WILEY

The dark figure of sexual offending: A replication and extension

Alan J. Drury[1] | Michael J. Elbert[1] | Matt DeLisi[2]

[1]United States Probation and Pretrial Services, Southern District of Iowa, Des Moines, Iowa, USA

[2]Iowa State University, Ames, Iowa, USA

Correspondence
Matt DeLisi, Iowa State University, 510 Farm House Lane, Ames, Iowa 50011, USA.
Email: delisi@iastate.edu

Abstract

Studies of the dark figure of sexual offending using federal correctional clients reported significant evidence of previously unknown or hidden sexual violence, often among clients with no official criminal history. Unfortunately, research has produced variable estimates of how large the dark figure is. The current study sought to replicate recent studies of federal sexual offenders about the dark figure of sexual offending. We also extended the knowledge base by providing additional correlational analyses to see whether self-reported and official sexual offending have shared or divergent correlates. Overall, 73.8% of federal sexual offenders reported prior contact victims, which is higher than, but generally consistent with, prior prevalence estimates of 55–69% in studies of federal correctional clients. In the current data, clients convicted of child pornography possession or receipt and who had no official record of sexual abuse nevertheless reported contact sexual offenses in more than 59% of cases.

1 | INTRODUCTION

Coined by Biderman and Reiss (1967), the "dark figure of crime" is a substantive and methodological concept that describes the differences between the true amount of criminal offending that occurs in a population as assayed by validated offender self-reports compared to official estimates based on arrest reports and other criminal justice system information and victimization surveys. To be sure, self-report and official estimates of crime have an important overlap, suggesting convergent validity (Hindelang, Hirschi, & Weis, 1981; Pollock, Menard, Elliott, & Huizinga, 2015; Thornberry & Krohn, 2000); however, an offender's official criminal record is at best a sampling of his or her actual criminal activity.

Although the dark figure of crime pertains to all criminal offenses, it is particularly pronounced for sexual offending, because the nature of sexual victimization is fundamentally different from other forms of criminal victimization due to the sensitive, intrusive and intimate valence of sexual contact (Cermak & Molidor, 1996; Jones, Alexander, Wynn, Rossman, & Dunnuck, 2009; Katzenstein & Fontes, 2017; Levan Miller, 2010; Spencer, Mallory, Toews, Stith, & Wood, 2017; Taylor & Gassner, 2010). More than other forms of criminal harm, sexual victimization produces a mélange of emotions spanning embarrassment, guilt, shame, anger, depression and self-derogation. For these reasons, victims are less likely to report their victimization relative to a crime that does not produce these emotional and behavioral sequelae. To illustrate, a 25-year study of sexual offenders in Canada found that 70–77% of child molestation victimizations, 98% of exhibitionism victimizations, but only 9% of violent non-sexual victimizations were unreported. Based on these estimates, most sexual crime goes unreported, especially relative to non-sexual offenses (Langevin et al., 2004).[1]

Evidence for the dark figure of sexual offending is widespread, as evidenced by an array of studies employing multitudinous analytical techniques and data sources (Abel et al., 1987; Bouchard & Lussier, 2015; Koss, Gidycz, & Wisniewski, 1987; Mathesius & Lussier, 2014; Miethe et al., 2006; Scurich & John, 2019). For example, Weinrott and Saylor's (1991) study of 37 institutionalized sexual offenders charged with rape reported 66 official charges but 433 self-reported rapes, which corresponded to mean estimates of 1.8 official victims but 11.7 self-reported victims, respectively. Thus, according to this study, the dark figure is 6.5 times larger than the official estimate. Lisak and Miller (2002) studied 120 males who self-reported rape perpetration but were not arrested. Of the 120 male students who self-reported at least one rape, 63.3% reported that they committed multiple rapes involving either multiple victims or multiple assaults against the same victim. In addition, 58.3% of males reported committing other acts of violence, including battery, child abuse, sexual assault of a child or other forms of sexual assault. The 120 males reported 1225 violent acts, including 483 rapes, 53 sexual assaults less than rape, and 319 sexual assaults of children. These crimes were not included in official data. Similarly, a national-level study of university students indicated that the incidence of sexual assault is 10–15 times larger than provided by official estimates (Koss et al., 1987). Drawing on data from all individuals consecutively admitted to a Canadian federal penitentiary for a sex crime between 1994 and 2000, Bouchard and Lussier (2015) estimated that the dark figure of sexual offending is potentially 20.5 times larger than official records reveal.

In their seminal paper, Biderman and Reiss (1967, pp. 14–15, italics added) advised, "In exploring the dark figure of crime, the primary question is not how much of it becomes revealed but rather what will be the selective properties of any particular innovation for its illumination. As in many other problems of scientific observation, *the use of approaches and apparatuses with different properties of error has been a means of approaching truer approximations of phenomena that are difficult to measure.*" A recent approach that shows great promise in quantifying the dark figure of crime is offender self-reports facilitated by polygraph. A study of juvenile sexual offenders compared prevalence estimates for bestiality using a self-report measure called the Multiphasic Sexual Inventory-II (MSI-II) to self-reports elicited by polygraph. Specifically, Schenk, Cooper-Lehki, Keelan, and Fremouw (2014) reported prevalence estimates of 37.5% on the MSI-II and 81.3% on the polygraph.

Bourke and Hernandez (2009) analyzed federal sex offenders in an intensive residential sex-offender treatment program and found that, of 115 child pornography offenders with no official record of contact sexual offending, an average of 8.7 victims were reported after polygraphs. Indeed, the self-reported contact sexual offending in the cohort increased over 200–300% when polygraphs were used to facilitate self-reports. DeLisi et al.'s (2016) study of 119 federal sexual offenders employed self-reported sexual offending data elicited by polygraph sessions and produced several important findings regarding the dark figure of sexual offending. Correctional clients self-reported a mean of 3.69 contact victims (median of 1) and a range of 0–24 victims, and overall 69% of sexual offenders reported prior contact victims. By contrast, the official arrest charges for rape or sexual abuse for these clients indicated a mean (range) of 1.11 (0–7) sexual offenses. The ratio of self-report to official victims was 3.32. Additionally, 34 offenders among the 119 had zero official sex crimes, but self-reported a total of 148 contact victims. Among the seven most prolific sexual abusers, four did not have an official criminal

history and their instant conviction offense was possession or receipt of child pornography. In their study of federal sexual offenders in Canada, Mathesius and Lussier (2014) reported that sexual offenders engaged in sexual violence for more than 7 years on average before their first arrest. Moreover, the number of sexual crime events in their data was staggering, as offenders perpetrated a minimum of 1, a median of 10, a mean of 216.9, and a maximum of 5524 sex crime events.

Using federal sex offender data from a jurisdiction in the northeastern United States, Smith (2020) replicated the DeLisi et al. study, but focused exclusively on child pornography possession cases. Smith found that nearly 55% of clients reported a prior contact victim, 40% of clients had two or more victims, and 8% of clients reported that they sexually abused 10 or more child victims. In total, the 105 child pornography possession offenders in the sample reported 528 child sexual abuse victims. The polygraph was very useful for studying the dark figure of sexual offending. Nearly 25% of clients failed polygraph examinations that attempted to validate their self-reported sexual history disclosures. After staff informed clients about the negative polygraph results, nearly 44% of these clients ultimately revealed an additional 46 contact victims.

1.1 | Current focus

While studies of the dark figure of sexual offending using federal correctional clients report significant and often dramatically high evidence of previously unknown or hidden sexual violence often among clients with no official criminal history, research has produced variable estimates of how large the dark figure is. As such, replication is essential. With this in mind, the current study sought to replicate the approach by DeLisi et al. (2016) and Smith (2020) to quantify the dark figure of sexual offending, while also extending the knowledge base by providing additional correlational analyses to see whether self-reported and official sexual offending have shared or divergent correlates.

2 | METHOD

2.1 | Participants and procedures

The initial study group constituted the entire population of federal supervised release clients who had a sexual offense in their criminal career ($N = 216$), selected from a federal jurisdiction in the Midwestern United States between 2016 and 2020. Of the 216 offenders in the entire population, 109 (50.5%) had an official arrest charge for a contact sexual offense and 107 (49.5%) did not have an official charge for a contact sexual offense. Of the 216 sexual offenders in the total population, 168 sexual offenders had self-reported sexual offending data and constituted the analytical sample. The descriptive profile of sexual offenders in this jurisdiction is a 46.6-year-old male, 82.6% White, 17.4% African-American, and 4.2% Hispanic. There are no female offenders in these data. Nearly 70% of the offenders were low risk (40%) or low-moderate risk (29.76%) on the federal Post-Conviction Risk Assessment (PCRA), with 22.9% moderate risk and 7.3% high risk. The sexual offenders are comparable to the current population profile in this jurisdiction by sex (population is 88% male and 12% female) but are disproportionately White (population is 44% White, 21% Black, 33% Hispanic). The most common commitment offenses were in descending order: possession or receipt of child pornography (47.2%), Sex Offender Registration and Notification Act (SORNA) (17.6%), distribution of child pornography (11.1%), various firearms offenses (10.6%), various drug trafficking offenses (6.9%), attempt to induce or entice minor for sexual activity (4.2%), sexual trafficking (0.9%), and sexual abuse (0.9%).

Data collection involved two procedures. First, all data in the client's Probation/Pretrial Services Automated Case Tracking System (PACTS), which is the case management platform used in all 94 federal districts, were

electronically extracted and converted to an Excel spreadsheet. The electronic extraction contained information on a variety of variables, including demographics, commitment offense, case information, conditions, PCRA and assorted biographical information. Second, the senior author manually extracted information on dozens of variables from the client's presentence investigation report (PSR), offender dossiers from the Bureau of Prisons, psychological and psychiatric reports, treatment reports, criminal career indicators and self-reported sexual history reports. These variables were coded, entered into the Excel spreadsheet, and exported to Stata 12.1 for data analyses.

Sexual history questionnaires were completed as part of a polygraph examination that was ordered as a condition of the client's supervised release. The polygraph continuously records autonomic responses associated with respiration, electrodermal activity and cardiovascular functioning in response to questions. In addition, sensors are designed to record peripheral behavior activity and cooperation during the examination, and the Axciton computerized polygraph system was employed. All clients reviewed a release and consent form and signed it, and all examinations were audio- and video-recorded consistent with American Polygraph Association guidelines. None of the current authors participated in the polygraph sessions.[2]

2.2 | Measures

2.2.1 | Dependent variables

Two dependent variables were used. Self-reported sexual abuse is a count variable of the number of victims the offender reported having victimized for the crimes of rape, sexual abuse, sodomy, oral copulation and related statutes that involved contact sexual violence ($M = 3.26$, SD $= 5.04$, range: 0–40). Official sexual abuse is a count variable of the number of arrest charges the client has for rape, sexual abuse, sodomy, oral copulation and related statutes that involve contact sexual violence ($M = 1.96$, SD $= 3.01$, range: 0–19).

2.2.2 | Independent variables

Conviction offense
Four dichotomous terms (0 = no, 1 = yes) were used for conviction offense for the most common sexually based offenses, that is, possession or receipt of child pornography, violations of federal SORNA, distribution of child pornography, and attempt to induce or entice minor for sexual activity.

Paraphilias or paraphilic disorders
All paraphilias were scored on an ordinal scale (0, no evidence; 1, some evidence; 2, definite evidence) based on documents in the client's PACTS. The current authors did not render any diagnoses and all diagnostic information was based on extant reports from psychologists or psychiatrists. The paraphilias included: pedophilia, bestiality, frotteurism, sexual masochism, voyeurism, exhibitionism, paraphilia not otherwise specified (NOS), sexual sadism and transvestic fetishism. Pornography addiction was also included given its association with child pornography.

Personality disorders
All personality disorders were scored on an ordinal scale (0, no evidence; 1, some evidence/symptoms; 2, definite evidence/diagnosis) based on documents in the client's PACTS. The current authors did not render any diagnoses, and all diagnostic information was based on extant reports from psychologists or psychiatrists. These included paranoid, schizoid, schizotypal, antisocial, borderline, histrionic, avoidant, dependent, and obsessive compulsive personality disorder.

Psychopathology

Fifteen forms of psychopathology spanning behavioral disorders, suicidal thoughts and behaviors, homicidal ideation and mood disorders were scored on an ordinal scale (0, no evidence; 1, some evidence/symptoms; 2, definite evidence/diagnosis) based on documents in the client's PACTS. The current authors did not render any diagnoses and all diagnostic information was based on extant reports from psychologists or psychiatrists. Psychopathology included oppositional defiant disorder, conduct disorder, attention deficit/hyperactivity disorder, intermittent explosive disorder, post-traumatic stress disorder, self-mutilation, suicidal ideation, suicide attempts, homicidal ideation, adjustment disorder, major depressive disorder, dysthymia, bipolar I disorder, bipolar II disorder and schizoaffective disorder.

2.3 | Analytical strategy

We utilized multiple analytical techniques. A histogram (see Figure 1) shows the prevalence of self-reported sexual abuse victims for the sample. A one-way ANOVA model was also performed to compare self-reported sexual offending among four sexually based conviction offenses (distribution of child pornography, possession or receipt of child pornography, attempt to induce or entice minor for sexual activity, and violations of SORNA). Next, we cross-tabulated self-reported and official sexual abuse offenses with measures of association (Cramér's V and Pearson χ^2). Clients who had zero official record of sexual abuse but non-zero self-reported sexual abuse were quantified. Descriptive statistics were provided for the prevalence of sexual abuse victims by age, across age categories and for both genders. Next, Spearman zero-order correlations with Bonferroni adjustments for multiple tests for self-reported and official sexual abuse and paraphilias, personality disorders and psychopathology were estimated. Due to the ordinal measurement of paraphilias, personality disorders and psychopathology, Spearman's rho (ρ) correlations are the most appropriate. Finally, we reported descriptive statistics for self-reported sexual abuse among clients whose instant conviction offense was possession or receipt of child pornography and who have zero official record of sexual abuse.

3 | FINDINGS

3.1 | Self-reported sexual abuse victims

Figure 1 is a histogram that shows the prevalence of self-reported sexual abuse victims for the sample. Approximately one in four offenders reported zero contact victims, with 73.8% reporting at least one prior contact victim. Nearly half of the sample victimized two or more victims and the 90th percentile of sexual abusers victimized at least eight victims. The mean self-reported victims was nearly 3.3. Of the seven most prolific self-reported sexual abusers, six had a commitment offense of possession or receipt of child pornography. Among those whose instant offense was for a sexual offense, there were slight differences in the mean self-reported victims, but these group differences were not significant (omnibus $F = 0.32$, ns). These conviction offenses included distribution of child pornography ($M_{victims} = 2.36$), possession or receipt of child pornography ($M_{victims} = 3.34$), inducement or enticement of minor for sexual activities ($M_{victims} = 2.0$), and SORNA ($M_{victims} = 3.66$).

There was wide variability in self-reported sexual offending by victim age, including victims aged 0–2 years ($M = 0.05$, SD = 0.27, median = 1, range: 0–3), victims aged 3–12 years ($M = 1.1$, SD = 3.34, median = 6, range: 0–38), victims aged 13–17 years ($M = 0.34$, SD = 1.13, median = 6, range: 0–16), and adult victims ($M = 0.34$, SD = 1.13, median = 3, range: 0–11).
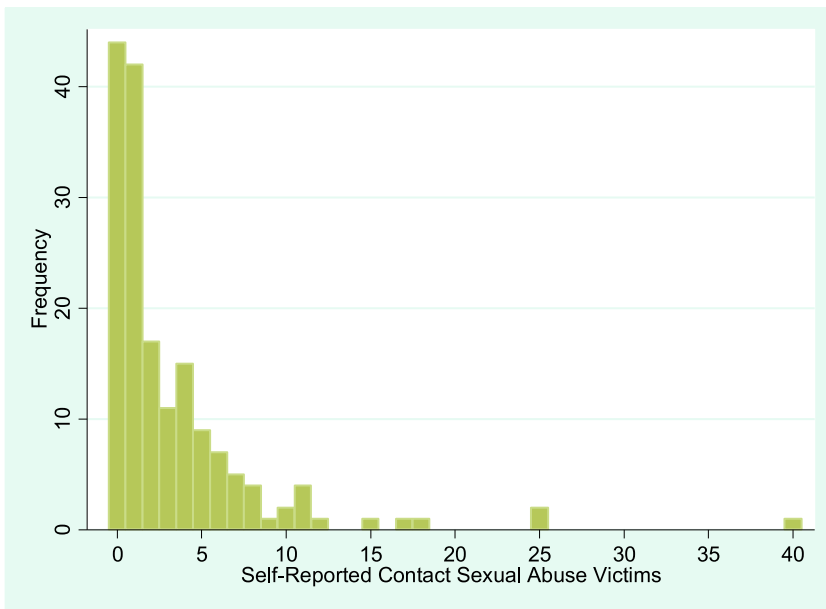
FIGURE 1 Histogram of self-reported contact sexual abuse victims

3.2 | Cross-tabulation of self-reported versus official sexual abuse offenses

Table 1 shows a cross-tabulation of self-reported versus official sexual abuse offenses (Cramér's $V = 0.353$, Pearson $\chi^2 = 314.81$, $p < 0.01$). The data in the first column showing zero for official sexual abuse charges and non-zero for self-reported sexual abuse offenses represent the dark figure of sexual offending. The dark figure includes 57 offenders – 34% of the total sample – who abused 271 victims.

3.3 | Characteristics of self-reported sexual abuse victims

There was considerable diversity for the age and gender of self-reported sexual abuse victims. In terms of prevalence, the most commonly abused victims based on offender self-reported were adolescents between aged 13–17 years (35.5%), children aged 3–12 years (32.2%), adults (15.4%), and children between the ages of 0 and 2 years (3.7%). Nearly 23% of offenders sexually abused victims of multiple age groups and 11.2% of offenders sexually abused both female and male victims.

3.4 | Spearman zero-order correlations for self-reported and official sexual abuse

Table 2 shows Spearman zero-order correlations between paraphilias, personality disorders and psychopathology for self-reported and official measures of sexual abuse. The results indicate that self-reported and official sexual abuse have different correlates. In terms of paraphilias, there are significant correlations for self-reported sexual abuse and frotteurism ($\rho = 0.30$) and exhibitionism ($\rho = 0.34$). No significant correlations between official sexual abuse and paraphilic disorders were found. For personality disorders the only significant correlation was between official sexual abuse and antisocial personality disorder ($\rho = 0.44$). For psychopathology, no significant correlations were found.

TABLE 1 Cross-tabulation of self-reported (y-axis) versus official (x-axis) sexual abuse offenses

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	19	Total
0	36	3	1	-	1	2	1	-	-	-	-	-	-	-	-	-	44
1	19	8	5	3	1	1	1	3	1	-	-	-	-	-	-	-	42
2	6	3	3	-	-	2	-	1	1	-	-	-	-	1	-	-	17
3	4	1	1	2	2	-	-	-	-	1	-	-	-	-	-	-	11
4	5	-	2	2	3	-	-	-	-	-	1	1	-	-	-	1	15
5	5	-	1	2	-	-	-	-	-	-	-	-	-	-	1	-	9
6	5	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	7
7	3	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	5
8	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	4
9	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
10	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2
11	1	-	-	1	1	-	-	-	-	-	-	-	1	-	-	-	4
12	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
15	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
17	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
18	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
25	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2
40	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Total	93	15	14	10	9	8	3	5	3	1	1	2	1	1	1	1	168

3.5 | Self-reported sexual abuse victims for child pornography possession/receipt cases with no official record of sexual abuse

In all, 71 offenders in the current data had an instant conviction offense for child pornography possession or receipt and had no official record of sexual abuse. Nearly 41% of these clients reported zero victims, with approximately 59% of clients reporting at least one sexual abuse victim. More than 42% reported two or more victims. The mean number of victims was 3.0 (SD = 4.79) and the range was 0–25. Those in the 90th percentile or above reported seven or more victims.

4 | DISCUSSION

Several findings warrant discussion in our empirical study of the dark figure of sexual offending. First, the evidence for the dark figure of sexual offending is substantial and the prevalence of self-reported sexual abuse of 73.8% is consistent with prior studies of federal correctional clients that reported 69% (DeLisi et al., 2016) and 55% (Smith, 2020), respectively, although the latter study only focused on child pornography possession cases. In the current data, clients convicted of child pornography possession or receipt and who had no official record of sexual abuse nevertheless reported contact sexual offenses in > 59% of cases. Taken together, these data indicate that at a minimum, more than one in two federal sexual offenders have previously sexually abused a victim.

TABLE 2 Spearman zero-order correlations for self-reported and official sexual abuse

Variable	Self-reported sexual abuse	Official sexual abuse
Paraphilias		
Bestiality	0.20	−0.14
Frotteurism	**0.30**	−0.04
Pedophilia	0.11	−0.04
Sexual masochism	0.09	−0.01
Voyeurism	0.13	−0.15
Exhibitionism	**0.34**	−0.01
Paraphilia NOS	0.17	−0.14
Sexual sadism	0.12	0.17
Transvestic fetishism	0.06	−0.09
Pornography addiction	0.04	−0.17
Personality disorders		
Paranoid	−0.03	0.06
Schizoid	−0.02	−0.09
Schizotypal	−0.04	0.02
Antisocial	0.05	**0.44**
Borderline	0.01	−0.05
Histrionic	−0.02	−0.07
Narcissistic	0.03	0.12
Avoidant	−0.02	−0.07
Dependent	0.001	−0.07
Obsessive compulsive	0.02	−0.02
Psychopathology		
Oppositional defiant disorder	−0.01	0.05
Conduct disorder	0.14	0.20
ADHD	0.06	0.05
PTSD	−0.02	0.09
Intermittent explosive disorder	−0.03	−0.001
Self-mutilation	−0.01	0.10
Suicidal ideation	−0.01	0.04
Suicide attempts	0.01	0.09
Homicidal ideation	0.002	0.14
Adjustment disorder	−0.01	−0.04
Major depressive disorder	0.07	−0.002
Dysthymia	−0.04	−0.001
Bipolar I disorder	0.06	0.07

T A B L E 2   (Continued)

Variable	Self-reported sexual abuse	Official sexual abuse
Bipolar II disorder	−0.12	−0.03
Schizoaffective disorder	−0.16	0.04

Note: Bolded correlations significant after Bonferroni adjustment with 35 tests, two-tailed.

Abbreviations: ADHD, attention deficit/hyperactivity disorder; NOS, not otherwise specified; PTSD, post-traumatic stress disorder.

Second, and relatedly, the dark figure of sexual offending is also found with federal offenders who theoretically should have little to no involvement in contact offending, namely the offenses of child pornography possession and receipt, which potentially have a more voyeuristic quality. Clearly, these offenders are not simply voyeurs, given that 59% reported prior contact offenses. Moreover, some of the most prolific sexual abusers in these data, including clients who self-reported 8, 10, 12, 15, 17, 18 and 25 victims, were possession/receipt cases with no documented history of sexual abuse. That sexual offenders who engage in voyeuristic offenses also engage in contact offenses is supportive of research indicating that, like most offenders, sexual offenders are versatile in their offense conduct (Cale, Smallbone, Rayment-McHugh, & Dowling, 2016; DeLisi et al., 2017; Drury et al., 2017; Lussier, Leclerc, Healey, & Proulx, 2011).

Third, although official and self-reported sexual offending are significantly correlated (Pearson $r = 0.19$, $p < 0.05$), there is also evidence of discordance between the two measures. Based on the cross-tabulation shown in Table 1, only 52 offenders accurately reported their sexual crimes: 36 offenders reported and had zero official charges for sexual abuse, eight clients had one arrest and reported one, three clients had two arrests and reported two assaults, two clients had three arrests and reported three sexual assaults, and three clients had four arrests and self-reports of sexual assault. This means that 31% of sexual offenders in these data accurately reported their crimes as corroborated by arrest, while 69% of sexual offenders misrepresented their sexual violence, or accurately reported what was previously unknown based on official data. For example, the most prolific sexual offender had 19 arrests for sexual abuse, but reported only four offenses. The offender with 14 arrests reported just five offenses and the client with 13 arrests for sexual abuse reported just two assaults. On the other hand, the offenders in the first column reported multiple victimizations relative to their zero arrests for sexual abuse.

Fourth, self-reported and official sexual abuse have different correlates and suggest different psychological profiles of the offender. Self-reported sexual abuse is primarily paraphilic in nature, especially involving frotteurism and exhibitionism. By contrast, official sexual abuse was not correlated with paraphilic disorders. Official sexual abuse has an externalizing psychopathology valence with significant correlation with antisocial personality disorder (correlations with conduct disorder and homicidal ideation were significant prior to adjustments for multiple tests). In this regard, sexual offenders who accrue arrests for sexual violence also exhibit psychopathology that is itself strongly associated with generalized criminal activity. This is a different profile than a "hidden" sexual offender whose sexual violence is instantiated with sexual deviancy (Hazelwood & Warren, 2000).

Fifth, victim characteristics include prevalence estimates that reveal the magnitude of sexual victimization and its likely downstream consequences. The most commonly abused victims were adolescents aged 13–17 years and children aged 3–12 years. Nearly 4% of clients in these data sexually abused infants and toddlers. Nearly one in four offenders sexually assaulted victims from multiple age groups and 11.2% sexually abused both males and females. These are sobering data for multiple reasons. There is a huge amount of evidence that sexual victimization is associated with subsequent internalizing disorders (Aday, Dye, & Kaiser, 2014; Kennedy & Prock, 2018; Turner, Finkelhor, & Ormrod, 2010), externalizing disorders (Miley, Fox, Muniz, Perkins, & DeLisi, 2020; Renner, Boel-Studt, & Whitney, 2018), impaired socioeconomic and social functioning (Hochstetler, DeLisi, Jones-Johnson, & Johnson, 2014; Kennedy & Prock, 2018), increased overall psychopathology (Najdowski & Ullman, 2009; Romano & De Luca, 2001), suicidal thoughts and behaviors (Aday et al., 2014), and, among males, becoming a sexual offender

(DeLisi & Beauregard, 2018; Drury, Elbert, & DeLisi, 2019; DeLisi, Kosloski, Vaughn, Caudill, & Trulson, 2014; Miley et al., 2020). Thus these victimizations are devastating to the victim and set into motion multiple, interrelated, immediate and long-term negative consequences.

Finally, a critical issue in studies of the dark figure of sexual offending relates to the representativeness of the sample and thus the generalizability of the findings. It is important to recognize that the current study employed the *entire population* of clients with a sexual offense spanning 2016–2020 in a federal jurisdiction and the analytical sample represented 78% of that total population. Moreover, the sample was behaviorally heterogeneous in terms of their criminal careers, paraphilic disorders, psychopathology and sexual offending. Although correctional samples are potentially susceptible to criticism that they contain too many pathological offenders, that is not true of these data. Nearly 70% were low or low-moderate risk and only 7.3% – fewer than 1 in 10 – were high risk. These are important points to understand considering the high prevalence of contact sexual offending among federal sexual offenders, many of whom have no documented history of sexual violence.

DISCLOSURE STATEMENT

Matt DeLisi receives consulting income and travel expenses in criminal and civil litigation relating to criminological and forensic assessmentof criminal offenders, receives editorial remuneration from Elsevier, has received expert services income from the United States Department of Justice and the Administrative Office of the United States Courts, and receives royalty income from Cambridge University Press, John Wiley & Sons, Jones & Bartlett, Kendall/Hunt, McGraw-Hill, Palgrave Macmillan, Routledge, Sage, University of Texas Press, and Bridgepoint Education. No direct remuneration is associated with the current study.

ENDNOTES

[1] According to the most recent year of complete Uni-form Crime Reporting (UCR) Program data in 2018, there were 139,380 rapes using the new criteria and 101,151 rapes using the legacy definition (Federal Bureau of Investigation, 2020). The most comprehensive victimization data source is the National Crime Victimization Survey (formerly known as the National Crime Survey) which is a nationally representative survey of American households but only includes persons age 12 years or older as participants. Thus, all victimization of children age 11 years and younger is not measured. In 2018, the NCVS indicated 734,630 rape/sexual assaults in the United States (Morgan & Oudekerk, 2019). In terms of raw national data for rape/sexual assault, the ratio of victimizations to arrests is about 7:1. This is itself a downwardly biased estimate because the NCVS does not measure sexual abuse of younger children.

[2] The use of polygraphs in legal contexts is controversial, but the reliability, validity and veracity of the method is demonstrated with supervision of sexual offenders (Grubin, Madsen, Parsons, Sosnowski, & Warberg, 2004; Kokish, Levenson, & Blasingame, 2005). For example, Kokish et al. (2005) found that sexual offenders agreed with the polygrapher's examination in 90% of cases and nearly three out of four sexual offenders reported that the method facilitated their openness and honesty in reporting prior sexual behaviors. Polygraphs are also evaluated favorably by correctional officials who supervise sexual offenders (see, McGrath, Cumming, Hoke, & Bonn-Miller, 2007). Moreover, polygraph examinations of sexual offenders is a core component of the containment model, which is a comprehensive correctional approach to supervising sexual offenders that maximizes public safety and the protection of crime victims (English, 1998, 2004; English, Jones, Patrick, & Pasini-Hill, 2003).

REFERENCES

Abel, G. G., Becker, J. V., Mittelman, M., Cunningham-Rathner, J., Rouleau, J. L., & Murphy, W. D. (1987). Self-reported sex crimes of nonincarcerated paraphiliacs. *Journal of Interpersonal Violence*, *2*(1), 3–25. https://doi.org/10.1177/088626087002001001

Aday, R. H., Dye, M. H., & Kaiser, A. K. (2014). Examining the traumatic effects of sexual victimization on the health of incarcerated women. *Women & Criminal Justice*, *24*(4), 341–361. https://doi.org/10.1080/08974454.2014.909758

Biderman, A. D., & Reiss, A. J., Jr (1967). On exploring the "dark figure" of crime. *The Annals of the American Academy of Political and Social Science*, *374*(1), 1–15.

Bouchard, M., & Lussier, P. (2015). Estimating the size of the sexual aggressor population. In A. Blokland & P. Lussier (Eds.), *Sex offenders: A criminal career approach* (pp. 351–371). Malden, MA: John Wiley & Sons.

Bourke, M. L., & Hernandez, A. E. (2009). The 'Butner Study' redux: A report of the incidence of hands-on child victimization by child pornography offenders. *Journal of Family Violence*, 24(3), 183. https://doi.org/10.1007/s10896-008-9219-y

Cale, J., Smallbone, S., Rayment-McHugh, S., & Dowling, C. (2016). Offense trajectories, the unfolding of sexual and non-sexual criminal activity, and sex offense characteristics of adolescent sex offenders. *Sexual Abuse*, 28(8), 791–812. https://doi.org/10.1177/1079063215580968

Cermak, P., & Molidor, C. (1996). Male victims of child sexual abuse. *Child and Adolescent Social Work Journal*, 13(5), 385–400. https://doi.org/10.1007/BF01875856

DeLisi, M., & Beauregard, E. (2018). Adverse childhood experiences and criminal extremity: New evidence for sexual homicide. *Journal of Forensic Sciences*, 63(2), 484–489. https://doi.org/10.1177/1556-4029.13584

DeLisi, M., Caropreso, D. E., Drury, A. J., Elbert, M. J., Evans, J. L., Heinrichs, T., & Tahja, K. M. (2016). The dark figure of sexual offending: New evidence from federal sex offenders. *Journal of Criminal Psychology*, 6(1), 3–15. https://doi.org/10.1108/JCP-12-2015-0030

DeLisi, M., Drury, A., Elbert, M., Tahja, K., Caropreso, D., & Heinrichs, T. (2017). Sexual sadism and criminal versatility: Does sexual sadism spillover into nonsexual crimes? *Journal of Aggression, Conflict and Peace Research*, 9(1), 2–12. https://doi.org/10.1108/JACPR-05-2016-0229

DeLisi, M., Kosloski, A. E., Vaughn, M. G., Caudill, J. W., & Trulson, C. R. (2014). Does childhood sexual abuse victimization translate into juvenile sexual offending? New evidence. *Violence and Victims*, 29(4), 620–635. https://doi.org/10.1891/0886-6708.VV-D-13-00003

Drury, A. J., Elbert, M. J., & DeLisi, M. (2019). Childhood sexual abuse is significantly associated with subsequent sexual offending: New evidence among federal correctional clients. *Child Abuse & Neglect*, 95, 104035. https://doi.org/10.1016/j.chiabu.2017.104035

Drury, A., Heinrichs, T., Elbert, M., Tahja, K., DeLisi, M., & Caropreso, D. (2017). Adverse childhood experiences, paraphilias, and serious criminal violence among federal sex offenders. *Journal of Criminal Psychology*, 7(2), 105–119. https://doi.org/10.1108/JCP-11-2016-0039

English, K. (1998). The containment approach: An aggressive strategy for the community management of adult sex offenders. *Psychology, Public Policy, and Law*, 4(1–2), 218–235.

English, K. (2004). The containment approach to managing sex offenders. *Seton Hall Law Review*, 34, 1255–1272.

English, K., Jones, L., Patrick, D., & Pasini-Hill, D. (2003). Sexual offender containment: Use of the postconviction polygraph. *Annals of the New York Academy of Sciences*, 989(1), 411–427. https://doi.org/10.1111/j.1749-6632.2003.tb07322.x

Federal Bureau of Investigation. (2020). *Crime in the United States, 2018*. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/tables/table-1

Grubin, D., Madsen, L., Parsons, S., Sosnowski, D., & Warberg, B. (2004). A prospective study of the impact of polygraphy on high-risk behaviors in adult sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 16(3), 209–222. https://doi.org/10.1023/B:SEBU.0000029133.78168.ab

Hazelwood, R. R., & Warren, J. I. (2000). The sexually violent offender: Impulsive or ritualistic? *Aggression and Violent Behavior*, 5(3), 267–279. https://doi.org/10.1016/S1359-1789(99)00002-6

Hindelang, M. J., Hirschi, T., & Weis, J. G. (1981). *Measuring delinquency*. Santa Monica, CA: Sage.

Hochstetler, A., DeLisi, M., Jones-Johnson, G., & Johnson, W. R. (2014). The criminal victimization–depression sequela: Examining the effects of violent victimization on depression with a longitudinal propensity score design. *Crime & Delinquency*, 60(5), 785–806. https://doi.org/10.1177/0011128710382261

Jones, J. S., Alexander, C., Wynn, B. N., Rossman, L., & Dunnuck, C. (2009). Why women don't report sexual assault to the police: The influence of psychosocial variables and traumatic injury. *The Journal of Emergency Medicine*, 36(4), 417–424. https://doi.org/10.1016/j.jemermed.2007.10.077

Katzenstein, D., & Fontes, L. A. (2017). Twice silenced: The underreporting of child sexual abuse in orthodox Jewish communities. *Journal of Child Sexual Abuse*, 26(6), 752–767. https://doi.org/10.1080/10538712.2017.1336505

Kennedy, A. C., & Prock, K. A. (2018). "I still feel like I am not normal:" A review of the role of stigma and stigmatization among female survivors of child sexual abuse, sexual assault, and intimate partner violence. *Trauma, Violence, & Abuse*, 19(5), 512–527. https://doi.org/10.1177/1524838016673601

Kokish, R., Levenson, J. S., & Blasingame, G. D. (2005). Post-conviction sex offender polygraph examination: Client-reported perceptions of utility and accuracy. *Sexual Abuse: A Journal of Research and Treatment*, 17(2), 211–221. https://doi.org/10.1007/s11194-005-4606-x

Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology*, 55(2), 162–170.

Langevin, R., Curnoe, S., Fedoroff, P., Bennett, R., Langevin, M., Peever, C., ... Sandhu, S. (2004). Lifetime sex offender recidivism: A 25-year follow-up study. *Canadian Journal of Criminology and Criminal Justice*, 46(5), 531–552. https://doi.org/10.3138/cjccj.46.5.531

Levan Miller, K. (2010). The darkest figure of crime: Perceptions of reasons for male inmates to not report sexual assault. *Justice Quarterly*, *27*(5), 692–712. https://doi.org/10.1080/07418820903292284

Lisak, D., & Miller, P. M. (2002). Repeat rape and multiple offending among undetected rapists. *Violence and Victims*, *17*(1), 73–84.

Lussier, P., Leclerc, B., Healey, J., & Proulx, J. (2011). Generality of deviance and predation: Crime-switching and specialization patterns in persistent sexual offenders. In M. DeLisi, & P. J. Conis (Eds.), *Violent offenders: Theory, research, policy, and practice* (pp. 97–118). Burlington, MA: Jones & Bartlett.

Mathesius, J., & Lussier, P. (2014). The successful onset of sex offending: Determining the correlates of actual and official onset of sex offending. *Journal of Criminal Justice*, *42*(2), 134–144. https://doi.org/10.1016/j.jcrimjus.2013.09.004

McGrath, R. J., Cumming, G. F., Hoke, S. E., & Bonn-Miller, M. O. (2007). Outcomes in a community sex offender treatment program: A comparison between polygraphed and matched non-polygraphed offenders. *Sexual Abuse: A Journal of Research and Treatment*, *19*(4), 381–393. https://doi.org/10.1007/s11194-007-9058-z

Miethe, T. D., Olson, J., & Mitchell, O. (2006). Specialization and persistence in the arrest histories of sex offenders: A comparative analysis of alternative measures and offense types. *Journal of Research in Crime and Delinquency*, *43*(3), 204–229. https://doi.org/10.1177/0022427806286564

Miley, L. N., Fox, B., Muniz, C. N., Perkins, R., & DeLisi, M. (2020). Does childhood victimization predict specific adolescent offending? An analysis of generality versus specificity in the victim-offender overlap. *Child Abuse & Neglect*, *101*, 104328. https://doi.org/10.1016/j.chiabu.2019.104328

Morgan, R. E., & Oudekerk, B. A. (2019). *Criminal victimization, 2018*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

Najdowski, C. J., & Ullman, S. E. (2009). Prospective effects of sexual victimization on PTSD and problem drinking. *Addictive Behaviors*, *34*(11), 965–968. https://doi.org/10.1016/j.addbeh.2009.05.004

Pollock, W., Menard, S., Elliott, D. S., & Huizinga, D. H. (2015). It's official: Predictors of self- reported vs. officially recorded arrests. *Journal of Criminal Justice*, *43*(1), 69–79. https://doi.org/10.1016/j.jcrimjus.2014.12.004

Renner, L. M., Boel-Studt, S., & Whitney, S. D. (2018). Behavioral profiles of youth who have experienced victimization. *Journal of Child and Family Studies*, *27*(5), 1692–1700. https://doi.org/10.1007/s10826-017-1008-x

Romano, E., & De Luca, R. V. (2001). Male sexual abuse: A review of effects, abuse characteristics, and links with later psychological functioning. *Aggression and Violent Behavior*, *6*(1), 55–78. https://doi.org/10.1016/S1359-1789(99)00011-7

Schenk, A. M., Cooper-Lehki, C., Keelan, C. M., & Fremouw, W. J. (2014). Underreporting of bestiality among juvenile sex offenders: Polygraph versus self-report. *Journal of Forensic Sciences*, *59*(2), 540–542.

Scurich, N., & John, R. S. (2019). The dark figure of sexual recidivism. *Behavioral Sciences & the Law*, *37*(2), 158–175. https://doi.org/10.1002/bsl.2400

Smith, T. R. (2020). *Federal probation clients convicted of possessing child pornography: A follow-up analysis*. Department of Criminal Justice, Rochester Institute of Technology.

Spencer, C., Mallory, A., Toews, M., Stith, S., & Wood, L. (2017). Why sexual assault survivors do not report to universities: A feminist analysis. *Family Relations*, *66*(1), 166–179. https://doi.org/10.1111/fare.12241

Taylor, S. C., & Gassner, L. (2010). Stemming the flow: Challenges for policing adult sexual assault with regard to attrition rates and under-reporting of sexual offences. *Police Practice and Research: An International Journal*, *11*(3), 240–255. https://doi.org/10.1080/15614260902830153

Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring delinquency and crime. In D. Duffee, R. D. Crutchfield, S. Makowski, L. Mazerolle, & D. McDowall (Eds.), *Criminal justice 2000: Volume 4: Measurement and analysis of crime and justice*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). The effects of adolescent victimization on self-concept and depressive symptoms. *Child Maltreatment*, *15*(1), 76–90. https://doi.org/10.1177/1077559509349444

Weinrott, M. R., & Saylor, M. (1991). Self-report of crimes committed by sex offenders. *Journal of Interpersonal Violence*, *6*(3), 286–300. https://doi.org/10.1177/088626091006003002