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April Sanders  
May 2012

DENIAL AND ANTISOCIAL TRAITS IN SEXUAL OFFENDERS

A Dissertation Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
of the Requirements for the Degree

Doctor of Philosophy

by

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- To all of the victims of sexual abuse in the hope that they find peace.

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## Abstract

Although it is assumed that denial is related to negative outcomes among sexual offenders and significant, life changing decisions are made regarding sexual offenders based on their denial, little empirical evidence supports this practice. The Criminogenic model of denial proposes that sex offenders who deny their offenses tend to exhibit higher levels of antisocial traits than offenders who accept their offenses while the Adaptational model proposes that deniers and admitters do not differ in antisocial traits (Rogers & Dickey, 1991). Research findings also suggest that offenders of non-children victims tend to be more antisocial than offenders of children (e.g. Ahlmeyer et al., 2003; Whitaker et al., 2008). The purpose of this study was to test the predictions of the Criminogenic and Adaptational models by examining the relation of admission status and victim age to antisocial traits while controlling for response bias. Participants were 371 post-conviction, non-incarcerated, adult sex offenders who received pre-treatment psychosexual assessments.

The questions addressed included: (1) Are there mean differences in faking good and faking bad response biases among sex offenders who admit and deny their sexually abusive behaviors? Are there mean differences in antisocial traits among (2) admitters versus deniers and (3) offenders of children versus non children? and (4) Does victim age (child versus non-child) moderate the relation of admission status to antisocial traits? An ANOVA and a MANCOVA were used to examine the four research questions; the covariates were offenders' age, years of education, and fake good and fake bad response bias. The MMPI-2-RF was used to assess fake good and fake bad response bias and antisocial tendencies (Ben-Porath & Tellegen, 2008).

Results indicated that as hypothesized, deniers provided higher levels of fake good responses than admitters; contrary to expectations, there were no differences between admitters and deniers in fake bad responses. Contrary to expectations, admitters scored higher than deniers in antisocial traits and there were no differences in antisocial traits related to age of victim. Finally, victim age did not moderate the relation of admission status to antisocial traits. These findings did not provide support for either the Criminogenic or Adaptational models.

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## Denial and Antisocial Traits in Sexual Offenders

### **Chapter 1**

Denial among sexual offenders has been defined in a variety of ways, including denial of all aspects of sexual behaviors, denial that the sexual behavior was wrong, denial of harm to the victim or blaming the victim for initiating the sexual contact, and denial of future risk of sexually inappropriate behaviors (Lund, 2000; Yates, 2009). Although denial of sexually abusive behaviors among sexual offenders is a common occurrence, it is a poorly understood behavior. There are negative ramifications for the denial of sexually abusive behaviors for both victims and sexual offenders. For victims, the extremes that offenders take to deny their sexually inappropriate behaviors may cause unneeded emotional stress, revictimization and a sense of injustice. For sexual offenders, denial may lead to the inability to participate in plea bargaining processes, enter and remain in treatment programs, and obtain and remain in community supervision, which, in turn, may result in violation of parole or probation and incarceration. Despite the potential consequences of denial to sexual offenders, open disclosure of sexually abusive behaviors is generally the exception, not the rule (Grossman & Cavanaugh, 1990; Marshall, 1994; Maruna & Mann, 2006).

Denial has become a primary focus in the identification, evaluation, risk assessment, judicial proceedings and treatment of sexual offenders. However, there is limited empirical support regarding its predictive utility of future offending behaviors or its relationship to a specific psychological profile, such as antisocial traits (Hanson & Bussiere, 1998; Lund, 2000; Yates, 2009). The act of denying negative behaviors is not

exclusive to sexual offenders. Most individuals faced with accusations of negative behaviors initially deny all or at least aspects of the behaviors, even if the accusations are true (Lanyon, 1993; Maruna & Mann, 2006). However, among some sexual offenders, the pattern of denial has been so entrenched as to defy reason. For example, anecdotal reports have noted that some sexual offenders have continuously denied sexually abusive behaviors even when caught in multiple acts of sexual abuse, while other sexual offenders readily admit to their behaviors. Because important treatment, judicial and other life-changing decisions are made based on an admission status, a greater understanding of the dynamics of denial is important.

Two models have been proposed to explain sexual offenders' motivations to deny or accept responsibility for their sexually abusive behaviors. The Adaptational model suggests that sexual offenders deny or minimize their offensive behaviors based on the expected utility of the denial, while the Criminogenic model suggests that sexual offenders deny due to the presence of antisocial traits (Rogers & Dickey, 1991). From the perspective of the Adaptational model, psychological differences between admitters and deniers of sexually abusive behaviors are not expected. In contrast, the Criminogenic model proposes that deniers have higher levels of antisocial traits than admitters. The relatively few studies that have examined psychological characteristics among admitters and deniers of sexual offenses have found that admitters tend to report higher levels of psychopathology, including, antisocial traits, than deniers (Baldwin & Roys, 1998; Grossman & Cavanaugh, 1989; Lanyon, 1993; Lanyon & Lutz, 1984; Wasyliw, Grossman, & Haywood, 1994). These findings do not provide support for either the

Adaptational or the Criminogenic model of denial. Characteristics of the existing studies related to the assessment of response bias, sampling and instrumentation may contribute to these unexpected findings.

Response bias is the attempt of individuals to answer questions in a way to appear differently than they really are. This is often seen as either faking bad, respondents attempt to appear more psychologically impaired than they actually are or faking good, respondents attempt to appear more psychologically stable or socially acceptable than they actually are. One may speculate that in order to gain advantages in judicial and treatment settings, admitters may be more likely to over-report psychological symptoms while deniers may be more likely to under-report symptoms. Therefore, it seems important to examine differences in faking good and faking bad response bias among sexual offenders who deny and admit their offenses and to control for both types of response biases when examining differences in psychological traits among these two groups of sexual offenders.

In addition to a lack of control for response bias, sampling and instrumentation issues also may have contributed to findings that contradict both the Adaptational and the Criminogenic models of denial among sexual offenders. Many of the studies that have examined psychological differences among deniers and admitters have included mixed samples that combine sexual offenders who are incarcerated and who are under community supervision, offenders at the pre-trial, pre and post conviction stages of assessment and at different treatment phases (Lanyon & Lutz, 1984, Nunes, Hanson, Firestone, Moulden, Greenberg & Bradford, 2007). Instrumentation issues primarily

include the use of old versions of the MMPI rather than the newest version that has superior psychometric properties. In order to test prevalent assumptions regarding denial among sexual offenders, studies are needed that examine differences in antisocial traits between admitters and deniers in light of faking good and faking bad response bias and that include samples that avoid confounds related to conviction and incarceration status and treatment phase.

Victim age has shown a significant relationship to psychological characteristics among sexual offenders. Ample evidence suggests that sexual offenders of children typically report lower levels of antisocial traits than abusers of older victims (Ahlmeyer, Kleinsasser, Stoner & Retzlaff, 2003; Curnoe & Langevin, 2002; Feelgood, Cortoni & Thompson, 2005; Mills & Kroner, 2003; Whitaker, Le, Hanson, Baker, McMahn, Ryan, Klein, Risk and Risk, 2008). Findings from some studies (Gibbons, de Volder & Casey, 2003; Langton, Barbaree, Harkins, Arenovich, McNamee, Peacock, Dalton, Hansen, Luong and Marcon, 2008), but not others (Nunes, et al, 2007) suggest that sexual offenders of children are more likely to admit their offenses than offenders of non-children. Taken together, these findings suggest that differences in antisocial traits between admitters and deniers may depend on the age of the offenders' victims. However, no studies were found that considered both admission status and victim age when examining differences in antisocial traits among convicted sex offenders.

The purpose of the proposed study is to examine the relation of admission status and victim age to antisocial traits while accounting for response bias among post-conviction, non-incarcerated, male sex offenders assessed before participating in

psychological treatment. More specifically, the study addresses four research questions. The first research question is to examine mean differences in faking good and faking bad response biases among offenders who admit and deny their sexually abusive behaviors. The second question is to examine mean differences in antisocial traits among sexual offenders who admit and deny their offenses controlling for their levels of faking good and faking bad response biases. The third question is to determine the extent of differences in antisocial traits between sexual offenders who choose child versus non-child victims while accounting for the presence of faking good and faking bad response bias. The fourth and last question is to examine whether victim age (child versus non-child) moderates the relation of admission status to antisocial traits.

The next chapter provides a review of the literature related to the constructs of interest for the proposed study. First, a brief description of response biases and denial among sexual offenders is provided. Next follows a discussion of empirical findings regarding antisocial traits among sexual offenders who differ in their admission-denial status and in age of victim. The final section of the literature review provides a synthesis of the available information and a discussion regarding the hypotheses for the proposed research questions.

## **Chapter 2**

The literature review will begin with a brief description of response biases and denial among sexual offenders. Next, empirical findings regarding the relation of victim age to psychological dysfunctions among sexual offenders are presented. The final section of the literature review provides a synthesis of the available information and a discussion of how it supports the proposed research questions.

### **Admitters versus Deniers and Response Bias**

Assumptions exist regarding psychological differences between deniers and admitters of sexually abusive behaviors. Of primary importance is the long-standing assumption that significant psychological differences exist between admitters and deniers, which make deniers unamenable to treatment interventions and more likely to recidivate than admitters. This assumption, which has been pervasive, has led to the exclusion of deniers from sex offender treatment programs and negatively impacted judicial decisions regarding sentencing of these offenders (Maruna & Mann, 2006; Terry, 2005; Yates, 2008). Although there is evidence to suggest that denial of sexually abusive behaviors is a risk factor for treatment failure, which in turn is predictive of recidivism, limited evidence has linked denial directly to recidivism (Larochelle, Diguier, Laverdière & Greenman, 2011). For the most part, studies have not substantiated differences in recidivism between admitters and deniers based solely on denial of inappropriate sexual behaviors (Gibbons, Volder & Casey, 2003; Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Harkins, Beech & Goodwill, 2010; Langton, et al, 2008; Lord & Willmot, 2004; Marshall, Thornton, Marshall, Fernandez & Mann, 2001).

The widespread assumption that denial of sexually abusive behaviors is a significant risk factor for recidivism likely stems from the high prevalence rates of antisocial characteristics among sexual offenders. The DSM-IV-TR defines the essence of antisocial personality disorder as the consistent and repetitive disregard for the rights of others and includes the following traits: callousness, unemotional behaviors, lack of concern for others, glibness, superficial relationships, and a general lack of adherence to social norms, rule breaking, manipulation, deceitfulness and consistent failure to fulfill one's responsibilities (DSM-IV-TR). Numerous studies confirm that antisocial traits are the most prevalent form of psychopathology among sexual offenders (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Langton, et al, 2008). The available research has substantiated the association of treatment failure and recidivism to antisocial tendencies (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Levenson & Macgowan, 2004; Nunes, et al 2007; Terry, 2005). Furthermore, treatments for individuals with antisocial characteristics are typically considered ineffective and even counter-productive (Abracen, Looman, & Langton, 2008). Therefore, the belief that sexual offenders who deny their offense exhibit a higher level of antisocial characteristics than offenders who admit their offense has led to the conclusion that deniers are not amenable to treatment while admitters are more amenable. However, if admitters and deniers do not differ in antisocial tendencies, this argument would not hold.

Several models have been proposed to explain denial among sexual offenders, including Rogers and Dickey's Criminogenic and Adaptational models (1991). The Criminogenic model proposes that denial is a result of underlying antisocial

characteristics among sexual offenders and is supported by the high prevalence rate of antisocial traits among this group, as noted above. The Adaptational Model, on the other hand, is based on decisional models and purports that because sexual offenders are in a highly adversarial setting; their motivation to deny their offenses is based on situational factors. The decision to deny is made based on the expected impact denial will have on their current situation, such as reducing legal consequences, or minimizing physical harm to themselves from other inmates. In their qualitative study of sexual offenders, Lord and Willmot (2004) concluded that overcoming denial was a process based on situational factors, not psychopathology, thus providing support for the Adaptational model. To summarize, the Adaptational model proposes that because sexual offenders find themselves in an adversarial situation, they deny or minimize their problem behaviors to avoid negative consequences, while the Criminogenic model suggests that sexual offenders deny their offenses due to the presence of antisocial traits. Therefore, the Adaptational model does not predict differences in antisocial traits between admitters and deniers, while the Criminogenic model predicts higher levels of antisocial traits among deniers than admitters.

Studies that have examined psychological differences between admitters and deniers of sexually abusive behaviors have yielded findings that contradict predictions of both the Criminogenic and the Adaptational model (Baldwin & Roys, 1998; Gibbons, de Volder & Casey, 2003; Langton, et al, 2008; Kennedy & Grubin, 1992; Nunes et al, 2007). Findings indicated that these offenders subgroups differ in psychological characteristics, which is inconsistent with the Adaptational model, and that admitters

report more psychological disturbances than deniers, which is inconsistent with the Criminogenic model. Compared to deniers, admitters have reported higher levels of general distress as measured by the General Health Questionnaire (Gibbons, de Volder & Casey, 2003; Kennedy & Grubin, 1992) and higher levels of antisocial traits (Baldwin & Roys, 1998; Grossman & Cavanaugh, 1990; Harkins, Beech & Goodwill, 2010; Langton & Lutz, 1984). Several factors that may contribute to findings that are inconsistent with the theoretical models and that will be addressed in the current study include: lack of control for response bias in psychological testing among sexual offenders, the use of old versions of the MMPI and the characteristics of the sexual offender groups examined.

Response bias is an individual's attempt to manage how others perceive him or her. Response bias may be expressed by faking bad or malingering (exaggerating psychological symptoms) or by faking good or denial (minimizing psychological symptoms). It is possible that offenders who are willing to admit their sexual offenses may also exaggerate their psychological symptoms as a way to gain advantages in the disposition of their cases. Deniers, on the other hand, may choose to minimize their psychological symptoms as part of their strategy of presenting themselves in a favorable light. Only one study was found that controlled for response bias among sex offenders who deny or admit their offenses. In this study only malingering, a faking-bad response bias, was controlled for and results still showed that admitters scored higher than deniers in the MMPI scales that assess antisocial traits, masculinity, anxiety and bizarre thoughts (Baldwin & Roys, 1998). However, since some sex offenders may also utilize faking good response biases, it seems important to control for both faking good and faking bad

response biases when comparing the psychological functioning of sexual offenders who deny and admit their offenses. Therefore, in the present study differences in both faking good and faking bad response biases among offenders who deny and admit their offense will be examined. Furthermore, in the comparison of admitters and deniers regarding the presence of antisocial traits, the impact of both faking good and faking bad response bias will be controlled.

Other characteristics of the offender groups that may impact findings regarding differences in levels of psychopathology between admitters and deniers of sexually abusive behaviors include where offenders are in the process of adjudication, and among adjudicated offenders if they are incarcerated or not. Of the few relevant studies located, three included both pre-trial and post-conviction sexual offenders (Grossman & Cavanaugh, 1989; Lanyon & Lutz 1984; Nunes et al, 2007). Including pre-trial and post-conviction individuals in the same sample may be a confounding factor due to inclusion of data from potentially innocent individuals (Baldwin and Roy, 1998). In addition, evidence suggests that there may be differences in offenders' willingness to accept their behaviors depending on where they are in the process of adjudication. In Lord and Willmot's (2004) retrospective study, 94% of participants reported that they had denied any inappropriate behavior when first confronted while 44% indicated that they admitted their sexually abusive behaviors only after entering the prison system.

The outcome of the legal procedures also seems to be related to offenders' reports of mental health. Incarcerated sexual offenders tend to be more psychologically disturbed than non-incarcerated offenders, making generalizations from one sample to

another questionable (Harkins, Beech & Goodwill, 2010; Kennedy & Grubin, 1992; Langton et al, 2008; Lanyon, 1993; Lanyon & Lutz, 1984; Wasylw, Grossman & Haywood, 1994). These findings suggest that to examine differences in psychopathology among sex offenders who deny or admit their offense, it is important to only include offenders who are in a similar place in their judicial process at the time of assessment.

In addition to controlling for differences between offenders who are incarcerated and offenders under community supervision, two other problematic issues have been noted in existing studies that will be addressed in the present investigation. These issues are the country in which the studies were conducted and the use of older versions of the MMPI to assess offenders' psychological characteristics. Of the relevant studies that explored psychological differences between admitters and deniers, only three were conducted with American offenders (Baldwin & Roy, 1998; Lanyon, 1993; Lanyon & Lutz, 1984), while the others were conducted with offenders in Canada, England and Ireland (Gibbons, de Volder & Casey, 2003; Harkins, Beech & Goodwill, 2010; Kennedy & Grubin, 1992; Langton et al, 2008, Nunes et al, 2008).

Most of the studies that have examined the psychological profile of sexual offenders have used the original MMPI. In a meta-analysis of personality inventories with sexual offenders, Davis and Archer's (2010) identified 32 studies that used the original MMPI and only one that used the MMPI-2 to explore psychological functioning among this population. Although the MMPI-2, published in 1989, improved upon the normative sample and added new validity scales, the clinical scales remained intact. Therefore, the most notable psychometric problem of the original MMPI, the significant

item overlap within the clinical scales, remained. Subsequently, item overlap led to the higher than expected intercorrelations between clinical scales. The MMPI-2-RF, published in 2008, has addressed this problem, along with further improvements to the validity scales. Therefore, in this study the use of the MMPI-2-RF to assess the psychological characteristics of American sexual offenders provides an advantage over previous studies that have examined psychological differences among deniers and admitters with older versions of the MMPI and with offenders from diverse countries.

Considering the potential confounds noted above, further research is needed to clarify the psychological differences between sexual offenders who admit and deny their offenses. The current study will examine differences in antisocial traits among adjudicated, non-incarcerated, pre-treatment, American male offenders who admit and deny their offenses controlling for faking good and faking bad response biases. The newest version of the MMPI, which possesses improved psychometric properties, will be used to assess antisocial traits among the study participants. It is expected that in support of the Adaptational Model of Denial, results will reveal no statistically significant differences in antisocial traits between offenders who accept versus deny their offenses.

Research findings suggest that factors other than admission status, such as victim age, are associated to the psychological characteristics of sexual offenders. Therefore, the current study will also examine the relation of admission status to antisocial traits taking into consideration the age of the offenders' victims.

### **Victim Age**

This section provides an overview of studies that have examined differences in psychological characteristics, including antisocial traits, between sexual offenders who choose child versus adult or adolescent victims. Although various studies have defined childhood as any age under 18 years-old (Kennedy & Grubin, 1992; Langton et al, 2008) in the present study the term “child” will be used to indicate pre-pubescent children (up to age 12) and “non-child” to indicate adults or post-pubescent individuals. This delineation follows findings from phallometric studies which have concluded that there are no clinically significant differences between sexual offenders who exhibit sexual arousal toward adults and those with arousal to post-pubescent females; however, there are significant differences between these two groups and sexual offenders who exhibit sexual arousal to pre-pubescent children (Looman & Marshall, 2005). Therefore, for the purpose of this study, a pre-pubescent (12 years old and younger) victim will be labeled “child”, while victims 13-years and older will be referred to as “non-child.”

Research findings suggest that offenders with non-child victims tend to report higher rates of antisocial traits than offenders with child victims (e.g., Hanson and Bussiere, 1998; Kalichman, 1991; Whitaker et al, 2008). Results of several meta-analysis have indicated that offenders of non-children exhibit higher rates of antisocial personality disorders (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Terry, 2005) and higher levels of anger, hostility, substance abuse and general dysfunctional behaviors (effect size  $d=0.27$ ) than offenders with child victims (Whitaker et al., 2008). Studies that explored anger and aggression also concluded that sexual offenders of children are typically passive and use manipulation and coercion to victimize

children rather than gratuitous violence, as is more often noted among sexual offenders of non-children (Beyko, & Wong, 2005; Shechory & Ben-David, 2005; Terry, 2005).

In sum, the general consensus among researchers is that sexual offenders of non-children show higher levels of psychopathology, including higher levels of antisocial traits, than child offenders (Hanson & Bussiere, 1998; Hanson & Morton-Bourgon, 2005; Terry, 2008; Whitaker et al, 2008). However, findings regarding the relation of victim age to offenders' willingness to accept their offenses are mixed. Some researchers have reported that sexual offenders of children were more likely to admit to their sexually offensive behaviors than those with older victims (Groff & Hubble, 1984; Kennedy & Grubin, 1992; Langton et al, 2008). However, no such differences in admission status were found between sexual offenders' victim age groups by other researchers (Gibbons, de Volder & Casey, 2003). Therefore, one may expect that because offenders of non-children tend to show higher levels of antisocial tendencies than offenders of children, the relation of admission status to antisocial tendencies among sex offenders may be moderated by victim's age. It is possible that among offenders with non-child victims, who typically show relatively high levels of antisocial tendencies, admission status at post-conviction will not be not related to their antisocial tendencies, providing support for the Adaptational model with that offender subgroup. On the other hand, among offenders with child victims, who typically show relatively low levels of antisocial tendencies, those who are not willing to admit their offense at post-conviction, will show higher levels of antisocial tendencies than their peers who admit their offense, providing support for the Criminogenic model for offenders of children.

## **The Present Study**

The main purpose of the present study is to examine among non-incarcerated, convicted sex offenders, the relation of admissions status and victim age to the presence of antisocial tendencies. As mentioned earlier, in the current study several design problems identified in previous studies will be addressed. In the analyses of the relation of admission status and victim age to antisocial tendencies, faking bad and faking good response biases will be controlled for. Also, the newest version of the MMPI, (MMPI-2-RF), which has improved psychometric properties compared to older versions, was used to assess response biases and antisocial tendencies among the study participants. Because studies with mixed samples of sexual offenders who are at different phases in the legal process have yielded findings that contradict existing theoretical models, the proposed study will only include convicted, non-incarcerated sex offenders in the U.S. It is expected that when controlling for faking good and faking bad response biases, convicted, non-incarcerated sex offenders who admit their offense will not differ in antisocial traits compared to their peers who admit their offense.

Research findings have suggested that age of victim may be related to both levels of antisocial tendencies among offenders as well as their willingness to accept their offense. Offenders with non-children victims typically show higher levels of antisocial traits and, in some cases, less willingness to admit their offense than offenders with children victims. Based on these findings, one may expect that offenders with non-child victims will report higher levels of antisocial tendencies than offenders of child victims. In addition, it is possible that the relation of admission status to the presence of antisocial

traits may be moderated by the age of the offenders' victim. More specifically, the hypotheses in the proposed study regarding this interaction effect are that among non-incarcerated, convicted sex offenders who victimized non-children, those who denied their offense will not differ in antisocial tendencies from those who admitted their offense. However, among offenders who victimized children, those who denied their offense will show higher levels of psychopathology than those who admitted their offense. In other words, if the interaction hypotheses proposed here are supported, among non-incarcerated, post-conviction offenders, findings will provide support for the Adaptational model of denial for offenders of non-children and for the Criminogenic model of denial for offenders of children.

## **Chapter 3**

### **Methods**

#### **Participants**

Participants in the study were 371 adult male sex-offenders referred for post-conviction psychosexual evaluations between 1990 through 2010. The data for the study was obtained from archival records of an outpatient sexual offender treatment provider in a large metropolitan area in the southwest. The median age of the sample was 35 years old and ranged from 18 to 76 years old. The sample consisted of 19% African Americans, 0.3% Asians, 51.5% Whites, 26.7% Hispanics; the remaining participants did not report their race/ethnicity. In regards to educational level, the clinician who completed the initial intake interview determined the highest grade completed based on self-report and other documentation available. For the purpose of analysis, the last grade completed was converted to number of years of schooling. The overall years of education for the sample ranged from 0 to 19 years, with the mean being 12.2 years and the standard deviation 2.48. Only 1.91% of the sample reported completing fewer than 6 years of education.

Inclusion criteria for study participants included: completion of an intake interview, a charge of a sexual offense with the exclusion of exhibitionism and voyeurism, and completion of a valid MMPI-2 profile. Exclusion criteria included female gender, age younger than 18 years-old, sexual offenders with charges of exhibitionism or voyeurism, and lack of adequate intake information to categorize participants into admission and/or victim age groups. One offender was excluded from

the study due to the lack of adequate information for classification, making the sample 370.

In order to identify the groups of interest, admitters and absolute deniers and child- versus non-child victim, the data was categorized as described below. The absolute deniers included individuals who denied all aspects of their current charge of sexually inappropriate behavior at the post-conviction treatment intake evaluation. Admitters were individuals who admitted to any aspect of inappropriate sexual behavior that resulted in their current charge. Admitters of sexually abusive behaviors at intake constituted 65.4% (n =370) of the sample while deniers made up 34.6% (n= 370). Victim age was determined by police reports, and validated self-reports during intake interviews. Based on victim age, two mutually exclusive subgroups were formed: sexual offenders of children and sexual offenders of non-children. The sexual offenders of children group included individuals who had at least one offense involving a victim 12 years old or younger and no offenses with victims who were older than 12 years old. The sexual offenders of non-children group included individuals who committed an offense with at least one victim 13 years old or older and no known offenses with victims younger than 13 years old. There were 116 (31.4%) child offenders and 254 (68.6%) non-child offenders.

### **Research Design**

An archival, quantitative descriptive factorial research design was employed to compare level of antisocial traits among admitters and complete deniers and between sexual offenders of children and sexual offenders of non-children.

## **Instruments**

**Demographic Questionnaire.** Demographic information was obtained from a variety of sources, including client verbal report during intake interview, written demographic questions completed as part of the test administration procedures, police and court reports, and pre-sentence investigation reports conducted by correctional system. Ultimately, all sources of information are assessed by the therapist conducting the initial intake interview and data entered into the database is taken from the therapist's final report. The final initial intake reports contain standard demographic variables including offender age, victim age, legal charge and a description of the sexual behavior (as these are not always consistent due to plea bargaining), highest grade completed, family history, psychosexual history, employment and relationship history.

**Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF).** The MMPI-2-RF was used to assess for response bias and for antisocial tendencies. This instrument, a revision of the MMPI-2, is a well-known and empirically validated measure of psychological functioning and personality. The MMPI-2-RF utilized 338 true/false items from the original 567-item MMPI-2 to compose fifty scales including eight Validity Scales, three Higher-Order Scales (H-O), nine Revised Clinical Scales (RC), 28 Specific Problems Scales (SP), two Interest Scales and five Personality Psychopathology Five Scales (PSY-5) (Ben-Porath, & Tellegen, 2008). For the purposes of this study, two validity scales and the Antisocial Traits Revised Clinical Scale (RC4) were utilized.

The validity scales used to assess faking good and faking bad response bias were the Infrequent Responses (F-r) and Uncommon Virtues (L-r) scales. The Infrequent Responses (F-r) Scale is a measure of rare responses in the general population which is considered to be a measure of over-reporting or “faking bad.” The Uncommon Virtues- (L-r) scale is a measure of rarely claimed moral attributes or activities which is considered a measure of “faking good” or lying. The following test-retest reliability and internal consistency information was obtained from the *MMPI-2-RF Technical Manual* (2008). Among a normative sample of 1138 the F-r Scale was shown to have test-retest reliability coefficients of .82, and a coefficient of internal consistency of .69. However, among mental health patients, in community outpatient treatment, community psychiatric hospitals and VA psychiatric hospitals the internal consistencies were .85, .88, and .87, respectively. The L-r Scale was shown a test-retest reliability coefficient of .79, in the normative sample along with a coefficient of internal consistency of .60. Only slightly different internal consistencies were noted among community mental health outpatients, at .65, community psychiatric hospitals at .63, and VA psychiatric hospitals slightly lower at .57.

The Antisocial Behavior (RC4) scale, one of the Revised Clinical Scales in the most recent version of the MMPI, measures general rule breaking, irresponsible behavior and antisocial tendencies. This scale has shown a test-retest reliability coefficient of .89, and a coefficient of internal consistency of .76 in the normative sample reported in the technical manual. Among the community mental health outpatients the internal

coefficient was .81, the community psychiatric hospital sample had .82, and VA psychiatric hospital sample was .83.

Exclusion criteria for the MMPI-2-RF protocols were based on those indicated in the *MMPI-2-RF Manual for Administration, Scoring and Interpretation* (2008). As instructed in the MMPI-2-RF Manual, MMPI-2-RF Variable Response Inconsistency (VRIN-r) and True Response Inconsistency (TRIN-r) scores were examined for any greater than 80 to be excluded from the sample; however the range of scores for the sample was 33.83 to 77.36 and 33.07 to 72.58, respectively. The last validity scale examined as an exclusion criterion was the Infrequent Psychopathological Responses (FP-r) which ranged from 42.37 to 93.60 with a mean of 51.48 within the current sample. No data required exclusion due to invalid protocols in this sample.

## **Procedures**

**Data collection.** Approval from the UH IRB was obtained prior to receiving archival clinical data from the outpatient sexual offender treatment provider who maintained a clinical database of patients. This database included demographic information, legal charges, victim variables and a battery of psychological testing. Typical psychological batteries include the MMPI-2, Multiphasic Sex Inventory, Shipley Living Scales, and Burt's Rape Myth Scales. The principal was provided a de-identified archival database for the completion of this study. The database included item level MMPI-2 data and demographic information, treatment start and end dates, victim variables, admission status, and other offense variables.

The de-identified database was maintained in an Excel spreadsheet on a password protected computer by the principal investigator. A separate de-identified database containing only item-level MMPI-2 scores was created for the conversion to the MMPI-2-Revised Form, as explained in the MMPI-2 RF Technical Manual (Tellegen & Ben-Porath, 2008). Once the converted scaled scores were calculated, all data was entered into a SPSS program for the completion of the statistical analyses.

### **Research Questions and Hypotheses**

The following research questions were examined in the present study:

1. To what extent are there differences between admitters and complete deniers on response bias as measured by the faking bad (F-r) and faking good (L-r) Validity Scales of the MMPI-2-RF?

*Hypothesis.* Complete deniers will score significantly higher on the faking good scale (L-r) and lower on the faking bad (F-r) than Admitters.

2. To what extent are there differences between admitters and complete deniers on the Antisocial Traits scale of the MMPI-2-RF while controlling for faking bad (F-r) and faking good (L-r)?

*Hypothesis.* We expect complete deniers and admitters to show no significant differences on the Antisocial Traits scale in support of the Adaptational Model.

3. To what extent are there differences between offenders who choose child victims versus non-child victims on the Antisocial Traits scale of the MMPI-2-RF while controlling for faking bad (F-r) and faking good (L-r)?

Hypothesis. Non-child offenders will have significantly higher scores on Antisocial Traits subscale than child offenders.

4. To what extent does victim age moderate the relation of admission status to antisocial tendencies, while controlling for faking bad (F-r) and faking good (L-r) among sexual offenders

Hypotheses:

- a. Among sex offenders who victimized non-children, deniers will not differ in antisocial tendencies from admitters.
- b. Among sex offenders who victimized children, deniers will show higher levels of antisocial tendencies than admitters.

## Chapter 4

### Results

#### Preliminary Analyses

Preliminary data analyses included calculations of the internal consistency coefficient for the MMPI-2-RF scales: Faking Bad (F-r), Faking good (L-r) and antisocial traits (RC-4). The Cronbach's Alpha for each were scale was .61, .38 and .60, respectively. Table 1 includes means and standard deviations for the three variables. Preliminary analyses also included bivariate correlations of all continuous variables included in the study.

Table 1.

*Sample Means, Standard Deviations and Sample Size.*

	Mean	Standard Deviation	N
<b>Age of offender</b>	35.13	13.00	368
<b>Education level</b>	12.19	2.48	367
<b>Victim age</b>	13.69	6.21	371
<b>Fr (faking bad)</b>	55.98	16.16	371
<b>Lr (faking good)</b>	63.68	13.85	371
<b>RC4 (antisocial)</b>	53.01	10.35	371

As displayed in the correlation matrix (see Table 2), age at time of testing and highest grade completed were significantly, negatively related to the dependent variable, antisocial traits. Despite the relationship between these variables being small to medium

( $r = -.26$ ), both age and years of education were entered as covariates in the main analyses to control for their effects on the main analyses.

Table 2.

*Correlation between continuous variables*

	Highest grade	Offender Age	Faking bad	Faking Good
<b>Offender age</b>	-0.031			
<b>Faking bad</b>	-.262**	-0.037		
<b>Faking good</b>	-.154**	-.148**	-.139**	
<b>Antisocial traits</b>	-.238**	-.141**	.444**	-.384**

*Note.* \*\*  $p < 0.01$ , \*  $p < 0.05$

### Main Analyses

A MANOVA was conducted to examine differences between admitters and complete deniers on the fake good and fake bad validity scales (L-r and F-r Validity Scales) of the MMPI-2-RF. MANOVA results showed no significant differences between admitters and deniers on the fake bad scale (F-r scale) ( $F(1,33)=.691$ ,  $p=.407$ ). However, there was a significant difference on the fake good scale (L-r scale) between groups ( $F(1,333)=6.407$ ,  $p=.012$ ) with deniers scoring significantly higher than admitters (See Table 3). Based on these findings, faking good was used as a co-variate in the remaining ANCOVA, along with years of education and age.

Table 3.

*Means by Admission Status.*

		<b>Faking bad</b>	<b>Faking good</b>	<b>Antisocial traits</b>
<b>Deniers</b>	Mean	57.53	66.24	50.75
	N	128.00	128.00	128.00
	Standard Deviation	16.74	12.93	9.42
<b>Admitters</b>	Mean	55.21	62.21	54.25
	N	242.00	242.00	242.00
	Standard Deviation	15.83	14.06	10.64
<b>Total</b>	Mean	56.01	63.60	53.04
	N	370.00	370.00	370.00
	Standard Deviation	16.17	13.80	10.35

An ANCOVA was performed to examine the relation of admission status, victim age and the interaction of admission status by victim age to antisocial traits while controlling for faking good, age of offender and years of education. Results showed that the main effect was present for admission status ( $F(1,364)=13.820$ ,  $p=.000$ ,  $\eta^2=.037$ ) after controlling for faking good, age and educational level. The admitters had significantly higher scores on antisocial traits than the deniers. However, the main effect for victim's age was not significant ( $F(1, 364)=2.089$ ,  $p=.149$ ,  $\eta^2=.006$ ) and neither was

the interaction effect of admission status by victim age ( $F(1,364)= 3.98$ ,  $p=.047$ , partial eta squared .011), (see Table 4).

Table 4.

*Means by Victim Age.*

		<i><b>Faking bad</b></i>	<i><b>Faking good</b></i>	<i><b>Antisocial traits</b></i>
<b>Child offenders</b>	Mean	56.86	64.01	52.40
	N	116.00	116.00	116.00
	Standard Deviation	16.03	13.18	10.79
<b>Non-child offenders</b>	Mean	55.57	63.53	53.29
	N	255.00	255.00	255.00
	Standard Deviation	16.23	14.17	10.16
<b>Total</b>	Mean	55.98	63.68	53.01
	N	371.00	371.00	371.00
	Standard Deviation	16.16	13.85	10.35

## Chapter 5

### **Discussion**

The current study examined differences among convicted sexual offenders who admitted versus denied their offense on the validity scales of the MMPI-2-RF. The hypothesis, that complete deniers would score significantly higher on the fake good scale (L-r) and lower on the fake bad (F-r) than Admitters was partially supported by the data. Deniers scored significantly higher on the fake good scale, suggesting they were more likely to minimize or lie about their psychological problems than admitters. No significant differences were noted on the F-r scale suggesting levels of faking bad or exaggerating psychological symptoms was similar between groups.

Within the current sample, 45% scored in the clinical range (65 or higher) on the fake good, while only 9% of the sample scored in the clinical range on the faking bad scale (65 or higher). This suggests that the more predominant type of response bias seen among outpatient sexual offenders is likely to be minimization of psychological symptoms as opposed to over-reporting. This is important because, should sexual offenders report symptoms at intake, it is likely they are experiencing their symptoms at a more severe level than indicated.

The second purpose of the study was to examine differences in antisocial traits among sexual offenders who admit or deny their offenses and offenders who choose child or non-child victims. Results did not support the hypothesis that sexual offenders who admit their offenses would score lower on antisocial traits than those who deny them. Instead, results showed the opposite; admitters of sexually abusive behaviors at the time

of the intake interview reported higher levels of antisocial traits than their peers who denied any aspect of their offense. These findings are consistent with many other studies that have shown that admitters report more antisocial traits than deniers (Baldwin & Roys, 1998; Grossman & Cavanaugh, 1989; Lanyon, 1993; Lanyon & Lutz, 1984; Wasylw, Grossman, & Haywood, 1994). Findings did not provide support for the hypothesized differences in antisocial traits between sexual offenders of children versus non-children. Similarly, victim age did not moderate the relation of admission status to antisocial traits, as it was hypothesized.

In sum, results showed that contrary to expectations, admitters reported lower scores than deniers in the fake good but higher in the antisocial traits scales. There were no significant differences on the tendency to fake-bad. These findings suggest that sexual offenders who admit to their sexually abusive behaviors at intake are more open to report other psychological problems than offenders who deny their offenses.

Although differences in antisocial traits among admitters and deniers were statistically significant, clinically, these differences may not be as meaningful. The range of the sample scores on the antisocial traits scale was 34 to 87 (out of a possible score of 34 to 99) with only 15% of the sample scoring in the clinically significant range (65 and over). Scores may remain relatively low in outpatient samples because the legal system is more likely to incarcerate individuals who exhibit higher levels of antisocial traits in order to preserve public safety. Although some violent or otherwise antisocial individuals are released from prison, they may not be as readily able to obtain parole as others with obviously lower levels of antisocial traits.

In regards to the Criminogenic and Adaptational Model of denial, this study found limited support for either model. Because the Criminogenic model suggests that sexual offenders deny their offenses due to the presence of antisocial traits, and the Adaptational model proposes that offenders deny to avoid negative consequence, the finding that admitters actually scored higher on antisocial traits than deniers does not provide support for either the the Criminogenic or the Adaptational model. It is possible that the limited definition of denial in the current study made support for either model obscure.

### **Limitations**

The major limitation of the study is the low levels of internal consistency the MMPI scales showed with participants in the study. The statistical significant findings related to the Fake Good scale must be interpreted carefully, because the internal reliability coefficient for that scale was very low (Cronbach alpha = .38). Although no study was found that published the alpha levels for the fake good scale, there are numerous comparisons in the Technical Manual, none of which were found to be .57 in a VA inpatient psychiatric population. The internal reliability coefficients for the other two MMPI scales (fake bad and antisocial traits) although more acceptable, also were rather low (.61 and .60, respectively). It is difficult to ascertain to what extent findings reflect actual relations among constructs or error variance. It would be helpful for future research to ensure the reliability of the fake good scale with sexual offender populations.

Another limitation to the current study is the nature of the archival data, which is limited. Not only were the available variables limited, the methods of data collection were not under the purview of the primary investigator. In particular, it is unclear if any

data collection problems may have accounted for the low internal consistency of the MMPI-2-RF scales noted above. In addition, information regarding the duration of time passed between the commission of a sexual offense and the administration of the MMPI-2, leaving any potential impact unaccounted for. A common example on how time lapse could possibly impact the results of an MMPI-2 is in the cases when a juvenile offender commits an offense but the victim makes outcry when the offender is an adult. The traits measured by the MMPI-2 would have theoretically changed from the time the offense occurred until adulthood. Similarly, it is not possible to determine what percentage of the sample was in the outpatient sample as a probationer or as a parolee. As mentioned previously, because the legal system's risk assessment to community safety automatically removes the most violent or antisocial offenders from outpatient samples, the only way they would end up in such a sample is via parole. Because some parolees may have served extensive time in prison, or received a variety of treatment programs, it is difficult to have a clear understanding of how these factors may have impacted the characteristics of the sample.

Another limitation to the study was the operational definitions used for victim age and denial. The age of the victim was defined as 12 years old or younger in an attempt to distinguish any pedophilia within the sample. Pedophilia is the attraction to children but it is common for sexual offenders to offend against a child without having pedophilia, and such cases are often referred to as "situational offenders." These offenders typically are more responsive to treatment and have lower recidivism than pedophiles. Pedophiles have been noted to have significantly different characteristics from non-child offenders;

however, the base rates of pedophilia are relatively low in outpatient samples. Therefore, it is likely that studies that have reported differences in psychological functioning between sexual offenders of children and adults may have had more variability in their sample than may be found in an outpatient setting such as the one used for the current study.

The current study utilized only information of the offenders' current charge. This was also a limitation because some studies have noted a distinct difference in some psychological traits between sexual offenders who have both child and non-child victims compared to offenders who focus on only one type of victim (Olver, Stockdale & Wormith, 2011). Based on the data available, we were unable to identify a group of mixed offenders for comparison.

Regarding the definition of denial, it was measured as a dichotomous variable (yes or no); however, other studies have found more differences between sexual offenders based on a more complex, dynamic conceptualization of denial, (Harkins, Beech & Goodwill, 2010; Kennedy & Grubin, 1992; Nunes, et al., 2007). Kennedy and Grubin developed a typology of sexual offenders based on denial and other factors while Nunes, et al. and Harkins, Beech & Goodwill used combinations of self-reports and clinician rated instruments to develop a comprehensive measure of aspects of denial. Future research in this area should use a more complex measure of denial that allows for the continuous assessment of level of denial rather than characterizing admission versus denial in a categorical fashion, present versus absent.

With regards to additional areas of future research, several extensions to the current study are suggested. First, a more complex operational definition of denial would provide a richer understanding of sexual offenders in future studies. Because the current study was conducted with an outpatient sample of sexual offenders, a comparison group of inpatient sexual offenders would provide further clarity of denial and antisocial traits between these groups. In addition, outcomes associated with denial would also be useful in future research designs, such as determining if polygraph failures are predicted by denial at intake. Because denial has been linked to treatment failure and sexual offenders who do not complete treatment are at higher risk of sexual recidivism, it would be important to explore the dynamics of denial that impact removal from treatment programs. And finally, it is imperative to examine treatment and recidivism outcomes with individuals who maintain their denial throughout treatment in order to compare them to individuals who admit on intake.

## References

- Abracen, J., Looman, J., & Langton, C. M. (2008). Treatment of sexual offenders with psychopathic traits: Recent research developments and clinical implications. *Trauma, Violence, & Abuse, 9* (3), 144-166. doi:10.1177/1524838008319633.
- Ahlmeier, S., Kleinsasser, D., Stoner, J. & Retzlaff, P. (2003). Psychopathology of incarcerated sex offenders. *Journal of Personality Disorders, 17*, 306-318.
- Baldwin, K., & Roys, D. (1998). Factors associated with denial in a sample of alleged adult sexual offenders. *Sexual Abuse: Journal of Research and Treatment, 10* (3), 211-226. doi:10.1023/A:1021317920914.
- Ben-Porath, Y. & Tellegen, A. (2008). *MMPI-2-RF Manual for Administration, Scoring and Interpretation*. University of Minnesota Press: Minneapolis, MN.
- Beyko, M. J., & Wong, S. P. (2005). Predictors of treatment attrition as indicators for program improvement not offender shortcomings: A study of sex offender treatment attrition. *Sexual Abuse: Journal of Research and Treatment, 17* (4), 375-389. doi:10.1177/107906320501700403.
- Curnoe, S. & Langevin, R. (2002). Personality and deviant sexual fantasies: An examination of the MMPIs. *Journal of Clinical Psychology, 58*, 803-815.
- Davis, K. & Archer, R. (2010). A critical review of objective personality inventories with sex offenders. *Journal of Clinical Psychology, 66*, 1254-1280.
- Feelgood, S. Cortoni & Thompson (2005). Sexual coping, general coping and cognitive distortions in incarcerated rapists and child molesters. *Journal of Sexual Aggression, 11*(2), 157-170.

- Gibbons, P., de Volder, J., & Casey, P. (2003). Patterns of Denial in Sex Offenders: A Replication Study. *Journal of the American Academy of Psychiatry and the Law*, 31, 336-344. Retrieved from EBSCOhost.
- Groff, M. & Hubble, L. (1984). A comparison of father–daughter and stepfather– stepdaughter incest. *Criminal Justice and Behavior*, 11, 461-475.
- Grossman, L. S., & Cavanaugh, J. L. (1989). Do Sex Offenders Minimize Psychiatric Symptoms? *Journal of Forensic Sciences*, 34 (4), 881-886.
- Grossman, L. & Cavanaugh, J. L. (1990). Psychopathology and denial in alleged sex offenders. *Journal of Nervous and Mental Disease*, 178 (12), 739-744.
- Grossman, L., Haywood, T. & Wasylw, O. (1992). The evaluation of truthfulness in alleged sex offenders' self-reports: 16 PF and MMPI Validity Scales. *Journal of Personality Assessment*, 59, 264-275.
- Hanson, K. & Bussiere, M. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology*, 66, 348-362.
- Hanson, K. & Morton-Bourgon, K. (2005). The characteristics of persistent sexual offenders: A meta-analysis of recidivism Studies. *Journal of Consulting and Clinical Psychology*, 73, 1154–1163.
- Harkins, L., Beech, A. & Goodwill, A. (2010). Examining the influence of denial, motivation, and risk on sexual recidivism. *Sexual Abuse: Journal of Research and Treatment*, 22, 78-94.
- Kalichman, S., (1991). Psychopathology and personality characteristics of criminal sexual offenders as a function of victim age. *Archives of Sexual Behavior*, 20, 187-197.

- Kennedy, H. & Grubin, D. (1992). Patterns of denial in sex offenders. *Psychological Medicine*, 22, 191-196.
- Langton, C., Barbaree, H., Harkins, L., Arenovich, T., Mcnamee, J., Peacock, J., Dalton, A., Hansen, K., Luong, D. & Edward, H. (2008). Denial and minimization among sexual offenders: Posttreatment presentation and association with sexual recidivism. *Criminal Justice and Behavior*, 35, 69-98.
- Lanyon, R. (1993). Validity of MMPI sex offenders scales with admitters and nondamitters. *Psychological Assessment*, 5, 302-306.
- Lanyon, R. & Lutz, R. (1984). MMPI discrimination of defensive and nondefensive felony sex offenders. *Journal of Consulting and Clinical Psychology*, 52, 841-843.
- Larochelle, S., Diguier, L., Laverdière, O., & Greenman, P. (2011). Predictors of psychological treatment noncompletion among sexual offenders. *Clinical Psychology Review*, 31(4), 554-562. doi:10.1016/j.cpr.2010.12.004.
- Levenson, J. S., & Macgowan, M. J. (2004). Engagement, Denial, and Treatment Progress Among Sex Offenders in Group Therapy. *Sexual Abuse: Journal Of Research And Treatment*, 16(1), 49-63. doi:10.1177/107906320401600104.
- Looman, J. & Marshall, W. (2005). Sexual arousal in rapists. *Criminal Justice and Behavior*, 32, 367-389.
- Lord, A., & Willmot, P. (2004). The process of overcoming denial in sexual offenders. *Journal of Sexual Aggression*, 10 (1), 51-61. doi:10.1080/13552600410001670937.
- Lund, C. (2000). Predictors of Sexual Recidivism: Did meta-analysis clarify the role and relevance of denial? *Sexual Abuse: A Journal of Research and Treatment*, 12, 275-287.

- Marshall, W. L. (1994). Treatment effects on denial and minimization in incarcerated sex offenders. *Behaviour Research And Therapy*, 32(5), 559-564.
- Marshall, W., Thornton, D., Marshall, L. Fernandez, Y. & Mann, R. (2001). Treatment of sexual offenders who are in categorical denial: A pilot project. *Sexual Abuse: A Journal of Research and Treatment*, 13, 205-215.
- Maruna, S. & Mann, R. (2006). A fundamental attribution error? Rethinking cognitive distortions. *The Legal and Criminological Psychology*, 11, 155-177.
- Mills, J. F., & Kroner, D. G. (2003). Antisocial constructs in predicting institutional violence among violent offenders and child molesters. *International Journal of Offender Therapy and Comparative Criminology*, 47(3), 324-334. doi:10.1177/0306624X03047003006.
- Nunes, K., Hanson, K., Firestone, P., Moulden, H., Greenberg, D. & Bradford, J. (2007). Denial Predicts Recidivism for Some Sexual Offenders. *Sex Abuse*, 19, 91–105.DOI 10.1007/s11194-007-9041-8.
- Olver, M. Stockdale, K. & Wormith, J. (2011). A Meta-Analysis of Predictors of Offender Treatment Attrition and Its Relationship to Recidivism. *Journal of Consulting and Clinical Psychology*. 79, 6–21.
- Rogers, R. & Dickey, R. (1991). Denial and minimization among sex offenders: A review of competing models of deception. *Annals of Sex Research*, 4, 49-63.
- Shechory, M., & Ben-David, S. (2005). Aggression and Anxiety in Rapists and Child Molesters. *International Journal of Offender Therapy and Comparative Criminology*, 49(6), 652-661.

- Tellegen, A. & Ben-Porath, Y. (2008). *MMPI-2-RF Technical Manual*. University of Minnesota Press: Minneapolis, MN.
- Terry, K. J. (2005). *Sexual offenses and offenders: Theory, Practice, and Policy*. Wadsworth Publishing: Florence, KY. ISBN-10: 0495000388.
- Wasylw, Grosman & Haywood (1994). Profiling psychological distortion in alleged child molesters. *Psychological Reports*, 75, 915-927.
- Whitaker, D., Le, B. Hanson, K., Baker, C., McMahon, P., Ryan, G., Klein, A., & Rice, D. (2008). Risk factors for the perpetration of child sexual abuse: A review and meta-analysis. *Child Abuse & Neglect*, 32, 529-548.
- Yates, P. (2008). Is sexual offender denial related to sex offence risk and recidivism? A review and treatment implication. *Psychology, Crime & Law*, 15, 183-199.