

A Two by Two Comparison of Offense and Gender: What Characteristics do Female Sex
Offenders Have in Common with Other Offender Groups?

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Abstract

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The current study was a chart review that examined 31 female sex offenders (FSO), 31 male sex offenders (MSO), 31 female violent offenders (FO), and 31 male violent offenders (MO) using a 2 (female/male) by 2 (sex/violent offender) design. This is the first study to include three comparison groups when researching female sex offenders. Several variables appeared to relate to gender. Having a co-perpetrator during the crime and being a passive participant in the crime was related to being a female. There was a main effect of gender on the Social Introversion Scale of the MMPI-2 indicating that the male samples had a higher mean score than the two female samples. There were several variables that appeared to be related to the crime. Sex offenders were on average older than their violent counter parts at the time of their first conviction. The FSO sample had the largest percentage of reported sexual victimization. However, both sexual offender samples were significantly different from the MO group, i.e. reported more sexual victimization. Sex offenders reported less drug abuse history than the two violent groups. The two sex offender groups also had a lower reading and spelling level on the WRAT than the violent offender samples. Finally, there was a main effect of crime on the Schizophrenia scale of the MMPI-2 suggesting that the sex offender samples had higher mean scores. There were also several variables associated with the FSO group. The FSO sample reported less alcohol history and had significantly less admissions to the crime than the two violent offender samples. Significantly more FSOs knew their victim and were biologically related to their victim than MSOs. Lastly, the FSO sample was the least discriminate regarding their victim gender of all the offender samples.

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A Two by Two Comparison of Offense and Gender: What Characteristics do Female Sex Offenders Have in Common with Other Offender Groups?

Female sexual perpetrators are an under-represented offender population (Becker, Hall, & Stinson, 2001; Grayston, & De Luca, 1999; Hislop, 2001; Wakefield, & Underwager, 1991). Multiple barriers have been identified as contributing to the lack of identification of female sexual perpetrators. Denov (2001) interviewed police officers and psychiatrists about their sex offender training with the hypothesis that many professionals adhere more to their training than to their experience. Participants in the study reported that their training focused entirely on male offending. Denov exemplified this point by examining the Diagnostic and Statistical Manual of Mental disorders (DSM-IV; APA, 1994), and indicated how it repeatedly implied that pedophiles are typically male. The revised DSM-IV-TR (APA, 2000), although revised, still contains one of the examples given by Denov (2001) in the definition of pedophilia:

[Pedophiles] “develop complicated techniques for obtaining access to children, which may include...marrying a woman with an attractive child” (APA, 2000: 571).

Gender bias in sex offender training for professionals is unfortunate because it may contribute to poor identification. If professionals are taught that only males sexually offend, they might not even consider the possibility of a female perpetrator, which in turn would decrease the possibility of identification. Denov (2001) concluded that we live in a culture of denial where female sex offenders may not be identified or treated because of this gender bias. The culture we live in has even promoted the view of a female as a nonviolent nurturer without a sexual drive and the sexual abuse of a younger male by an older female as a positive fantasy (Becker, Hall, & Stinson, 2001; Denov, 2001; Hislop, 2001). Education and training of individuals who might have contact with female sex offenders or those who make policy and law for better

identification and treatment of female sex offenders are advocated by many (Becker et al., 2001; Denov, 2001, 2003). Recently, high profile cases of female sex offenders, especially of teachers such as Mary Kay Letourneau, etc. (www.courttv.com), have raised awareness of this problem around the globe.

Related to barriers in identification of female sex offenders, prevalence estimates vary from 1% to 42.7% of the sex offender population. Studies examining incarcerated samples usually report low prevalence rates of female sex offenders around 1-2% (Lewis & Stanley, 2000; Miccio-Fonseca, 2000; Rowan, Rowan, & Langelier, 1990; Vandiver & Kercher, 2004). In 2000, the Center for Sex Offender Management reported an increase in identification of female sexual offenders from 1% (1994) to 8% (1997). Uniform Crime Reports (UCR, 2003) reported that females account for 1.3% (247 arrests) of forcible rape and for 8.3% (5415 arrests) of sexual offense arrests. There are, however, several problems inherent in the reporting from this agency. Most national data collections only label sexually criminal acts as rape and sexual assault/other sex offenses (U.S. Department of Justice, Bureau of Justice Statistics, 1997). "Forcible rape" is defined as forced intercourse with a female against her will, or with a threat of force, including attempts (i.e., a male cannot be a victim of rape according to this definition). "Sex offenses" include sexual acts, and attempts against decency, morals, and chastity. This label includes statutory rape and sodomy, but excludes prostitution, rape, and commercial vice (UCR, 2003).

The prevalence numbers reported for female sex offenders by this source might not accurately reflect the perpetration rate for several reasons. First, these numbers are based upon the arrested females from the participating agencies (agency participation is voluntary). Second, these agencies are only required to report forcible rapes. Third, only females can be victims of a forcible rape, according to the definition, excluding potential male-victim crimes. Fourth,

females may be more likely to engage in “sex offenses” such as molestation and statutory rape that do not have to be classified in the UCR data set. For example, Vandiver and Kercher (2004) examined all of the registered female sex offenders in the state of Texas on April 27, 2001. Their study used the largest sample of registered female sex offenders (471) in the research literature of this population. The results suggested that the majority of female sex offenders were arrested for indecency with a child or sexual assault with a victim around the age of 12 years of either gender, who was an acquaintance or relative.

Most sexual offenses are believed to have a large “dark number” of sexual victimizations that remain unreported. There is a large discrepancy between the prevalence rates of female sexual offending reported by criminal justice agencies and studies investigating incarcerated offenders as compared to the rates reported by victim organizations and studies with community samples. The Association for the Treatment of Sexual Abusers reported that female perpetrators were identified in 20% of child sexual offenses (ATSA, 1996). Faller (1989) reported that male victims identified a female to be the perpetrator in 28.7% of the cases. In a survey of 2,972 male college students, 42.7% of the 216 identified victims of sexual abuse reported a female perpetrator (Risin & Koss, 1987). Although most reported sexual offenses are committed by males (UCR, 2003), disregarding female perpetrators is problematic given the prevalence rates identified in these victim studies. However, the low number of identified female perpetrators makes this population a difficult target for scientific examination.

Review of Literature on Female Sexual Perpetration

Although limited, the research literature on female sex offenders has identified some variables of interest. These variables can be organized into two large categories: offender

variables and victim/crime variables. See Johansson-Love and Fremouw (2005) for a critical review of the 13 studies that have examined female sex offenders.

Offender Demographic/Historical Variables

Although the literature on female sex offenders has consisted primarily of case studies and small sample group studies, a few larger sample studies have examined offender characteristics. These offender variables consisted of demographic variables, such as age, marital status, race, and education level, and historical variables, such as number of sexual arrests and convictions, sexual victimization, and psychiatric history. The following sections will review these findings.

Age. The age of the offenders at the time of their first arrest/identification for a sexual offense appears to vary widely from teenagers (Faller, 1987, 1995; Kubik, Hecker, & Righthand, 2002; Lewis & Stanley, 2000; Mathews, Hunter, & Vuz, 1997) to as old as age 77 (Vandiver & Kercher, 2004). This should not be interpreted as age of onset since these offenders might have engaged in their criminal behavior prior to being identified. A study, by Kubik, Hecker, and Righthand (2002), investigated the age at first sexual offense ($M = 11.18$, $SD = 2.93$) in an adolescent sample of female sex offenders (FSO) and compared it to the age at first victim offense ($M = 14.45$, $SD = 1.57$) for an adolescent sample of female non sexual offenders (FO) and found that the FSO sample committed their offense at a significantly younger age than the FO sample. Two studies (Allen, 1991; Faller, 1995) suggested that FSOs are on average younger than male sex offenders (MSO) at the time of the initial offense. The Faller (1995) study reported a significant difference in the average age of their clinical FSO sample (28 years) and the MSO sample (33.2 years).

Marital Status. Findings regarding marital status have varied across different studies and might have been influenced by the characteristics of the sample selected such as, incarcerated or not and the age of the samples. Faller (1995) reported that 37.5% of her FSO sample was married ($M = 28$ years old), but Green and Kaplan (1994) reported that a larger number of their incarcerated FSOs ($M = 36.45$ years old), as compared to FOs ($M = 35.27$ years old), had never married. Miccio-Fonseca (2000) suggested that 17% of their mixed FSO sample ($M = 22$ years old) and 17% of MSOs ($M = 22$ years old) and 55% of FOs ($M = 34$ years old) were married. Hislop (2001) stated that most studies have found female perpetrators to have multiple unstable relationships and marriages.

Ethnicity. Few studies have reported the race of the female sexual perpetrators, but the studies that did report this variable examined predominately Caucasian samples. Faller (1995) investigated a clinical sample of 72 FSOs and reported that 94% were Caucasian, 4% African American and 1.4% Native American. Their sample was taken from Michigan, Ohio, and Ontario. For comparison purposes the racial make-up of Michigan is 81.4% Caucasian, 14.3% African American and .6% Native American and Alaska Native (<http://quickfacts.census.gov/qfd/states>). Ohio has 85.2% Caucasian and 11.9% African American persons and an Native American and Alaskan Native population of .2%. The racial make-up of Ontario is not known since there Census divides people into country of origin, not race ([www.40.statcan.ca/101/cst01/demo26g.htm](http://www40.statcan.ca/101/cst01/demo26g.htm)). Lewis and Stanley (2000) reported that 2/3 of their sample was Caucasian and 1/3 was African American in their South Carolina, sample ($N = 15$) similar to the racial make-up of the state, 68.4% Caucasian and 29.2% African American (<http://quickfacts.census.gov/qfd/states>). Vandiver and Walker (2002) reported that 90% Caucasian and 10% African American comprised their sample of 40 FSOs in Arkansas. The U.S.

Census (<http://quickfacts.census.gov/qfd/states>) reported that Arkansas had 81.3% Caucasian and 15.8% African American persons. Vandiver and Kercher (2004) reported that their sample of 471 female registered sex-offenders in Texas consisted of 88% Caucasian and 12% African American individuals. This racial make-up is fairly congruent with that reported by the U.S. Census (<http://quickfacts.census.gov/qfd/states>), indicating that Texas has 83.3% Caucasian and 11.7% African American persons in the state. Ferguson and Cricket Meehan (2005) conducted their study in the state of Florida and reported 77% Caucasian, 20% African American, 2% Hispanic, and 1% other of their sample of 279. Except for the much lower percentage of Hispanic offenders in their sample, the results are similar to the U. S. Census Bureau reported racial make-up of the state of Florida; Caucasian persons 80.6%, African American persons 15.7%, and persons of Hispanic or Latino origin 19.0%. (<http://quickfacts.census.gov/qfd/states>)

Educational Level. The educational level for FSOs has been reported in a limited number of studies. Two studies reported less than a high school degree appeared prevalent in the FSO samples (Lewis & Stanley, 2000, $M = 28.2$ years old; Nathan & Ward, 2002, $M = 30$ years old), whereas one (Allen, 1991) reported that the majority of their registered/convicted sample (80% between 20 and 39 years old) had a high school degree. Female sex-offenders have also been identified in a college sample where they naturally had a high school degree (Fromuth & Conn, 1997).

Number of Sexual Offense Arrests. The number of sexual offense arrests and convictions has been reported in a limited number of studies. Kubik et al. (2002) indicated that 63.6% of their sample of adolescent FSOs had a non-sexual victimless offense history compared to 81.8% of FOs. Vandiver and Walker (2002) reported that the average number of arrests for a sexual offense was 1.4 ($SD = .87$) and that 73% of their sample was initially arrested for a sexual

offense. Vandiver and Kercher (2004) reported that 86% of the FSOs had been arrested for only one sexual offense (range 1-6). Ferguson and Meehan (2005) reported that only 24% of their sample had a prior arrest before the index sex offense, and that overall, 15% of the sample had one previous sex offense conviction whereas 6% had several previous sex offense convictions.

Sexual Victimization. Sexual victimization is the offender variable that has received the most empirical support and it appears that FSOs have experienced sexual victimization at a higher rate than other females or FOs and MSOs (Adshead, Howett, & Mason, 1994; Allen, 1991; Fromuth & Conn, 1997; Grayston, & De Luca, 1999; Higgs, Canavan, & Meyer, 1992; Hislop, 2001; Kaplan & Green, 1995; Kubik et al., 2002; Lewis & Stanley, 2000; Lloyd, 1987; Mathews et al., 1997; Miccio-Fonesca, 2000; Nathan & Ward, 2002; Vick, McRoy, & Matthews, 2002). Physical abuse victimization also has been reported to be more common in the FSO population than MSO population (Allen, 1991; Kubik et al., 2002)

Psychiatric History. History of psychiatric problems is prevalent in the FSO population (Faller, 1995; Mathews, Hunter, & Vuz, 1997), but there has been a lack of standardized assessments and of consistency of definitions in these studies which makes interpretation of reported results problematic. For example, Faller (1995), in their clinical sample, reported coding mental illness (excluding personality disorders), mental retardation, and substance abuse based on a chart review. In their sample of 72 women, 31.9% were positive for mental illness, 22.2% were described as having mental retardation, and 51.4% had some type of substance abuse history. The authors classified any person with a history of a nervous break down, psychosis, past inpatient hospitalizations for mental health problems, or testing results indicating psychosis, thought disorder, or depressive disorder, as mentally ill. A person could be classified as having mental retardation if they had psychological testing, "EMI classes", data indicating mental

retardation in the chart, or if the person appeared cognitively deficient during an interview.

Substance abuse was determined through self report of any alcohol or drug use, any treatment history, record of substance abuse, and if a victim or a family member reported abuse. This is just one example of a method of coding for mental illness, mental retardation, and substance abuse that can potentially create a lot of variability and lead to confusion when addressing the issue of psychiatric history among FSOs.

Initial research of this population suggested that FSOs were more likely to be diagnosed with psychotic problems. Later studies suggested that psychological problems, but not psychosis, are common in this population (Grayston & De Luca, 1999; Hislop, 2001). Substance abuse (Adshead et al., 1994; Grayston & De Luca, 1999; Hislop, 2001), depression, anxiety, dissociation, and post-traumatic stress disorders (Grayston & De Luca, 1999; Hislop, 2001) seem to be prevalent. Lewis and Stanley (2000) did, however, report a high rate of psychosis and depression in their sample of FSOs, but their findings should be carefully interpreted because their sample consisted of FSOs referred for a competency to stand trial evaluation, which would likely be a biased sample among those with more severe psychological problems. Green and Kaplan (1994), in an incarcerated sample, reported similar levels of psychiatric problems, including substance abuse, in their samples of 11 FSOs and 11 FOs. However, they reported that the female sex offenders were more psychiatrically impaired than the FOs as measured by the Global Assessment of Functioning Scale in the Structured Clinical Interview for DSM- II-R, Outpatient version (SCID-OP). Psychiatric treatment was investigated by Miccio-Fonseca (2000) and indicated that their mixed FSO sample had received more psychiatric treatment than their FO control sample. PTSD has been shown to be more prevalent in FSO than MSO juvenile samples (Kubik et al., 2002). Allen (1991) and Pothast and Allen (1994) have suggested that both male

and female sex offenders are more feminine as measured by the Bem Sex-Role Inventory (Bem, 1981).

A literature review by Grayston and DeLuca (1999) suggested that substance abuse/dependency is present in the modal FSO. A recent review (Johansson-Love & Fremouw, 2006) suggests that confident conclusions regarding psychological problems including PTSD, Depressive Disorder, and Substance Abuse were difficult to make because the results of the studies investigating psychopathology were inconsistent and suffered numerous methodological flaws (Faller, 1995; Fromuth & Conn, 1997; Lewis and Stanley, 2000; Kubik et al., 2002; Nathan & Ward, 2002). Two studies have specifically mentioned that substance abuse was present in a minority of their female sex-offender samples (Kubik et al., 2002; Lewis & Stanley, 2000).

Summary. Overall, the limited research has suggested a relationship between FSOs and the following variables: (a) a lower average age at the time of their first sex offense, and (b) a history of previous sexual victimization.

Victim/Crime Variables

The literature reports several important victim/crime variables associated FSOs, including the age of victim, victim gender, relationship between the victim and the perpetrator, active or passive female perpetrator, type of abuse/crime, presence of threats and force, co-perpetrator, and admission of guilt. Each will be reviewed in the following sections.

Victim Age. Some of the larger statewide studies lend insight into the age of the victims. Vandiver and Walker (2002) investigated all ($N = 40$) registered FSOs in Arkansas on February 1, 1999, and reported that 50% of their victims were categorized as 11-16 years and 24 % were in the 4-10 age range. Vandiver and Kercher (2004) utilized all registered FSOs in the state of

Texas on April 27th 2001. This study grouped victims whose ages ranged from infancy to 97 years old into age groups (0-5, 6-11, 12-17, & 17+) based on previous research and revealed that 53% of the victims fell in the 12-17 year old age group. However, the authors cautioned that the younger victims might not be identified by the criminal justice system. Ferguson and Cricket Meehan (2005) utilized a sample of 279 convicted FSOs in the Florida Department of Corrections (DOC). They reported that 67.7% of the victims of their sample of perpetrators were between 12-16 years, 15.3% of the victims were under the age of 12 years, and 7.1% were adults.

Victim Gender. The gender of the victim has also been examined. Grayston and De Luca (1999) concluded in their literature review that females were more likely to victimize females, but males were victimized as well. This variable may need further investigation because there is currently no clear support for a single preferred victim gender in the FSO literature according to a recent literature review (Johansson-Love & Fremouw, 2006). It has also been suggested that offenders with multiple victims abuse either gender (Vandiver & Kercher, 2004).

Relationship Between Victim and Offender. The relationship between the offender and the victim has been investigated in several studies with varying results. Mathews et al. (1997) suggested that in their sample of 67 adolescent FSOs, only 13% were strangers to their victim. In Fromuth and Conn (1997)'s study of self-reported sexual perpetrators in a college population, 68% of the victims were identified as family members. Faller (1995) reported that in the sample of 40 clinically-referred perpetrators, 85% were mothers and 55% abused only their own children, whereas 30% abused both their own and other's children. Kaplan and Green (1995) reported that 45.5% of their sample of offenders was biologically-related to their victims. In their competency to stand trial sample, Lewis and Stanley (2000; $N=15$) reported that 58.3% abused their own children. Miccio-Fonseca (2000) compared FSO and MSO samples (both adolescent

and adult) and the author indicated that 70% of the female sex-offender victims and 29% of the male sex-offender victims were family members. Kubik et al. (2002) compared adolescent FSO and MSO samples and suggested that 9.1% of females abused unknown victims, whereas none of the males did. Fifty-four and five tenths percent of the female offenders and 45.5% of the males were biologically-related to their victims. The statewide studies suggests that 37% of the FSOs in Arkansas ($N = 40$; Vandiver & Walker, 2002) were related to their victim, and in Texas ($N = 471$; Vandiver & Kercher, 2004), 46% were acquainted with their victim, 37% were related to the victim, and only 7% did not know their victim. It appears that the majority of FSOs know their victim and are more often biologically related to their victim than their male counterparts.

Type of Offense. Grayston and DeLuca's review (1999) identified two categories of FSO behavior while committing the offense: active or passive. An active female physically participates in the sexual victimization of another person, whereas a passive female will observe the abuse or know about it and does nothing stop it. The ratio of active versus passive FSOs is not clear and warrants further investigation. This is an interesting categorization, as the literature suggests that a subgroup of female sex offenders offend with a co-perpetrator. However, it appears that FSOs are typically charged with active crimes. Faller (1995) reported that in her clinical sample, the most common type of abuse/crime was sexual contact (30.6%) followed by intercourse (23.65%). In the Arkansas sample of FSOs ($N = 40$; Vandiver & Walker, 2002), rape was the most common offense (24%) followed by sexual abuse in the first degree (16%). Vandiver and Kercher (2004; $N = 471$) reported the three most common sexual offenses of the registered females to be "indecent with a child- sexual contact" (33%), "sexual assault on a child" (18%), and "aggravated sexual assault" (14%).

Presence of Threat. The presence of threats and force is also an important variable because it helps to determine the type of crime with which the sexual perpetrator is charged. Kubik et al. (2002) reported that the adolescent FSOs used physical restraint/force and weapons at the same level as adolescent MSOs. Ferguson and Cricket Meehan (2005) also investigated force used during the offense. They supported their hypothesis (citing a study by Holmes (1991) that suggested that male sex offenders used more violence with time) that perpetrator age and length of criminal history would predict the amount of force used. However, Ferguson and Cricket Meehan (2005) reported that crime history was a better predictor of force than age. They also reported that the majority of the offenses (86.1%) involved some physical force and 17% of these could be classified as victim mutilation/disfigurement.

Presences of others. Vandiver and Kercher (2004) identified the presence of a co-perpetrator as a potentially important variable. The presence of a dominant male co-perpetrator has been examined in previous reviews (Grayston & De Luca, 1999; Wakefield & Underwager, 1991) and was suggested to be a distinct phenomenon for FSOs (Wakefield & Underwager, 1991) and to occur in the majority of the cases where a female is involved in sexual abuse (Grayston & De Luca, 1999). This is different from males who usually act alone (Finkelhor & Williams, 1988; Solomon, 1992). However, a recent review (Johansson-Love & Fremouw, 2006) reported that only 3 out of 13 studies indicated that a majority of the FSOs had acted in conjunction with a male. Vandiver (2006), using the National Incident-Based Reporting System (NIBRS), examined all (N = 232) reported arrests of female sex offenders during 2001 and indicated that 46% of their sample had a co-perpetrator. This variable may have potential implications for criminal charges, sentencing, and treatment of female sex offenders and it should therefore be investigated further.

Admission of guilt. Admission or denial of guilt may also be a useful variable. Allen (1991) examined registered/convicted samples to suggest that MSOs are more likely to admit their guilt than FSOs. Faller (1995) reported that 68% of the female sex-offenders admitted to some abuse, 29.2% gave a full confession of all cases of abuse reported by the victims, but 31.9% of the offenders denied the abuse. Whether a sexual perpetrator took a plea bargain or whether s/he went to trial is a variable that has not been extensively investigated in this population.

Summary. Overall, the strongest findings distinguishing FSOs on victim/crime variables are (a) most of their victims are adolescents, between 11-17 years, (b) the majority of FSOs know the victim and more of them are biologically related to their victim than MSOs, and (c) more FSOs have co-perpetrators than MSOs.

Risk Assessment.

Risk assessments are commonly used in the criminal justice system in order to predict the future violence of identified perpetrators. Risk assessments are used in numerous areas such as sentencing, reunification of families, conditional release, and civil commitments (Hanson, 2000). There are several laws in place, such as, those regarding the civil commitment of sexually-violent perpetrators, that have increased the need for prediction of recidivism and especially prediction of specific (sexual) recidivism. Different risk factors are important in different types of risk assessments and they can be categorized into static and dynamic variables (Hanson, 2000). Static variables are factors that do not change over time such as a person's age at the time of his/her first offense. Dynamic variables are able to change over time and can be divided into stable and acute (Hanson, 2000). Stable factors can last for long periods of time such as alcoholism and depression. Acute factors, on the other hand, change more rapidly such as

intoxication and victim availability. In Hanson's (2000) review of risk assessments, he makes a final recommendation of using the Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995) or the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, Rice, & Cormier, 1998) to predict any type of recidivism. The LSI-R incorporates a great number of dynamic factors but the VRAG is a better predictor of violent recidivism (Hanson, 2000). Hanson (2000) stated that The Minnesota Sex Offender Screening Tool-Revised (MnSOST-R; Epperson, Kaul, Hesselton, Alexander, & Goldman, 1999) and the Static-99 are two promising devices for predicting sexual recidivism. These types of risk assessments have been studied with male offender populations but none of these risk assessments have been normed on female sex-offenders. These assessments are being used in the West Virginia Department of Corrections (DOC) with the female sex-offender population. Because these instruments have not been validated for the use with FSOs, it is crucial to examine the results of these assessments for this population, comparing them to the male offender populations.

Rationale

The above victim prevalence research suggests that there are a large number of unreported sexual victimizations by female perpetrators. Female sexual perpetrators are an understudied population. A study of adolescent FSOs (Vick, et al., 2002) indicated that although clinicians reported differences between the male and female sex offenders and observed a need for differential treatment, they treated them in the same manner. Complicating the use of differential treatment is that there is not enough research literature available on female sex offenders. For example, there is only one assessment measure with female sex-offender norms currently available, the Multiphasic Sex Inventory II, MSI-II (Nichols, & Molinder, 2002). No risk assessments and no standardized treatment protocols are available for this population

(Becker et al., 2001). There is, therefore, a need to learn more about female sex offenders to better educate the community, professionals, and the criminal justice system about this population. Increased knowledge may in turn aid identification, sentencing, and treatment of FSOs.

The purpose of the present study is to replicate and extend the limited FSO research by examining potentially meaningful variables that may relate to the offender's gender or the type of crime committed (sex offense or victim involved offense). This study used a two (male/female) by two (sexual offender/violent offender) quasi experimental design with the independent variables being Gender and Offense. This is the first study to compare adult incarcerated FSOs with adult incarcerated MSOs, and with adult incarcerated FOs and male offenders who have committed a victim involved non sexual offense (MOs). This four group design has not previously been used in the adult female sex-offender population and improved interpretation of findings in comparison to the previously used three group designs (female sex offenders, male sex offenders and female offenders; Miccio-Fonseca, 2000; Kubik, Hecker, & Righthand, 2002). The previously mentioned studies used either adolescent samples or mixed adult/adolescent samples; however, this study only used adult incarcerated samples.

Overall, the study attempted to (a) replicate and expand the investigation of offender demographic/historical and victim/crime variables, (b) explore which offender demographic/historical and victim/crime variables are related to gender, (c) examine which offender demographic/historical and victim/crime variables are related to being a sex-offender, (d) investigate new variables using standardized assessment measures, (e) explore if these standardized assessment scores relate to the type of offense committed, (f) explore whether the

standardized assessment scores relate to gender, (g) explore whether the risk assessment scores relate to gender, and (h) examine other exploratory variables.

Sexual Offense Definition

The major independent variable in this study was being a female sexual offender as defined by being convicted of a sexual offense in the state of West Virginia. In research, a definition of a sexual offense has to be established to identify a population of perpetrators and/or victims. The definitions used can have a wide range and vary from study to study. Child sexual abuse, for instance, can range from intercourse to watching another person perform a sexual act such as masturbation (Hislop, 2001). The term “case of sexual abuse” used in many studies, could include the number of sexual acts performed by the perpetrator, a single victim, or a single perpetrator (Hislop, 2001). The proposed study used the state of West Virginia’s legal definitions of felony sexual offenses because the sample was derived from the state prison population and a person can not be incarcerated in a prison facility without being convicted of a felony offense. The following are the sexual offenses which are defined as a felony offense according to West Virginia law (See appendix A for more complete definitions): sexual assault in the first degree (§61-8B-3), sexual assault in the second degree (§61-8B-4), sexual assault in the third degree (§61-8B-5), sexual abuse in the first degree (§61-8B-7), imposition of sexual intercourse or sexual intrusion on incarcerated persons (§61-8B-10), sexual abuse by a parent, guardian, or custodian; parent, guardian or custodian allowing sexual abuse to be inflicted upon a child; displaying of sex organs by a parent, guardian or custodian (§61-8D-5), sending, distributing, exhibiting, possessing, displaying or transporting material by a parent, guardian or custodian, depicting a child engaged in sexually explicit conduct (§61-8D-6), and incest (§61-8-12).

Overview of Study

Investigators examined all available case files ($n = 31$) of adult female sex-offenders (FSOs) in the West Virginia Department of Corrections and compared them to charts of three control groups: 31 male sex-offenders (MSOs), 31 male offenders (MOs) and 31 female offenders (FOs). Overall, 124 case files were included in the current study. The female and male offenders in the non sex-offender comparison groups had to have committed a victim-involved offense such as robbery, assault, malicious wounding, and so on replicating part of the methodology of Kubik, Hecker, and Righthand (2002). The independent variables in the current study were the offense (sexual or violent/victim involved) and gender (male or female). This created a two (male/female) by two (sex offender/offender) design. There were 19 dependent variables (see Table 1 & 2) and several exploratory variables. All four offender groups were examined on these variables to the extent that they were available (i.e., collected by the DOC staff members for a particular offender and available to the experimenters during the case file reviews). All data were collected through retrospective chart review of the archival data available. There are several problems with archival research such as missing or varying amount of data available, and experimenter bias (Goodwin, 1998). However, the experimenter bias was reduced in the current study by deciding how to select the case files and defining the variables prior to data collection. There are also several advantages to conducting archival research because using an existing sources reduces the data collector bias and subject reactivity to assessment procedures (Goodwin, 1998).

Hypotheses

Offender demographic/historical variable hypotheses:

1. Kubik, Hecker, and Righthand (2002), investigated the age at first sexual offense and reported that adolescent FSOs were significantly younger at the time of their first sex offense than the FOs age at first victim involved offense. Two studies (Allen, 1991; Faller, 1995) have also suggested that FSOs are on average younger than male sex offenders (MSO) at the time of the initial offense. Therefore, it was hypothesized that the female sex offender sample would have a younger age at the time of their first offense than the female offender, male sex offender, and the male offender samples.
2. Sexual victimization has received the most empirical support and it appears that FSOs report experiencing sexual victimization at a higher rate than other females, FOs, and MSOs (Adshead, Howett, & Mason, 1994; Allen, 1991; Fromuth & Conn, 1997; Grayston, & De Luca, 1999; Higgs, Canavan, & Meyer, 1992; Hislop, 2001; Kaplan & Green, 1995; Kubik et al., 2002; Lewis & Stanley, 2000; Lloyd, 1987; Mathews et al., 1997; Miccio-Fonesca, 2000; Nathan & Ward, 2002; Vick, McRoy, & Matthews, 2002). Based on the previous literature it was hypothesized that female sexual offenders would have the highest percentage of prior sexual victimization as compared to FO, MSO, and MO samples.
3. A literature review suggested that substance abuse/dependency is present in the modal FSO (Grayston and DeLuca, 1999). However, one study specifically mentioned that substance abuse was present in a minority of their female sex-offender sample (Lewis & Stanley, 2000). Kubik et al. (2002) also reported that their adolescent sample of FSOs had significantly less alcohol and drug abuse than their FO comparison group. To examine this variable further it was, therefore, hypothesized that substance abuse (alcohol

& drugs) would be less frequent in both the FSO and the MSO samples as compared to the non sexual perpetrator samples.

4. Initial research suggested that FSOs were likely to be diagnosed with psychotic problems, but later studies suggested that psychological problems, but not psychosis, were common in this population (Grayston & De Luca, 1999; Hislop, 2001). PTSD has been shown to be more prevalent in FSO than MSO juvenile samples (Kubik et al., 2002). A recent review (Johansson-Love & Fremouw, 2006) suggests that confident conclusions regarding psychological problems including PTSD, Depressive Disorder, and Substance Abuse were difficult to make because the results of the studies investigating psychopathology were inconsistent and suffered numerous methodological flaws (Faller, 1995; Fromuth & Conn, 1997; Lewis and Stanley, 2000; Kubik et al., 2002; Nathan & Ward, 2002). To further examine psychological problems in the FSO population, it was hypothesized that anxiety related psychiatric problems such as PTSD would be the most prevalent in the FSO sample as compared to the other samples.

Victim/crime variable hypotheses:

5. The presence of a dominant male co-perpetrator has been examined in previous reviews and was suggested to be a distinct phenomenon for FSOs (Grayston & De Luca, 1999; Wakefield & Underwager, 1991) and to occur in the majority of the cases where a female is involved in sexual abuse (Grayston & De Luca, 1999). This is different from males who usually act alone (Finkelhor & Williams, 1988; Solomon, 1992). Vandiver (2006), using the National Incident-Based Reporting System (NIBRS), examined all (N = 232) reported arrests of female sex offenders during 2001 and indicated that 46% of their sample had a co-perpetrator. In addition, a recent review reported that only 3 out of 13

studies indicated that the majority of FSOs had acted in conjunction with a male (Johansson-Love & Fremouw, 2006). It was hypothesized that a larger percentage of the FSO sample would offend together with a co-perpetrator than in the MSO sample, but that the majority of the FSO sample would offend alone.

6. Allen (1991) suggested that MSOs are more likely to admit their guilt than FSOs. Faller (1995) reported that 68% of the female sex-offenders admitted to some abuse, 29.2% gave a full confession of all cases of abuse reported by the victims, but 31.9% of the offenders denied the abuse. Therefore, it was hypothesized that the FSO sample would be less likely to have admitted their guilt than the MSO sample.
7. Multiple studies have reported that the majority of the FSOs were related or knew their victim (Faller 1995; Fromuth and Conn, 1997; Lewis and Stanley, 2000; Mathews et al., 1997). Miccio-Fonseca (2000) compared FSO and MSO samples (both adolescent and adult) and indicated that 70% of the female sex-offender victims and 29% of the male sex-offender victims were family members. Kubik et al. (2002) compared adolescent FSO and MSO and reported that 54.5% of the female offenders and 45.5% of the males were biologically-related to their victims. The statewide studies suggests that 37% of the FSOs in Arkansas ($N = 40$; Vandiver & Walker, 2002) were related to their victim, and in Texas ($N = 471$; Vandiver & Kercher, 2004), 46% were acquainted with their victim, 37% were related to the victim, and only 7% did not know their victim. It was hypothesized that a larger percentage of FSOs would be biologically related to their victim than MSOs.

Clinical variable hypotheses:

8. A recent review (Johansson-Love & Fremouw, 2006) suggests that confident conclusions regarding psychological problems such as Depressive Disorder were difficult to make because the results of the studies investigating psychopathology were inconsistent and suffered numerous methodological flaws. To further examine if depression is a prevalent psychological problem in the FSO population it was hypothesized that the FSO sample would have more clinically elevated two point codes on the MMPI-2 including the depression scale than other samples.
9. It was hypothesized that the FO and MO samples would have more two point codes including the psychopathic deviate scale than the FSO and the MSO samples because high elevations on this scale is usually associated with aggressive, interpersonally manipulative, and impulsive behavior, and high elevations have been associated with delinquents and psychopathy (Butcher & Williams, 2000).
10. Allen (1991) and Pothast and Allen (1994) suggested that both male and female sex offenders are more feminine as measured by the Bem Sex-Role Inventory (Bem, 1981). To further examine this finding it was hypothesized that the MSO and the FSO samples would be more feminine on the MMPI-2 m/f scale than the FO and the MO samples.

Method

Sample

The sample was taken from three West Virginia state prison facilities (Denmar Correctional Center, Lakin Correctional Center, and Pruntytown Correctional Center) with the permission of the Commissioner of Prisons to review the case files. The prisons included in this study were selected based on the population housed in them in order to make data collection as efficient as possible. It is important to note that most inmates work their way through the system

that is receiving transfers to lower security facilities after displaying appropriate behaviors (excluding life time prisoners), and can be housed at multiple prisons during their incarceration. This would suggest that even though only 3 prisons were selected as sample sites, their population would represent a diverse sample of the West Virginia Department of Corrections (DOC). Pruntytown Correctional Center was selected because it houses both male and female inmates in the FSO, FO, and MO categories. Denmark Correctional Center was selected because the WV DOC had begun to transfer many of the incarcerated male sex offenders (MSO) to this institution and also houses inmates in the MO group. Lakin Correctional Facility was selected because it is the only maximum security female prison in WV housing inmates in the FSO and FO groups. The FSO sample constituted all, but one, of the identified and available case files (active and inactive) of adult female sex offenders in the WV DOC from 1992-2005 (N=31). The MSO sample consisted of 31 randomly selected charts. The charts were randomly selected by pointing at names on a non-alphabetical list of offenders. Unfortunately the West Virginia DOC statistics department does not separate their statistics by gender or facility, but simply reports number of offenders per crime category. The MSO group is therefore estimated to have been selected out of a sample of about 880 male sex offenders. All sex offenders had to have been convicted of a sexual offense in the state of West Virginia according to the above definition.

The non-sex offender comparison groups (FO & MO) had to have committed a victim-involved offense replicating previous methodology (Kubik, et al., 2002). The victim-involved offenses selected were convictions of assault, robbery, and such where there is a clear victim with whom the perpetrator had contact. These groups were randomly selected from a pool of about 780 offenders incarcerated for victim involved offenses in the West Virginia DOC during 2005-2006. Again the files were selected by pointing to names on a non-alphabetical list of

offenders. Charts of persons convicted of murder were excluded because the majority of incarcerated murderers are not repeat offenders and may never be in that situation again, unlike sex offenders and violent offenders. The proposed hypotheses were tested using 2 by 2 ANOVAs (continuous variables) to examine interactions and main effects of gender and crime and Chi square analyses (categorical variables) followed by pairwise comparisons to examine where the significant differences were. A power analysis was conducted using G-power (Faul & Erdfelder, 1992). Examining a priori Chi square analysis with a medium effect size (.38), $\alpha = .05$ and $df = 3$ suggested a sample size of 119. This is less than our sample size of 124 suggesting that the current study had the power to detect medium effect sizes. All information obtained through the chart reviews was coded under an anonymous participant number. Compliance with all aspects of regulations concerning the use of humans as research participants was maintained throughout the study. The study was approved by the Institutional Review Board for the Protection of Human Participants at West Virginia University.

Demographic information for the four different groups (FSO, MSO, FO, & MO) is outlined in Table 2 but the modal offender in each category will be discussed below. The average female sex offender in the FSO group was found to be a Caucasian (100%), West Virginia native (58%) who was married (55%) with less than a high school education (55 %) and minimal (42 %) work history. The modal male sex offender can be described as Caucasian (94%), West Virginia native (90%), divorced (45%) with a high school degree or GED (58%) and steady work history (52%). The average female offender was Caucasian (81%), West Virginia native (52%), single (48 %) with a high school or GED (35%) or less than high school education (35%) and minimal work history (61%). The modal male offender in this sample was Caucasian (97%), West Virginia native (74%), single (45%) with a high school or GED education (48%) and

minimal (42%) or steady (42%) work history. The racial make-up of the sample is consistent with the U. S. Census Bureau reported racial diversity of the state of West Virginia, 95.2% Caucasian and 3.2% African American persons (<http://quickfacts.census.gov/qfd/states>).

Measures

Chart Coding Sheet (CCS; See Appendix B)

This coding sheet depicts the variables and data collected for each on the computers during the chart review. The coding options during data collection are reflected in Appendix B. After the interrater reliability had been collected the data from the rater with the most information was included in the final data set (e.g., if rater 1 reported an 8th grade education but rater 2 reported a GED rater 2's data was used). There were only a few variables that required the rater to make a judgment. Work history was categorized into: none/house wife/disabled, minimal, and steady. Steady was defined as during working years no period of unemployment over 3 yrs and minimal was less than this. Offender action was recorded as passive or active. An active offender was defined as physically participating in the crime and passive as knowing about the crime or watching the crime take place. Admission data was collected as full admission, no admission and partial admission. Partial admission was defined as a person who denied parts of the crime, or only admitted to being present but not to everything the person was convicted of, or a person who initially made a full confession but later recanted and stated they lied.

The BETA-III (Kellogg & Morton, 1999)

This is a nonverbal test of intelligence for ages 16-89 years especially useful in low-functioning, non-native speakers, and low skilled individuals. This measure can be administered both individually and in a group setting. The BETA-III was normed using a sample of 1,260

adults based on the 1997 census information in 82 cities around the United States. This measure was also normed for a prison population using a sample of 400 inmates (Psychological Assessments Resources, Inc, 2005). This measure was validated using well-known assessments such as the WAIS-III. The BETA-III was developed to measure different areas of nonverbal intelligence such as visual information processing, processing speed, fluid intelligence, and spatial and nonverbal reasoning. It has five subtests: coding, picture completion, clerical checking, picture absurdities, and matrix reasoning. The BETA III IQ scale has a reported test-retest reliability of .91. The validity of the BETA III has been investigated by examining its correlation with the BETA II, the Wechsler Adult Intelligence Scale (WAIS-III), and the Adult Basic Learning Examination-second edition screening battery (ABLE-II). The BETA II and the BETA III have a correlation coefficient of .87 for a prison sample. The correlation coefficient between the BETA III and the WAIS-III full scale IQ score is .77 in varying samples including inmates. The relation between the ABLE-II and the BETA-III was also examined in a prison population and in the general population. The correlation coefficient reported in the manual for the prison sample BETA-III IQ score was .40 for reading comprehension and .39 for problem solving. These lower correlation coefficients were expected because the ABLE-II is an achievement test. Only the BETA-III IQ score was used in the current study.

The Wide Range Achievement Test-3 (WRAT-III; Wilkinson, 1993)

This is a measure designed to evaluate a person's basic skills in reading, arithmetic, and spelling. The administration time is approximately 15-30 minutes and this measure can be administered to persons 5 to 75 years old (Stetson, Stetson, & Sattler, 2001). The arithmetic and spelling subtests may be administered in small groups (5 people) but the reading subtest should be administered individually. The WRAT-III converts the raw scores into standard scores and

produces grade equivalents, percentile ranks, and normal curve equivalents for the three areas measured (reading, arithmetic, & spelling; Stetson et al., 2001). This measure was standardized in 1992-1993 on 4,433 adults and children with each age category including 183-200 persons. The internal consistency reliabilities reported range from .69-.95 for the subtests (Stetson et al., 2001). The test-retest reliability was measured using 142 children (6-16 years), who were administered the measure on two occasions on average 37 days apart, and ranged from .91 to .98 (Stetson et al., 2001).

The Minnesota Multiphasic Personality Inventory (MMPI-2; Butcher et al., 1989)

This is a standardized questionnaire with 567 self-description statements which are answered true or false to be used with adults 18 years or older. This measure produces a quantitative measurement of the individual's personality and test-taking strategy. The MMPI-2 has six validity scales. This measure also has 10 clinical/personality scales, supplementary scales, content, and research measures. The questionnaire also has measures of masculinity and femininity as well as 15 extra content scales. The MMPI-2 scales of interest in the proposed study are the validity and the clinical scales because the two-point code and validity was coded for all cases reviewed. The clinical scales that combine in the two-point codes can be any of ten following scales: Hypochondriasis (Hs), Depression (D), Hysteria (Hy), Psychopathic Deviate (Pd), Masculinity-Femininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma), and Social Introversion (Si). The MMPI-2 was normed on a larger sample (2600) reflecting the U.S. Census of the population except regarding educational level and occupational status. The reported reliability, over a median seven days, appears moderate in samples of both genders (male = 82, female = 111) ranging from a low of .58 (scale 6) to a high of .92 (scale 0) test-retest reliability (Butcher, Dahlstrom, Graham, Tellegen, & Kramer, 1989).

The MMPI-2 profiles have also been examined for their stability over 30 years and indicated that the Si scale (scale 0) had a .73 test-retest correlation (Spiro, Butcher, Levenson, Aldwin, & Bossé, 2000). The MMPI-2 scales have been shown to correlate to the total number of Recent Life Changes (LES) and the Social Readjustment Rating Scale (SRRS) scores by the authors. For their male sample, all clinical scales except D, Hy, and Si were significantly correlated to the LES and the SRRS. Both the LES and SRRS were shown to be significantly correlated to all the clinical scales except the Mf and the Si for the female sample.

The Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995)

This is a 54-item semi-structured interview designed to determine risk for re-offending with 10 sub-scales using both static and dynamic variables. The ten subscales include criminal history, education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problems, emotional/personal, and attitude/orientation. It is suggested that the information gathered by the examiner (prison staff) be verified to the extent possible with collateral sources such as school records, and interviews with family members. The 54 items are scored yes/no or 0,1,2,3 but will produce a score ranging from 0-54. The potential risk to re-offend is then given as follows: 0-13 = low, 14-23 = low moderate, 24-33 = moderate, 34-40 = medium high, and 41+ = high. This semi-structured interview is described as one of the most well-established measures predicting general violent recidivism using crime history, education/employment, family and marital status, criminal associates, emotional problems, criminally supportive attitudes, financial problems and accommodation ability (Hanson, 2000). Interrater reliability coefficients for the LSI-R range from .80 to .96 (Andrews & Bonta, 1995). This measure has been shown to have an internal consistency of $r = .72$, and temporal stability of $r = .80$ (Bonta & Motiuk, 1990, 1992). A meta analysis also indicated that the LSI-R was

significantly correlated with general ($r = .42$) and violent ($r = .29$) recidivism (Gendreau, Goggin, & Smith, 2002). Validity studies have indicated that high LSI-R scores were linked with parole failure (Bonta & Motiuk, 1990; Motiuk, Bonta, & Andrews, 1986) and institutional misconduct (Bonta, 1989; Bonta & Motiuk, 1987). Hanson (2000) described this measure as having “high-moderate” strength of “general-violent” recidivism with a “high” strength of replication.

Procedure

The West Virginia DOC staff and law enforcement officials were responsible for collecting the data in the case files, including the measures previously described. The data was coded and entered into a database by two female researchers (the primary investigator, doctoral candidate, and an advanced undergraduate assistant). There were 31 charts coded for the FSO group and for each of the FSO cases, three comparison cases that were randomly selected from the charts at the aforementioned prisons facilities. A total of 124 case files were reviewed and retrospective data coding of demographic variables, crime variables, historical variables, and assessment variables was conducted on all case files (see Appendix B for the variables collected). The data was coded during several visits to each of the three facilities during the fall of 2005 and spring of 2006. The anonymous data was entered into one of two laptop computers under a participant number. Given the great distance to two out of three collection sites two laptop computers were used so that data could be collected simultaneously by both researchers and prevent lost data. A list with the name and the subject number were kept at each facility to enable the researchers to examine interrater reliability and to assure that the same chart was not entered twice. The participant anonymity was maintained at all times because the data was never housed together with the list, as the researchers brought the laptops out of the facility after each

data collection. The list at the facility with the participant name and subject number was destroyed at the completion of data collection. There were no interviews conducted with staff or inmates concerning the data collected or the selected case files. Interrater reliability for the coding of the variables was obtained for about 30 % of all case files for a total of 9 files per category. Most of the variables coded did not involve a judgment on the part of the examiner but the examiner simply coded the information collected (see Appendix B). Therefore, only the judgment variables were examined for interrater reliability using percentage agreement. The work history variable interrater reliability was examined and it had a 98.6% agreement between the two raters. The variable examining offender activity had 100% interrater agreement. The last variable involving a judgment was the offenders' admission and it also had 97.23% interrater reliability, this variable was later combined into two categories and the interrater reliability rose to 100%.

Results

Offender Demographic/Historical Variable Hypotheses

A 2 by 2 ANOVA was conducted on the age at first conviction to evaluate the first hypothesis that FSOs would be on average younger than the other offender groups (MSO, FO, MO) at the time of their initial offense. The means and standard deviations for age at the time of first offense as a function of gender and crime are presented in Table 3. The ANOVA indicated no significant interaction between gender and crime, $F(1,120) = .015, p = .902$, and no significant main effect for gender, $F(1,120) = .002, p = .967$, but there was a significant main effect for crime, $F(1,120) = 20.24, p = .000$. The hypothesis that the FSO group would be on average significantly younger than the MSO, FO and MO samples at the time of their first offense was not supported. The crime main effect was in the opposite direction of the hypothesis

with both of the sex offender groups being significantly older ($M = 30.23$, $SD = 1.1$) than the violent offender groups at first conviction ($M = 23.19$, $SD = 1.1$).

The second hypothesis that a larger percentage of the FSO group would have been victims of sexual abuse was examined using Chi square analysis (see Table 4 for group frequencies). The reported victimization was categorized as sexual or no victimization. There were significant group differences, $\chi^2(3, N = 123) = 15.23$, $p = .002$, Cramér's $V = .35$. The hypothesis was supported with the largest percentage of sexual victimization (i.e., 45%) reported in the FSO group. Follow-up pairwise comparisons were conducted to evaluate the differences between the groups. These analyses revealed that there were significant differences between both the FSO and MSO groups and the MO group (see Table 4).

The third hypotheses regarding substance abuse history being less frequent in the sex offender samples than the violent offenders was divided into two separate analyses for alcohol and drug abuse history. This hypothesis was fully supported regarding drug abuse and partially supported regarding drug abuse history (see Table 5 and 6 for frequencies). There were significant group differences for alcohol abuse history, $\chi^2(3, N = 122) = 23.7$, $p = .000$, Cramér's $V = .44$ and there were also significant group differences regarding drug abuse history, $\chi^2(3, N = 123) = 17.3$, $p = .001$, Cramér's $V = .38$. Follow-up pairwise comparisons (see Table 5 and 6) revealed that the FSO and MSO groups were significantly different regarding the history of alcohol abuse history, $\chi^2(1, N = 62) = 6.5$, $p = .011$, Cramér's $V = .32$ with less FSOs (32%) than MSOs (65%) having a history of alcohol abuse. The sex offender groups were not significantly different regarding the history of drug abuse $\chi^2(1, N = 62) = .58$, $p = .445$, Cramér's $V = .1$. The FSO group was significantly different from the MO group on alcohol abuse history, $\chi^2(1, N = 61) = 21.3$, $p = .000$, Cramér's $V = .59$ with less FSOs (32%) than MOs (87%) reporting an

alcohol abuse history. These two groups were also different on drug abuse history, $\chi^2(1, N = 61) = 9.26, p = .002$, Cramér's $V = .39$. Again less FSOs (42%) than MOs (80%) reported a history of drug abuse. The FSO and the FO group was also significantly different regarding both the alcohol $\chi^2(1, N = 61) = 10.31, p = .001$, Cramér's $V = .41$ and drug $\chi^2(1, N = 62) = 11.68, p = .001$, Cramér's $V = .43$ abuse history. Again less FSOs reported a history of alcohol (32%) and drug (42%) abuse than the FOs (73% & 84% respectively). The MSO group was significantly different than the MO group on both alcohol $\chi^2(1, N = 61) = 5.60, p = .018$, Cramér's $V = .30$ and drug $\chi^2(1, N = 61) = 5.44, p = .020$, Cramér's $V = .30$ abuse history. When examining the percentages it was revealed that the MSO group had significantly less alcohol and drug abuse history than the MO group. The MSO group also had significantly less alcohol abuse history than the FO group, $\chi^2(1, N = 62) = 7.38, p = .007$, Cramér's $V = .35$. However, the MSO group was not significantly different from the FO group regarding alcohol abuse history.

The fourth hypothesis that the FSO sample would have more anxiety related psychiatric problems such as PTSD, than the other offender groups, was examined using Chi square analysis of the self reported diagnoses a person had been given. This hypothesis was not supported, $\chi^2(3, N = 124) = 3.87, p = .276$, Cramér's $V = .18$ (see Table 7 for group frequencies).

Victim/Crime Variable Hypotheses

The fifth hypothesis that a larger percentage of the FSO sample would offend together with a co-perpetrator than the MSO sample but that the majority would offend alone was tested using Chi square analysis. This hypothesis was partially supported. There were significant group differences when examining the presence of a co-perpetrator, $\chi^2(1, N = 62) = 20.8, p = .000$, Cramér's $V = .58$, see Table 8 for group frequencies. The second part of the hypothesis that the majority of the FSO group would offend alone was not supported because 61% of the FSO

sample had a co-perpetrator.

The sixth hypothesis that the FSO sample would be less likely to admit their guilt than the MSO sample was examined using Chi square analysis. The collected data was categorized into some admission of guilt or no admission of guilt. This hypothesis was not supported in that there were no statistically significant group difference between the FSO and MSO samples, $\chi^2(1, N = 62) = 2.54, p = .111$, Cramér's $V = .20$. However, the largest percentage of no admission (45%) was in the FSO group (see Table 9 for group frequencies).

The seventh hypothesis that a larger percentage of the FSO group would know and be biologically related to their victim than the MSO group was supported $\chi^2(4, N = 62) = 13.8, p = .008$, Cramér's $V = .47$, with 58% of the FSOs being biologically related to at least one victim (see Table 10 for group frequencies).

Clinical Variable Hypotheses

The eighth hypothesis that the FSO sample would have more clinically elevated two-point codes on the MMPI-2 that included the Depression scale (D; scale 2) than the other samples was not supported, $\chi^2(3, N = 57) = 1.63, p = .654$, Cramér's $V = .17$, see Table 11 for group frequencies.

The ninth hypothesis that the FO and MO samples would have more two-point codes included the Psychopathic deviate scale (Pd; scale 4) than the FSO and MSO samples was not supported, $\chi^2(3, N = 57) = 1.63, p = .654$, Cramér's $V = .17$, see Table 11 for group frequencies.

The tenth hypothesis that the MSO and FSO samples would be more feminine on the MMPI-2's m/f scale than the FO and MO samples was examined using a 2 x 2 ANOVA analysis of the MMPI-II Masculinity/Femininity (m/f, scale 5) clinical scale T-scores. Prior to analysis, the T-scores for the female samples were inverted as the m/f scale is interpreted in the opposite

direction for the two genders (i.e., a high score for a male indicates feminine interest patterns and a high score for females indicates masculine interests. The hypothesis was not supported as the ANOVA did not indicate a significant main effect of crime, $F(1,115) = 3.06, p = .083$. The interaction between crime and gender was not significant, $F(1,115) = .017, p = .898$. However, there was a significant main effect for gender, $F(1,115) = 116.71, p = .000$ indicating that both the FSO ($M = 67.59, SD = 11.05$) and the FO ($M = 64.07, SD = 10.65$) samples were more feminine than the MSO ($M = 47.13, SD = 10.94$) and the MO ($M = 44.10, SD = 7.94$) samples.

Exploratory Variables

Exploratory victim/crime variables

There were significant group differences for having a co-perpetrator, $\chi^2(3, N = 124) = 25.8, p = .000$, Cramér's $V = .46$ (see Table 12 for group frequencies). Both the FSO and FO groups had a high percentage of co-perpetrators 61% and 45% respectively. Follow-up pairwise comparisons indicated that there were significant differences between both the female samples and the two male samples (see Table 12).

Admission, previously examined for the two sex offender samples, was examined for all four groups. A Chi square analysis revealed significant group differences $\chi^2(6, N = 124) = 22.2, p = .001$, Cramér's $V = .30$ on this variable. An argument could be made that a partial confession is an admission of some guilt; therefore, the partial and full admission was combined and the significant differences remained $\chi^2(3, N = 124) = 12.14, p = .007$, Cramér's $V = .31$ (see Table 13 for group frequencies) suggesting that both of the sex offender groups were less likely to admit guilt, but especially the FSO group who was significantly different from the two violent offender groups (see Table 13 for pairwise comparisons) with the largest percentage of no admission (45%).

There were also significant group differences present for being an active participant (i.e., a perpetrator who is physically participating in the crime and not simply allowing the abuse/crime to occur), $\chi^2(3, N = 124) = 27.7, p = .000$, Cramér's $V = .47$ (see Table 14 for group frequencies). Both of the male offender groups had 100% active members and the FSO and FO groups around 65% (68% and 61% respectively).

The age of the youngest index victim was not significant as tested by a one-way ANOVA analysis, $F(1, 59) = 1.30, p = .258$, and suggested that there were no group differences between the MSO and FSO.

The gender of the index victim/s was examined using a Chi square analysis and revealed significant group differences, $\chi^2(6, N = 119) = 23.52, p = .001$, Cramér's $V = .31$ (see Table 15 for group frequencies). These results suggest that the FSO sample had the largest percentage (35%) of victimizing both genders. Additionally the MSO group had the largest percentage (74%) of female victims.

Sentence length was analyzed for all four groups using Chi-square analysis, grouping sentence length into four categories (0-5, 6-10, 11-19, 20 and above). A Chi square analysis revealed significant group differences $\chi^2(9, N = 124) = 18.7, p = .028$, Cramér's $V = .22$ on this variable. This analysis indicated that a larger percentage of female offenders received lengthier sentences (see Table 16 for group frequencies). After conducting pairwise comparisons (see Table 16) it was revealed that only the FO group was significantly different from the MO group.

Exploratory clinical variables

The full scale IQ score on the BETA-III was examined using a 2 by 2 ANOVA. The means and standard deviations for full scale IQ as a function of gender and crime are presented in Table 17. The ANOVA indicated no significant interaction between gender and crime, F

(1,120) = .692, $p = .407$, and no significant main effect for gender, $F(1,120) = .030$, $p = .862$.

The main effect for crime approached significance, $F(1,120) = 3.705$, $p = .057$, with the sex offender groups having a lower full scale IQ score ($M = 86.91$, $SD = 1.837$) than the violent offender groups ($M = 91.91$, $SD = 1.837$).

The WRAT scores in reading, spelling, and math were analyzed using a 2 by 2 ANOVA. The means and standard deviations for WRAT scores as a function of gender and crime are presented in Table 17. There was no significant interaction between gender and crime on the WRAT reading scores, $F(1,104) = 1.88$, $p = .174$, and no significant main effect for gender, $F(1,104) = .39$, $p = .533$. The main effect for crime was significant, $F(1,104) = 7.38$, $p = .008$ suggesting that the sex offender groups had a lower reading level ($M = 8.7$, $SD = .55$) than the violent offender samples ($M = 10.8$, $SD = .50$). There was no significant interaction between gender and crime on the WRAT spelling scores, $F(1,104) = 1.05$, $p = .307$, and no significant main effect for gender, $F(1,104) = 2.14$, $p = .147$. The main effect for crime was significant, $F(1,104) = 4.88$, $p = .029$ suggesting that the sex offender groups had a lower spelling level ($M = 7.4$, $SD = .55$) than the violent offender samples ($M = 9.05$, $SD = .50$). There were no significant interaction between gender and crime on the WRAT math scores, $F(1,104) = 2.37$, $p = .126$, and no significant main effect for gender, $F(1,104) = 1.25$, $p = .265$, or main effect for crime, $F(1,104) = 1.05$, $p = .307$.

The MMPI-2 data was initially examined for profile validity. The validity of the MMPI-2 profiles was coded using the F, L, K, and Fb (when available) according to Butcher and Williams (2000) and analyzed for group differences. This analysis did not show any overall significant group differences, $F(3,122) = 6.44$, $p = .092$. For exploratory purposes 2 by 2 ANOVAs were conducted for nine of the ten clinical scales (as the m/f scale results were included in the

hypotheses). Only valid MMPI-2 protocols were included of the MMPI-2. There were significant differences on three out of the nine clinical scales. The means and standard deviations for the three clinical scale scores as a function of gender and crime are presented in Table 17. There was no significant interaction between gender and crime on the Sc scale scores, $F(1, 81) = 2.06$, $p = .155$, and no significant main effect for gender, $F(1, 81) = .27$, $p = .603$. The main effect for crime was significant, $F(1, 81) = 4.45$, $p = .038$ suggesting that the sex offender groups had a higher scale score ($M = 61.77$, $SD = 2.41$) than the violent offender samples ($M = 54.99$, $SD = 2.12$). The 2 by 2 ANOVA did indicate a significant interaction between gender and crime on the Ma scale scores, $F(1, 81) = 4.52$, $p = .037$, indicating that the FO sample is significantly different than the three other samples. There was no significant interaction between gender and crime on the Si scale scores, $F(1, 81) = .034$, $p = .854$. The main effect for gender, $F(1, 81) = 4.15$, $p = .045$ was significant revealing that the female samples had a lower scale score ($M = 52.98$, $SD = 2.08$) than the male samples ($M = 58.99$, $SD = 2.10$). The main effect for crime was only approaching significance, $F(1, 81) = 3.59$, $p = .062$.

The LSI-R total scores were examined using a 2 by 2 ANOVA. This analysis was not significant for an interaction between gender and crime, $F(1, 107) = .033$, $p = .856$ or any of the main effects of gender, $F(1, 107) = 2.86$, $p = .094$, and crime, $F(1, 107) = 1.34$, $p = .249$. The possible implications of these results will be examined in the discussion section of this document.

Discussion

Offender Demographic/Historical Variable Hypotheses

The first hypothesis that the FSO group would be on average younger than the MSO and the violent offender groups was examined by analyzing the first conviction data of each group.

This hypothesis was not supported. On the contrary, both violent offender groups were significantly younger than both the sex offender groups at the time of their first offense. The sex offender average age was 30 years for both groups and the average age of both violent offender groups was 23 years old.

The results of the current study are not consistent with the small sample study of Kubik, Hecker, and Righthand (2002) who reported, in their chart review of a sample of 11 adolescent FSOs and 11 adolescent FOs, that the FSO group committed their first sex offense at a significantly earlier age than the FO group committed their first victim involved offense. However, their sample was identified/convicted at a young age and these results may not translate to an adult offender sample. The inconsistent results of the current study may be due to the sex offenders in the current sample escaping detection/conviction until an older age.

The first conviction age may not equal the first time that they had engaged in this type of criminal behavior, but the first time they were caught and prosecuted. It is possible that sex offenders, and female sex offenders in particular, engage in crimes for which they are less likely to be apprehended such as crimes against children they know and with whom they have a relationship and who can be intimidated to stay silent. Researchers in the male offender literature have conducted anonymous data collection studies that suggest that male sex offenders may commit numerous offenses before they are apprehended (Abel et al., 1987; Weinrott & Saylor, 1991).

A study by Faller (1995) reported that in their sample, at the time of data collection, female offenders were significantly younger ($M = 28$ years) than their male counterparts ($M = 33.2$ years). Examining age in this way would only give an indication of sample age differences at the time the sample was collected and not contribute any answers as to which sample, if any,

offended at a younger age. Future research should attempt to examine the age at the time of the first sexual offense (detected or undetected) through anonymous data collection with the female sex offender population instead of using conviction data. It may also be useful to examine whether female sex offenders should be examined based on age of onset (i.e. age when they committed their first sex offense). It may be hypothesized that victims of a sex offense will be less likely to report the crime (especially if the perpetrator is a family member or acquaintance) than someone who gets robbed or beaten (by a stranger) which can negatively effect the early identification of sex offenders.

The second hypothesis that the FSO group would report more frequently being the victim of sexual abuse than the three other groups was supported in the current study. The present results indicated that 45% of the FSO group reported being sexually abused, followed by the MSO (39%), FO (33%) and MO (3%) groups. However, both of the sex offender samples reported significantly more sexual victimization than the MO sample. The current findings are consistent with previous research. A recurring finding in previous research (Adshead, Howett, & Mason, 1994; Grayston & De Luca, 1999; Higgs, Canavan, & Meyer, 1992; Hislop, 2001; Lewis & Stanley, 2000; Lloyd, 1987; Nathan & Ward, 2002; Vick, McRoy, & Matthews, 2002) was that sexual abuse victimization was reported frequently in the female sex offender population. Other studies have compared rates of sexual abuse victimization among female sex offenders to other samples, such as juvenile male sexual offenders (Kubik et al., 2002; Mathews et al., 1997), female non-offending college students (Fromuth & Conn, 1997), male registered child abusers (Allen, 1991), male sex offenders (Miccio-Fonseca, 2000), female offenders (Miccio-Fonseca, 2000) and incarcerated female offenders (Green & Kaplan, 1994; Kaplan & Green, 1995), finding that the FSO consistently reports a higher incidence of sexual victimization.

The current study results were in agreement with Greenfeld (1997), who examined male inmates in state correctional facilities and reported that 11.8% of the criminal population, 19% of rapists, and 34% of other sexual offenders had childhood abuse histories. A review by Hanson and Slater (1988) indicating that about 30% of adult male sex offenders reported a history of sexual abuse and that this percentage increased to almost 50% when examining offenders who offend against young male victims. In conclusion, the current finding that both of the sex offender groups reported high incidence of sexual victimization is a persistent finding in the literature and suggests that identifying and treating victims of sexual abuse may be a point for intervention/prevention for sex offenders as these results appear to support a cycle of sexual abuse.

The current results also suggests that abuse may be worth examining among female offenders overall. When combining the percentages for sexual and physical abuse, the majority of the FSO (68%) and FO (70%) samples have experienced some serious form of abuse, but the majority of the MO sample has not (77%). The majority of female offenders, regardless of crime, appeared to have experienced serious abuse to a larger extent than male offenders; however, male sex offenders have a similar rate of prior sexual victimization as FSOs. These results need to be replicated to examine this possible gender and crime interaction further.

The third hypothesis was supported in that the sex offender groups reported less history of alcohol and drug abuse history than the non sex offender groups. Although, using follow-up pairwise comparisons, it was revealed that the MSO group was not significantly different from the FO group regarding to history of alcohol abuse, they had significantly more history of alcohol abuse history than the FSO group. The majority of FSOs did not report alcohol and drug abuse history in their records as compared to the other three groups, where the majority reported

a history of alcohol and drug use. Interestingly, the FSO and FO groups reported more drug abuse than alcohol abuse in comparison to the males which is a new finding that should be investigated in future studies. The current results of history of alcohol and drug abuse in the female sex offender sample is consistent with previous studies reporting rates ranging from 20%-55% of alcohol/substance abuse problems (Allen, 1991; Faller, 1987 & 1995). However, in many studies it is unclear if they referred to history of substance abuse or substance abuse during the crime. Hislop (2001) reported that many case reports indicated that many female sex offenders had a history of alcohol and drug abuse and used substances during the commission of the crime. Adshead et al. (1994) reported that substance abuse was present in 30-40% of the male sex offenders and “also common” in female sex offenders. However, it is unclear where the data came from and how these conclusions were made and if they referred to history of substance abuse or substance abuse during the crime. In conclusion, the current results suggest that there are incidents of alcohol and drug abuse history in the sex offender population. However, both male and female sex offender populations in the current study actually have less of a history of alcohol and drug abuse than their violent offender counterparts. These results are consistent with a previous study indicating that adolescent FSOs had less alcohol and substance abuse history than adolescent FOs (Kubik et al., 2002). A study by Lewis and Stanley (2000) also reported low levels (6.7%) of substance use during the offense for their sample of female sex offenders. Substance abuse may not play as large of a role within the sex offender population as within other criminal motivations. A logical conclusion is that sex offenses are motivated by sexual drives while “other” crimes are often motivated/related to substance abuse/addiction. Although previous researchers have mentioned a function of alcohol and substances as a disinhibitor, this may be less important in a sexual crime. The ability to experience the sexual acts may be more

important to the sexual offender, and substance abuse may interfere with this, rather than reduce inhibition.

Contrary to the fourth hypothesis, the current results did not indicate that the FSO group had significantly more anxiety related psychological problems than the MSO sample or the two violent offender groups. Examining the diagnoses reported in the inmates' charts had inherent problems including that numerous charts had several diagnoses, some including non-existent diagnoses such as "nerves," "mild to moderate schizophrenia," and "sociopath," and that the data was not derived in a standardized fashion. Future research should attempt to use standardized measures or DSM –IV diagnoses made by mental health professionals to clarify this issue.

Victim/Crime Variable Hypotheses

As anticipated in hypothesis five, more female sex offenders (61%) than male sex offenders (6%) had co-perpetrators. The female sex offender literature (Faller, 1995; Graystone & De Luca, 1999; Kaplan & Green, 1995; Nathan & Ward, 2002) has suggested that some female sex offenders were coerced into committing the crime by a male co-perpetrator.

Although, more many more FSOs (61%) have co-perpetrators than the MSOs (6.5%) this does not necessitate coercion which is a variable that probably should be investigated using interview data from both accomplices. The co-perpetrator variable will also be discussed and expanded in the exploratory section of this document.

Some support was found for the sixth hypothesis that female sex offenders would be less likely to admit guilt as suggested by Allen (1991). Admission of guilt was initially investigated by categorizing the offenders into full, partial/recanted or no admission. This methodology was used by Faller (1995). There were more FSOs who did not make any admission/denying the crime (45%) than MSOs (26%). This is congruent with Allen (1991) who suggested that female

sex offenders were less likely to admit their guilt than male sex offenders. The current results are consistent with those of Faller (1995), as the percentage of females, denying the crime, are similar 45% (current study) vs. 31.9% (Faller). However, the current sample of FSOs were more likely than Faller's (1995) sample to make a full confession (42%, current study vs. 29.2%, Faller) but less likely to make a partial confession (13 % current study vs. 68% Faller). In the current study the MSO group was most likely to recant or make a partial admission (52%). It may be that female sex offending is associated with greater stigma than male offending due to the societal views (Denov, 2001; Hislop, 2001) and may further decrease the percentage of FSO admissions of guilt. The admission data will also be discussed and expanded in the exploratory section of this document.

Findings also supported the seventh hypothesis that the FSO group would be more likely to know their victim/s and be biologically related to their victim than the MSO group. Consistent with previous research, the current examination of victim-offender relationship indicated that most offenders are at least acquainted with the victim (Faller, 1995; Fromuth & Conn, 1997; Kaplan & Green, 1995; Lewis & Stanley, 2000; Mathews et al., 1997; Vandiver & Kercher, 2004). Only 2 of the male offender victims were stranger offenses and none of the female offender victims were unknown to the perpetrator. The current data also revealed that the female sex offenders (58%) were more likely than their male (23%) counterparts to be biologically related to their victim. This finding was consistent with findings of Miccio-Fonseca (2000) who compared FSO and MSO samples (both adolescent and adult) and found that 70% of the female sex-offender victims and 29% of the male sex-offender victims were family members. Kubik et al. (2002) compared adolescent FSO and MSO and suggested that 54.5% of the female offenders and 45.5% of the males were biologically-related to their victims. These results could potentially

be explained by victim access. During adolescence both genders may have access to siblings (i.e., easily accessible biologically related targets) and adult females may maintain their easy access through children (easy access biological targets). Males on the other hand may have less access if they have not had children or have lost custody of them through divorce and have to expand their victim base to include unrelated victims. These results should be further replicated using samples of both male/female and adolescent/adult samples.

Clinical Variable Hypotheses

None of the clinical hypotheses were supported. The current study did not support hypothesis eight or nine and there were no significant group differences in the number of elevated two point codes including the psychopathic deviate scale or the depression scale. This could potentially be explained by examining what composes the two scales. The psychopathic deviate scale is also measuring overall distress and appears to be a frequent elevation in the incarcerated population. Elevations on these two scales occurred at the same rate in all four groups.

The tenth and final hypothesis, that the sex offender groups would be more feminine than the other two offender groups, was not supported in the current study. To examine femininity, the m/f scale from the MMPI-II was analyzed while in previous studies a separate sex-role measure, the BEM, was used (Allen, 1991; Pothast & Allen, 1994). This examination indicated that there were no significant differences between the two female groups or between the two male groups. Neither of the female groups was approaching the traditional female role identification cut off and both of the male groups were approaching the macho, extremely masculine cut off (Pope, Butcher & Seelen, 2000). These current findings that both female samples had more feminine interests than the male samples do not support the theory that the sex

offender groups would be more feminine as suggested by Allen (1991) and Pothast and Allen (1994).

Exploratory Variables

Exploratory victim/crime variables

The co-perpetrator issue does not appear to be a distinct phenomenon for FSOs as suggested by Wakefield & Underwager (1991), but a gender factor supported by the high number (45%) of co-perpetrators in the FO group but not in either of the male offender groups. The results of the current study suggest that this may be a gender factor rather than a crime factor. Overall, females may be more likely to be coerced into “any” criminal activity by a co-perpetrator than males, or that they may justify/excuse their behavior by having an accomplice. These results need to be replicated by future researchers.

Further, the conclusions regarding admission became more complicated when examining the results in all four groups. The results indicated that the MSO group was the least likely and the MO group was the most likely to make a full admission. The FSO group was most likely to not make any confession followed by the MSO group. The MO group was least likely to not make any confession which follows logically with this group having the most full confessions. The partial/recanted category was most frequently used by the MSO group followed by the FO group and least likely in the FSO group. These potential interactions of crime and gender should be further investigated in a larger sample of inmates.

The partial admission and admission was combined to a category of some confession versus denial. The results of this analysis indicate that 90% of the MO group made some admission of guilt followed by the FO group (84%), MSO group (74%), and lastly the FSO group (55%). Overall, these results should be encouraging since the majority of all offenders,

regardless of crime, make some form of admission to the crime. However, Allen's (1991) suggestion that FSOs may be less likely to admit their guilt than MSOs was supported. The current research expands the results regarding the admission issue and indicate that the FSO group was the least likely to admit their guilt out of these four offender groups. It may be hypothesized that the results that sex-offenders overall were less likely to admit guilt is due to the stigma attached to sex-offenses even in the prison population. An admission could lead to violence from the other inmates, negative relationships with staff members, increased treatment programming, and being housed in a segregation cell with less privileges and reduced freedom for the full length of the sentence. This finding needs to be replicated to examine if this is a reliable finding in other states.

Graystone and DeLuca's review (1999) organized offenders into two categories of behavior (active & passive) during the commission of the crime. They defined an active female as physically participating in the sexual victimization whereas the passive female observed the abuse or knew about it and did nothing stop it. These categories were examined in the current study and revealed that all (100%) of the male offenders were active participants in their crimes which was statistically higher than the female groups. However, the majority of the female offenders were also active, FSO 68% and FO 61%. This could be considered to be congruent with the co-perpetrator results, which suggests that the increased likelihood of having a co-perpetrator and being a passive participant in the crime is a female offender group characteristic and not solely a female sex offender group characteristic. Active offending needs to be further investigated, but these results suggest that the majority of female offenders are active participants in their crimes.

There were no significant group differences between the sex offender samples regarding age of victims. However, when examining the gender of the index victim/s it was revealed that the FSO group victimized the highest percentage of both genders. The MSO group had the largest percentage of female victims (74%). The FO group had the most male victims (56%). These results are consistent with prior studies suggesting that the female sex offenders do not have a preferred victim gender (Becker et al., 2001; Graystone & De Luca, 1999; Johansson-Love, & Fremouw, 2006). Male sex offenders, on the other hand, do appear to prefer female victims, although they too victimize both genders.

Sentence length was evaluated for the participants with some interesting results. The significant differences indicated that the FSO and FO group were more likely to receive longer sentences as compared to their male group counter parts. Visually examining the data regarding the charges in the index conviction did not indicate that the female samples had more severe charges. It is also important to remember that except for the FSO sample the three comparison samples were quasi randomly selected. Possible explanations for the disparity in sentencing could include that the courts have a traditional view that females should know better and therefore punishing them with longer sentences. The FO sample had significantly different sentences as compared to the MSO group. Females who committed violent offenses received the most (32%) harsh sentences (20yrs+). Seven percent of the FSO also received a 20+ years sentencing while none of the male sex offenders received a sentence over 20 years. A recent study of adolescent FSOs and MSOs (Vandiver & Teske, 2006) however, reported the opposite results indicating that adolescent MSOs were more likely than adolescent FSOs to receive longer sentences. Sentence length would be an important variable to study for researchers interested in

gender equality within the courts. This variable will also have an effect on treatment programs and housing issues at prison facilities.

Exploratory clinical variables

The overall profile validity was assessed using the F, L, K, and when available the Fb validity scales. The results indicate that the majority of all offenders produced valid profiles using the interpretation guidelines presented by Butcher and Williams (2000). The Chi square analysis did not reveal statistically significant group differences when examining all four groups. Interestingly, when examining the T-scores on the clinical scales of the MMPI-II significant group differences emerged. The invalid profiles were excluded for the analyses of the clinical scales and are not included in the discussion below. The main effect for crime was significant on the Sc scale suggesting that the sex offender groups had a higher scale score than the violent offender samples. Both the FSO and MSO samples had scores approaching clinical significance that is suggestive of people who lead an unconventional life and may feel alienated from others and different from others. They may be aloof and uninterested people who use fantasy as protection against unpleasant events (Butcher & Williams, 2000). There was a significant gender and crime interaction on the Ma scale indicating that the FO group is approaching a clinically significant mean scale score. The FO group's mean score approached a moderate elevation associated with people who have a high activity level and are energetic and outgoing (Butcher & Williams, 2000). There was a main effect of gender on the Si scale revealing that the female samples had a lower scale score than the male samples indicating that the males were more socially introverted, more comfortable alone, sensitive to criticisms of others, may having a difficult time making decisions, and may be hard to get to know than the female sample (Butcher & Williams, 2000). It should be noted that none of the violent or sex

offender group means reached clinical significance. The MMPI-2 should be included in future research studies to examine if these differences can be replicated.

The LSI-R total scores were examined using a 2 by 2 ANOVA. This analysis was not significant for an interaction between gender and crime or any main effects of gender or crime. These results suggest that the four offender groups do not differ on general violent recidivism. All four groups had total LSI-R risk scores in the high end of the low moderate category or in the low end of the moderate category of risk of re-offending. This measure examined violent recidivism using crime history, education/employment, family and marital status, criminal associates, emotional problems, criminally supportive attitudes, financial problems and accommodation ability (Hanson, 2000). The current study results indicated that the four current groups did not differ significantly overall on these variables. This result is consistent with Gentry, Dulmus, and Theriot (2005). They compared the LSI-R to the Static-99 in a sample of 30 male sex offenders and reported that the LSI-R produced a lower risk for re-offending score than the Static-99. They concluded that this is due to the dynamic factors of the LSI-R and that both measures should be used. The current study also suggests that there is a need to include crime specific risk assessments in a comprehensive risk assessment of re-offending. This finding should be replicated in future research because another potential implication is that the total risk score may not be useful in differentiating sex offenders from violent offenders, or female violent and sexual offenders from male violent and sexual offenders. However, a study by Hollin and Palmer (2003) concluded that four of the subscales on the LSI-R were able to distinguish between violent and non-violent offenders. Future research should examine all subscales of the LSI-R, not just the total score, to assess any potential differences between the four groups included in the current study.

Limitations and Future Directions

There are multiple important limitations to the current study that will be discussed below. One of the most significant limitations is the fact that this study included many variables and multiple exploratory analyses that reduces power and increases the likelihood of making a Type 1 error. However, it is important to note that our hypotheses were based on previous research and theory and that many of the significant findings were beyond the .05 alpha level. A second limitation is that the data was collected using a chart review and that the data in the charts had been collected in a non-standardized fashion by DOC employees and law enforcement officials. The self-report data collected in the charts was not collected in a confidential manner, which might have increased reporting of potentially mitigating factors and denial of aggravating factors. There are also some differences in sample sizes on some of the variables based on the available information in the chart. The majority of the sample in this study was Caucasian (92.7%) which is representative of the state of West Virginia; therefore, no racial factors could be examined. The U.S. Census Bureau reported that 95.2% of West Virginia is Caucasian and 3.2% is African American. Using a prison sample in itself can be problematic because it may exclude the less serious offenders who received community placement. It is important to note that this study yielded results about these inmate groups in West Virginia at the time of data collection and may not generalize to other states or to other time frames.

In conclusion, the results of the current study suggest that several variables were related to gender. Having a co-perpetrator during the crime appeared to be related to being a female and not a FSO phenomenon as suggested in the previous literature. Significantly more females were passive participants in the crime (i.e., did not physically participate in the crime), none of the males were passive participants. There was also a main effect of gender on the Social

Introversion indicating that the male samples had a higher mean score than the two female samples.

There were also several variables which appeared to be related to the crime. The results of the current study indicated that both male and female sex offenders were on average older than their violent counter parts at the time of their first conviction. The FSO sample had the largest percentage of reported sexual victimization, continuing to lend further support to the finding that the FSO group reports experiencing a higher rate of sexual victimization (Adshead, Howett, & Mason, 1994; Allen, 1991; Fromuth & Conn, 1997; Grayston & De Luca, 1999; Green & Kaplan, 1994; Higgs, Canavan, & Meyer, 1992; Hislop, 2001; Kubik et al, 2002; Lewis & Stanley, 2000; Lloyd, 1987; Mathews et al., 1997; Miccio-Fonseca, 2000; Nathan & Ward, 2002; Vick, McRoy, & Matthews, 2002). However, both sexual offender samples were significantly different from the MO group, i.e. reported more sexual victimization. Both of the sex offender samples reported less drug abuse history than the two violent groups. The two sex offender groups also had a lower reading and spelling level on the WRAT than the violent offender samples. Finally, there was a main effect of crime on the Schizophrenia scale of the MMPI-2 suggesting that the sex offender samples had higher mean scores.

There were also several variables associated with the FSO group. The FSO sample reported less alcohol history than both of the violent offender groups. The FSO group had significantly less admissions than the two violent offender samples. Significantly more FSOs knew their victim and were biologically related to their victim than MSOs. Lastly, the FSO sample was the least discriminate regarding their victim gender of all the offender samples.

Important considerations for future research include exploring valid and reliable ways of measuring psychopathology in the criminal population. Related to this issue would be to

replicate and expand the current MMPI-2 findings. Increasing research using standardized measures will also be a valuable contribution to this research area. Studies in more racially diverse states and other countries would also make significant contributions to the understanding and treatment of female sex offenders. A worthwhile research endeavor may also be to standardize risk assessments for sexual recidivism, devised for the MSO population, for the FSO population or devise new risk assessment measures for this population. The research base and knowledge of female sex offenders keeps growing which will aid in better identification, assessment and treatment of this population. Future studies need to continue to incorporate control groups, such as in this study, to better evaluate what variables are related to gender, being a sex offender, and/or unique to being a female sex offender.

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Appendix A

Sexual assault in the first degree (§61-8B-3) is defined as the person engage in sexual intercourse or intrusion with a person and inflicts serious bodily injury on anyone or uses a deadly weapon during the act or a person who is fourteen years or older has intercourse with another person who is eleven years or younger and is not married to the individual. This felony offense carries a 15-35 years incarceration and may include a fine of 1000-10,000 dollars.

Sexual assault in the second degree (§61-8B-4) is defined as a person engaging in sexual intercourse or intrusion with another who is physically helpless. This felony carries a 10-25 years incarceration and may include a fine of 1000-10,000 dollars.

Sexual assault in the third degree (§61-8B-5) is defined as a person who engages in a sexual intercourse or intrusion with a person who is mentally defective or incapacitated or a person 16 years or older engages in sexual intercourse or intrusion with a person younger than 16 years and at a minimum for years younger than the perpetrator and is not married to the individual. This felony carries a 1-5 years incarceration and may include a fine of not more than 10,000 dollars.

Sexual abuse in the first degree (§61-8B-7) is defined as a person who has sexual contact with another without their consent and the lack of consent is due to a forcible compulsion or the victim is physically helpless or the perpetrator is 14 years old or older and has sexual contact with a person who is 11 years old or younger. This felony carries 1-5 years incarceration and may include a fine not to exceed 10,000 dollars.

Imposition of sexual intercourse or sexual intrusion on incarcerated persons (§61-8B-10) is defined as any person employed at a correctional facility, juvenile facility, or jail and who engage in sexual intercourse or intrusion with a person incarcerated in the state is guilty of a

felony. This felony carries a 1-5 years incarceration or fined not more than 5,000 dollars or both. The same law applies to parole/probation officers and the people they supervise.

Sexual abuse by a parent, guardian or custodian; parent, guardian or custodian allowing sexual abuse to be inflicted upon a child; displaying of sex organs by a parent, guardian or custodian (§61-8D-5). “ If any parent, guardian or custodian of a child under his or her care, custody or control, shall engage in or attempt to engage in sexual exploitation of, or in sexual intercourse, sexual intrusion or sexual contact with, a child under his or her care, custody or control, notwithstanding the fact that the child may have willingly participated in such conduct, or the fact that the child may have consented to such conduct or the fact that the child may have suffered no apparent physical injury or mental or emotional injury as a result of such conduct, then such parent, guardian or custodian shall be guilty of a felony.” This felony carries a 10-20 years incarceration and may include a fine of 500-5,000 dollars.

“If any parent, guardian or custodian shall knowingly procure another person to engage in or attempt to engage in sexual exploitation of, or sexual intercourse, sexual intrusion or sexual contact with, a child under the care, custody or control of such parent, guardian or custodian when such child is less than sixteen years of age, notwithstanding the fact that the child may have willingly participated in such conduct or the fact that the child may have suffered no apparent physical injury or mental or emotional injury as a result of such conduct, such parent, guardian or custodian shall be guilty of a felony.” This felony carries a 5-15 years incarceration and may include a fine of 1,000-10,000 dollars.

“If any parent, guardian or custodian shall knowingly procure another person to engage in or attempt to engage in sexual exploitation of, or sexual intercourse, sexual intrusion or sexual contact with, a child under the care, custody or control of such parent, guardian or custodian

when such child is sixteen years of age or older, notwithstanding the fact that the child may have consented to such conduct or the fact that the child may have suffered no apparent physical injury or mental or emotional injury as a result of such conduct, then such parent, guardian or custodian shall be guilty of a felony.” This felony carries a 1-5 years incarceration.

“The provisions of this section shall not apply to a custodian whose age exceeds the age of the child by less than four years.”

Sending, distributing, exhibiting, possessing, displaying or transporting material by a parent, guardian or custodian, depicting a child engaged in sexually explicit conduct (§61-8D-6).

“Any parent, guardian or custodian who, with knowledge, sends or causes to be sent, or distributes, exhibits, possesses, displays or transports, any material visually portraying a child under his or her care, custody or control engaged in any sexually explicit conduct, is guilty of a felony.” This felony carries 1-2 years and a 400-4,000 dollar fine.

Incest (§61-8-12) is defined as “A person is guilty of incest when such person engages in sexual intercourse or sexual intrusion with his or her father, mother, brother, sister, daughter, son, grandfather, grandmother, grandson, granddaughter, nephew, niece, uncle or aunt” and the following are the definitions used:

- (1) "Aunt" means the sister of a person's mother or father;
- (2) "Brother" means the son of a person's mother or father;
- (3) "Daughter" means a person's natural daughter, adoptive daughter or the daughter of a person's husband or wife;
- (4) "Father" means a person's natural father, adoptive father or the husband of a person's mother;
- (5) "Granddaughter" means the daughter of a person's son or daughter;
- (6) "Grandfather" means the father of a person's father or mother;

- (7) "Grandmother" means the mother of a person's father or mother;
 - (8) "Grandson" means the son of a person's son or daughter;
 - (9) "Mother" means a person's natural mother, adoptive mother or the wife of a person's father;
 - (10) "Niece" means the daughter of a person's brother or sister;
 - (11) "Nephew" means the son of a person's brother or sister;
 - (12) "Sexual intercourse" means any act between persons involving penetration, however slight, of the female sex organ by the male sex organ or involving contact between the sex organs of one person and the mouth or anus of another person;
 - (13) "Sexual intrusion" means any act between persons involving penetration, however slight, of the female sex organ or of the anus of any person by an object for the purpose of degrading or humiliating the person so penetrated or for gratifying the sexual desire of either party;
 - (14) "Sister" means the daughter of a person's father or mother;
 - (15) "Son" means a person's natural son, adoptive son or the son of a person's husband or wife;
- and
- (16) "Uncle" means the brother of a person's father or mother". This felony carries a 5-15 years incarceration and may include a fine of 500-5,000 dollars.

Appendix B

1. Subject number: *assigned number*
2. Group: *FSO, FO, MSO, MO*
3. Age: *current age*
4. Gender: *male, female*
5. Race: *Caucasian, African American, Hispanic, Asian, Other*
6. State of birth: *WV, Other*
7. Marital status: *Single, Married, Divorced, Widowed*
8. Number of marriages: *the number*
9. Level of completed education: *less than high school, high school/GED, Vocational/College*
10. work history: *none/house wife/disabled, minimal, steady (during working years no period of unemployment over 3 yrs)*
11. Type of first conviction: *write in conviction*
12. Current offense: *write in conviction*
13. Inpatient stays: *Yes, No*
14. Previous diagnoses: *Yes, No*
15. Number of diagnoses: *number*
16. List Psychiatric diagnoses: *names of all diagnoses*
17. Own victimization: *physical, sexual, verbal, verbal and sexual, physical and sexual, physical and verbal, all types of abuse, no abuse (the data was later combined into sexual, physical, emotional & nothing categories)*
18. Reported treatment: *write in type of reported treatment*

19. Psychiatric medications: *Yes, No*
20. List psychiatric medication history (names): *List all previous medications*
21. Suicide attempts: *Yes, No*
22. Number of reported suicide attempts: *number*
23. Religious affiliation: *Write in stated religious affiliation*
24. Number of siblings: *number*
25. Parents marital status: *Single, Divorced, Married, Widowed*
26. List the offender's children with age and gender: *list ages and genders*
27. Number of children the offender has custody of: *number*
28. Age of offender at the time of first offense: *age*
29. Offender military history: *Yes, No*
30. Medical hospitalizations (surgeries): *List*
31. Offender history of alcohol abuse: *Yes, No*
32. Offender history of drug abuse: *Yes, No*
33. History of intravenous drug use: *Yes, No*
34. Family history of mental illness: *Yes, No*
35. Family history of alcohol abuse: *Yes, No*
36. Family history of drug abuse: *Yes, No*
37. Family history of suicide: *Yes, No*
38. Family history of incarceration: *Yes, No*
39. Relationship between victim and offender for index offense: *Stranger, Acquaintance, Biological relative, Non-biological family member, Both biologically related and acquaintance*

40. Co-perpetrator during index offence: *Yes, No*
41. Co-perpetrator gender: *Male, Female, Both*
42. Age of offender at time of index offense according to description and age at the time of conviction: *Ages*
43. Age of the index crime victim/s at the time of crime and conviction: *Ages*
44. Victim/s gender: *Male, Female, Both*
45. Offender action: *Passive, Active*
46. Admission: *Yes, No, Partial*
47. Plea/trial agreement: *Plea, Trial, No contest*
48. Use of threats during index offence: *Yes, No*
49. Use of force during the index offence: *Yes, No*
50. Physical damage to the victim/s during the index offence: *Yes, No*
51. Sentence: *Write in the sentence*
52. List all previous sexual victims, their gender and age: *List the ages and gender*
53. Was alcohol use during the commission of the index crime reported: *Yes, No, Sometimes*
54. Was drugs use during the commission of the index crime reported: *Yes, No, Sometimes*
55. Number of nonsexual arrests: *Number*
56. Age of first arrest (sexual or not): *Age*
57. Age at first sexual offence: *Age*
58. Number of sexual offences: *Number*
59. IQ score: *Score*
60. IQ test: *WAIS-III BETA-II, Beta -III*
61. WRAT scores: *Reading score, Spelling score, Math score*

62. ABLE scores: *Problem solving score, Reading score*
63. Number of risk assessments available and when administered: *Number and date*
64. RRASOR: *Score*
65. MnSOST: *Score*
66. VRAG: *Score*
67. LSIR: *Score*
68. MMPI type: *I, II*
69. Initial MMPI (I or II) two point code (the two highest clinical score): *Numbers*
70. L: *Score*
71. F: *Score*
72. K: *Score*
73. Fb: *Score*
74. Hs: *Score*
75. D: *Score*
76. Hy: *Score*
77. Pd: *Score*
78. Pf: *Score*
79. Pa: *Score*
80. Pt: *Score*
81. Sc: *Score*
82. Ma: *Score*
83. Si: *Score*
84. Supplementary scales elevations: *Write in all elevations*

85. Date of the initial MMPI administration (I or II): *The date*

86. Number of MMPI administrations: *Number*

87. Elevations on the second MMPI: *Write in all elevations*

88. Elevations on the third MMPI: *Write in all elevations*

89. Number of parole hearings: *Number*

90. Write ups: *Yes, No*

91. Date of index crime: *Date*

92. Date of intake: *Date*

Table 1.

Dependent Variables by Category

Category (n)	Variable	continuous or categorical
Offender demographic/historical Variables (8)	Age at 1 st offense	continuous
	Type of 1 st offense	categorical
	Total # of arrests	continuous
	Own victimization	categorical
	Education in years	categorical
	Marital status	categorical
	Substance abuse	categorical
	Psychiatric history	categorical
Victim/crime variables (7)	Relationship b/w perp. & vic.	categorical
	Age of offender at crime	continuous
	Age of victim at crime	categorical
	Victim gender	categorical
	Co-perpetrator	categorical
	Active or not	categorical
	Admission	categorical

Table 1 (continued).

Dependent Variables by Category

Category (n)	Variable	continuous or categorical
Clinical variables (3)		
Standardized assessments	IQ score	continuous
	WRAT	
	reading	continuous
	spelling	continuous
	math	continuous
	MMPI-2	
	2-point codes	categorical
	clinical scales	continuous
Actuarial risk assessment (1)		
Risk assessment	LSI-R	continuous

Note. A more through description of these variables can be found in the manuscript.

Table 2.

Demographic/Historical Characteristics by Offender Group

	FSO	MSO	FO	MO	
Variable	%(n)	%(n)	%(n)	%(n)	X ²
Caucasian	100(31)	94(29)	81(25)	97(30)	9.9*
West Virginia native	58(18)	90(28)	52(16)	74(23)	13**
Marriage status					25.9**
Married	55(17)	32(10)	32(10)	29(9)	
Single	3(1)	23(7)	48(15)	45(14)	
Divorced	42(13)	45(14)	16(5)	26(8)	
Widowed	0(0)	0(0)	3(1)	0(0)	
Education					NS
< high school education	55(17)	32(10)	35(11)	32(10)	
High school- education/GED	26(8)	58(18)	35(11)	48(15)	
College/vocational	19(6)	10(3)	29(9)	19(6)	
Inpatient hospitalization	48(14)	35(11)	48(14)	19(6)	NS
Work					NS
None	32(10)	13(4)	13(4)	16(5)	
Minimal	42(13)	35(11)	61(19)	42(13)	
Steady	26(8)	52(16)	26(8)	42(13)	
	FSO(n=31)	MSO(n=31)	FO(n=31)	MO(n=31)	
Variable	M (sd)	M(sd)	M (sd)	M (sd)	F
Age	41.6 (7.7)a	44.3(10.8)a	33.3(7.5)b	38.5(11.3)ab	7.7***
Number of marriages	1.7 (.8)a	1.1 (.8)b	.7 (.9)b	.8(.9)b	9.4***

Note. **p<.00, *p<.05

Table 3.

Means and Standard Deviations for Age at First Conviction

Crime	Gender	Mean	<i>SD</i>	<i>N</i>
Sex offense	Female	30.36	8.5	31
	Male	30.10	10.9	31
Violent offense	Female	23.13	5.5	31
	Male	23.26	9.1	31

Table 4.

Sexual Victimization among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Own victimization	
		Sexual	No-sexual
Sexual offense			
	Female	14 (45.2%)	17 (54.8%)
	Male	12 (38.7%)	19 (61.3%)
Violent offense			
	Female	10 (33.3%)	20 (66.7%)
	Male	1 (3.2%)	30 (96.8%)

<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value	Cramér's <i>V</i>
FSO vs. MSO	3.75	.289	.25
FSO vs. MO	17.47**	.001	.53
FSO vs. FO	2.76	.430	.21
MSO vs. FO	6.87	.076	.34
MSO vs. MO	11.99**	.007	.44

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 5.

Alcohol Abuse among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Abuse history	
		Alcohol	No-alcohol
Sexual offense			
	Female	10 (32.2%)	21 (67.8%)
	Male	20 (64.5%)	11 (35.5%)
Violent offense			
	Female	22 (73.3%)	8 (26.7%)
	Male	27 (90%)	3 (10%)

<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value	Cramér's <i>V</i>
FSO vs. MSO	6.46*	.011	.32
FSO vs. MO	21.30***	.000	.59
FSO vs. FO	10.31**	.001	.41
MSO vs. FO	.55	.457	.1
MSO vs. MO	5.60*	.018	.30

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 6.

Drug Abuse among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Abuse history	
		Drug	No-drug
Sexual offense			
	Female	13 (41.9%)	18 (58.1%)
	Male	16 (51.6%)	15 (48.4%)
Violent offense			
	Female	26 (83.9%)	5 (16.1%)
	Male	24 (80%)	6 (20%)

<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value	Cramér's <i>V</i>
FSO vs. MSO	.58	.445	.1
FSO vs. MO	9.26**	.002	.39
FSO vs. FO	11.68**	.001	.43
MSO vs. FO	7.38**	.007	.35
MSO vs. MO	5.44*	.020	.30

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 7.

Anxiety and PTSD diagnoses among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Anxiety or PTSD diagnoses	
		Yes	No
Sexual offense	Female	6 (19.4%)	25 (80.6%)
	Male	2 (6.5%)	29 (93.5%)
Violent offense	Female	2 (6.5%)	29 (93.5%)
	Male	5 (16.1%)	26 (83.9%)

Table 8.

Co-perpetrator Presences among Males and Females Convicted of Sexual Offenses

Crime	Gender	Co-perpetrator	
		Yes	No
Sexual offense	Female	19 (61.3%)	12 (38.7%)
	Male	2 (6.5%)	29 (93.5%)

Table 9.

Admissions among Males and Females Convicted of Sexual Offenses

Crime	Gender	Admission	
		Yes	No
Sexual offense	Female	17 (54.8%)	14 (45.2%)
	Male	23 (74.2%)	8 (25.8%)

Table 10.

Victim Relationship among Males and Females Convicted of Sexual Offenses

Relationship	Gender	
	Female	Male
Stranger	0 (0%)	2 (6.5%)
Acquaintance	11 (35.5%)	11 (35.5%)
Non-biological family member	2 (6.5%)	11 (35.5%)
Biological relative/ acquaintance	2 (6.5%)	0 (0%)
Biological relative	16 (51.6%)	7 (22.6%)

Table 11.

Two-point Codes among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Two-point code	
		Including scale 2	Including scale 4
Sexual offense	Female	4 (28.6%)	10 (71.4%)
	Male	3 (27.3%)	8 (72.7%)
Violent offense	Female	3 (20%)	12 (80%)
	Male	2 (11.8%)	15 (88.2%)

Table 12.

Co-perpetrator among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Co-perpetrator	
		Yes	No
Sexual offense			
	Female	19 (61.3%)	12 (38.7%)
	Male	2 (6.5%)	29 (93.5%)
Violent offense			
	Female	14 (45.2%)	17 (54.8%)
	Male	6 (19.4%)	25 (80.6%)
<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value	Cramér's <i>V</i>
FSO vs. MSO	20.82***	.000	.58
FSO vs. MO	11.33**	.001	.43
FSO vs. FO	1.62	.203	.16
FO vs. MSO	12.13***	.000	.44
FO vs. MO	4.72*	.030	.28

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 13.

Admission among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Admission		
Sexual offense		Yes	No	Partial
	Female	13 (41.9%)	14 (45.2%)	4 (12.9%)
	Male	7 (22.6%)	8 (25.8%)	16 (51.6%)
Violent offense				
	Female	14 (45.2%)	5 (16.1%)	12 (38.7%)
	Male	19 (61.3%)	3 (9.7%)	9 (29%)
Crime	Gender	Admission		
Sexual offense		Yes	No	
	Female	17 (54.8%)	14 (45.2%)	
	Male	23 (74.2%)	8 (25.8%)	
Violent offense				
	Female	26 (83.9%)	5 (16.1%)	
	Male	28 (90.3%)	3 (9.7%)	
<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value	Cramér's <i>V</i>	
FSO vs. MSO	2.54	.111	.20	
FSO vs. MO	9.81**	.002	.40	
FSO vs. FO	6.15*	.013	.32	
MSO vs. FO	.876	.349	.12	
MSO vs. MO	2.76	.096	.21	

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 14.

Activity among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Active	
		Yes	No
Sexual offense			
	Female	21(67.7%)	10 (32.3%)
	Male	31 (100%)	0 (0%)
Violent offense			
	Female	19 (61.3%)	12 (38.7%)
	Male	31 (100%)	0 (0%)

Table 15.

Index Victim Gender among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	index victim gender		
		Male	Female	Both
Sexual offense	Female	9 (29%)	11 (35.5%)	11 (35.5%)
	Male	4 (12.9%)	23 (74.2%)	4 (12.9%)
Violent offense	Female	15 (55.6%)	9 (33.3%)	3 (11.1%)
	Male	14 (46.7%)	13 (43.3%)	3 (10%)

Table 16.

Sentence Length among Males and Females Convicted of Sexual and Violent Offenses

Crime	Gender	Sentence length			
Sexual offense		1-5years	6-10years	11-19years	20years+
	Female	20 (64.5%)	6 (19.4%)	3 (9.7%)	2 (6.5%)
	Male	22(71%)	7 (22.6%)	2 (6.5%)	0 (0%)
Violent offense					
	Female	15 (48.4%)	5 (16.1%)	1 (3.2%)	10 (32.3%)
	Male	22 (71%)	4 (12.9%)	2 (6.5%)	3 (9.8%)
<i>Follow-Up Pairwise Comparison</i>	Pearson chi square	<i>p</i> value		Cramér's <i>V</i>	
FSO vs. MSO	2.37	.499		.20	
FSO vs. MO	.895	.827		.40	
FSO vs. FO	7.14	.068		.34	
FO vs. MSO	11.99**	.007		.44	
FO vs. MO	5.54	.136		.30	
MO vs. MSO	3.82	.28		.25	

Note. *** $p < .000$, ** $p < .00$, * $p < .05$.

Table 17.

Means and Standard Deviations for Exploratory Measurement Analyses

Crime	Gender	Mean	SD	N
Full scale IQ				
Sex offense	Female	85.2	14.5	31
	Male	88.2	13.9	31
Violent offense	Female	92.8	15.8	31
	Male	91.1	13.5	31
WRAT-reading				
Sex offense	Female	8.0	4.7	19
	Male	9.5	4.0	31
Violent offense	Female	11.0	2.9	27
	Male	10.5	3.7	31
WRAT-spelling				
Sex offense	Female	7.6	4.0	19
	Male	7.3	4.0	31
Violent offense	Female	10.0	3.6	27
	Male	8.1	3.6	31
WRAT-math				
Sex offense	Female	5.7	3.3	19
	Male	7.4	3.6	31
Violent offense	Female	7.3	2.8	27
	Male	7.0	3.0	31

Table 10 (continued).

Means and Standard Deviations for Exploratory Analyses

Crime	Gender	Mean	<i>SD</i>	<i>N</i>
MMPI-2-Sc				
Sex offense	Female	60.3	12.3	20
	Male	63.2	17.7	17
Violent offense	Female	58.1	14.3	22
	Male	51.8	14.4	26
MMPI-2-Ma				
Sex offense	Female	52.1	9.3	20
	Male	50.7	9.3	17
Violent offense	Female	60.3	8.9	22
	Male	50.7	7.9	26
MMPI-2-Si				
Sex offense	Female	55.5	12.4	20
	Male	62.0	14.9	17
Violent offense	Female	50.5	13.3	22
	Male	55.9	13.3	26

Table 10 (continued).

Means and Standard Deviations for Exploratory Analyses

Crime	Gender	Mean	<i>SD</i>	<i>N</i>
LSI-R				
Sex offense	Female	22.6	7.4	20
	Male	19.7	8.4	30
Violent offense	Female	24.1	9.3	31
	Male	21.8	6.8	30