Sex Offenders and Insanity: An Examination of 42 Individuals Found Not Guilty by Reason of Insanity

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Although currently there is a large body of research on the characteristics and treatment of sex offenders, very little research has been conducted to investigate the characteristics of sex offenders who have been adjudicated insane. This study included 42 patients at Napa State Hospital who were adjudicated not guilty by reason of insanity (NGRI) for a sex offense. The sample was further divided into offenders whose victims were children and those whose victims were adults. Data were collected with a structured chart review instrument. A large percentage of the sex offenders received a primary diagnosis of schizophrenia or schizoaffective disorder, and many had a comorbid substance use disorder. The high percentage of sex offenders in the current study with diagnosed schizophrenia or schizoaffective disorder may represent a previously unstudied subgroup of sex offenders. An alternative explanation is that the experts did not evaluate substance use and intoxication adequately, assess for malingering, or apply the proper legal standard for insanity.


The plea of not guilty by reason of insanity (NGRI) received substantial attention when John Hinckley used it successfully in 1982 after his attempted assassination of President Reagan. As a reaction, many states enacted legislation to abolish the plea or to make a successful defense more difficult. Some states adopted a strict M’Naughten standard, which requires that mental illness impair one’s ability to understand the nature and consequence of his or her actions and/or distinguish right from wrong. Generally, voluntary intoxication is not a sufficient reason to declare insanity. Recently, researchers have begun to investigate the various characteristics of defendants pleading NGRI as well as the process by which evaluators form their psycholegal opinions.

As expected, this research has shown that the presence of a psychotic illness is often necessary to mount a successful NGRI plea. In general, delusional beliefs about the victim or motive for the crime are necessary to impair an individual’s ability to differentiate between right and wrong. These studies suggest that it is relatively rare for an evaluator to opine that an individual was insane at the time of the commission of a sex offense. This finding makes intuitive sense, as sex offenders such as rapists and child molesters typically have a rational, nonpsychotic motive for committing their offenses.

Research has shown that sex offenders have high rates of nonpsychotic psychiatric disorders such as mood and anxiety disorders. In addition, substance use disorders are particularly frequent among sex offenders. In the Dunsieht et al. study of 113 men convicted of sexual offenses, 85 percent had a lifetime substance use disorder. Looman et al. found that over 40 percent of rapists and child molesters reported severe levels of alcohol abuse, compared with only 4.2 percent of a control group of...
nonsexual violent offenders. Using data from a Bureau of Justice Statistics’ national inmate survey, Peugh and Belenko\textsuperscript{14} found that of the 13,986 inmates in the sample, 11.5 percent were sex offenders. Of the sex offenders, they found that two-thirds were under the influence of drugs or alcohol at the time of the crimes, committed the crimes to get money to buy drugs, had histories of regular illegal drug use, had received treatment for alcoholism, or shared some combination of these characteristics. They also found that drug use among sex offenders is more likely to be associated with the victimization of adults than of children.

While research has provided evidence of a large number of nonpsychotic Axis I disorders in sex offenders, there is an indication that there also are a significant number of individuals with Axis II disorders, with the greatest number receiving a diagnosis of antisocial personality disorder.\textsuperscript{7,9,10} Unlike mood, anxiety, personality and substance use disorders, however, it appears that nonsubstance-induced psychotic disorders may be rare in rapists and child molesters.\textsuperscript{9,15} This research provides a cogent, data-based explanation of why sex offenders rarely are found NGRI. Although these individuals have high rates of psychiatric illness, most of the illnesses are not psychotic.

At a large forensic facility in California, approximately 10 percent of the NGRI population have committed a sex offense. We explored the characteristics of these individuals to inform the literature regarding the basis for a successful NGRI plea. We hypothesized that these sex offenders would have a high rate of psychotic-spectrum psychiatric illness. We also examined the differences between sex offenders whose victims were children and those whose victims were adults. We explored the prevalence of substance use disorders in both samples. Finally, we conducted a systematic evaluation of the adequacy of the sanity reports.

**Materials and Methods**

This research was approved by the Human Subjects Committee at Napa State Hospital (NSH), the State (of California) Committee for the Protection of Human Subjects, and the University of California-Davis (UCD) School of Medicine Institutional Review Board.

**Subjects**

The study included all persons at Napa State Hospital (NSH) who had been found NGRI and were hospitalized between July 1, 2002, and March 31, 2003 ($n = 458$). NSH is an approximately 1,000 bed inpatient psychiatric facility located in northern California. Eighty percent of the beds are forensic, with the remaining 20 percent reserved for patients under nonforensic civil commitments. Of the 458 patients hospitalized as NGRI at the time of this research, 44 (9.5\%) had a sex offense in their criminal histories.

**Definitions**

**Not Guilty by Reason of Insanity**

The California statute for insanity codified in 1982 closely follows the M’Naughten test for insanity. The statute states that an individual is not guilty by reason of insanity if, as a result of a mental disease or defect, “he or she was incapable of knowing or understanding the nature and quality of his or her act and (or) was incapable of distinguishing right from wrong at the time of the commission of the offense” (Ref. 16, p 12). Before 1982, California followed the American Law Institute (ALI) test that defined as insane the person who, as a result of a mental illness or defect, “he or she was incapable of knowing or understanding the nature and quality of his or her act and (or) was incapable of distinguishing right from wrong at the time of the commission of the offense” (Ref. 16, p 12). Before 1982, California followed the American Law Institute (ALI) test that defined as insane the person who, as a result of a mental illness or defect, is unable to appreciate the nature and quality of his or her actions or to conform his or her conduct to the requirements of law. In 1994, the California State Senate amended the Penal Code, preventing California courts from finding a defendant insane solely on the basis of a personality disorder, adjustment disorder, seizure disorder, or addiction to, or abuse of, intoxicating substances.\textsuperscript{2,16}

**Sexual Offenses**

For the purpose of this study, sexual offenses are identified according to the California Penal Code statute for the registration of sex offenders. This statute requires that an individual who has been convicted of certain specified offenses register with the Department of Justice. The offenses include rape, lewd and lascivious acts, and sodomy. In the present study, these offenses were further divided by victim type: child under the age of 16 and adult over the age of 18. (There were no victims age 17.) Of the 44 offenders, 21 had victims who were children (child molesters) and 21 had victims who were adults (adult offenders). The victims of two offenders could not be determined, and thus those offenders were omitted.
from the analyses, bringing the number of studied offenders to 42.

**Procedure**

Data were collected with a structured chart review instrument developed by one of the authors (CLS). When available, the following records were reviewed: hospital psychiatric records, mental health evaluations assessing criminal responsibility for the offense that resulted in commitment (committing offense), police and witness reports regarding the committing offense, and the California criminal rap sheet.

A research assistant reviewed all records by using the structured chart review instrument. All coding was reviewed by a psychiatrist board certified in both forensic and addiction psychiatry. The interrater reliability between the research assistant and the senior psychiatrist was high ($\kappa = .97$). All discrepancies were discussed, and the decision on how to code the particular item was made by the reviewing psychiatrist.

Information coded included basic demographic and clinical data. Psychiatric information included current chart diagnosis (Axes I through V) and mental illness symptoms reported to have occurred at the time of the instant offense. These included evidence of delusions, paranoia, auditory hallucinations, or visual hallucinations and any evidence of a rational alternative motive.

The court sanity reports were evaluated by using a structured rating system. Elements of an adequate report included a substance use history, including use within 24 hours of the instant offense; a DSM diagnosis; and use of the appropriate standard (at the time) in forming an opinion regarding the culpability of the defendant.

A variety of statistical methods were used to evaluate differences, including chi-square, $t$ tests and correlational analyses. All analyses were conducted with SPSS software.

**Results**

**Characteristics of Offenders**

Table 1 presents the demographic information for the sample of sex offenders, as a whole and divided by victim type. As can be seen from the table, the sample was predominantly male. There was only one woman, and she was found NGRI for an offense against a child. The groups did not differ in marital status. However, both age and race differed depending on victim type. Child molesters were primarily Caucasian (86%), whereas adult offenders were more likely to be African American (48%) and primarily minority (72%) ($\chi^2 = 14.7, df = 3, p < .002$). Child molesters were more likely to be younger (15–25 years at the instant offense) or older (45 years or more at the instant offense), and adult offenders were more likely to be between 26 and 45 years of age ($\chi^2 = 10.1, df = 3, p < .02$).

Table 2 presents the diagnostic breakdown between samples and shows that child molesters carried a large number of nonpsychotic primary Axis I diagnoses (48%; $\chi^2 = 7.8, df = 4, p < .10$). For these offenders, “other diagnoses” were pedophilia. Of those with secondary Axis I diagnoses, although not statistically significant, adult offenders had a higher

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographics</th>
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<tbody>
<tr>
<td></td>
<td>Child</td>
</tr>
<tr>
<td>Gender, male</td>
<td>20 (95)</td>
</tr>
<tr>
<td>Age at instant offense (y)*</td>
<td></td>
</tr>
<tr>
<td>15–25</td>
<td>5 (24)</td>
</tr>
<tr>
<td>26–35</td>
<td>6 (29)</td>
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<tr>
<td>35–45</td>
<td>4 (19)</td>
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<tr>
<td>46+</td>
<td>6 (29)</td>
</tr>
<tr>
<td>Marital status, never married</td>
<td>14 (67)</td>
</tr>
<tr>
<td>Race†</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>18 (86)</td>
</tr>
<tr>
<td>African American</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (5)</td>
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</tbody>
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* $\chi^2 = 10.1, df = 3, p < .02$.
† $\chi^2 = 14.7, df = 3, p < .002$.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Diagnoses</th>
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<tbody>
<tr>
<td></td>
<td>Child</td>
</tr>
<tr>
<td>Axis I</td>
<td></td>
</tr>
<tr>
<td>Primary*</td>
<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>7 (33)</td>
</tr>
<tr>
<td>Schizoaffective disorder</td>
<td>4 (20)</td>
</tr>
<tr>
<td>Substance use</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Mood disorders</td>
<td>4 (19)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (19)</td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td>Substance use</td>
<td>10 (58)</td>
</tr>
<tr>
<td>Mood disorders</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (37)</td>
</tr>
<tr>
<td>Axis II†</td>
<td></td>
</tr>
<tr>
<td>ASPD</td>
<td>4 (40)</td>
</tr>
<tr>
<td>Other PD</td>
<td>6 (60)</td>
</tr>
</tbody>
</table>

* $\chi^2 = 7.8, df = 4, p < .10$.
† $\chi^2 = 3.55, p < .06$. 
incidence of substance abuse diagnoses and child molestors had a greater number of “other diagnoses” ($\chi^2 = 4.9$, $df = 2$, $p < .09$). Further exploration of the data showed these other diagnoses to be primarily pedophilia (five of six), with the sixth diagnosis that of sexual disorder NOS. Adult offenders assigned an Axis II personality disorder tended to have antisocial personality disorder more often than did child molestors ($\chi^2 = 1$, $df = 3.55$, $p < .06$).

In examining the differences in symptoms associated with diagnosis, we found that with child molestors, regardless of diagnoses, it was as likely as not that evidence of delusions at the time of the offense had been reported ($\chi^2 = .40$, $df = 1$, NS). This was not true of adult offenders. Although very few of these offenders received nonpsychotic primary diagnoses, those who did were less likely to have evidenced delusions at the time of the offense ($\chi^2 = 3.9$, $df = 1$, $p < .05$). However, the same pattern was not true of those with hallucinations. Hallucinations were as likely to be present as not, regardless of diagnosis or offender type. Overall, the number of offenders who reported hearing voices was approximately the same as those who did not (25 versus 27).

There was a trend for adult offenders to have documentation in their records of substance use at the time of the offense (compared with child molestors; $\chi^2 = 3.08$, $df = 1$, $p < .08$). Of those adult offenders with documented substance use at the time of the offense, most (six of seven with diagnoses) had a secondary substance use diagnosis.

Quality of Reports

Eighty-five reports were associated with the 42 patients included in the study, 46 for child molestors and 39 for adult offenders. In 6 of the 85 reports, the expert did not form an opinion regarding sanity. Of the 79 experts who formed an opinion, in 11 of the 42 reports on child molestors, the opinion of the expert was that the defendant was sane, compared with 4 of 37 opinions in the reports of adult offenders ($\chi^2 = 3.0$, $df = 1$, $p < .09$). Of the 21 child molestors, 8 were found sane by at least one forensic expert, compared with 3 of 21 of the adult offenders ($\chi^2 = 3.08$, $df = 1$, $p < .08$).

The symptoms reported in each report varied, depending on the opinion of the expert and offender type. There were no significant differences in either delusions or hallucinations reported in the hospital record for reports where the expert opined that the defendant was sane (versus insane). However, for child molestors, there was a trend for those reported sane to be associated with fewer delusions ($\chi^2 = 3.74$, $df = 1$, $p < .06$). The same pattern was not true of hallucinations.

Experts evaluating adult offenders were less likely to obtain a substance use history ($\chi^2 = 5.1$, $df = 1$, $p < .03$). However, this deficiency did not vary by whether the expert had opined that the defendant was sane. In addition, in the reports of child molestors in which the experts’ opinion was that the offenders were sane, the expert was more likely to document voluntary intoxication ($\chi^2 = 4.2$, $df = 1$, $p < .04$). Finally, there were no differences in the quality of the forensic report between types of offenders.

Discussion

Previous research has indicated that although the prevalence of psychiatric disorders in sex offenders is high, there is a notable absence of psychotic diagnoses. For example, in the Kafka and Hennen study of 120 male outpatients with paraphilias, only four percent were found to have had some psychosis during their lives. In a study of pedophilic offenders by Raymond et al., only 1 of 45 (2%) subjects had a diagnosis of schizophrenia or schizoaffective disorder. Dunseith et al. found no evidence of a psychotic-spectrum disorder in 113 men convicted of sexual offenses.

In our study, fully two of three of the sex offenders had a diagnosis of schizophrenia or schizoaffective disorder. There are several possible explanations to account for these differences. One explanation is that in offenders found to be NGRI, the rate of psychotic disorders would be expected to be higher than in offenders convicted and incarcerated. As noted previously, in many states, California included, the legal standard requires that one’s mental illness interfere with the ability to understand the wrongfulness and/or the nature and quality of the act. In general, such a lack of understanding necessitates the presence of a psychotic disorder. Thus, the large percentage of psychotic-spectrum illness in the present study may represent a previously unstudied subgroup of sex offenders who were appropriately found NGRI because they were psychotic at the time they committed the sex offense.

In contrast, the high rate of psychotic disorders may be related to problems with diagnosing. First, all reported diagnoses were chart diagnoses, rather than
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Based on a clinical interview or the DSM checklist. As such, the diagnoses cannot be confirmed via standard research criteria and may not be an accurate representation of the true diagnoses of the offenders. Along these same lines, because the legal stakes for sex offenders can be high, there may be significant impetus to malinger. As such, the high percentage of offenders with diagnosed psychosis may represent a group of successful malingers. Although this explanation seems implausible, as such malingering would require successfully deceiving a large group of mental health professionals over an extended period, it may explain the relatively low overall incidence of psychotic symptoms (at the time of the offense) in a group of purportedly psychotic individuals.

Finally, the higher incidence of psychotic disorders in our sample may represent a group of offenders with a substance-induced psychotic disorder. This appears to be a particularly cogent argument for adult offenders, who exhibited a high rate of comorbid substance use disorders. Individuals whose symptoms were due to voluntary drug intoxication may have been inappropriately found NGRI, as California statute does not allow voluntary intoxication to be considered a viable insanity defense, in contrast with involuntary intoxication, which may lead to a valid NGRI defense. Although cases seem to be rare, courts have held intoxication to be involuntary if it is the result of an innocent mistake (the defendant is unaware of the nature of the substance), fraud, duress or coercion, or administration for medical purposes.17

California, like other jurisdictions, has been faced with the dilemma of how to deal with individuals who continue to have substance-induced symptoms but are no longer intoxicated. When such individuals have drug-induced psychotic symptoms they are considered to have "settled psychosis," and if insane, they have "settled insanity." According to the California Supreme Court in 1973 (People v. Kelly, 10 Cal.3d 565, 111 (1973)) settled insanity is a viable defense. However, according to § 25.5 of the California Penal Code as first interpreted by the California Court of Appeal in People v. Robinson, 72 Cal. App. 4th 421 (1999), a defendant may not be found NGRI solely as the result of voluntary ingestion of drugs and/or alcohol.16,18–20

Thus, settled insanity, if caused only by the voluntary use of drugs or alcohol, is no longer a viable defense in California. The change in how California views settled insanity demonstrates the legal complexity in dealing with defendants with substance-induced mental status changes at the time of the offense. Moreover, the issue of settled insanity demonstrates the importance of experts differentiating substance-induced psychoses from psychoses caused by other psychiatric illnesses.

In child molesters, we found that, regardless of diagnosis, delusions and hallucinations were as likely to be present as not. In other words, the child molesters, four of whom received a primary diagnosis of pedophilia, were noted to have delusions and hallucinations. Obviously, these symptoms are inconsistent with pedophilia. In contrast, fully 11 of the 21 child molesters did not have evidence of any type of hallucination at the time of their offense and fully 9 did not have evidence of any type of delusion. Six of these offenders evidenced no psychotic symptomatology at all at the time of the offense, although they received, and continued to receive throughout their hospitalization, a diagnosis of psychosis.

Along these lines, many evaluators apparently had concerns regarding the sanity of the child molesters compared with the adult offenders. Many more evaluations were conducted for these offenders, presumably secondary to conflicting opinions regarding sanity. Additionally, more evaluators judged child molesters to be sane than they did adult offenders. These findings, taken together, may indicate increased skepticism regarding the validity of the insanity defense for child molesters. It may be that at least some of the child molesters have successfully malingered their NGRI defense.

This same pattern was not present in adult offenders. Although there were no differences in the presence of hallucinations, regardless of diagnosis, adult offenders without a psychotic disorder were less likely to evidence delusions. This finding lends further support to the hypothesis that adult offenders’ psychotic disorders may be substance induced. Substance use was diagnosed in fully 89 percent of adult offenders with a secondary diagnosis, which represents 76 percent of all adult offenders. Although in most cases the primary diagnosis was schizophrenia or schizoaffective disorder (only four offenders received another diagnosis, three of whom were given a diagnosis of bipolar disorder), the presence of a comorbid substance-use disorder may indicate that in at least some of these cases, these offenders had a misdiagnosis. It is particularly telling that in 39 san-
ity evaluations of adult offenders, only 18 evaluators obtained a substance-use history. This deficiency indicates that obtaining a substance-use history is particularly critical in this population.

In addition to assessing substance use inadequately, the evaluators who opined that the defendant was insane may not have rigidly applied the insanity criteria. For example, a sex offender may have a legitimate Axis I or II disorder, but not such that he or she is unable to understand the nature and consequence of his or her actions or to distinguish right from wrong. A sex offender with an Axis II disorder may, under stress, have displayed psychosis-like symptoms that the expert wrongly opined were hallucinations or delusions. In this sense, it is possible that some of the sex offenders were not malingering, but rather that the expert mistakenly concluded that they were suffering from a psychosis at the time of the instant offense.

Further research may be necessary to determine the overall quality of the evaluator’s opinions and how such opinions are formed. To assess defendants who plead NGRI appropriately, it is important for clinicians in our field to maintain high standards. Evaluators should consider doing an extensive review of records and performing a thorough interview of the defendant that should be guided by the appropriate legal criteria for insanity. Potential pitfalls include the failure to consider substance intoxication at the time of the offense and inadequate assessment for malingering.

Moreover, further research may be needed to determine if there is a subgroup of sex offenders with schizophrenia or schizoaffective disorder. The existence of such a subgroup may have treatment and policy implications. Typically, individuals committed as NGRI are held in psychiatric hospitals and are transitioned into the community on “conditional release” as their conditions improve. The U.S. Supreme Court has ruled that such individuals must be released when no longer mentally ill (Foucha v. Louisiana, 504 U.S. 71, 80 (1992)).

In contrast, sexually violent predator (SVP) statutes generally permit indeterminate civil commitment for sex offenders after their criminal sentences in cases in which they are likely to commit repeated sex offenses due to a mental abnormality. Such SVP statutes have been found to be constitutional (Kansas v. Hendricks, 521 U.S. 346 (1997)). Policy makers and the legal system may be faced with a dilemma: should sex offenders have the same legal rights as other NGRI acquittees and be transitioned back into the community, or should they be held longer under SVP laws for further treatment and to protect society?

This question may be particularly relevant for individuals who are no longer thought to have schizophrenia or schizoaffective disorder. Theoretically, they would be released as NGRI acquittees (Foucha v. Louisiana) but could be held under SVP law. Consider the case of an individual with a personality disorder who successfully malingers his NGRI defense but no longer demonstrates psychotic symptoms in the psychiatric hospital. He would probably be released based on NGRI commitment statutes but could be held under SVP law. California may have addressed this possibility by allowing NGRI acquittees of sexually violent offenses to be considered sexually violent predators.

In addition to determining release criteria, policy makers and the legal system may be faced with determining how and when to treat sex offenders. While they are committed as NGRI, should such sex offenders be treated as a matter of policy to help gain their release or should they be treated after their NGRI commitment, as would occur under SVP statutes? The answer may in part depend on why we civilly commit sex offenders in the first place: is it for treatment or to protect society?

There are several limitations to the current study. The study design was retrospective and included a relatively small number of offenders. Moreover, we were unable to ascertain for certain if any of the sex offenders were in fact sane at the time of their offense or if they successfully malingered their NGRI defense. In addition, all information was obtained from record review, which is limited by the quality of the records. Finally, all diagnoses reported were based on chart diagnoses and therefore are dependent on the skill of the diagnostician. Often in the criminal justice system an inmate will report hearing voices and, based solely on this symptom, receive a diagnosis of psychosis. Once assigned, it is difficult to remove such inappropriate diagnoses. It may be that if our diagnoses were based on thorough and comprehensive record reviews coupled with a diagnostic interview, the prevalence of psychotic disorders in our sample would be reduced.
References