lilienfeld & Andrews, 1996).

A recent study by Sandoval, Hancock, Poythress, Edens, & Lilienfeld (2000) demonstrated a negative relationship between psychopathy and emotional empathy in a correctional sample. Sandoval et al. (2000) administered the PPI (Lilienfeld & Andrews, 1996) and the QMEE (Mehrabian & Epstein, 1972) to a sample of 100 male prison inmates. As expected, the authors found that the total score on the PPI was negatively related to empathy. They also found that the PPI subscales of Coldheartedness and Machiavellian Egocentricity were both negatively related to emotional empathy. According to the authors of the PPI (Lilienfeld & Andrews, 1996), the Coldheartedness subscale was initially developed to assess the "propensity toward callousness, guiltlessness, and unsentimentality." The PPI Machiavellian Egocentricity subscale was developed to measure "narcissistic and ruthless attitudes in interpersonal functioning" (Lilienfeld & Andrews, 1996, p. 495).

Psychopathy and Sex Offenders. Research has consistently shown that psychopaths "reoffend faster, violate parole sooner, perpetrate a higher degree of violence, and are less motivated in treatment" than non-psychopathic criminals (Porter et al., 2000, p. 219). In addition, psychopathy has recently been linked to increased criminal misbehavior in institutional settings (Buffington-Vollum, Edens, Johnson, & Johnson, 2002), increased sadism (Holt, Meloy, & Strack, 1999), as well as higher

likelihood of reoffense despite exposure to treatment (Poythress et al., 1998; Seto & Barbaree, 1999). Psychopathy has been shown to have good predictive power with regard to violence and recidivism and it is frequently examined in assessments of dangerousness in forensic settings (Serin, 1991; Serin & Amos, 1995).

Given the recidivism rates for sexual crimes and the findings of research examining empathy in sexual offenders, it is not surprising that there has been a relatively high incidence of psychopathy observed in sex offenders (e.g. Meloy, 2002). A study by Serin, Malcolm, Khanna, and Barbaree (1994) demonstrated a significantly high correlation between psychopathy and sexual deviance. More recently, Porter et al. (2000) found that 64% of the incarcerated male sexual offenders they sampled met criteria for psychopathy. Porter et al. (2000) also found that mixed rapist/molesters and rapists tended to generate higher psychopathy scores than child molesters. Porter et al. (2000) found that psychopathy levels may vary within the sex offender population and that this may help to explain differences in sexual violence (e.g. against adults, children, mixed).

Narcissistic Personality

Many of the interpersonal symptoms associated with psychopathy (i.e. grandiosity & superficiality) are also very similar to contemporary views of narcissistic personality

disorder. So much so, that many individuals who work with psychopaths support the notion that all psychopaths are narcissists (Stone, 1993). Psychopathy and narcissism have been theoretically linked in the personality literature (Hart & Hare, 1998). In his psychodynamic theory of personality organization, Kernberg (1980; 1984) described narcissistic character traits as existing along a continuum, ranging from normal to pathological. According to Kernberg (1984; 1985), "malignant narcissism" and antisocial personality disorder are both extreme forms of narcissism in which there is severe superego pathology (lack of morals). Such individuals are disloyal, without remorse, and lack concern for others. As perhaps a more extreme form of narcissistic pathology, psychopathic individuals are distinguished by their complete inability to have nonexploitative/parasitic relationships with others (Kernberg, 1998). Psychopaths always have an "angle" and are out to get something they want. They see other people as a means to an end and will use them accordingly (Cleckley, 1982; Hare, 1993).

The link between psychopathy and narcissism has also been demonstrated empirically. For instance, a study by Hart and Hare (1989) examined the relationship between narcissism and psychopathy using the PCL-R in a forensic psychiatric sample. They found that the first Factor of the PCL-R (assessing psychopathic personality traits) was correlated more highly with

narcissistic personality disorder than with any of the other personality disorders aside from antisocial personality. Similar results were found with the screening version of the PCL-R in a sample of prison inmates (PCL-SV; Hart, Hare, & Forth, 1994). In addition, research has demonstrated high levels of comorbidity between narcissistic and antisocial personality disorders. A review of this literature by Widiger, Francis, and Harris (1991), found that these two personality disorders co-occurred approximately 16% of the time.

Psychopathy has also been linked to narcissism in nonclinical samples. For example, a recent study by Paulhus and Williams (2002) examined subclinical psychopathy and narcissism using the five-factor model of personality with a sample of college students. Not surprisingly, the authors found that both narcissists and psychopaths were low in Agreeableness and high in Extraversion and Openness. Unlike narcissists however, psychopaths were low in Conscientiousness. Narcissism and psychopathy were positively correlated with one another (r=.50), suggesting that they were related but not identical constructs (Paulhus & Williams, 2002).

Narcissism and Empathy. Similar to the definition of psychopathy, narcissism is generally characterized by a lack of compassion or concern for others (Kernberg, 1998). However, there are few published studies directly examining the

relationship of narcissism to empathy. A study by Watson, Little, Sawrie, and Biderman (1992) examined narcissism and empathy utilizing the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1981) and the Interpersonal Reactivity Index (IRI; Davis, 1980) in a normative sample of college students. Watson et al. (1992) found that the factor of the NPI most closely associated with maladjustment (Exploitativeness/Entitlement scale; E/E scale) was also associated with lower levels of empathy. Similar results were found in an earlier study by Watson, Grisham, Trotter, and Biderman (1984), which explored the relationship between the NPI and several measures of empathy. As expected, Watson et al. (1984) found that the Exploitativeness/Entitlement factor of the NPI was negatively related to all empathy measures.

Narcissism and Sexual Offending. Few studies have systematically examined the prevalence of personality disorders in sexual offenders. However, in an early study by Bard and Knight (1987), the first edition of the Millon Clinical Multiaxial Inventory (MCMI-I; Millon, 1982) was administered to approximately 184 incarcerated sex offenders. Bard and Knight (1987) performed cluster analysis on the scores and revealed four distinct subgroupings of sex offenders. One subgrouping included avoidant, schizoid and dependent personality traits. There was also an antisocial and negativistic cluster which was observed

evenly throughout the sex offender sample. One subgrouping was found primarily in men who had been convicted of rape and included narcissistic, antisocial and histrionic personality traits. The fourth subgrouping of sex offenders generated MCMI-I scores that were within normative ranges (Bard & Knight, 1987).

Another study which demonstrated differences among violent and sexually violent offenders on personality variables using the MCMI-I (Millon, 1982) was conducted by Chantry and Craig (1994). Chantry and Craig (1994) sampled 603 incarcerated criminals: 201 of whom were convicted child molesters, 195 were rapists and the control group consisted of 205 nonviolent offenders. Both groups of sex offenders generated MCMI-I scores which suggested higher levels of both clinical syndromes (e.g. anxiety) and diverse personality pathology. Chantry and Craig (1994) found that child molesters were distinct from rapists on scales measuring schizoid, dependent and borderline personality traits. Child molesters were also found to report more symptoms of depression and psychotic thinking than both other offender groups. Interestingly, the rapists generated scores that were more similar to those generated by the control group.

On a much larger scale, a more recent study was conducted by Ahlmeyer, Kleinsasser, Stoner, and Retzlaff (2003) which also examined levels of psychopathology in incarcerated sex offenders. However, the authors utilized a newer version of the MCMI (MCMI-

III; Millon, 1994) and administered this instrument to 7,921 inmates (223 rapists, 472 child molesters, & 7,226 general population inmates) to explore whether differences could be found between sex offenders and nonoffenders (as well as between sexual offenders) on traits of various clinical syndromes (e.g. major depression) and personality disorders.

Specifically, similar to the findings of Chantry and Craig (1994) with the original version of the MCMI, Ahlmeyer et al., (2003) found that sex offenders generated significantly higher scores than nonsexual offenders on subscales measuring schizoid, avoidant, depressive, dependent, schizotypal, and self-defeating personality traits. Also similar to the earlier findings of Chantry and Craig (1994), sexual offenders reported more symptoms of dysthymia, major depression, anxiety, and thought disorder than general population inmates. As predicted, Ahlmeyer (2003) found that general population inmates generated response sets that were consistent with traditional views of criminal/antisocial personality, scoring higher for sadistic, antisocial, and narcissistic personality traits than both groups of sex offenders. General population inmates were also found to report more substance abuse than sex offenders. When examining rapists and child molesters separately, the nonsexual offenders were found to be most different from the child molesters

(Ahlmeyer et al., 2003). The rapists' scores fell somewhere between the child molesters' and nonoffenders'.

Comparing the rapists and child molesters to one another, Ahlmeyer et al., (2003) found a similar pattern to what they saw with general population inmates and sex offenders in general. The child molesters rated significantly higher than the rapists on MCMI-III scales including those which assessed avoidant personality (41%), depressive personality (30%), dependent personality (30%), anxiety (49%) and dysthymic (30%) disorders. Again, the rapists' response sets were more typical of a general population criminal. Although not significantly different, rapists scored higher for narcissistic, borderline, sadistic and antisocial personality traits than child molesters in this sample (Ahlmeyer et al., 2003). The only scale that was found to be significantly higher among rapists was the one which assessed substance abuse.

Some theorists have linked narcissism to aggression and interpersonal violence (Baumeister, Catanese, & Wallace, 2002; Baumeister, Smart, & Bowden, 1996; Bushman & Baumeister, 1998). A recent study by Wiehe (2003) examined empathy and narcissism in a sample of child abuse perpetrators (21 males and 79 females) compared with a sample of foster parents (16 males and 84 females). Wiehe (2003) administered the IRI (Davis, 1980), the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979;

1981), and the Hypersensitive Narcissism Scale (HSNS; Hendin & Cheek, 1997) to all participants.

Wiehe (2003) reported no significant differences between groups on variables of gender or race. Not surprisingly, Wiehe (2003) found that the abusive parents "demonstrated less self-confidence, a greater lack of impulse control and were more narcissistic than their nonabusive counterparts" (p. 550). The abusive parents were also found to be significantly less empathic than the nonabusive foster parents (IRI subscales: Perspective Taking, Empathic Concern, & Personal Distress). Wiehe (2003) also found that the IRI Perspective Taking scale was negatively related to the NPI (Raskin & Hall, 1979) subscales of Entitlement and Exhibitionism (using a 7 factor model of the NPI suggested by Raskin & Terry, 1988).

Baumeister, et al. (2002) recently proposed that narcissism may serve as a moderating variable in understanding how some men are more or less likely to engage in sexually aggressive behavior toward women. In their "reactance theory" of sexual coercion and rape, Baumeister et al. (2002) propose that men who are more narcissistic will be more likely to believe that they can have sexual relations with a woman (due to inflated self-concept) than non-narcissistic men. These narcissistic men will also react more aggressively if they are rejected by women because they perceive the refusal as a threat to their pride (and sense of

entitlement). The act of sexual aggression then, is proposed to occur as a reaction to the rejection and as a means of maintaining their ego and perceived sense of superiority.

Borderline Personality Organization

The research reviewed above clearly demonstrates the link between antisocial and narcissistic personality traits and the capacity for empathy in sexual offenders. The studies by Chantry and Craig (1994) and Ahlmeyer et al. (2003) have also recently demonstrated the considerable variability of the personality pathology found among sexual offenders. There was also evidence of considerable variability regarding the Axis I (clinical syndromes) found among sex offenders, child molesters in particular. One form of personality disorder that is often characterized by a complicated diagnostic picture and reports of diffuse psychopathology (typically anxiety and depression) is the borderline personality disorder (Kraus & Reynolds, 2001).

Based upon the diagnostic criteria recommended by the DSM-IV (APA, 1994), patients with borderline personality disorder "have significant impairments in tolerating affect, controlling impulses, coping with feelings of aloneness....and an impoverished self-identity" (Kraus & Reynolds, 2001, p. 352). Borderline personalities are also often characterized as engaging in dangerous and/or self-destructive behaviors (self-harming as well). Borderline personality traits can be found in

approximately 1 - 2% of the general population and are most frequently seen in females (Kraus & Reynolds, 2001). There is also a high incidence of comorbidity between borderline personality disorder and other personality disorders. Links (1996) reported that over 90% of patients diagnosed with borderline personality disorder were also diagnosed with at least one other personality disorder.

Borderline personality disorder is also found to co-occur with several Axis 1 clinical syndromes. Corruble, Ginestet, and Guelfi (1996) found that as many as 87% of borderline patients also met criteria for unipolar depression. While Swartz, Blazer, George, Winfield, Zakris, and Dye (1989) reported comorbidity rates of close to 75% for borderline patients and anxiety disorders.

The constellation of symptoms characteristic of borderline personality disorder can be understood using a psychodynamic model. Kernberg (1984; 1996) proposed a dimensional model of personality organization. In his model, personality organization is viewed as existing along a developmental continuum ranging from primitive to more mature. Along this continuum, personality organizations are divided into three classes with the most immature personality organizations falling within the psychotic range, followed by the borderline range, and up to the most mature personality organizations falling in the neurotic range.

Kernberg (1984) suggested that the personality organization of an individual is determined by his/her functioning in the three broad domains of impaired vs. intact reality testing, identity diffusion vs. identity integration, and reliance on primitive defense mechanisms vs. reliance on mature defense mechanisms.

The psychotically organized personalities are the most intrapsychically undifferentiated and immature. They are characterized by poor reality testing ability, a poorly integrated sense of self (identity diffusion) and the tendency to utilize primitive/immature psychological defenses. Psychotically organized personalities tend to be primarily preoccupied with their own existence, who they really are, and their safety/security. In addition, they lack the ability to fully identify with normative views of reality. They often cannot distinguish self from others and they often cope with their confusion and intense fears by employing the most primitive types of coping strategies. Primitive defenses typically include: regression, dissociation, magical thinking and/or projection. Based on object relations theory, psychotically organized personalities lack the capacity for empathy. Empathy would require the ability to see the "self" as separate from "other," to be present and to be grounded in reality.

Like those personalities at the psychotic level of organization, individuals at the borderline level of personality

organization exhibit significant identity diffusion and predominantly use primitive psychological defenses. However, these individuals are generally anchored in reality. They also exhibit a distorted and fragmented sense of self and others, and tend to view others (and the self) as either "all good" or "all bad." They are primarily preoccupied with autonomy, longing for intimacy and closeness but fearing it at the same time. They are intolerant of ambivalence and become easily overwhelmed with conflicting emotions. Individuals with personalities organized at the borderline level tend to cope with their internal conflicts and intense emotions by utilizing such primitive defenses as splitting and projective identification. The capacity for empathy is considerably limited, especially at the lower level of the borderline personality organization spectrum.

At the higher end of Kernberg's (1984; 1996) developmental spectrum, neurotically organized individuals demonstrate intact reality testing, an integrated sense of self and others, and use of more mature psychological defenses. Such individuals are characterized by their capacities for self-reflection and emotion regulation. They can integrate both "bad" and "good" aspects in their evaluations of themselves as well as of others. When they experience conflict or distress, neurotically organized individuals typically employ more psychologically healthy and emotionally mature coping strategies such as intellectualization,

compartmentalization or rationalization (Clarkin, Yeomans, & Kernberg, 1999). Kernberg's (1984) model suggests that the capacity for empathy is found at this level of personality organization.

Borderline Personality Organization and Empathy. Kernberg (1984; 1996) explained that the identity diffusion and use of primitive psychological defenses, typical of individuals with borderline personality organizations, often results in a diminished capacity for empathy toward others (Clarkin, et al., 1999). According to Kernberg's developmental model, empathy represents a mature ego function. Empathy allows us to feel tenderness for others and to develop meaningful relationships. It allows us to offer support and encouragement to important people in our lives. It allows us to "walk in another person's shoes." It also allows us to feel remorse for wrongdoings we have committed. According to Kernberg (1984), the mature ego is capable of integrating both positive and negative internalized mental representations of self and of autonomous others. Empathic capacity becomes organized and consolidated as the personality develops and interpersonal relationships are internalized.

According to Kernberg's (1984) model, ego capacity is directly associated with personality organization such that the more mature the personality organization, the greater the

expected ego functioning. This is due to the developmental nature of the model and the notion that lower-level borderline and psychotic level personalities have more immature and undifferentiated egos. Using empathic capacity as an example, it can be assumed that this mature ego function will only be consistently reflected in individuals who function within the neurotic and higher-level borderline ranges. It can also be assumed that individual character traits will affect how empathy is expressed.

Borderline Personality and Offenders.

Support for Kernberg's (1984) theory can be seen in the results of a recent study by Leichsenring, Kunst, and Hoyer (2003). In this study, the authors examined borderline personality organization in violent offenders. They did so by administering the Antisocial Personality Questionnaire (APQ; Blackburn & Fawcett, 1999), the Borderline Personality Inventory (BPI; Leichsenring, 1999), the NEO Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992), and the Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) to 91 violent male offenders. Leichsenring et al. (2003) found that borderline personality organization (as measured by the BPI) was significantly related to features of antisocial personality disorder as well as a host of interpersonal problems.

An early study by Berner, Berger, Guitierrez, Jordan, and Berger (1992) demonstrated that diagnoses of borderline personality disorder and antisocial personality disorder were equally frequent, occurring in approximately 23% of their incarcerated sex offender sample. In a follow-up study by the same research team, borderline personality disorder was again found to be one of the most frequently diagnosed personality disorders among rapists (Berger, Berner, Bolterauer, Guitierrez, & Berger, 1999). Berger et al. (1999) also found that antisocial and borderline personality disorders co-occurred most frequently with sadistic personality disorder.

In addition to various other forms of psychopathology, Chantry and Craig (1994) found that traits associated with borderline personality disorder were higher in child molesters than nonoffender controls. In the Ahlmeyer et al. (2003) study, features of borderline personality disorder occurred in approximately 6-8% of the incarcerated offender sample. There were no significant differences found between groups on these variables (of borderline personality disorder), although sexual offenders' scores were higher than the nonoffender controls overall.

An early study by Herman, Perry, and Van der Kolk (1989) suggested that as many as 80% of the borderline patients they sampled had a history of physical and sexual abuse. For patients

functioning within the borderline level of personality organization, early childhood experiences of intense frustration and aggression often lead to the development of unhealthy coping mechanisms. This interferes with the normal development of integrated internalized representations of self and others. These individuals frequently grow up with distorted views of self and others, often seen through their reliance on "black and white" thinking. According to Kernberg (1992), an excess of aggression is one of the key underlying features of the borderline condition.

In Kernberg's (1984; 1996) theory, personality disorders can be understood within the object relations framework and can be classified through this dimensional approach. He has frequently described personality disorders as originating primarily from the borderline level of personality organization. Kernberg (1984; 1996) also suggested that high levels of aggression and the inability to control aggressive impulses significantly impact the development of primitive defenses and identity diffusion. According to Kernberg (1992), sexual perversions can also be understood within an object relations framework. He defined sexual perversions as "fixed, repetitive, obligatory behaviors required to obtain sexual gratification" (Kernberg, 1992, p. 248). Consistent with borderline personality pathology, clinical observations of sexually perverse patients has suggested there is

excessive aggression in conjunction with preoedipal and oedipal conflicts (Kernberg, 1992). In the case of fetishism, the fetish would serve as a symbolic means of coping with the aggression and the fear associated with acting on this aggression (Kernberg, 1992).

Despite the limited research on borderline personality disorder in sexual offenders, this disorder represents one of four Cluster B personality disorders (as seen in the DSM-IV; APA, 1994). The remaining three Cluster B personality disorders include antisocial, narcissistic, and histrionic personality disorders. These four Cluster B personality disorders are typically characterized as the dramatic, emotional, or erratic disorders (APA, 1994). In addition, Kernberg's (1984) developmental model would suggest that all four Cluster B personality disorders would likely originate from the borderline level of personality organization. It is therefore expected that borderline personality organization would function like narcissism and psychopathy in a sex offender sample.

Treatment Issues with Personality Disordered Patients

The treatment of personality disorders is particularly challenging. This is due to their extensive interpersonal difficulties which often interfere with the formation and maintenance of a working therapeutic alliance (Lingiardi, Filippucci, & Baiocco, 2005). Not surprisingly, there are also

high dropout rates reported for personality disordered patients in psychotherapy (Gunderson, Najavits, Leonard, Sullivan, & Sabo, 1997; Kraus & Reynolds, 2001).

A recent study by Lingiardi, et al. (2005), evaluated measures of therapeutic alliance in 47 patient-therapist dyads (with personality disordered patients). The authors demonstrated that early formation of a strong therapy alliance was predictive of a better therapy outcome and lower dropout rates. Lingiardi, et al. (2005) also found that therapists rated the therapy alliance negatively for those patients with Cluster B personality disorders. Therapists tended to find the lack of basic trust and the interpersonal sensitivity of Cluster B personality disordered patients to be particularly problematic.

Other researchers have noted that Cluster B personality disorders share a common inability to feel empathy for others (Kraus & Reynolds, 2001). That it is this diminished capacity for empathy which makes the formation of therapeutic alliance considerably more difficult. According to the review of treatment for Cluster B personality disorders by Kraus and Reynolds (2001),

> Persons with narcissistic personality disorder – by definition – do not see others as important enough to warrant empathy. Those with borderline personality disorder typically find themselves too much a victim to have any

empathy to spare, and patients with antisocial personality disorder usually cannot even conceptualize empathy (p. 347). Another therapeutic challenge has to do with the level of honesty that the patient brings to treatment. Many Cluster B patients (antisocial personalities in particular), have a tendency to be deceitful and manipulative in their interpersonal interactions and this poses a threat to the development of a trusting and safe therapy environment (McWilliams, 1994).

The Current Investigation

The purpose of the current investigation was to explore the construct of empathy in sex offenders as well as the pathological personality traits believed to impact treatment effectiveness. As discussed in detail in the above sections, there is a wealth of literature demonstrating the negative relationship between empathy and personality traits associated with antisocial and narcissistic personality disorder. There is also literature which suggests that empathy may serve to inhibit interpersonal violence and to promote altruistic behavior. It has also been widely shown that the capacity for empathy toward others may change over time in treatment for patients with personality disorders (McWilliams, 1994). It was therefore believed that levels of personality pathology would serve to moderate the relationship between the length of time offenders spent in treatment and their levels of self-reported empathy.

The Moderator Model

Baron and Kenny (1986) distinguished between models of moderation and those of mediation. They defined a moderator as a variable "that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (Baron & Kenny, 1986, p. 1174). According to Baron and Kenny (1986) "moderators and predictors are at the same level in regard to their role as causal variables antecedent or exogenous to certain criterion effects" (p. 1174). Therefore in moderator analyses, predictor variables are all treated as independent variables with no assumptions about causality. Statistically, models of moderation can be supported by finding a significant interaction between the predictor variable and the hypothesized moderator variable(s).

For the present study, a model of moderation was selected because it was believed that self-reported empathy would vary over time in treatment as a function of personality pathology. In the present study, the specific personality traits associated with psychopathic, narcissistic, and borderline character disorders would be examined. The model of moderation suggested by this study is depicted in Figure 1.

As seen clearly in Figure 1, the dependent variables are the measures of empathy (general and victim) while the moderator variables are measures of pathological narcissism, psychopathic

personality and borderline personality organization (as defined by Kernberg, 1984; 1996). It was assumed that the longer inmates were engaged in treatment, the greater their awareness would be regarding their own feelings and their deviant behavior patterns. It was therefore believed that empathy would increase over time and exposure to treatment. Therefore, the variable of time in treatment would be regarded as another predictor variable with a direct relationship to empathy.

Hypotheses

1. The variable of time in treatment will be a significant predictor of empathy (and hostility for women). It is expected that offenders will demonstrate an increase in empathy with more time in treatment. It is also expected that this pattern will be observed with each of the three factors of empathy.
2. Traits associated with psychopathic, narcissistic, and borderline personality disorder will be significant predictors of empathy. Based on the findings of earlier studies using these measures, it is expected that the PPI total score, PPI Coldheartedness scale, PPI Machiavellian Egocentricity scale, NPI Entitlement/Exploitativeness scale, and IPO factor score will have a direct impact on levels of empathy (inverse relationship).

3. It is predicted that there will be a significant interaction found between length of time in treatment and levels of personality pathology (psychopathic, narcissistic, and borderline). It is expected that those offenders with high levels of personality pathology will show little difference in their empathy ratings despite exposure to treatment. However it is predicted that those offenders with lower levels of personality pathology will generate higher empathy ratings with more exposure to treatment.

Analyses

In response to having multiple measures of empathy, scores were submitted to a principal component analysis. This is done in order to reduce the assessment of empathy to its' fundamental factors.

Per the recommendations of Baron and Kenny (1986), hierarchical linear regression analyses would be appropriate to test for moderation effects. For the purposes of the current study, a series of two-step linear regression analyses was performed, entering time in treatment in the first step for all regressions. Along with the variable of time in treatment, one of the moderator (pathological personality traits) variables was also entered at step one of the regression. The interaction of time in treatment and personality pathology was entered at the second step of each regression.

Methods

Participants

Participants were 58 incarcerated male sex offenders from a state correctional institution in central Pennsylvania (see Table 1). All of the inmates who participated in this study resided in a therapeutic community (a single cell-block with approximately 120 beds) within the institution. The inmates were voluntarily lodged in this therapeutic community and each had been convicted of at least one sexual offense. As members of a therapeutic community, these inmates were actively engaged in treatment but any given time, there were offenders who were in different stages of treatment living together.

At the time that this study was conducted, there were regular therapeutic community meetings held within the cell block which included all inmates and treatment staff. At these monthly meetings, staff typically made announcements about new therapy groups and other issues affecting the whole community. Recruitment for this study was done via verbal announcements made by the chief investigator at one of these regular meetings. In the recruitment announcements, the project was described as a study about personality and emotion in sex offenders and that participation involved completing several questionnaires. The community was informed that participation would occur in a single testing session and that the length of this session would be

approximately 90 minutes. It was explained that each testing session would be conducted privately with only the chief experimenter present. It was also explained that participation in this study would be strictly voluntary and confidential, with no compensation or other incentives being offered. Inmates were told that the study was being conducted through Penn State University and that it was independent of the Department of Corrections. It was made clear that whether an inmate chose to participate in the study or not, there would be no ramifications on treatment or parole decisions. A sign-up sheet was passed around so individuals could indicate their interest in participating in the study and so that they could schedule an appointment for a testing session.

Following the recruitment meeting, 58 inmates signed up for the study. The men ranged in age from 22-76 years (M=41, SD=9.7). Please refer to Tables 1 and 2 for additional background information regarding the inmate population that was sampled for this study. The offense details indicate that the majority of these sex offenders had child victims under 16 years of age (approximately 75%). Most of these child victims were female (N=48, 82.8%) and the majority of victims also knew their offenders. In fact, 81.6% of the offenders reported being family members (either biological, step-family, foster family or adopted family) of their victims. The other offenders reported that they

were family friends, neighbors or baby-sitters who cared for their victims.

At the time that this data was collected, approximately 41.4% of the sample had been in sex offender treatment for twelve months or less. On the other end of the spectrum, approximately 32.8% of the sample had been involved in treatment for two years and beyond. Some preliminary correlations demonstrated that the amount of time that the offenders were engaged in treatment was significantly related to some forms of empathy (see Table 3). In reviewing Table 3, it should be noted that the minimum magnitude of significant correlations varied as a result of different sample sizes (58 participants, 44 offenders with child victims).

The Sex Offenders Treatment Program

Given the significance of the variable of time in treatment on the factors being examined in this study, the following is a brief description of the treatment provided to sex offenders at this institution. Once inmates were thoroughly screened and evaluated by the treatment staff, it was determined whether or not they would be appropriate for the treatment program. Appropriateness for treatment was determined by several criteria including: the inmate admitting to the sexual offense(s) for which he was convicted, the inmate not having any legal cases under appeal and the inmate being willing to voluntarily reside within the sex offender therapeutic community. The treatment

program consisted of three phases. The first phase of treatment ran for approximately eight to twelve weeks and focused on orienting the inmates to life in the therapeutic community and the policies specific to that setting. In addition, during phase-one treatment, inmates participated in psychoeducational groups which oriented them to working in group therapy and about basic human sexuality.

Once they completed phase-one treatment, inmates began phase-two treatment, also referred to as "core treatment." Core treatment lasted for approximately two years and it primarily consisted of intensive group therapy. The size of the groups ranged from eight to twelve individuals. The structure of the core treatment was based, in part, on the treatment series developed by Freeman-Longo and associates (Freeman-Longo & Bays, 1988; Bays & Freeman-Longo, 1989; Bays, Freeman-Longo, & Montgomery-Logan, 1990). The treatment protocol at this facility combined interpersonal, cognitive-behavioral and rational-emotive therapy models. The treatment also utilized a "hot seat" approach in which one offender was in focus at any given time and group members provided him with constructive feedback. There were five major areas that were covered over the course of each core treatment group and which were evaluated prior to completion of phase-two treatment. These areas included: lifeline competency, identifying deviant cycles, full disclosure

competency, victim empathy, and the development of relapse prevention plans.

According to this treatment program, lifelines were autobiographical statements which included relevant demographic information, including a detailed sexual history and history of deviant sexual behavior for each individual. Deviant cycles generally included a description of key behaviors, feelings and cognitive distortions/thinking errors, which were believed to contribute to sexually acting out. Each group member developed a written version of his cycle, identifying his cognitive errors, triggers and how each played a role in his deviant sexual behavior.

Group members were required to develop their individual deviant cycles over the course of treatment. When on the "hot seat," they needed to orally communicate their understanding about their own deviant behavior and "when," "how," and "why" they acted out sexually. Individuals also gave oral presentations of full disclosure in which they stated what sexual crimes they were charged with and the specific details of their offense(s). In doing so, they needed to accept full responsibility for their actions without minimizing, rationalizing or justifying their behavior.

Victim empathy was typically addressed toward the end of the second year of core treatment. This unit of treatment involved

helping the offenders develop an understanding of the physical, emotional and behavioral impact they had on their victims. In order to demonstrate victim empathy competency, inmates had to produce written statements of victim empathy/impact for their crimes. They also had to make oral presentations of victim empathy to their therapy groups, in which they accepted full responsibility for the impact of their crimes on their victims. This also had to be done without minimizing, blaming, rationalizing, romanticizing or justifying their behavior.

The final component of core treatment was the development of a relapse prevention plan by each group member. Relapse prevention plans included strategies for addressing the identified behaviors, cognitive distortions and deviant sexual arousal patterns specific to each individual's deviant cycle. Each relapse prevention plan was expected to be a well-developed approach to managing the offender's deviant sexual behavior. The aftercare plans also typically included an identified support network and outpatient sex offender treatment.

Although the sex offender treatment program was often completed in less than two years, some inmates did remain in treatment longer because they had difficulty with the material and required additional help. On the other side, some inmates choose to stay in the therapeutic community longer because they want to serve as tutors for offenders who are new to treatment.

Procedure

Each participating inmate scheduled a 90 minute testing session. A copy of this sign-up schedule was given to the correctional officers in the control room on the cell-block, so that the inmates were given permission to leave their cells during their scheduled appointment times.

Upon arriving for the testing session, each participating inmate was greeted by the chief investigator and was given two copies of informed consent forms and institutional release of information forms to read over and sign. Two copies of each form were provided so that the participants could keep copies for their own records. Any questions about the procedure, consent forms, and/or confidentiality were addressed by the chief investigator at this time.

Once each participant gave consent to participate in this study, the chief investigator conducted a brief interview (about 10 minutes long) to gather some background information and sexual offense details. Background information collected during the interview included demographic information, details about the nature of their sexual offense(s), victims, as well as information regarding length of time in treatment and prior offenses. Upon conclusion of the brief interview, each participant was informed that he would be completing six questionnaires about the way he thought and felt about himself

and others along with his behavior. Participants were provided with writing utensils and were asked to carefully read the instructions for each questionnaire before beginning. The chief investigator was present for each testing session with each participant and personally responded to all questions. The questionnaires were administered one at a time in the order they are described below. The questionnaires were read aloud to those individuals with reading or writing difficulties. All participants completed all of the questionnaires.

Measures

The Inventory of Personality Organization (IPO; Clarkin, Foelsch, & Kernberg, 2001). The IPO is an 83-item self-report instrument which was developed to assess the three major components of Kernberg's (1984; 1996) model of personality organization and it is based on object relations theory. According to Kernberg's model, an individual's personality organization is based upon his/her level of functioning in the areas of Reality Testing (20 items), use of Primitive psychological Defenses (16 items) and Identity Diffusion (21 items). These three components are examined in the three clinical scales of the IPO. This measure also contains two supplementary scales which assess levels of Aggression (18 items) and Moral Values (11 items).

An examination of the psychometric properties of the IPO in the current study reveals good internal consistency: IPO impaired Reality Testing (α = .90), IPO Primitive Defenses (α = .82), IPO Identity Diffusion (α = .89), IPO Aggression (α = .72) and IPO low Moral Values (α = .72). The alpha reliability scores for the three clinical IPO scales in the present study were consistent with the published findings (Foelsch, Clarkin, Kernberg, Somavia, Normandin & Lenzenweger, 2000). Items on the IPO are rated on a five-point Likert scale, ranging from "Never True" to "Always True." For the purposes of this study, a composite score was created which summed together all five IPO subscales. Higher composite scores indicate more severe borderline personality features. In contrast, lower composite scores suggest healthier and more mature personality characteristics (i.e. neurotic level of personality organization).

The Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996). The PPI is a 187-item self-report measure designed to assess the presence of psychopathic personality traits. It is comprised of eight clinical scales (163 items) examining eight major personality traits associated with psychopathic character including: Machiavellian Egocentricity, Social Potency, Coldheartedness, Carefree Nonplanfulness, Fearlessness, Alienation, Impulsive Nonconformity, and Stress Immunity.

Reliability analyses with the present sample demonstrates good internal consistency for the PPI total score (α = .90) as well as for the eight PPI clinical subscales. The PPI Machiavellian Egocentricity scale assesses narcissistic and ruthless attitudes (α = .86). The PPI Social Potency scale examines the perceived ability to influence and manipulate others (α = .81) while the PPI Coldheartedness scale assesses an individual's propensity toward callousness and guiltlessness (α = .79). Psychopaths are not future-oriented in their thinking and planning and they tend to make the same mistakes in judgment over and over again. This attitude of indifference in planning activities is assessed by the PPI Carefree Nonplanfulness scale (α = .77).

Psychopathic personalities are also thought to be thrill-seeking in their behavior and the PPI Fearlessness scale assesses these individuals' willingness to participate in potentially dangerous and risky activities (α = .83). The PPI Alienation scale assesses a tendency to externalize blame for one's own mistakes and misbehavior (α = .88), while the PPI Impulsive Nonconformity scale assesses a lack of concern regarding social norms and mores (α = .74). Another characteristic of psychopathic personalities is their ability to remain calm when faced with typically stressful and anxiety-provoking situations.

This quality is tapped by the PPI Stress Immunity scale (α = .74).

In addition to the eight PPI clinical subscales, the PPI has three validity scales. Validity scales were included to detect dishonest response sets such as "faking good" (PPI Unlikely Virtues, 14 items)and "faking bad" (PPI Deviant Responding, 10 items). Another validity scale was added to assess response inconsistency (PPI Variable Response Inconsistency, 40 pairs of highly intercorrelated items). All items on the PPI are rated on a four-point Likert scale which range from 1 (False) to 4 (True).

The Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979; 1981). The NPI is a 40-item self-report measure which assesses character traits associated with narcissism. The NPI items are designed as forced choice items for which participants select one of two possible statements about how they experience themselves. Higher scores on this instrument are associated with more narcissistic personality traits. The NPI is one of the most frequently used measures in the literature and it has been shown to have construct validity and high internal consistency (Raskin & Hall, 1988).

The NPI can be scored to generate a total score for narcissism as well as a score for each of the four subscales (Emmons, 1984; 1987). For the sample used in the present study, the NPI was shown to have good internal consistency overall (NPI

total score, α = .79). The four main factors which comprise the NPI are Leadership/Authority (L/A), Superiority/Arrogance (S/A), Self-Absorption/Self-Admiration (S/S) and Entitlement/Exploitation (E/E). The L/A scale is often associated with a desire for dominance and leadership (α = .65). The S/A scale appears to be associated with vanity and a need for status and prestige (α = .19). The S/S scale is characterized by self-centeredness as well as a desire for independence and achievement (α = .60). The NPI E/E scale seems to be associated with nonconformity, hostility, lack of consideration for others, lack of self-control and a need for power and dominance (α = .36).

It is widely believed that the E/E scale of the NPI is the one most related to maladaptive narcissism while the other three factors are associated with more adaptive narcissism (Emmons, 1987). In fact, Watson et al. (1984) found that the E/E scale of the NPI was inversely related to three different measures of empathy. For this reason and given the relatively low alpha coefficients generated for the NPI subscales, only the E/E scale was used in the analyses for the present study.

According to the results of a multi-sample analysis using the NPI by Tschanz, Morf, and Turner (1998), significant gender differences were found in an undergraduate student sample. The male students (N = 1060) generated NPI E/E scale scores (M =

2.58, SD = 1.82) that were higher than those of the female students (N = 1029) in the sample (M = 2.28, SD = 1.73). For the present sample (N = 58) of sex offenders, the NPI E/E scale scores were relatively low (M = .64, SD = .91).

The Interpersonal Reactivity Index (IRI; Davis, 1980; 1983). The IRI is a 28-item self-report instrument that assesses four major components associated with general empathy according to Davis' multidimensional model of empathy (Perspective Taking, Empathic Concern, Fantasy, and Personal Distress). Items are rated on a five-point Likert scale, ranging from "Does not describe me well" to "Describes me very well." The IRI scores are all summed together to generate the IRI total score. The alpha coefficient for the IRI total score in the current study was .72.

According to Davis' (1980) model, the two components of Perspective Taking and Fantasy are associated with more cognitive processes. The IRI Perspective Taking scale assesses the ability to put oneself in another person's shoes ("I try to look at everybody's side of a disagreement before I make a decision," α = .71). The IRI Fantasy scale measures the tendency to identify with characters in fictitious situations ("When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me," α = .71).

The two other components, Personal Distress and Empathic Concern, are believed to examine the more affective processes involved in experiencing empathy for another. The IRI Personal Distress scale measures the amount of stress and anxiety one feels when observing the pain and suffering of others ("Being in a tense emotional situation scares me," α = .71). The IRI Empathic Concern scale assesses feelings of warmth and compassion for others ("I am often quite touched by things that I see happen," α = .67). All of the alpha coefficients reported here for the IRI subscales is consistent with findings published by Davis (1980) using a nonclinical sample.

A recent study by Pulos, Elison & Lennon (2004) examined the hierarchical structure of the IRI. The authors found that the IRI Personal Distress scale loaded on a different second-order factor than the other three general empathy scales. In fact, the results of this study challenge Davis' (1980) conceptualization of empathy as a 4-factor construct. The authors found that what Davis (1980) referred to as IRI Personal Distress ("negative feelings in response to the distress of others") might actually be a construct that is entirely different from general empathy. Pulos et al. (2004) recommended summing the IRI Perspective Taking, IRI Empathic Concern and IRI Fantasy scale scores to generate a total general empathy composite score. Given these

findings, the IRI Personal Distress scale was not used in statistical analyses conducted in the present study.

The Empathy for Women Test (Hanson & Scott, 1995). The Empathy for Women Test is a scenario-based self-report instrument which assesses the ability to distinguish between sexually abusive and non-abusive interactions between men and women. It examines victim empathy specific to violence perpetrated against women. This questionnaire is comprised of thirteen different vignettes and respondents are instructed to rate how the woman might react to each situation. After reading each vignette, respondents rate ten questions on a five-point Likert scale, ranging from "Not at all" to "Very Much." Four of these questions ask the respondent how he thinks the woman in the story would be likely to feel about her experience while the remaining six questions ask about what the woman would likely be thinking about in the situation described.

The EFW is scored for three types of errors: fake errors, hostile errors and oversexualized errors (Hanson & Scott, 1995). Results from a pilot study using the EFW showed that male sex offenders generated higher total error scores on the EFW (M = 46.2, SD = 18.9) compared to non-offending men (M = 32.3, SD = 14.6). According to the authors, fake errors are exaggerated responses to the woman's distress in each scenario. The higher the number of fake errors generated, the more likely the

individual is attempting to present himself in a better light (M = 7.5, SD = 4.7 for non-offenders and M = 9.9, SD = 6.4 for sex offenders). As would be expected, fake errors correlated highly with social desirability (Hanson & Scott, 1995).

Deviant responding was determined through examination of hostile and oversexualized errors. Generating more hostile errors suggests that the individual has a tendency to attribute hostile motives to women in dating situations (M = 10.3, SD = 8.5 for non-offenders and M = 16.87, SD = 11.2 for sex offenders). Similar to the hostile errors, oversexualized errors represent a tendency to misinterpret women's behavior, in this case by oversexualizing the behavior (M = 14.5, SD = 9.4 for non-offenders and M = 21.2, SD = 10.9 for sex offenders).

In the present study, only hostile and oversexualized errors were examined (fake errors were left out of analyses). Reliability analyses demonstrated moderate internal consistency. This was true for hostile errors (α = .51) as well as oversexualized errors (α = .53). It should be noted that these reliability values (although relatively low) are consistent with values published by the authors of the measure (Hanson & Scott, 1995). It should also be noted that the EFW has only been administered to samples of rapists and nonsexual offenders but not with samples of perpetrators against children. As mentioned

earlier in this paper, the population sampled for the current study was predominantly composed of child molesters.

The Child Molester Empathy Measure (CMEM; Fernandez, Marshall, Lightbody, & O'Sullivan, 1999). The CMEM is a self-report measure that uses scenarios to assess general aspects of empathy as well as empathy for child victims. The CMEM was designed for use with individuals who have engaged in sexual violence toward children. The instrument consists of three scenarios: one depicting a child who had been the victim of an accident (general empathy), one in which the child was the victim of sexual abuse and the final scenario was about the offender's own child victim(s). The instrument also consists of two parts, Part (a) and Part (b) for each scenario.

In Part (a), respondents read and rated the degree to which they believed the victims would experience particular thoughts, feelings, or behaviors (30 items, e.g. "Problems with school work"). In Part (b), respondents rated their own feelings about the each victim's situation (20 items, e.g. "Ashamed"). Items in both parts (a) and (b) were rated on an eleven-point Likert scale, ranging from "Not at all" to "Very Much." A composite score was created for each of the three vignettes.

In their evaluation of the psychometric properties of the CMEM, Fernandez et al. (1999) demonstrated good internal consistency. In addition to validating their victim empathy

instrument, Fernandez et al. (1999) demonstrated that empathy may be context specific, not merely victim specific (each scenario representing a different context). The offenders sampled in this study appeared to be most deficient in empathy toward their own victims. Some offenders did appear to have empathy for the child accident victim. In fact, Fernandez et al. (1999) found that the empathy scores generated by offenders did not differ significantly from nonoffenders for the accident victim. This study was important in demonstrating variability within the sex offender population and demonstrating that some offenders did have the capacity for empathy.

In the present study, reliability analyses demonstrated good internal consistency for the three scenarios and the alpha coefficients are consistent with findings published by Fernandez et al. (1999). For the present sample of sex offenders, the alphas are .90 for the accident victim, .85 for the general sexual abuse victim and .91 for the offender's own victims. These alpha scores are consistent with the published alpha coefficients collected from a sample of child molesters which are .87 for the accident victim, .82 for the general sexual abuse victim and .88 for the offender's own victims (Fernandez et al., 1999).

Fernandez et al. (1999) recommended using a single composite score for each scenario in the CMEM. However direct clinical

observation and literature review indicates that an offender's beliefs about the impact of abuse on a child victim and the offender's own feelings about that victim's experience may involve very different processes (Covell, 2001; Jolliffe & Farrington, 2004). Therefore in the present investigation, two scores were generated for each scenario (one for part "a" and one for part "b"). Reliability analyses demonstrated alpha coefficients that were all above .85.

It is important to note that although all of the inmate participants in the present study completed all of the aforementioned measures, not all of the participants had child victims. Therefore, participants who did not have child victims did not complete the third scenario (empathy for the offender's own child victim). Despite this, a large enough percentage of the current sample had offended against children (N = 44). These 44 participants were selected out and the remaining 14 participants scores were removed from further statistical procedures conducted with the CMEM.

Results

Factor Analysis of Empathy

In the present study, several measures of empathy were utilized. It was therefore critical to determine exactly what I was measuring. As mentioned earlier, I elected to use only three of the four subscales of the IRI – removing IRI Personal Distress

per the recommendations of Pulos et al. (2004). Fake errors on the EFW were also excluded from the analyses because these errors represented "faking good" responses. Although a person must possess some understanding of empathy in order to fake it successfully. Faking good was believed to involve a much different process than empathy, as defined in the current investigation. In the present study, a multidimensional view of empathy was used as recommended by Davis (1980; Pulos et al., 2004). In order to better understand the capacity for empathy in sex offenders, empathy was also explored at the level of the victim.

For both hostile and oversexualized errors, high scores reflected low empathy for women. The CMEM was the newest and least empirically supported of the three empathy measures (Fernandez et al., 1999). In their research, Fernandez et al. (1999) found that offenders and non-offenders did not differ significantly on the Accident Victim scenario. After careful consideration, the CMEM – Accident Victim scenario empathy scores (for Parts a & b) were omitted from the factor analysis.

The nine empathy scales that were utilized in the factor analysis included: three IRI scales measuring aspects of general empathy (Perspective Taking, Empathic Concern and Fantasy), EFW hostile errors and oversexualized errors, and the summary scores (a and b) for the two sexual abuse victim scenarios on the CMEM

(the general sexual abuse victim and the offender's own victim). Principal axis factor analysis with oblique rotation was conducted for the nine empathy variables described above. An oblique rotation was selected because there was no a priori reason to expect the three types of empathy (general, for women and for children) not to be related to one another. As such, the analysis would determine the level of the relationship among factors without arbitrarily imposing orthogonality on them via a varimax rotation.

The factor analysis extracted three distinct empathy factors. Two and four factor solutions were also explored but it was the three factor solution that demonstrated the best fit. As seen in Table 4, all four CMEM summary scores loaded almost exclusively on the first factor. I elected to label the first factor as Empathy for Children. Similarly, Table 4 shows that the two EFW error variables loaded very highly and almost exclusively on the second factor. This second factor was labeled as Hostility for Women. The third factor that emerged was labeled the General Empathy factor, as the three IRI subscales we included all loaded almost exclusively on it (see Table 4). An examination of the factor intercorrelations revealed that child empathy was negatively related to hostility for women (r = -.18) and positively related to general empathy (r = .30). The

hostility for women factor demonstrated little relationship to general empathy (r = -.06).

Testing for Moderation

Hierarchical linear regressions were conducted to test for moderation in the present study. It was hypothesized that a main effect on empathy would be found for time in treatment. It should be noted that the length of prison sentence was examined separately from time in treatment but was not found to have a significant relationship with levels of empathy. It was expected that the inmates' empathy ratings would increase over time as they were exposed to more sex offender treatment. It was expected that this would be true for all three forms of empathy. A main effect for empathy was also expected to be found for pathological personality traits. Specifically, it was expected that higher levels of personality pathology would be related to lower levels of empathy while lower levels of personality pathology would be related to higher levels of self-reported empathy.

Given some of the significant correlations that were found in early analyses, it was anticipated that some of the PPI subscales would demonstrate significant main effects with empathy (see Table 3). Specifically, levels of PPI Coldheartedness, PPI Carefree Nonplanfulness, and PPI Alienation would significantly predict empathy. Please refer to Table 5 for the means and

standard deviations for the psychopathy measure. There have been relatively few empirical investigations of empathy for children (with the CMEM) or for Women (with the EFW). As a result, there were no specific predictions as to potential differences in ratings among the three types of empathy.

The dependent variables in the factor analysis were the three empathy factors: General Empathy, Empathy for Children and Hostility for Women. I performed a series of 33 two-step hierarchical linear regressions, 11 for each of the three empathy factors. The 11 proposed moderator variables included: borderline personality organization (IPO composite score), pathological narcissism (E/E scale of the NPI) and psychopathic personality traits (the PPI total score and each of the eight PPI subscales). Along with the variable of time in treatment, one of the 11 predictor variables was entered at the first step of the regression for each type of empathy. An interaction term for these variables was entered at step two.

Significant Moderators of Empathy for Children. In general, the results revealed that length of time in treatment was related to an increase in reported empathy for children. Of the 11 predictor variables, hierarchical linear regression revealed five significant moderators for child empathy. These significant moderators included: pathological narcissism (NPI E/E scale), borderline personality organization (IPO), psychopathic

personality (PPI total score) as well as the specific psychopathic traits of externalizing blame (PPI Alienation) and disregarding laws and social mores (PPI Impulsive Nonconformity).

To predict empathy for children, a hierarchical linear regression analysis was performed with narcissistic entitlement/exploitativeness and time in treatment as predictor variables. As seen in Table 6, the regression revealed a significant main effect for time in treatment. The main effect contributed approximately 19% of the variance for this regression. Table 6 also illustrates the significant interaction between narcissistic entitlement/exploitativeness and time in treatment on levels of empathy for children. The interaction contributed an additional 11% to the overall variance of the model (30%). As expected, moderation was supported and the moderator effect is illustrated in Figure 2. As seen in Figure 2, individuals who were higher in pathological narcissism reported less empathy for children the longer they were in treatment. The opposite effect was found for offenders who rated lower in self-reported narcissism. These individuals actually reported more empathy for children the longer they were in treatment.

A hierarchical linear regression analysis was performed with borderline personality organization and time in treatment as predictor variables. As seen in Table 7, a main effect was found

for time in treatment. The main effect accounted for nearly 18% of the variance. Table 7 also illustrates the significant interaction found for borderline personality organization and time in treatment. The interaction contributed an additional 13% to the overall variance for the model (31%). As expected, moderation was supported and the moderator effect is clearly illustrated in Figure 3. As seen in Figure 3, the participants with high levels of borderline personality pathology reported less empathy for children the longer they were in treatment. Figure 3 also shows that participants with low levels of borderline personality pathology reported more empathy the longer they were in treatment.

A hierarchical linear regression analysis was performed with PPI total score and time in treatment as predictor variables of empathy for children. As shown in Table 8, a main effect was found for time in treatment (+). The main effect accounted for nearly 18% of the variance. Table 8 also illustrates the significant interaction found for PPI total score and time in treatment. The interaction contributed an additional 11% of the total variance for the model (29%). As expected, moderation was supported and the moderation effect can be seen in Figure 4. In Figure 4, the same pattern is observed with psychopathy that was found with narcissism and primitive personality organization. Individuals who were high in psychopathy reported less child

empathy with more treatment, whereas the inmates with the low levels of psychopathy reported more empathy for children with more exposure to treatment.

In addition to levels of psychopathic personality moderating the relationship between time in treatment and empathy for children, significant moderators also included certain traits associated with psychopathy. A hierarchical linear regression was performed with PPI Alienation (the tendency to externalize blame for one's own mistakes) and time in treatment as predictor variables. As seen in Table 9, a significant main effect was found for time in treatment. The main effect contributed nearly 18% of the variance. Also seen in Table 9, there was a significant interaction found for PPI Alienation and time in treatment. This interaction contributed nearly 12% of the overall variance for the model (30%). The moderator effect is illustrated in Figure 5. Also seen in Figure 5, the offenders with high ratings on the PPI Alienation subscale reported lower levels of empathy for children over time in treatment. In contrast, those offenders who rated themselves as low on PPI Alienation, showed a marked increase in empathy over time in treatment.

A hierarchical linear regression was performed with PPI Impulsive Nonconformity (anti-authority, rule-breaking attitude) and time in treatment as predictor variables for empathy for

children. As illustrated in Table 10, the regression revealed a significant main effect for time in treatment. The main effect contributed nearly 18% of the variance. Table 10 also shows that a significant interaction was found between PPI Impulsive Nonconformity and time in treatment. The interaction contributed nearly 12% of the overall variance for the model (29%). Once again, moderation was supported and the moderator effect can be seen in Figure 6. Also seen in Figure 6, those individuals who rated themselves as high on PPI Impulsive Nonconformity reported lower levels of empathy for children over time in treatment. Conversely, those individuals who self-rated as low on PPI Impulsive Nonconformity reported higher levels of empathy for children with more treatment (Figure 6).

Another characteristic often associated with psychopathy is the tendency to engage in dangerous/risky activities (assessed by the PPI Fearlessness scale). A hierarchical linear regression was performed with PPI Fearlessness and time in treatment as predictor variables. As seen in Table 11, a main effect was found for time in treatment. The main effect accounted for nearly 18% of the variance. The regression also revealed a trend toward significance between PPI Fearlessness and time in treatment. Although more modest, the model with the interaction term contributed to almost 7% of the overall variance for the model (24%). Although moderation was not supported here, the

trend observed followed the same pattern as the moderator variables discussed above. As illustrated in Figure 7, individuals who reported more of this personality trait reported less empathy for children the longer they were in treatment. Those individuals who reported less of this trait reported more empathy the longer they were in treatment.

The hierarchical linear regressions indicated that the five remaining PPI subscales were not significant moderators of child empathy (see Tables 12-16). Even though the interactions were not significant for these five variables, the tables reveal that in addition to the main effect for time in treatment on child empathy, a main effect was found for PPI Coldheartedness (Table 12). As expected, high levels of PPI Coldheartedness was significantly predictive of lower ratings of empathy for children.

Significant Moderators of Hostility for Women. Hierarchical linear regression analyses revealed only two significant moderators for hostility for women, both were characteristics associated with psychopathic personality (PPI Fearlessness and PPI Impulsive Nonconformity). Interestingly, there was no main effect found for time in treatment. As seen in Table 17, the interaction between PPI Fearlessness and time in treatment was significant. The interaction accounted for 9% of the overall variance for the model (20%). Moderation was supported and the

moderator effect can be seen in Figure 8. Also seen in Figure 8, the offenders who rated themselves high on the PPI Fearlessness subscale had the most thrill-seeking natures. Over time in treatment, these sex offenders actually reported having more hostility for women. On the other end of the spectrum, those sex offenders who rated themselves low on PPI Fearlessness reported decreased hostility for women over time in treatment (see Figure 8).

The PPI subscale of Impulsive Nonconformity was also found to be a significant moderator of time in treatment and hostility for women. As seen in Table 18, the interaction of PPI Impulsive Nonconformity and time in treatment was significant and it accounted for over 15% of the variance for the model (25%). Moderation was supported and the moderator effect is illustrated in Figure 9. Figure 9 shows that the sex offenders who reported high levels of antisocial and anti-authority attitudes (higher on PPI Impulsive Nonconformity) also reported more hostility for women the longer they were in treatment. This contrasts with findings for those offenders who rated lower on the PPI Impulsive Nonconformity scale. These individuals reported lower ratings of hostility for women with more time in sex offender treatment (see Figure 9).

Although not significant moderators of hostility for women, two other hypothesized predictors demonstrated a trend toward

significance. They included the PPI Alienation (externalizing blame) subscale and the PPI total score. The hierarchical linear regression analysis performed with PPI Alienation and time in treatment as predictor variables revealed a main effect for PPI Alienation. As seen in Table 19, the main effect accounted for nearly 18% of the variance. Although not significant, the interaction of PPI Alienation and time in sex offender treatment contributed an additional 6% to the overall variance (24%). As seen in Figure 10, participants who rated themselves either high or low on PPI Alienation showed little difference in their hostility for women when they were in early treatment. Figure 10 also shows that more exposure to treatment was associated with higher ratings of hostility for women for those participants who were high on PPI Alienation. The opposite effect can be seen for those participants who self-rated as low on PPI Alienation (accepting responsibility for own actions). These individuals seem to report more empathy for women the more treatment they had.

The same pattern was observed in the results of the hierarchical linear regression for overall psychopathic character traits (PPI total score) and time in treatment. Again, moderation was not supported however a trend toward significance was observed. As seen in Table 20, the interaction between time in treatment and PPI total score accounted for over 7% of the

overall variance (19%). As seen in Figure 11, differences between those offenders who were high or low on the PPI total score showed up the longer they were in treatment. Overall levels of psychopathy did not appear to affect the level of hostility toward women when the offenders were early in their treatment (Figure 11). Those who rated themselves as high on the PPI total score reported having more hostility for women with more exposure to treatment. Figure 11 also illustrates how those offenders who rated themselves as low on the PPI total score generated the least hostility with more time in treatment.

The hierarchical linear regressions did not reveal any other moderation effects for hostility for women. However the regression for borderline personality organization and time in treatment revealed one main effect for borderline personality organization. As seen in Table 21, in addition to the effects of time in treatment, levels of borderline personality organization, impacted levels of hostility for women. Such that offenders with more immature personality organizations would report higher levels of hostility for women while those with more mature personality organizations would report lower levels of hostility for women. The remaining five PPI subscales and level of NPI entitlement/exploitativeness were not significant moderators of hostility for women in this sample (see Tables 22-27).

Significant Moderators of General Empathy. The results of the hierarchical linear regression analyses demonstrated that there were four significant moderators of general empathy in this sex offender sample. One of the predictors was overall level of self-reported psychopathy (PPI total score) and the other three variables were specific traits of psychopathy: PPI Impulsive Nonconformity, PPI Carefree Nonplanfulness, PPI Alienation, and PPI Machiavellian Egocentricity. Interestingly, time in treatment was not a significant predictor of general empathy on its own.

A hierarchical linear regression analysis was performed with PPI total score and time in treatment as predictor variables of general empathy. As seen in Table 28, the interaction psychopathic personality (PPI Total score) and time in treatment was responsible for over 27% of the overall variance accounted for by this model (36%). Moderation was supported and the moderator effect can be seen in Figure 12. Figure 12 also illustrates how offenders who rated themselves as high in overall psychopathy reported lower general empathy ratings with more time spent in treatment. In contrast, those sex offenders who rated themselves as low in psychopathic personality traits reported increasing empathy with more time in treatment (Figure 12).

A hierarchical linear regression analysis was performed with PPI Impulsive Nonconformity (anti-authority) and time in

treatment as predictor variables of general empathy. As seen in Table 29, the interaction between time in treatment and PPI Impulsive Nonconformity was significant and it accounted for 35% of the overall variance for the model (42%). Moderation was supported and the moderator effect can be seen in Figure 13. As illustrated in Figure 13, those offenders who rated themselves as high on PPI Impulsive Nonconformity reported less general empathy the longer they engaged in treatment. Conversely, those offenders who rated themselves low on PPI Impulsive Nonconformity generated higher general empathy ratings with more treatment for (see Figure 13).

A hierarchical linear regression was performed with PPI Carefree Nonplanfulness (no future planning) and time in treatment as predictor variables of general empathy. As seen in Table 30, the interaction of PPI Carefree Nonplanfulness and time in treatment was significant and it accounted for 16% of the overall variance for the model (28%). Moderation was once again supported and the moderator effect can be seen in Figure 14. As seen in Figure 14, those offenders who self-rated as high on PPI Carefree Nonplanfulness reported lower general empathy ratings with more time in treatment. Figure 14 also illustrates how offenders who rated low on PPI Carefree Nonplanfulness reported more general empathy with more exposure to treatment.

A hierarchical linear regression was performed with PPI Alienation (blame externalization) and time in treatment as predictor variables for general empathy. As seen in Table 31, the interaction between PPI Alienation and time in treatment was significant and it contributed to nearly 23% of the overall variance for the model (26%). Moderation was supported and the moderator effect can be seen in Figure 15. As seen in Figure 15, those sex offenders who rated themselves high on PPI Alienation reported less general empathy with more time in treatment. Those offenders who self-rated low on PPI Alienation reported higher levels of general empathy the longer that they engaged in treatment (Figure 15).

A hierarchical linear regression was performed with PPI Machiavellian Egocentricity (aggressive & self-centered) and time in treatment as predictor variables for general empathy. As seen in Table 32, the interaction between PPI Machiavellian Egocentricity and time in treatment was significant and it accounted for 10% of the variance for the model (15%). Moderation was supported and the moderator effect can be seen in Figure 16. As seen in Figure 16, those offenders who rated themselves high on PPI Machiavellian Egocentricity reported lower general empathy ratings with more time in treatment. Conversely, those participants who rated themselves as low in PPI

Machiavellian Egocentricity made higher general empathy ratings with more treatment (Figure 16).

A hierarchical linear regression was performed with PPI Coldheartedness and time in treatment serving as predictor variables for general empathy. The regression revealed one main effect for PPI Coldheartedness. As seen in Table 33, the model with the interaction was significant but it appears that this was driven by the main effect which explained nearly 22% of the overall variance. None of the remaining three PPI subscales, NPI Entitlement/ Exploitativeness or level of borderline personality organization demonstrated moderator effects for self-rated general empathy (see Tables 34-38). Please refer to Table 39 for a summary of the results from the hierarchical linear regressions for each of the three empathy factors.

Discussion

Understanding Empathy in Sex Offenders

Empathy Deconstructed

One of the primary objectives of this study was to investigate the construct of empathy, as the definition of empathy has evolved and changed through the years. Most contemporary research supports a multidimensional view of empathy which highlights its' complexity (Covell, 2001; Davis, 1980). With regard to sex offenders, the study of empathy has been complicated by the multitude of perspectives regarding what this

construct actually involves (Jolliffe & Farrington, 2004). How can we say that sex offenders lack empathy when we cannot agree on how to assess it?

The results of this study support the argument that empathy has been defined too broadly. That to better understand empathy (in sex offenders), the construct must be broken down to allow for the examination of its' component parts. From the factor analysis of empathy, I extracted three very different factors of empathy from three instruments. The analysis revealed a factor of empathy for children, a factor of hostility for women, and a general empathy factor. These findings indicate that general empathy is something quite different from empathy for children or hostility (lack of empathy) for adult women. A person could actually possess the capacity for one form of empathy and be deficient in another. For instance, an offender could possess general empathy but lack empathy for children or for women.

The findings from the present study support the use of multiple measures to assess empathy in this population. There appears to be something that can be gained by utilizing general empathy as well as victim empathy measures. It appears that each instrument captures something slightly different. There is more to empathy than has been able captured by a single assessment measure.

My findings indicate that there was considerable variability in empathy ratings among sex offenders. These findings support the use of empathy as an individual difference variable and suggest that sex offenders may be able to learn empathy. Variability in empathy ratings among sex offenders provides more insight into the inconsistency in the research literature in this area. The idea that offenders can benefit from treatment and develop empathy is a very important and promising finding. Clearly, additional research needs to be conducted which assesses treatment effectiveness more systematically taking into account the heterogeneity that exists in this population.

The Effects of Time in Treatment on Empathy

Another objective of the current study was to examine the effects of time in treatment on levels of empathy in this unique clinical population. As expected, hierarchical linear regressions demonstrated a significant main effect for time in treatment and empathy for children. It was also expected that a main effect for time in treatment and hostility for women would be found. Contrary to my predictions, there was little association found between length of time in treatment and general empathy ratings. It is possible that these unexpected findings were related to the way that empathy was trained in the sex offender treatment program. Offenders spent considerable time in treatment trying to understand the impact of their deviant

behavior on others and developing victim empathy. Perhaps the victim empathy did not generalize to other people (aside from their victims).

Of course in the present study, data was collected at a single point in time during treatment for each participating sex offender. It would be difficult to know whether the effects found were due to time in treatment or to the passage of time (or the effects of living as an identified sex offender in a therapeutic community). Longitudinal analyses would need to be conducted and empathy would need to be assessed at different points over the course of treatment for additional conclusions to be drawn.

Moderation of Empathy in Sex Offenders

What is evident from these results is that levels of certain pathological personality traits moderate the relationship between time in treatment and levels of self-reported victim empathy. As predicted, a model of moderation was supported by the findings of the current investigation. In all cases of significant moderation, having high levels of personality pathology led to no change or a decrease in reported empathy (over time in treatment). A stark contrast can be seen for those offenders with low levels of personality pathology, who generated higher empathy ratings (with increasing time in treatment). The series of hierarchical linear regression analyses that were performed

revealed that there were some differences found regarding which pathological personality traits were moderators for each empathy factor.

Psychopathy as a Moderator of Empathy. Psychopathy was not only the strongest predictor of empathy it was a moderator for all three types of empathy. The effects were not the same across the board however. Interestingly, the hierarchical linear regression analyses demonstrated that the PPI total score was only a significant moderator for empathy for children and for general empathy. PPI total score was not found to be a moderator for hostility for women in this sample. It is unclear why the effects were so much smaller for the hostility for women factor. It was suspected, that some of the moderator effects might be washed out by using a composite score. The PPI (Lilienfeld & Andrews, 1996) had been selected for use in this study so that psychopathic personality could be explored on a global level and so that traits could be examined separately with the eight clinical subscales.

The PPI Impulsive Nonconformity subscale emerged as a significant moderator for all three types of empathy. This subscale was originally described by Lilienfeld & Andrews (1996) as measuring a "reckless lack of concern for societal norms and values." Examining those offenders who rated lowest and highest on the PPI Impulsive Nonconformity scale, we can see that

differences in empathy ratings were greatest for those inmates who remained in treatment the longest (see Figures 6, 9, & 13). Those offenders who reported the highest levels of this psychopathic trait also reported the lowest levels of empathy. For those offenders who reported low scores on the PPI Impulsive Nonconformity scale, empathy scores were higher for those with the most time in treatment.

The interaction between time in treatment and PPI Impulsive Nonconformity was most predictive of general empathy. In fact, this interaction accounted for 35% of the total variance for the model (42%). This was even greater than the variance accounted for by the interaction of time and the PPI Total score (accounted for 27% or total variance, 40%). It appears that offenders with more rule-breaking and anti-authority attitudes were more likely to experience less general empathy (over time in treatment). It also makes sense to think that offenders who were anti-authority and rule-breakers by nature would be exceedingly difficult to engage and retain in treatment.

An offender's tendency to externalize blame (PPI Alienation) was also significantly predictive of empathy for children and general empathy. It is not surprising that sex offenders who were unable to take responsibility for their actions and who blamed others for all interpersonal conflicts would be more deficient in empathy. Similar to the PPI Total score, the PPI

Alienation scale only demonstrated a trend toward significance in predicting hostility for women. It is possible that scores of hostility for women would have been different had there been a higher proportion of rapists in the sample.

Also interesting was the finding that PPI Fearlessness (thrill-seeking) was a moderator for hostility for women but not for the other empathy factors. One explanation for this comes from the recent research of Benning et al. (2005). Benning et al. (2005) found that the PPI Fearlessness scale was associated with a "Fearless Dominance" factor, reflecting a need to dominate others and a lack of anticipatory anxiety. It is widely believed that the elements of power and anger are associated with most rapes (Holmes & Holmes, 1996). Perhaps the type of sex offender who rapes women is more challenging to treat when he not only needs to dominate women but he also has a thrill-seeking personality.

Another psychopathy trait which affected the relationship between time in treatment and a single empathy factor was PPI Carefree Nonplanfulness. PPI Carefree Nonplanfulness was found to only function as a moderator for general empathy (as measured in the present study). So why were the effects of PPI Carefree Nonplanfulness so different for victim empathy?

Those individuals with high levels of PPI Nonplanfulness might be characterized as present-oriented people who give little

forethought or planning to their activities (Lilienfeld & Andrews, 1996). It is possible that individuals who rated themselves high on this psychopathy trait would behave more impulsively and be unable to consider the consequences of their behavior. It may be that the majority of the sex offenders in this study planned their crimes. It may also be that these individuals do in fact consider the consequences of their actions but act in a compulsive manner? This might help to explain why this characteristic functioned differently for the three empathy factors.

Although moderation was not found, a main effect was revealed for PPI Coldheartedness and general empathy. This finding was consistent with the existing research on psychopathy and empathy (or lack thereof), suggesting that individuals who are callous and ruthless in their interactions with others are less empathic (i.e. Sandoval et al., 2000). So why was this effect greater for general empathy and less so for victim empathy?

Once again it appears that this finding could be a result of the sample used in this study. Being a largely child molester sample, we could be picking up on a particular subtype of offender whose presentation may not be coldhearted or impulsive (as with PPI Carefree Nonplanfulness). Many times child molesters have described “grooming” their victims by spending

time with them in order to gain their trust (Bays et al., 1990; Flowers, 2001). This behavior is certainly not consistent with a hostile and impulsive personality style. It is quite possible that the effects would be stronger for PPI Coldheartedness and consistent across all three empathy factors if a more balanced and larger offender sample had been used.

Looking at all of the regressions with the PPI, my results suggest that offenders high in psychopathy may not benefit from treatment. Despite the logic of this statement, I use caution because this was only a cross-sectional analysis and the impact of the sex offender treatment on empathy cannot be determined. From the moderator analyses with the PPI (and subscales), it is apparent that empathy ratings were the lowest and ratings of hostility for women were the highest for those offenders who were in treatment the longest. The converse was true for those offenders who had generated the lowest PPI scores.

These findings could have serious implications for sex offender treatment programs and existing protocol therapies. Many existing sex offender treatment programs already screen their patients for psychopathy using some form of the PCL-R (and PCL-SV; Hare, 1991). According to the findings of the present study, a closer examination of the subscales of the PPI actually revealed more information than general psychopathy alone (Lilienfeld & Andrews, 1996). The findings of the present study

indicate that specific traits associated with psychopathy may determine whether an individual offender would be more or less likely to benefit from treatment.

Perhaps those individuals who are high on PPI Impulsive Nonconformity and PPI Fearlessness have the worst prognosis for treatment. Could these individuals represent the offenders who learn to be better psychopaths from exposure treatment? They would be the most antisocial, anti-authority and they would have no fear. Not a very pleasant combination and certainly an extremely difficult group to treat. Additional research would need to be conducted to further explore these psychopathy traits in other offender samples, particularly with those in treatment.

Psychopaths represent a subgroup of criminals that are generally seen as poor candidates for therapy. This may not be an entirely true however, particularly in light of the findings from the present investigation. In this study, I found a great deal of variability in the levels of pathological personality traits (primarily psychopathy) among sex offenders at this institution. There is already a growing concern about what to do with the rising numbers of sex offenders. The published rates of psychopathy within incarcerated male sex offender populations indicate that a significant number of offenders would be excluded from treatment for psychopathy. If we do exclude them from treatment, what do we offer them as an alternative? This has

become a large issue for the Federal Bureau of Prisons and in many cases offenders are discharged into state psychiatric facilities once they max out of their prison sentences. We cannot incarcerate someone indefinitely because we are afraid of what they might do and if we place them in psychiatric facilities we are saying that they are mentally ill and require treatment.

It may not be that psychopaths are untreatable, rather that we have not been successful at treating them with the currently available treatments. The findings from this study indicate that sex offenders are a heterogeneous population and that some offenders may benefit from treatment and their empathy ratings may even improve. Instead of holding a nihilistic view of psychopathy, the field needs to continue exploring new therapies and improving the available assessment instruments. In addition, putting efforts into prevention and addressing treatment issues with youth offenders. It may be helpful to identify these antisocial personality traits in children and adolescents (with conduct disorder symptoms) whose personalities have not yet consolidated. At young ages offenders may be most responsive to such interventions and treatments.

Narcissistic Personality as a Moderator of Empathy. Narcissistic personality disorder is prevalent in incarcerated populations and it has been closely linked to antisocial and psychopathic personalities. Interestingly, the findings of the

present study show that narcissistic entitlement/exploitativeness was only a significant moderator for victim empathy but not for general empathy. Even more specifically, narcissistic entitlement/exploitativeness was found to be a significant moderator for empathy for children.

Those offenders with narcissistic entitlement/exploitativeness (+) reported the lowest levels of empathy for children with the most exposure to treatment. The opposite was true for those offenders who were narcissistic entitlement/exploitativeness (-) who reported the highest levels of empathy for children. Given the disproportionately large number of child molesters in the sample, the scores collected here were representative of child molesters more than sex offenders in general. Similar to what was observed with the PPI (Lilienfeld & Andrews, 1996) and its' subscales, offenders with high levels of narcissistic entitlement/exploitativeness did not appear to benefit from treatment. At least as far as empathy for children was involved.

Contrary to my expectations, narcissistic entitlement/exploitativeness was not found to function as a moderator for hostility for women. Although the reason for this is not completely clear, it was likely related to the sample composition (mainly perpetrators against children). It was possible that there weren't enough offenders against adult women

in the sample and the results may have been different in a larger and more balanced sample of offenders (e.g. rapists, incest offenders, child molesters, etc…). There is also the impact of scale reliabilities to consider. As mentioned earlier in this paper, the overall reliability for the NPI was adequate (α = .79), however the Entitlement/Explotativeness scale was far less reliable (α = .36). It would be interesting to see whether the same results would be found with other measures of narcissistic personality traits. It would also be interesting to conduct a similar study with a larger sample and with nonsexual offenders and nonoffender controls.

Borderline Personality Organization as a Moderator of Empathy. As with narcissistic entitlement/exploitativeness, borderline personality organization was found to be a moderator for child empathy but not for hostility for women or for general empathy. As expected, child molesters with mature personality organizations appeared to benefit from more exposure to treatment (see Figure 3). Those offenders with primitive personality organizations and the most time in treatment reported the least empathy for children.

To better understand the findings, we need to go back to the theory. According to Kernberg (1984; 1992), all character types including narcissistic and antisocial characters can be present for individuals at any point along the personality organization

continuum. Those individuals with the most primitive personality organizations would have the worst prognosis clinically whereas individuals with mature ego and superego functioning would have the best prognosis for treatment (Kernberg, 1992).

It may be that infantile personalities with the most disturbed internalized object relations disregard socially acceptable rules of behavior and deal with interpersonal conflict by externalizing blame. These offenders may relate better to children than to adults and they may even find children less threatening interpersonally (Flowers, 2001). But why do individuals with primitive personality organizations report less empathy for children with more time in treatment? Offenders with primitive personality organizations are likely to have limited ego strength and they probably regress in treatment when confronted with their behavior. These individuals may even become more entrenched in their primitive defenses as a result of confrontation. Therefore, the confrontational style of most sex offender treatment programs may not be a good match for these types of patients. Once again, additional research is required for more conclusions can be drawn.

Limitations of the Present Study

This investigation was conducted in Central Pennsylvania and all data was collected during the summer of 2003. The sample that was available was a small percentage of the overall general

prison population. The participants had all received some form of treatment and were therefore not representative of the average incarcerated sexual offender. There were inherent limitations to the generalizability of these findings. There were a number of limitations to the current investigation. They included methodological issues of measurement, sample size and type, as well as the lack of a comparison group.

Measurement Issues

As mentioned, there were a number of relatively new instruments that were utilized for the purposes of this study. The CMEM (Fernandez et al., 1999) was the newest of the measures used and it has received the least empirical support in the research literature. Fernandez et al., (1999) developed and validated the CMEM with child molesters and there is little research to date in which it was administered to other types of offenders. The opposite was true for the EFW (Hanson & Scott, 1995) which has received more empirical support with rapists. Similar to the CMEM however, the research has not extended to samples of child molesters. As earlier mentioned, the sample was predominantly composed of perpetrators against children. This could help to explain why the effects were not as strong for hostility for women.

There was also the limitation inherent in the selection of self-report instruments. All of the measures used in this study

were self-report, primarily using Likert scale ratings. Only two of the measures used, the EFW (Hanson & Scott, 1995) and PPI (Lilienfeld & Andrews, 1996), were developed with validity scales which assessed "faking good" responses. Given the fact that we were looking at psychopathic and narcissistic individuals, there was more concern regarding the authenticity of the responses. Although the EFW and the CMEM (Fernandez et al., 1999) scores were based on the offenders' responses to scenarios they read, in most cases the correct responses were not terribly difficult to guess at. The CMEM has the additional component of requiring respondents to examine their feelings about their own crime and behavior. On a statistical level, the fact that this study involved running a series of 33 hierarchical linear regression analyses increased the rate of error.

Another limitation that affected measurement was related to the structure of the treatment program at this institution. According to the protocol, the victim empathy component of treatment was introduced at the end of the two year program. It was therefore difficult to fully understand the higher levels of empathy observed in those offenders with the most exposure to treatment. Was it a function of the treatment itself or the structure of the treatment?

Sampling Issues

The population that was sampled in this study included 58 male sex offenders. Although this is a relatively small sample size, it constituted nearly half of the sex offenders who were housed in the therapeutic community (120) at the time this study was conducted. In order to interpret the findings for hostility for women (which was derived from the EFW subscales of Hostile Errors & Oversexualized Errors and validated with rapists), it should again be noted that a much smaller proportion of the sample had adult female victims. It is certainly possible that the results would have been different had this investigation been conducted with a more balanced sample of both sex offenders against children, rapists, and mixed types (as well as with nonsexual offenders).

All of the participants assessed during this investigation had volunteered to live in a therapeutic community within a medium-security correctional facility. As mentioned, these inmates needed to be able to admit to the crimes for which they were convicted and they had to be willing to engage in treatment. There was considerable risk taken by those sex offenders who agreed to be identified within the institution. Sexual offenders are widely despised within general populations of inmates (as well as within society at large). In fact, they are often the

victims of violent crimes themselves while incarcerated (Holmes & Holmes, 1996).

There were approximately 2,200 inmates incarcerated at this correctional institution at the time that data was collected. Statistically speaking, it is very likely that there were numerous sex offenders who were living, "unidentified" within the institution at the time of this study. One might expect there to be significant differences in levels of personality pathology and empathy between the sex offenders who agreed to participate in treatment and those who did not (e.g. because they denied their offense(s), feared being identified, or were on a waiting list for treatment). Although these issues could certainly limit the generalizability of the findings from this study to all sex offenders, it is hoped that these questions will spark more research in this area.

Lack of a Control Group

Another limitation to the generalizability of these findings had to do with the lack of a comparison sample. Although one aspect of this study was to explore some of the individual differences among sex offenders, it would have been helpful to have had a control group of nonoffenders as well. At the time of this investigation, there was no other group of inmates within the prison involved in this level of treatment. There were also some restrictions that were imposed by security at the prison as

well the Department of Corrections which limited access to inmate records. We relied entirely on inmates reports of their crimes and the demographics of their victims. Based upon the variability among the personality and empathy ratings as well as the validity scales from some of the instruments, it appears that our sample was fairly honest in their responses. Of course it would have been helpful to have had access to the inmate records to corroborate the information provided during the interview.

Directions for Future Research

It was a goal of the current study to examine individual differences in personality and empathy within a sex offender sample. It is hoped that the findings of the present investigation will contribute to the growing literature examining the variability that clearly exists within this population (Hanson, 2002; Hanson & Harris, 2000). Perhaps the inconsistent findings reported in the literature on this topic can be better understood taking these individual differences into account (e.g. Jolliffe & Farrington, 2004).

It is hoped that my findings will encourage further research into the assessment and treatment of sex offenders. It might also be useful to assess personality and empathy factors pre and post-treatment and maybe even with offenders who refused treatment and those on a waiting list for treatment.

The question remains as to whether empathy is even necessary for sex offender treatment? Does reporting high levels of empathy (general or victim) result in empathic responding? Perhaps having the capacity for empathy has little impact on subsequent behavior upon institutional release? It is my opinion that there needs to be a shift toward identifying and understanding the variables which may predict empathic responding in addition to the capacity for empathy. We might find that individuals with lower empathy ratings could learn to control their behavior without learning to feel for others (victims)? What would this then mean for treatment programs?

Predicting future behavior, specifically deviant behavior is certainly beyond the scope of the present study. It would be an interesting area to explore in future research. It would be important to perform some form of follow-up assessment with those inmates who participate in these institutional sex offender treatment programs as well as with those who drop out early or are terminated from treatment by staff.

The length of time that offenders were in treatment was found to be a very important variable in my investigation. Additional research is recommended to further explore the components which are most important for treatment to be beneficial to sex offenders. This was one of the first studies which examined general empathy as well as victim empathy in

incarcerated sex offenders who were in active treatment. This was also one of the first studies to examine personality pathology such as narcissism and borderline personality organization with offenders in treatment. This is an exciting and promising direction for research and it is my hope that others will agree and finish reading this manuscript with many questions and ideas for further research.

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APPENDIX A

TABLES

Table 1

Participants' Demographic Information

	N	%		N	%
Ethnicity			Previous Incarcerations		
White	35	60.3	Yes	31	53.4
Native American9	15.5		No	27	46.6
African American	7	12.1			
Hispanic	6	10.3	Substance Abuse History		
Middle Eastern	1	1.7	Yes	35	60.3
			No	23	39.7
Education Level					
High School/GED28	48.3				
9-11th grade	13	22.4			
Some College	9	15.5			
Bachelors/Assoc.	4	6.9			
6-8th grade	3	5.2			
Masters Degree	1	1.7			
Marital Status					
Never Married	21	36.2			
Divorced	17	29.3			
Married	14	24.1			
Separated	4	6.9			
Engaged	2	3.4			
Gender of Victims					
Female	48	82.8			
Male	9	15.5			
Both	1	1.7			
Number of Victims					
One victim	38	65.5			
Two victims	9	15.5			
Four victims	4	6.9			
Six or more	3	5.2			
Three victims	2	3.4			
Five victims	2	3.4			

Table 2

Additional Demographic Information

	Mean	Standard Deviation	Range
Age of Participants	41 years	9.7 years	22 – 76 years
Time Already Served	61.7 months	53.9 months	12 – 336 months
Time in Treatment	17.8 months	14.5 months	0 – 84 months
Time living in Therapeutic Community	25.7 months	18.4 months	1 – 84 months

Table 3

Correlation Matrix

	Child	Host	Gene	Primi	Mach	Soci	Fear	Cold	Impul	Alien	Care	Stress	PPI	E/E	Time
Child	1.0 44														
Host	.21 44	1.0 44													
Gene	.30* 44	-.06 44	1.0 44												
Primi	.03 44	.36* 44	-.07 44	1.0 58											
Mach	-.12 44	.19 44	-.15 44	.43** 58	1.0 58										
Soci	.10 44	.04 44	-.02 44	-.19 58	.23 58	1.0 58									
Fear	-.05 44	-.1 44	-.16 44	.33* 58	.39** 58	.35** 58	1.0 58								
Cold	-.33 44	.08 44	-.44** 44	-.3 58	.08 58	.08 58	-.22 58	1.0 58							
Impul	-.02 44	.01 44	-.2 44	.44** 58	.40** 58	.29* 58	.76** 58	-.14 58	1.0 58						
Alien	-.06 44	.34* 44	.02 44	.73** 58	.48** 58	-.23 58	.30* 58	-.45** 58	.35** 58	1.0 58					
Care	-.14 44	.26 44	-.31* 44	.38** 58	.49** 58	-.16 58	.23 58	.22 58	.37** 58	.27* 58	1.0 58				
Stres	.17 44	-.03 44	.05 44	-.51 58	-.32 58	.56** 58	.07 58	.18 58	-.01 58	-.43 58	-.38 58	1.0 58			
PPI	-.11 44	.20 44	-.26 44	.41** 58	.78** 58	.51** 58	.75** 58	.11 58	.76** 58	.42** 58	.51** 58	.05 58	1.0 58		
E/E	-.12 44	-.02 44	-.05 44	.15 58	.46** 58	.31* 58	.23 58	.11 58	.26* 58	.12 58	-.05 58	.01 58	.41** 58	1.0 58	
Time	.42** 44	-.31 44	.18 44	-.05 58	-.09 58	.02 58	-.09 58	-.07 58	-.01 58	-.19 58	-.05 58	.06 58	-.13 58	.01 58	1.0 58

*p < .05, **p < .01

Table 4

Principal Component Analysis for Empathy Measures

	3 Factor Solution		
Scales from Empathy Measures Offender's…	Empathy for Children	Hostility for Women	General Empathy
Own feelings about abuse victim	.903	.118	-.089
Own feelings about own victim	.846	-.051	-.030
Empathy for offender's own victim	.713	-.219	.186
Empathy for sexual abuse victim	.674	-.069	.085
EFW - hostile errors	.094	.944	-.082
EFW - oversexualized errors	-.188	.897	.132
IRI Fantasy	-.213	-.060	.881
IRI Empathic Concern	.216	.056	.702
IRI Perspective Taking	.291	.069	.486

N = 58

Table 5

Means and Standard Deviations for Psychopathy Variables

Personality Variable	Mean	Standard Deviation
PPI Machiavellian Egocentricity	57.98	11.92
PPI Social Potency	55.74	9.71
PPI Fearlessness	45.57	10.30
PPI Coldheartedness	41.88	7.54
PPI Impulsive Nonconformity	34.66	7.30
PPI Alienation	40.29	9.84
PPI Carefree Nonplanfulness	36.00	7.07
PPI Stress Immunity	29.93	5.35
PPI Total Score	348.10	37.08

Table 6

Regression Analysis of NPI E/E scale and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
NPI E/E	- .134	.150	- .125	- .887	.380		
Time in Tx.	.028	.009	.421**	2.999	.005	.192*	
Step 2							
NPI E/E	.255	.209	.238	1.216	.231		
Time in Tx.	.051	.013	.752***	4.033	.000		
NPI E/E x Time in Tx.	- .023	.009	- .594*	-2.515	.016	.302**	.110*

*p < .05, **p < .01, ***p < .001

Table 7

Regression Analysis of Borderline Personality Organization and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
BPO	.046	.138	.047	.334	.740		
Time in Tx.	.028	.010	.422**	2.978	.005	.179*	
Step 2							
BPO	.651	.255	.667*	2.554	.015		
Time in Tx.	.030	.009	.446**	3.379	.002		
BPO x Time in Tx.	-.032	.012	-.716**	-2.747	.009	.309**	.130**

*p < .05, **p < .01, ***p < .001

Table 8

Regression Analysis of PPI Total Score and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
PPI Total	-.001	.004	-.055	-.387	.700		
Time in Tx.	.028	.010	.413**	2.894	.006	.179*	
Step 2							
PPI Total	.011	.006	.434	1.798	.080		
Time in Tx.	.271	.100	4.022**	2.711	.010		
PPI Total x Time in Tx.	-.001	.000	-3.594*	-2.443	.019	.286**	.107*

*p < .05, **p ≤ .01, ***p < .001

Table 9

Regression Analysis of PPI Alienation and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Alienation	.002	.014	.024	.170	.866		
Time in Tx.	.029	.010	.425**	2.940	.005	.177*	
Step 2							
Alienation	.048	.022	.480*	2.171	.036		
Time in Tx.	.125	.038	1.850**	3.280	.002		
Alienation x Time in Tx.	-.003	.001	-1.452*	-2.603	.013	.296**	.119*

*p < .05, **p < .01, ***p < .001

Table 10

Regression Analysis of PPI Impulsive Nonconformity and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Impulsive Nonconformity	-.002	.019	-.011	-.080	.937		
Time in Tx.	.028	.010	.420**	2.961	.005	.176*	
Step 2							
Impulsive Nonconformity	.086	.038	.640*	2.224	.032		
Time in Tx.	.174	.058	2.589**	3.010	.005		
Impulsive Nonconformity x Time in Tx.	-.004	.002	-2.283*	-2.553	.015	.292**	.115*

*p < .05, **p < .01, ***p < .001

Table 11

Regression Analysis of PPI Fearlessness and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Fearlessness	-.002	.013	-.016	-.112	.911		
Time in Tx.	.028	.010	.418**	2.940	.005	.177*	
Step 2							
Fearlessness	.031	.022	.324	1.425	.162		
Time in Tx.	.092	.035	1.369*	2.612	.013		
Fearlessness x Time in Tx.	-.002	.001	-1.014	-1.880	.067	.243*	.067

*p < .05, **p < .01, ***p < .001

Table 12

Regression Analysis of PPI Coldheartedness and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Coldheartedness	-.039	.017	-.299*	-2.230	.031		
Time in Tx.	.027	.009	.399**	2.970	.005	.265**	
Step 2							
Coldheartedness	-.052	.027	-.401	-1.909	.063		
Time in Tx.	.001	.042	.015	.023	.981		
Coldheartedness x Time in Tx.	.001	.001	.399	.631	.531	.273**	.007

*p < .05, **p < .01, ***p < .001

Table 13

Regression Analysis of PPI Social Potency and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Social Potency	.009	.014	.088	.624	.536		
Time in Tx.	.028	.010	.418**	2.962	.005	.184*	
Step 2							
Social Potency	.005	.024	.046	.195	.847		
Time in Tx.	.013	.068	.188	.186	.854		
Social Potency x Time in Tx.	.000	.001	.237	.229	.820	.185*	.001

*p < .05, **p < .01, ***p < .001

Table 14

Regression Analysis of PPI Machiavellian Egocentricity and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Machiavellian Egocentricity	-.007	.012	-.084	-.594	.556		
Time in Tx.	.028	.010	.412**	2.905	.006	.183*	
Step 2							
Machiavellian Egocentricity	.018	.019	.224	.947	.349		
Time in Tx.	.114	.054	1.685*	2.097	.042		
Machiavellian Egocentricity x Time in Tx.	-.001	.001	-1.301	-1.609	.116	.233*	.050

*p < .05, **p < .01, ***p < .001

Table 15

Regression Analysis of PPI Carefree Nonplanfulness and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Carefree Nonplanfulness	-.017	.019	-.122	-.864	.392		
Time in Tx.	.028	.009	.414**	2.942	.005	.191*	
Step 2							
Carefree Nonplanfulness	-.005	.033	-.034	-.145	.886		
Time in Tx.	.060	.070	.893	.860	.395		
Carefree Nonplanfulness x Time in Tx.	-.001	.002	-.487	-.466	.644	.195*	.004

*p < .05, **p < .01, ***p < .001

Table 16

Regression Analysis of PPI Stress Immunity and Time in Treatment as Predictors of Empathy for Children

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Stress Immunity	.027	.026	.148	1.060	.295		
Time in Tx.	.028	.009	.412**	2.939	.005	.198*	
Step 2							
Stress Immunity	.008	.044	.044	.184	.855		
Time in Tx.	-.006	.063	-.084	-.089	.930		
Stress Immunity x Time in Tx.	.001	.002	.517	.533	.597	.204*	.006

*p < .05, **p < .01, ***p < .001

Table 17

Regression Analysis of PPI Fearlessness and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Fearlessness	-.011	.013	-.123	-.833	.410		
Time in Tx.	-.020	.010	-.317*	-2.141	.038	.109	
Step 2							
Fearlessness	-.047	.021	-.522*	-2.229	.031		
Time in Tx.	-.092	.035	-1.430*	-2.654	.011		
Fearlessness x Time in Tx.	.002	.001	1.187*	2.142	.038	.200*	.092*

*p < .05, **p < .01, ***p < .001

Table 18

Regression Analysis of PPI Impulsive Nonconformity and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Impulsive Nonconformity	.001	.019	.010	.064	.949		
Time in Tx.	-.020	.010	-.306*	-2.056	.046	.094	
Step 2							
Impulsive Nonconformity	-.095	.038	-.745*	-2.513	.016		
Time in Tx.	-.181	.057	-2.818**	-3.181	.003		
Impulsive Nonconformity x Time in Tx.	.005	.002	2.645**	2.870	.007	.248**	.155**

*p < .05, **p < .01, ***p < .001

Table 19

Regression Analysis of PPI Alienation and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Alienation	.028	.014	.296*	2.054	.046		
Time in Tx.	-.016	.009	-.249	-1.725	.092	.178*	
Step 2							
Alienation	-.003	.022	-.033	-.145	.886		
Time in Tx.	-.082	.038	-1.280*	-2.186	.035		
Alienation x Time in Tx.	.002	.001	1.051	1.814	.077	.241*	.062

*p < .05, **p < .01, ***p < .001

Table 20

Regression Analysis of PPI Total Score and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
PPI Total	.004	.004	.161	1.087	.283		
Time in Tx.	-.018	.009	-.285	-1.930	.061	.119	
Step 2							
PPI Total	-.006	.006	-.243	-.946	.350		
Time in Tx.	-.209	.101	3.263*	-2.067	.045		
PPI Total x Time in Tx.	.001	.000	2.965	1.894	.065	.191*	.073

*p < .05, **p < .01, ***p < .001

Table 21

Regression Analysis of Borderline Personality Organization and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
BPO	.323	.129	.347*	2.507	.016		
Time in Tx.	-.019	.009	-.290*	-2.092	.043	.214	
Step 2							
BPO	.080	.255	.086	.313	.756		
Time in Tx.	-.019	.009	-.300*	-2.165	.036		
BPO x Time in Tx.	.013	.012	.302	1.104	.276	.237	.023

*p < .05, **p < .01, ***p < .001

Table 22

Regression Analysis of PPI Coldheartedness and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Coldheartedness	.007	.018	.055	.371	.712		
Time in Tx.	-.019	.010	-.302*	-2.029	.049	.097	
Step 2							
Coldheartedness	.042	.028	.338	1.493	.143		
Time in Tx.	.049	.043	.770	1.145	.259		
Coldheartedness x Time in Tx.	-.002	.001	-1.114	-1.633	.110	.153	.056

*p < .05, **p < .01, ***p < .001

Table 23

Regression Analysis of PPI Stress Immunity and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Stress Immunity	-.001	.026	-.008	-.056	.956		
Time in Tx.	-.020	.010	-.305*	-2.051	.047	.094	
Step 2							
Stress Immunity	-.007	.045	-.043	-.167	.868		
Time in Tx.	-.030	.064	-.470	-.469	.642		
Stress Immunity x Time in Tx.	.000	.002	.172	.166	.869	.094	.001

*p < .05, **p < .01, ***p < .001

Table 24

Regression Analysis of PPI Carefree Nonplanfulness and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Carefree Nonplanful	.032	.019	.243	1.685	.100		
Time in Tx.	-.019	.009	-.294*	-2.041	.048	.152	
Step 2							
Carefree Nonplanful	-.001	.031	-.008	-.032	.975		
Time in Tx.	-.107	.067	-1.663	-1.595	.119		
Carefree Nonplanful x Time in Tx	.002	.002	1.393	1.326	.192	.188	.036

*p < .05, **p < .01, ***p < .001

Table 25

Regression Analysis of PPI Machiavellian Egocentricity and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Machiavellian Egocentricity	.013	.011	.166	1.130	.265		
Time in Tx.	-.019	.009	-.290	-1.973	.055	.121	
Step 2							
Machiavellian Egocentricity	.000	.020	.006	.024	.981		
Time in Tx.	-.061	.055	-.952	-1.114	.272		
Machiavellian Egocentricity x Time in Tx.	.001	.001	.676	.786	.436	.134	.013

*p < .05, **p < .01, ***p < .001

Table 26

Regression Analysis of PPI Social Potency and Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Social Potency	.004	.014	.046	.308	.760		
Time in Tx.	-.020	.010	-.307*	-2.066	.045	.096	
Step 2							
Social Potency	-.006	.024	-.061	-.249	.805		
Time in Tx.	-.057	.068	-.884	-.832	.411		
Social Potency x Time in Tx.	.001	.001	.595	.549	.586	.102	.007

*p < .05, **p < .01, ***p < .001

Table 27

Regression Analysis of NPI E/E scale Time in Treatment as Predictors of Hostility for Women

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
NPI E/E	-.014	.152	-.014	-.092	.927		
Time in Tx.	-.020	.010	-.306*	-2.056	.046	.094	
Step 2							
NPI E/E	-.055	.227	-.054	-.241	.811		
Time in Tx.	-.022	.014	-.342	-1.612	.115		
NPI E/E x Time in Tx.	.002	.010	.066	.244	.809	.095	.001

*p < .05, **p < .01, ***p < .001

Table 28

Regression Analysis of PPI Total Score and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
PPI Total	-.006	.004	-.238	-1.583	.121		
Time in Tx.	.010	.010	.149	.989	.328	.088	
Step 2							
PPI Total	.014	.006	.543*	2.375	.022		
Time in Tx.	.397	.094	5.911***	4.207	.000		
PPI Total x Time in Tx.	-.001	.000	-5.739***	-4.118	.000	.359***	.272***

*p < .05, **p < .01, ***p < .001

Table 29

Regression Analysis of PPI Impulsive Nonconformity and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Impulsive Nonconformity	-.027	.020	-.199	-1.321	.194		
Time in Tx.	.012	.010	.177	1.177	.246	.072	
Step 2							
Impulsive Nonconformity	.125	.035	.935***	3.596	.001		
Time in Tx.	.266	.052	3.954***	5.087	.000		
Impulsive Nonconformity x Time in Tx.	-.008	.002	-3.976***	-4.919	.000	.422***	.350***

*p < .05, **p < .01, ***p ≤ .001

Table 30

Regression Analysis of PPI Carefree Nonplanfulness and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Carefree Nonplanfulness	-.041	.020	-.298*	-2.035	.048		
Time in Tx.	.011	.010	.164	1.121	.269	.121	
Step 2							
Carefree Nonplanfulness	.032	.031	.233	1.047	.301		
Time in Tx.	.206	.066	3.073**	3.134	.003		
Carefree Nonplanfulness x Time in Tx.	-.005	.002	-2.958**	-2.994	.005	.282**	.161**

*p < .05, **p < .01, ***p < .001

Table 31

Regression Analysis of PPI Alienation and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Alienation	.005	.015	.052	.332	.741		
Time in Tx.	.013	.011	.189	1.210	.233	.035	
Step 2							
Alienation	.067	.022	.679**	2.997	.005		
Time in Tx.	.145	.039	2.152***	3.724	.001		
Alienation x Time in Tx.	-.004	.001	-1.999***	-1.363	.001	.261**	.226***

*p < .05, **p < .01, ***p ≤ .001

Table 32

Regression Analysis of PPI Machiavellian Egocentricity and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model R²*	*Model R² change*
Step 1							
Machiavellian Egocentricity	-.011	.012	-.133	-.871	.389		
Time in Tx.	.011	.010	.167	1.090	.282	.050	
Step 2							
Machiavellian Egocentricity	.025	.020	.310	1.243	.221		
Time in Tx.	.134	.057	1.994*	2.360	.023		
Machiavellian Egocentricity x Time in Tx.	-.002	.001	-1.867*	-2.196	.034	.152*	.102*

*p < .05, **p < .01, ***p < .001

Table 33

Regression Analysis of PPI Coldheartedness and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Coldheartedness	-.055	.018	-.429**	-3.089	.004		
Time in Tx.	.010	.009	.149	1.071	.290	.215**	
Step 2							
Coldheartedness	-.045	.028	-.350	-1.611	.115		
Time in Tx.	.030	.043	.446	.692	.493		
Coldheartedness x Time in Tx.	.000	.001	-.310	-.473	.639	.219*	.004

*p < .05, **p < .01, ***p < .001

Table 34

Regression Analysis of PPI Fearlessness and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Fearlessness	-.014	.014	-.149	-.974	.336		
Time in Tx.	.011	.010	.166	1.087	.284	.054	
Step 2							
Fearlessness	.011	.024	.121	.486	.629		
Time in Tx.	.062	.038	.919	1.604	.117		
Fearlessness x Time in Tx.	-.001	.001	-.803	-1.363	.181	.096	.042

*p < .05, **p < .01, ***p < .001

Table 35

Regression Analysis of PPI Stress Immunity and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Stress Immunity	.008	.028	.043	.277	.783		
Time in Tx.	.012	.010	.177	1.150	.257	.034	
Step 2							
Stress Immunity	-.053	.047	-.289	-1.122	.268		
Time in Tx.	-.094	.067	-1.401	-1.395	.171		
Stress Immunity x Time in Tx.	.004	.002	1.648	1.589	.120	.091	.057

*p < .05, **p < .01, ***p < .001

Table 36

Regression Analysis of PPI Social Potency and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
Social Potency	-.002	.015	-.024	-.158	.875		
Time in Tx.	.012	.010	.180	1.170	.249	.033	
Step 2							
Social Potency	-.005	.026	-.050	-.196	.845		
Time in Tx.	.003	.074	.041	.037	.971		
Social Potency x Time in Tx.	.000	.001	.143	.127	.899	.033	.000

*p < .05, **p < .01, ***p < .001

Table 37

Regression Analysis of NPI E/E scale and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
NPI E/E	-.049	.164	-.046	-.302	.764		
Time in Tx.	.012	.010	.180	1.171	.249	.034	
Step 2							
NPI E/E	.263	.236	.247	1.115	.272		
Time in Tx.	.030	.014	.447*	2.119	.040		
NPI E/E x Time in Tx.	-.018	.010	-.481	-1.796	.080	.106	.072

*p < .05, **p < .01, ***p < .001

Table 38

Regression Analysis of Borderline Personality Organization and Time in Treatment as Predictors of General Empathy

Predictor	*b*	SE *b*	β	*t*	*p*	*Model* R^2	*Model* R^2 *change*
Step 1							
BPO	-.064	.149	-.066	-.430	.669		
Time in Tx.	.012	.010	.176	1.148	.258	.036	
Step 2							
BPO	.377	.289	.387	1.305	.199		
Time in Tx.	.013	.010	.193	1.290	.204		
BPO x Time in Tx.	-.023	.013	-.524	-1.768	.085	.106	.070

*p < .05, **p < .01, ***p < .001

Table 39

Moderators of Empathy in Sex Offenders

Empathy for Children

- NPI E/E scale
- IPO
- PPI Total Score
- PPI Impulsive Nonconformity
- PPI Alienation

Hostility for Women

- PPI Impulsive Nonconformity
- PPI Fearlessness

General Empathy

- PPI Total Score
- PPI Impulsive Nonconformity
- PPI Carefree Nonplanfulness
- PPI Alienation
- PPI Machiavellian Egocentricity

APPENDIX B

FIGURES

Figure 1

Model of Empathy

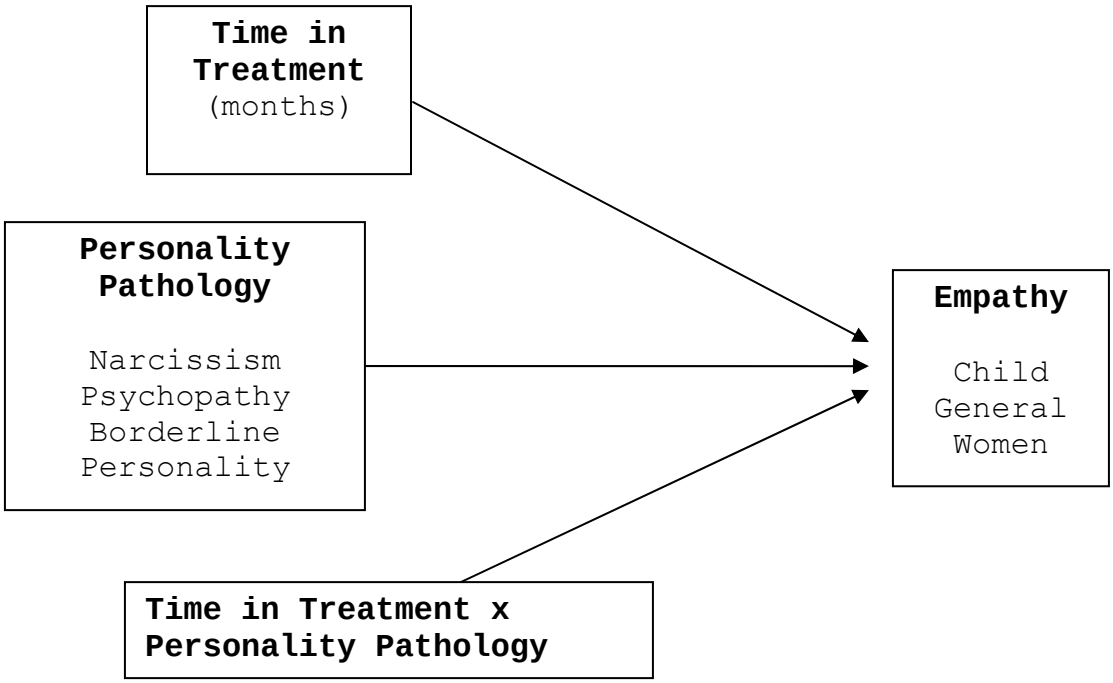


Figure 2

Interaction of Narcissistic Entitlement/Exploitativeness and Time in Treatment on Empathy for Children

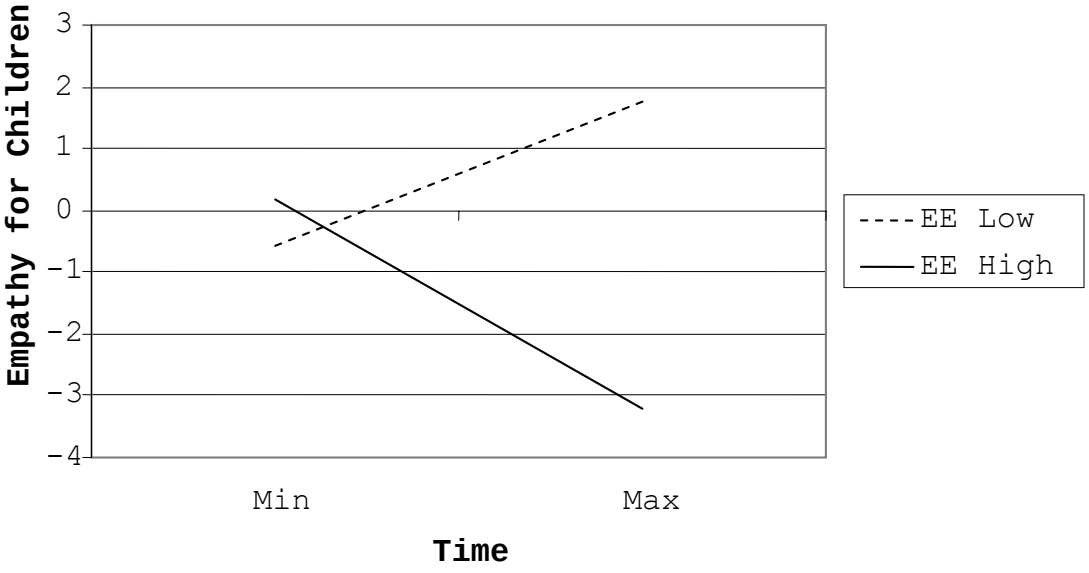


Figure 3

Interaction of Borderline Personality Organization and Time in Treatment on Empathy for Children

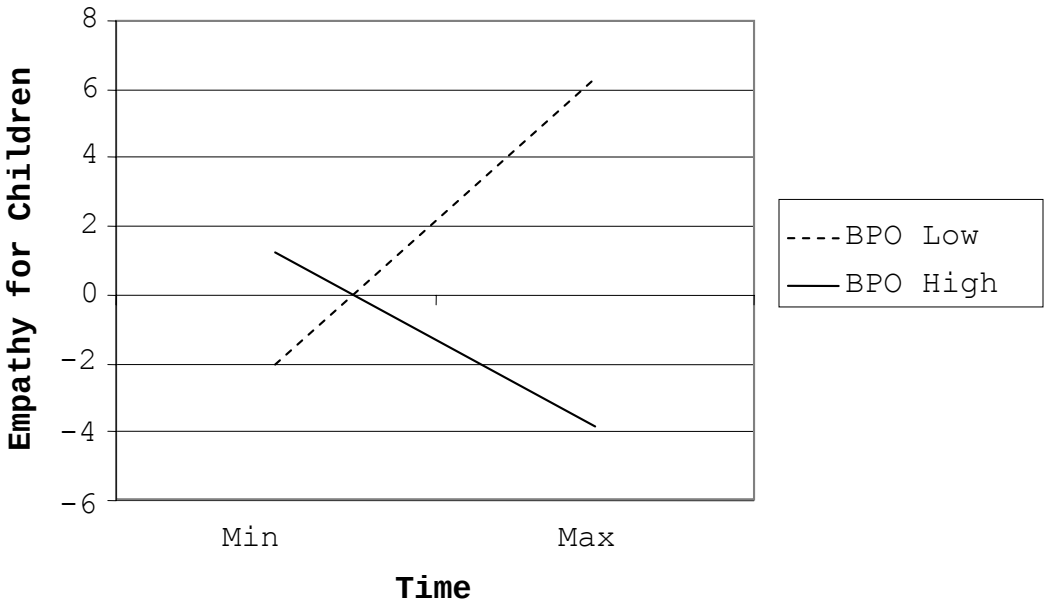


Figure 4

Interaction of Psychopathic Personality (PPI Total) and Time in Treatment on Empathy for Children

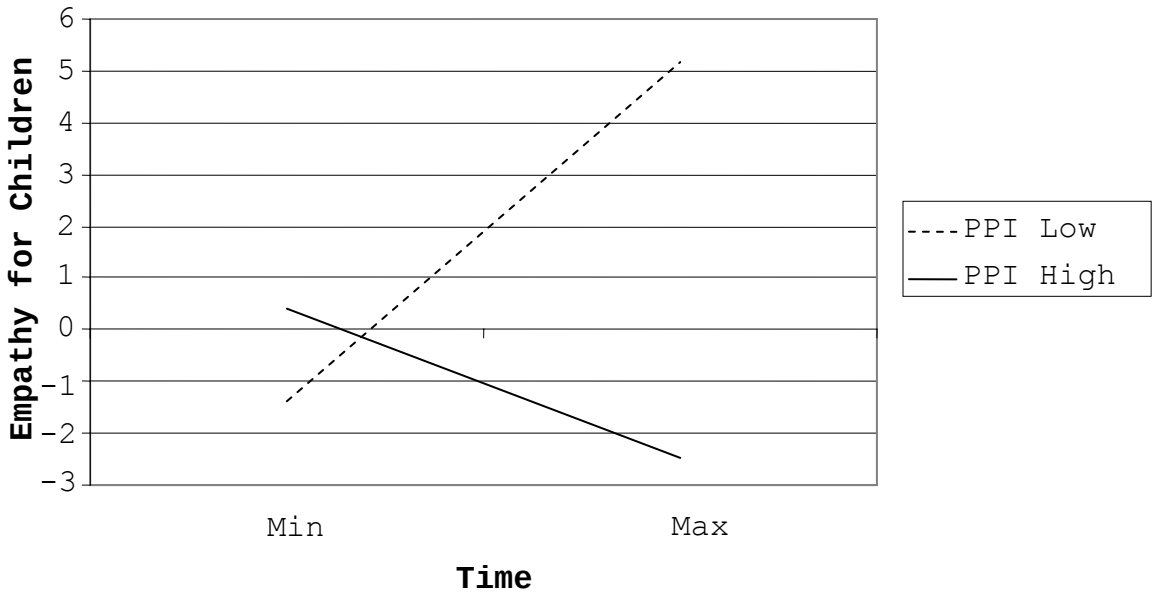


Figure 5

Interaction of PPI Alienation and Time in Treatment on Empathy for Children

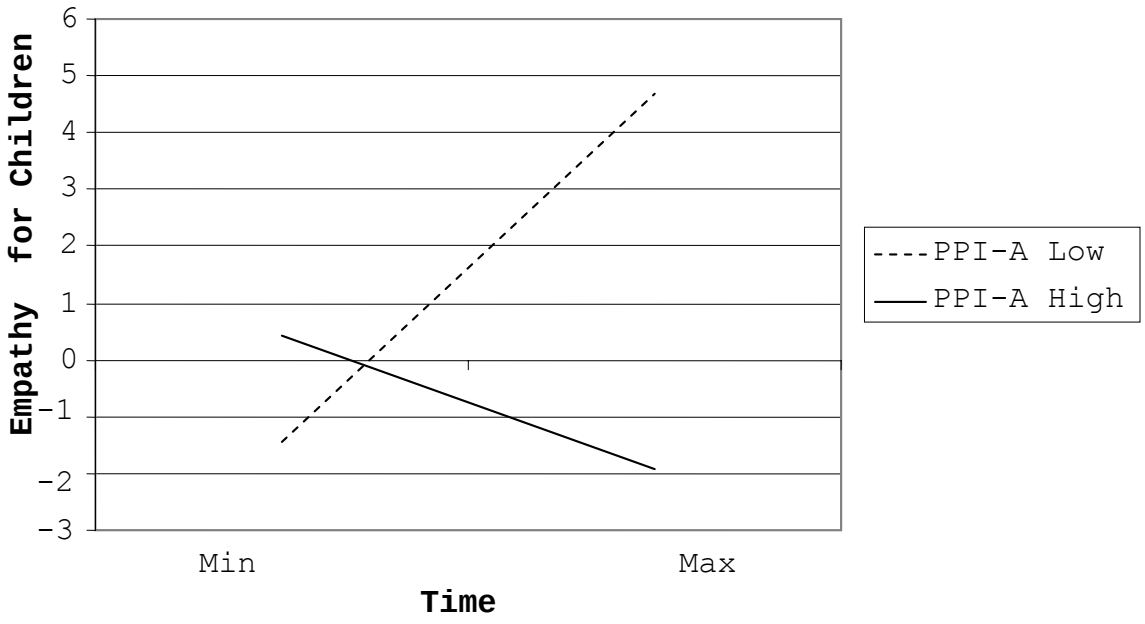


Figure 6

Interaction of PPI Impulsive Nonconformity and Time in Treatment on Empathy for Children

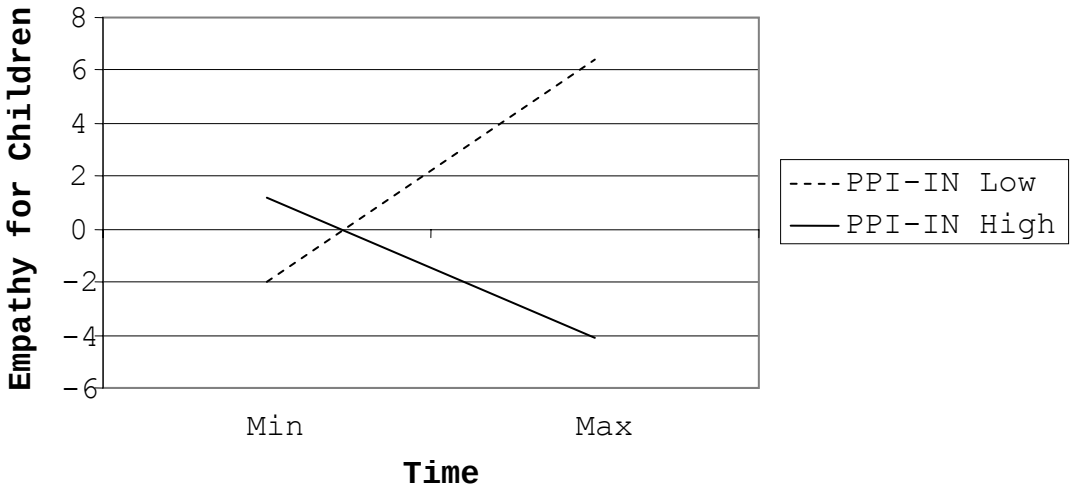


Figure 7

Interaction of PPI Fearlessness and Time in Treatment on Empathy for Children

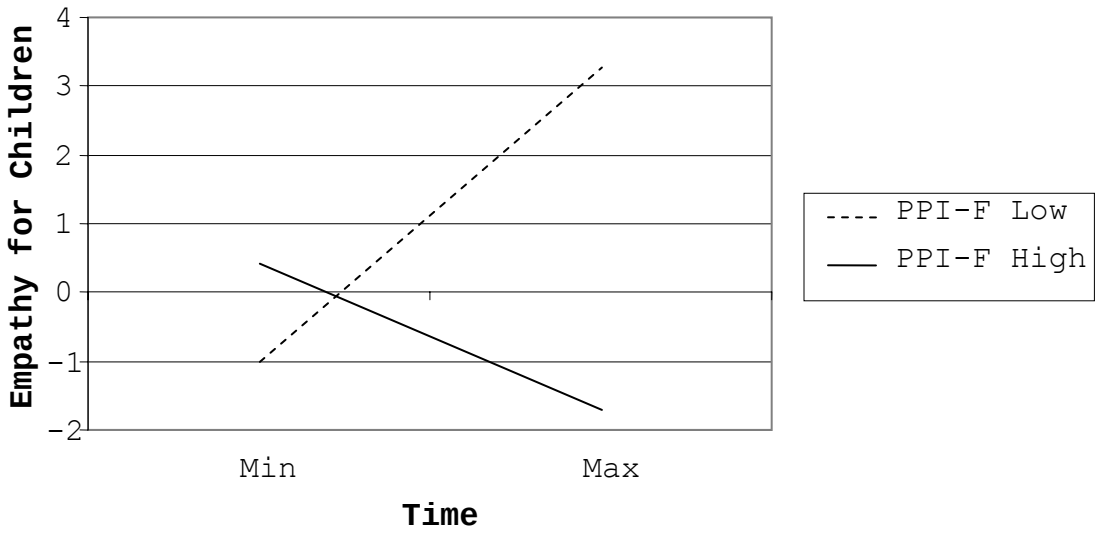


Figure 8

Interaction of PPI Fearlessness and Time in Treatment on Hostility for Women

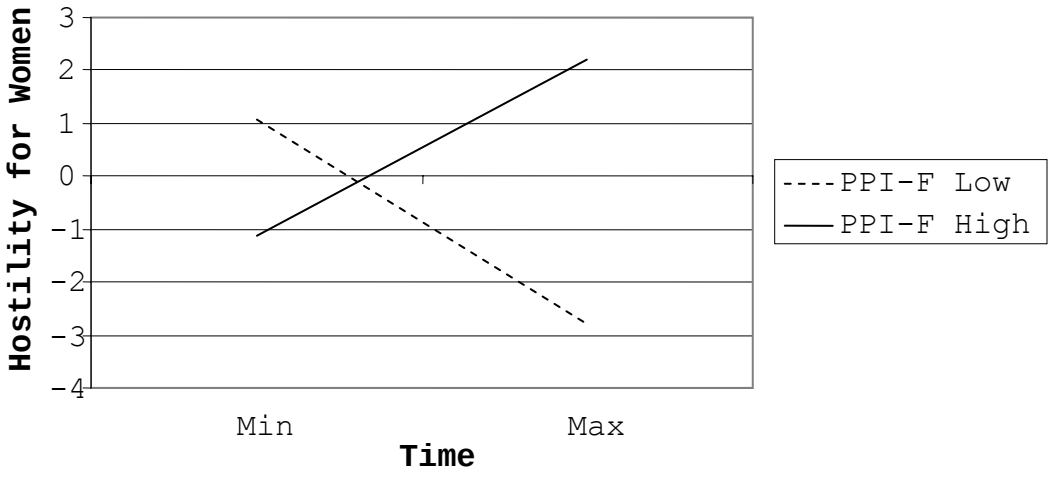


Figure 9

Interaction of PPI Impulsive Nonconformity and Time in Treatment on Hostility for Women

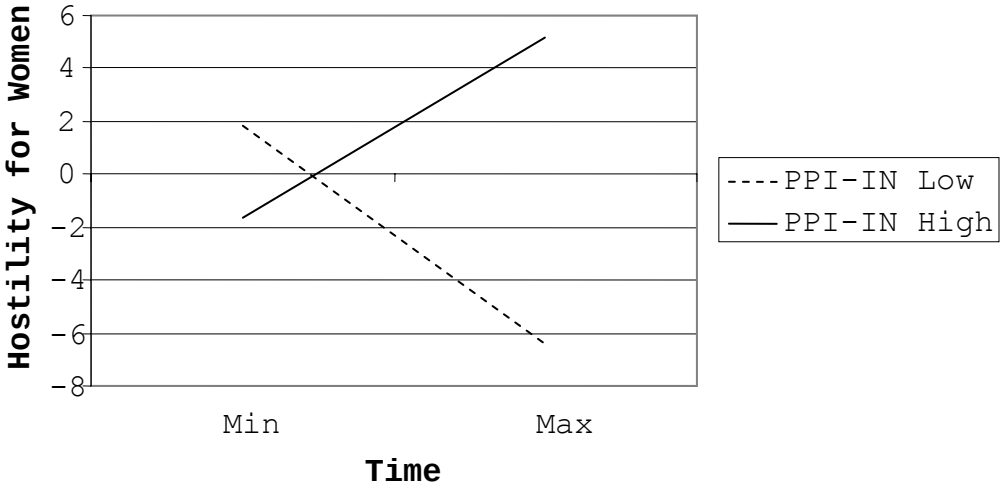


Figure 10

Interaction of PPI Alienation and Time in Treatment on Hostility for Women

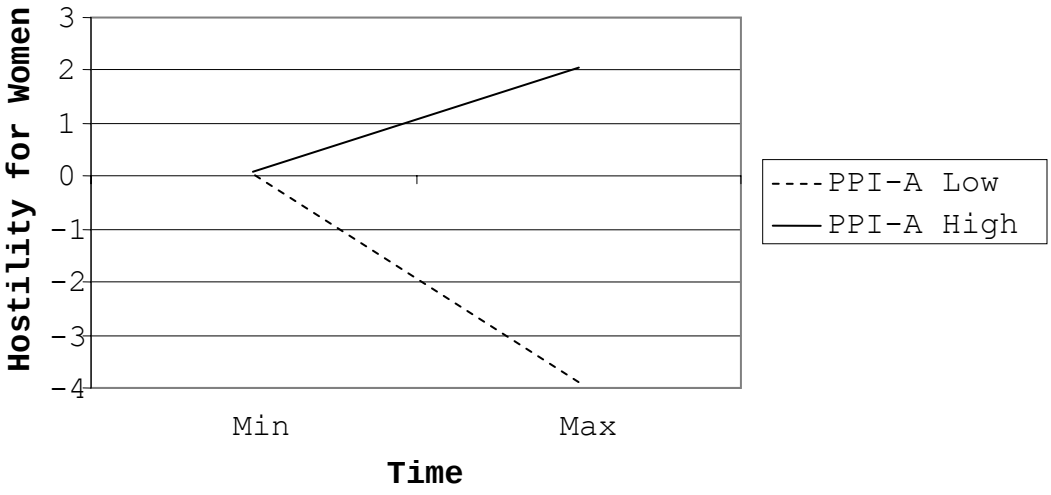


Figure 11

Interaction of PPI Total Score and Time in Treatment on Hostility for Women

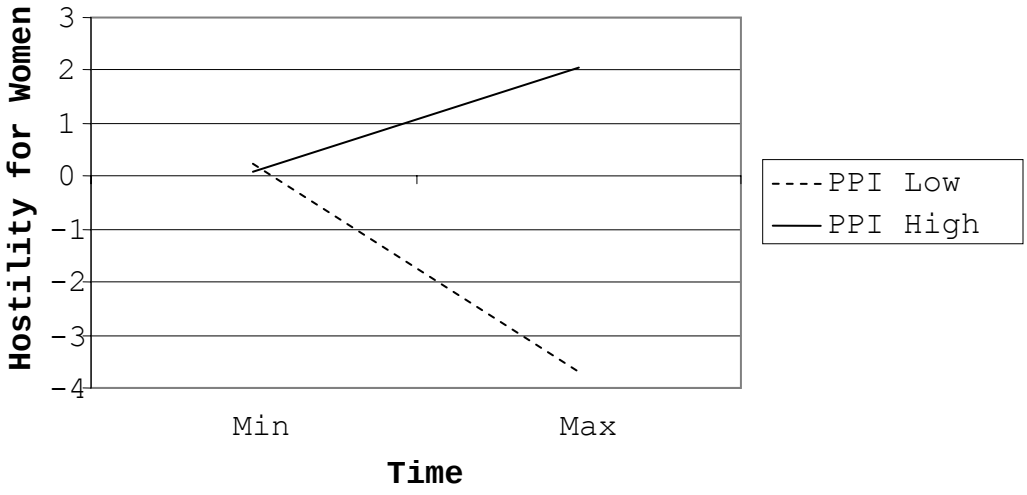


Figure 12

Interaction of PPI Total score and Time in Treatment on General Empathy

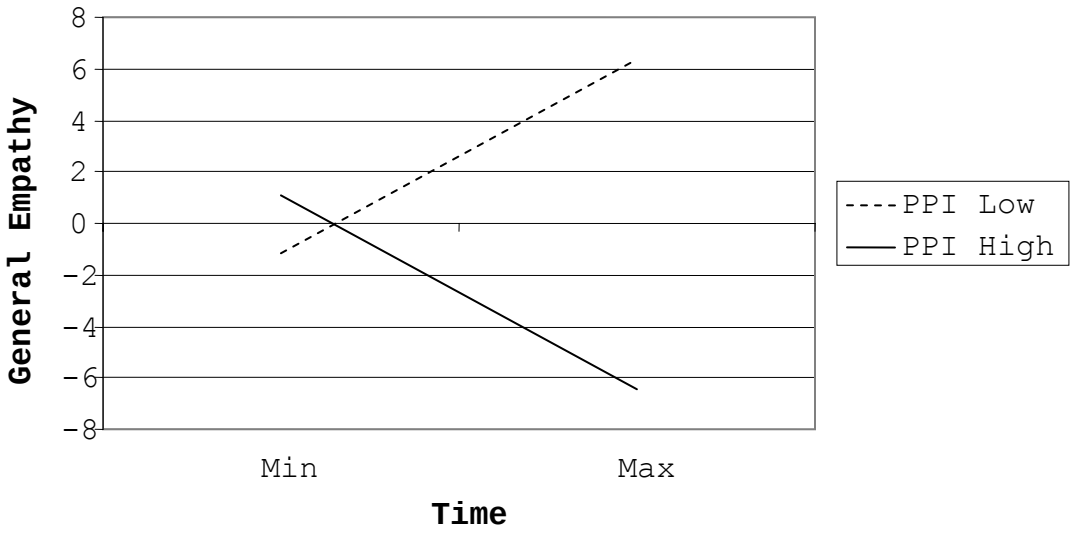


Figure 13

Interaction of PPI Impulsive Nonconformity and Time in Treatment on General Empathy

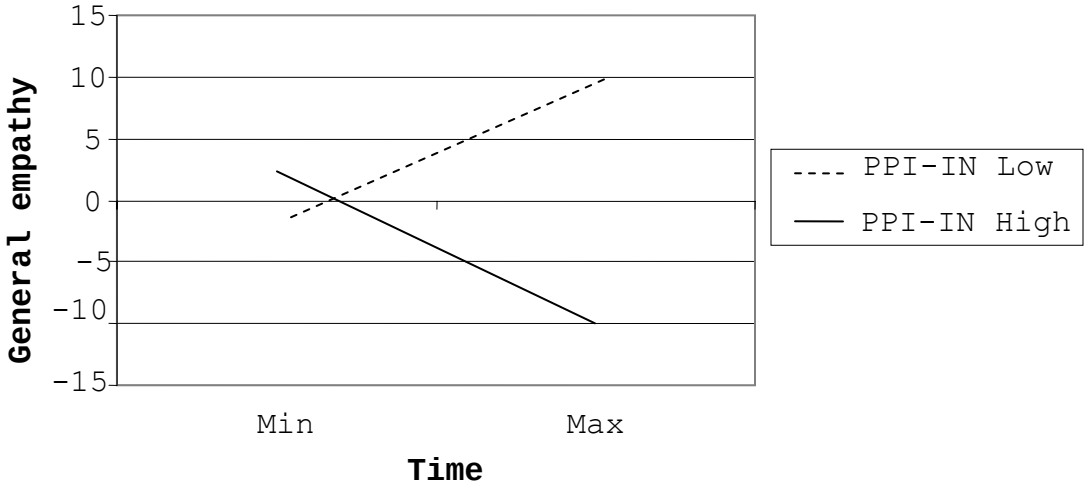


Figure 14

Interaction of PPI Carefree Nonplanfulness and Time in Treatment on General Empathy

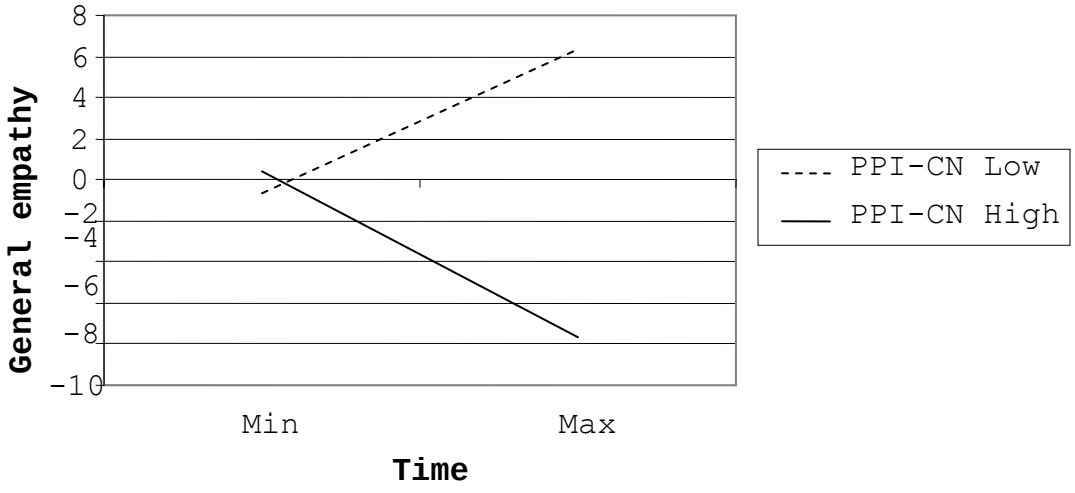


Figure 15

Interaction of PPI Alienation and Time in Treatment on General Empathy

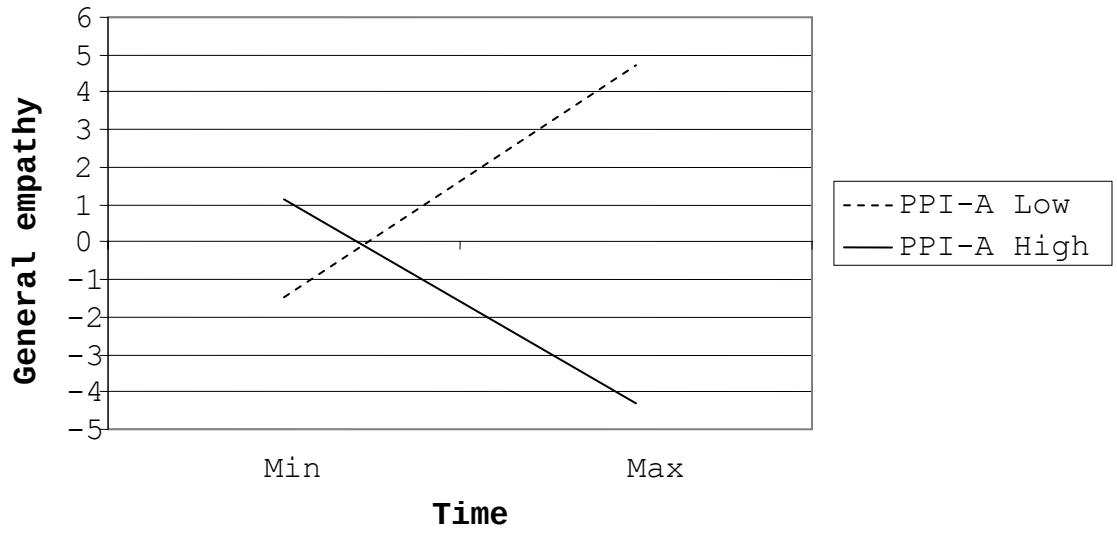
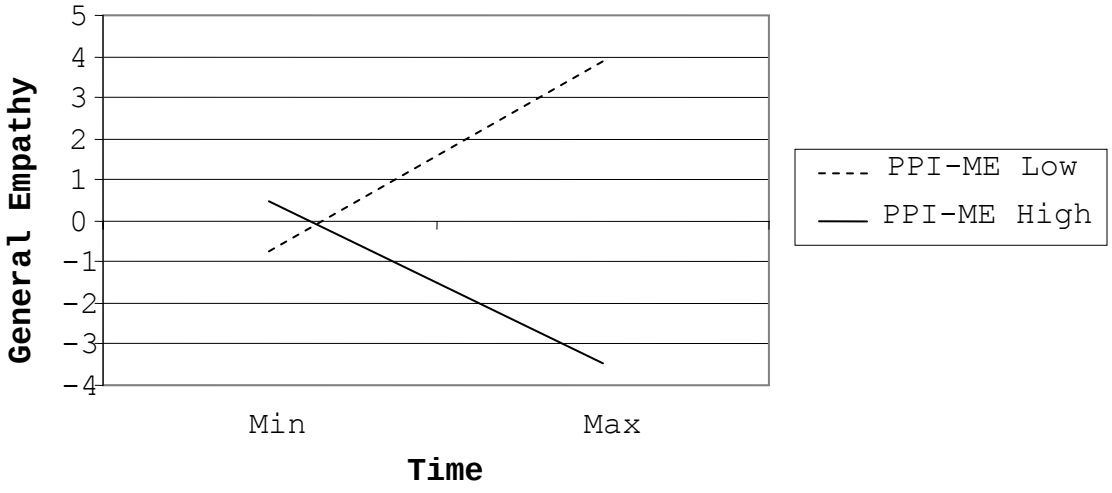


Figure 16

Interaction of PPI Machiavellian Egocentricity and Time in Treatment on General Empathy



Vita

Naomi Esther Shoss

I completed my undergraduate degree at Binghamton University in May 1997, with a major in psychology. I went directly into the adult clinical psychology program at Penn State University in August 1997. I initially worked as a research assistant in the area of sports neuropsychology and I developed a visual cancellation task as part of my masters' degree (awarded in May 2001). After transitioning into the area of personality research, I elected to focus on individual differences in antisocial personality. I examined a range of sexually harassing behaviors among undergraduate students for my minor project. The dissertation thesis was developed over several years during my internship at a local state correctional facility. I was exposed to some of the treatment programs, including the Sex Offender Treatment Program. I became involved in this treatment program and sex offenders became the target population for my thesis.

My clinical internship was at Manhattan Psychiatric Center, a state civil hospital in New York City. After completing my internship year in September 2004, I was hired as a substance abuse clinician in the intensive outpatient treatment program at The Addiction Institute of New York. I have also recently begun teaching a graduate level course in addiction and treatment at Ferkauf Graduate School for Psychology at Yeshiva University.