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# Female Sex Offenders: A Controlled Comparison of Offender and Victim/Crime Characteristics

Jill Johansson-Love · William Fremouw

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Abstract The current study was a chart review of 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 or male) by 2 (sex or violent offender) design. This is the first known study to employ three control groups when researching female sex offenders. Multiple variables appeared related to gender and crime. However, some variables emerged as FSO specific. They reported the least alcohol abuse history and had fewer admissions of guilt to the crime than the two violent offender samples. More FSOs knew their victim and were biologically related to their victim than MSOs. Lastly, the FSO sample was the least discriminating as to their victim's gender and had the highest overall rate of sexual victimization.

#### Keywords Female sex offenders · Sexual perpetrators

Female sex offenders are increasing in notoriety but are little studied and poorly understood. Male sex offenders have been the focus of most research to date, but much study has very limited generalization to female sex offenders. Johansson-Love and Fremouw (2006) could only identify 13 empirical studies of female sex offenders from 1989-2004 with samples larger than 10, and just eight of these studies had control groups. Samples of female sex offenders have ranged from a college student who self-reported child molestation (Fromuth and Conn 1997), to juvenile female sex offenders (e.g., Mathews et al. 1997; Vandiver and Teske 2006), and to incarcerated adult female sex offenders (e.g., Kaplan and Green 1995; Vandiver 2006).

J. Johansson-Love · W. Fremouw (⊠)
Department of Psychology, West Virginia University,
53 Campus Drive, Box 6040, Morgantown, WV 26506-6040,
USA

## **Offender Variables**

Although limited, research on these female sex offender populations has identified some findings in two general categories: offender variables and victim/crime variables. (Johansson-Love and Fremouw (2006) for a critical review of this literature through 2004). These offender variables consist of demographic variables such as age, and historical variables such as sexual victimization and psychiatric history. In the following sections we will briefly review these findings.

Age 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 et al. 2002) to as old as age 77 (Vandiver and 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 et al. (2002) investigated 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).

*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, FOs and MSOs (Adshead

e-mail: William.Fremouw@mail.wvu.edu

et al. 1994; Allen 1991; Fromuth and Conn 1997; Grayston and De Luca 1999; Higgs et al. 1992; Hislop 2001; Kaplan and Green 1995; Kubik et al. 2002; Lewis and Stanley 2000; Lloyd 1987; Mathews et al. 1997; Miccio-Fonseca 2000; Nathan and Ward 2002; Vick et al. 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 A history of psychiatric problems is prevalent in the FSO population (Faller 1995; Mathews et al. 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. Initial research of this population suggested that FSOs were more likely to be diagnosed with psychotic problems. Later studies suggest that psychological problems, but not psychosis, are common in this population (Grayston and De Luca 1999; Hislop 2001). Substance abuse (Adshead et al. 1994; Grayston and De Luca 1999; Hislop 2001), depression, anxiety, dissociation, and posttraumatic stress disorders (Grayston and De Luca 1999; Hislop 2001) are frequently reported. 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 among those with more severe psychological problems.

A literature review by Grayston and DeLuca (1999) suggests that substance abuse/dependency is present in the modal FSO. However, the review by Johansson-Love and Fremouw (2006) states that 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. Two studies have specifically mentioned that substance abuse was present in just a minority of their female sex-offender samples (Kubik et al. 2002; Lewis and Stanley 2000).

*Summary* Overall, the limited research suggests that FSO's have (a) a lower average age at the time of their first sex offense, and (b) a history of more sexual victimization than other female offenders. The variables of prevalence of substance abuse and psychiatric disorders have mixed findings.

#### 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, type of offense, 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 (N=471) in the state of Texas on April 27, 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 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 DeLuca (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 and Fremouw 2006). It has also been suggested that offenders with multiple victims abuse either gender (Vandiver and 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. 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 sexoffender victims were family members. The statewide studies suggests that 37% of the FSOs in Arkansas (N=40; Vandiver and Walker 2002) were related to their victim, and in Texas (N=471; Vandiver and 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.

Co-perpetrators Vandiver and Kercher (2004) identified the presence of a co-perpetrator as a potentially important variable. Presence of a dominant male co-perpetrator has been examined in previous reviews (Grayston and De Luca 1999; Wakefield and Underwagner 1991) and was suggested to be a distinct phenomenon for FSOs (Wakefield and Underwagner 1991) and to occur in the majority of the cases where a female is involved in sexual abuse (Grayston and De Luca 1999). This is different from males who usually act alone (Finkelhor and Williams 1988; Solomon 1992). However, Johansson-Love and 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 and 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. 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 and could potentially influence the admission rate.

*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.

The purpose of the present study is to replicate and extend the limited FSO research using a two (male or female) by two (sexual offender or violent offender) design. This is the first study to compare adult incarcerated FSOs with adult incarcerated MSOs, and with adult incarcerated FOs and adult incarcerated male offenders who have committed a victim involved non sexual offense (MOs). This four group design has not previously been used in adult female sex-offender research and should improve 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 et al. 2002). Overall, the study examined offender and victim/crime variables with a state-wide adult female incarcerated sex offender sample and three control groups.

### 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 victiminvolved offense such as robbery, assault, malicious wounding, and so on replicating part of the methodology of Kubik et al. (2002).

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 some advantages to conducting archival research such as the use of existing data sources reduces the data collector bias and subject reactivity to assessment procedures (Goodwin 1998).

### 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. 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). Pruntvtown Correctional Center was selected because it houses both male and female inmates in the FSO, FO, and MO categories. Denmar Correctional Center was selected because many of the incarcerated male sex offenders (MSO) were housed in this institution and it 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 data from 31 randomly selected charts. The charts were randomly selected by pointing at numbers from a list of inmate identification numbers. 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.

The non-sex offender comparison groups (FO & MO) had to have committed a victim-involved offense replicating previous methodology (Kubik et al. 2002). The victiminvolved 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 randomly selected by pointing at inmate identification numbers. 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.

Our data were analyzed with either 2 by 2 ANOVAs to examine interactions and main effects on continuous variables or by Chi square analyses followed by pairwise comparisons to examine where the significant differences were for categorical variables. A power analysis was conducted using Gpower (Faul and 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 modal offender in the four groups is the following: the typical female sex offender in the FSO group was 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 typical female offender was Caucasian (81%), West Virginia native (52%), single (48 %) with a high school degree 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 makeup of the sample was 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)

A coding sheet with definitions was used to summarize the data collected during the chart review. There were only a few variables that required the rater to make a judgment. For example, 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 but not participating. Admission of crime was coded 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 s/he lied. Evidence of substance abuse, anxiety disorders, or PTSD was based on any description of previous diagnosis in their official history.

#### Procedure

The West Virginia DOC staff and law enforcement officials had collected the data in the case files. The data were 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 each group, a total of 124 case files, the data were collected during the fall, 2005 and spring, 2006.

#### Results

#### Offender Characteristics

A 2 by 2 ANOVA was conducted on the age at first conviction to evaluate if FSOs would be vounger than the other offender groups (MSO, FO, MO) at the time of their initial offense. The FSO group had a mean age of 30.36 (SD=8.5), while the MSO group had a mean age of 30.10 (SD=10.9). Both the FO and MO group had earlier ages of first offense, M=23.13 (SD=5.5), and M=23.26 (SD= 9.1), respectively. 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; in fact, both violent offender groups were significantly younger at the age of first conviction than the sex offender graphs, 23.1 years versus 30.2 years, respectively.

The hypothesis that a larger percentage of the FSO group would have been victims of sexual abuse was examined using Chi square analysis (see Table 1). The reported victimization was categorized as yes or no sexual victimization. There were significant group differences,  $\chi^{2}$ = 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

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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, but no other pair of groups.

The hypotheses that substance abuse history would be 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 alcohol abuse history (see Table 2 and 3). There were significant group differences for alcohol abuse history,  $\chi^2$ =23.7, p=.000, Cramér's V=.44 and there were also significant group differences regarding drug abuse history,  $\chi^2$ =17.3, p=.001, Cramér's V=.38. Follow-up pairwise comparisons revealed that the FSO and MSO groups were significantly different regarding the history of alcohol abuse history,  $\chi^2 = 6.5$ , 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  $\chi^2 = .58$ , p = .445, Cramér's V=.1. The FSO group was significantly different from the MO group on alcohol abuse history,  $\chi^2=21.3$ , 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,  $\chi^2$ =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  $\chi^2 = 10.31$ , p = .001, Cramér's V=.41 and drug  $\chi^2$ =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  $\chi^2 = 5.60$ , p=.018, Cramér's V=.30 and drug  $\chi^2=5.44$ , 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,  $\chi^2 = 7.38$ ,

 Table 1
 Sexual victimization among males and females convicted of sexual and violent offenses

Crime	Gender	Own Sexual	X <sup>2</sup>	
		Yes	No	
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%)	15.23*

 Table 2
 Alcohol abuse among males and females convicted of sexual and violent offenses

Crime	Gender	Alcohol Abuse History		$X^2$
		Yes	No	
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 (87.1%)	3 (10%)	23.7***

Crime	Gender	Drug Abuse History		X <sup>2</sup>
		Yes	No	
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%)	17.3**

Table 3 Drug abuse among males and females convicted of sexual and violent offenses

p=.007, Cramér's V=.35. However, the MSO group was not significantly different from the FO group regarding alcohol abuse history.

The hypothesis that the FSO sample would have more anxiety disorders such as PTSD, than the other offender groups, was examined using Chi square analysis of the diagnoses in the record. This hypothesis was not supported,  $\chi^2$ =3.87, p=.276, Cramér's V=.18. The frequencies of anxiety diagnosis by groups was 19.4% for FSO, 6.5% for MSO, 6.5% for FO, and 16.1% for MO.

#### Victim/Crime Characteristics

The gender of the index victim/s was examined using a Chi square analysis and revealed significant group differences,  $\chi^2 = 23.52$ , p = .001, Cramér's V = .31 (see Table 4). These results show 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.

The hypothesis that a larger percentage of the FSO group would know or be biologically related to their victim than the MSO group was supported  $\chi^2 = 13.8$ , p = .008, Cramér's V=.47. FSOs were biologically related to at least one victim 58.1% as compared to 22.6% of the MSO group.

The hypothesis that a larger percentage of the FSO sample would offend with a co-perpetrator than the other groups was examined with a Chi square analysis. There were significant group differences for having a coperpetrator,  $\chi^2 = 25.8$ , p = .000, Cramér's V = .46 (see Table 5). Both the FSO and FO groups had a high percentage of co-perpetrators 61.3% and 45.2% respectively. Follow-up pair-wise comparisons indicated that both the female samples were higher than the two male samples, but they did not differ from each other.

Admission of guilt, or partial admission, was examined for all four groups. A Chi square analysis revealed significant group differences  $\chi^2 = 22.2$ , p = .001, Cramér's V=.30 on this variable (see Table 6). Pair wise comparisons showed that the FSO sex offender group was significantly less likely to admit guilt than the two violent offender groups.

### Discussion

The hypothesis that the FSO group would be vounger 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 first conviction age, however, 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 and Saylor 1991).

Faller (1995) reported that female offenders were significantly younger (M=28 years) than their male counterparts (M=33 years) at the time of collection. They did not assess the offender's age at the time of

dex victim gender and females con- ual and violent	Crime	Gender	index victim gender			X <sup>2</sup>
			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%)	
						23.52***

Table 4 Inde among males victed of sexu offenses

p < .000

 Table 5
 Co-perpetrator among males and females convicted of sexual and violent offenses

Crime	Gender	Co-perpetrator		$X^2$
		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%)	25.8**

conviction or the age of onset. 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. 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.

The hypothesis that the FSO group would report more frequently being the victim of sexual abuse than the three other groups was partially 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 that the MO sample and did not differ from each other or the FO group.

The current findings are consistent with previous research. A recurring finding in previous research (Lewis and Stanley 2000; Nathan and Ward 2002; Vick et al. 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 and Conn 1997), male registered child abusers (Allen 1991), male sex offenders (Miccio-Fonseca 2000), female offenders (Miccio-Fonseca 2000) and incarcerated female offenders

(Green and Kaplan 1994; Kaplan and 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 reported histories of childhood abuse. A review by Hanson and Slater (1988) indicated 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 consistent finding in the literature. It 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 sex offender groups reported less history of alcohol and drug abuse than the non sex offender groups. 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).

In many studies, however, 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), also 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 whether they were referring to a history of substance abuse or substance abuse

Table 6 Guilt admission among males and females convicted of sexual and violent offenses

Crime	Gender	Admission	Admission		
		Yes	No	Partial	
Sexual Offense	Female	13 (41.9%)	14 (45.2%)	4 (12.9%)	
	Male	7 (22.6%)	8 (25.8%)	16 (15.6%)	
Violent Offense	Female	14 (45.2%)	5 (16.1%)	12(38.7%)	
	Male	19 (61.3%)	3 (9.7%)	9 (29%)	22.2**

during the crime. 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. Substance abuse may not play as large of a role within the sex offender population as within other criminal groups because sex offenses may be 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.

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.

Examining the gender of the index victim/s 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; Grayston and De Luca 1999; Johansson-Love and Fremouw 2006). Male sex offenders, on the other hand, do appear to prefer female victims, although they too victimize both genders.

Findings also supported the 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 and Conn 1997; Kaplan and Green 1995; Lewis and Stanley 2000; Mathews et al. 1997; Vandiver and Kercher 2004). Only 2 of the MSO victims were stranger offenses and none of the FSO victims were unknown to the perpetrator. 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 to 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. Our results should be further replicated using samples of both male/female and adolescent/adult samples.

As predicted, more female sex offenders than male sex offenders had co-perpetrators. The female sex offender literature (Faller 1995; Grayston and De Luca 1999; Kaplan and Green 1995; Nathan and 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 (61,3%) have co-perpetrators than the MSOs (6.5%), the results of the current study suggest that this may be a gender factor rather than a crime factor because 45% of the FO also have co-perpetrators. 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.

Some support was found for the hypothesis that female sex offenders would be less likely to admit guilt as suggested by Allen (1991). Admission of guilt was 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%). 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 1995). 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%) but less likely to make a partial confession (13 % current study vs. 68%). In the current study the MSO group was most likely to recant or make a partial admission (52%).

## 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 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 were collected using a chart review and that data in the charts had been collected in a non-standardized fashion by DOC employees and law enforcement officials. Self-report data collected in the charts were not collected in a confidential manner, which might have increased reporting of potentially mitigating factors and denial of aggravating factors. 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. Using a prison sample can be problematic because it may exclude the less serious offenders who received community placement. Therefore, this study presents 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, results of the current study suggest that one variable was related to only gender. Having a coperpetrator during the crime was related to being a female and not a FSO phenomenon as suggested in the previous literature.

Several variables were related to the type of crime. The current study indicated that both male and female sex offenders were older than their violent counter parts at the time of their first conviction. The FSO sample had the largest percentage of reported sexual victimization (45%), but it was only significantly different from the MO group. In fact, both sexual offender samples and both female groups 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.

There also were several variables associated with the FSO group. The FSO sample reported less alcohol history than both of the violent offender groups. They had also fewer guilt 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. 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. 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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