

---

Theses, Dissertations, and Projects

---

2007

**Substance use and related criminality among male juvenile sexual and nonsexual offenders : an investigation of the patterns and prevalence**

Deborah Ann Caserta  
*Smith College*

Follow this and additional works at: <https://scholarworks.smith.edu/theses>



Part of the [Social and Behavioral Sciences Commons](#)

---

**Recommended Citation**

Caserta, Deborah Ann, "Substance use and related criminality among male juvenile sexual and nonsexual offenders : an investigation of the patterns and prevalence" (2007). Masters Thesis, Smith College, Northampton, MA.

<https://scholarworks.smith.edu/theses/1320>

This Masters Thesis has been accepted for inclusion in Theses, Dissertations, and Projects by an authorized administrator of Smith ScholarWorks. For more information, please contact [scholarworks@smith.edu](mailto:scholarworks@smith.edu).

Deborah Ann Caserta  
Substance Use and Related Criminality  
Among Male Juvenile Sexual and Nonsexual Offenders:  
An Investigation of the Patterns and Prevalence

ABSTRACT

The purpose of this study was to investigate whether juvenile sexual offenders use substances and engage in substance related criminality or if other forms of criminality (e.g. sexual or nonsexual crime) are associated with substance use. Three related quantitative articles were written to execute this project. The first article explored the prevalence of substance use and related crime among sexual offenders. The findings of this study suggested that juvenile sexual offenders have high rates of substance use, including, but not limited to cigarette use, alcohol, and high percentages of drug selling among this population. The second article investigated the prevalence of substance use and related criminality among a population of juvenile sexual and nonsexual offenders. This study also began to investigate whether sexual and nonsexual offenders specialize in a “cluster” of criminal behaviors and as their needs evolve, their crimes are more diverse in nature. The findings suggested that sexual offenders have significantly higher frequencies on salient items, although not limited to alcohol use, the use of inhalants, and “other drug” use compared to nonsexual offenders. The third article explored the prevalence of substance use and related criminality among juvenile sexual offenders only. More specifically, the relationship between substance use and sexual and nonsexual criminality was examined. Results suggested that sexual offenders who used alcohol and drugs when committing criminal acts had significantly higher perpetration scores. Findings also suggested that a significant portion of the number of sexual abuse victims

reported by sexual offenders can be predicted by drug use. Research and treatment implications are discussed.

Substance Use and Related Criminality Among Male Juvenile Sexual and Nonsexual  
Offenders: An Investigation of the Patterns and Prevalence

A project based upon an independent investigation,  
submitted in partial fulfillment of the requirements  
for the degree of Master of Social Work.

Deborah Ann Caserta

Smith College School for Social Work  
Northampton, Massachusetts 01063

2007

## ACKNOWLEDGEMENTS

I would like to express my appreciation to a few significant people who assisted and supported me throughout this thesis project.

To my thesis advisor, Dr. David Burton. As a noted and accomplished researcher, you have provided me with invaluable guidance and support throughout this process. Your unfailing generosity, patience, and clever sense of humor made working with you a memorable experience. Your passion for your work was inspiring.

To my internship supervisor, Susan Jasko. Thank you for your invaluable expertise in clinical practice. Your approachable nature and openness made my internship experience very rewarding and provided a foundation on which I could build.

To my mother, Maria Caserta. Thank you for your unwavering love and belief in me. Through your commitment, I found the strength I needed to have my goals come to fruition. You have been a source of strength and comfort for which I will always be grateful.

To my father, John Caserta. Thank you for your love and encouragement during this process. Your support meant a great deal to me throughout this experience.

To my sister, Christine Caserta. Thank you for your hilarious sense of humor and encouraging words. Your spirited energy, strength, and honesty have always made difficult times more palatable.

To my friends, Annie Ferri and Jeff Garber. Thank you for your honesty and empathy with my struggles and lending support at crucial times.

Thank you to all of the participants that were recruited in this project. Without your contribution, this project would have not been possible.

TABLE OF CONTENTS

ACKNOWLEDGMENTS..... ii

TABLE OF CONTENTS..... iii

ARTICLE

I. Examining Substance Use and Abuse among Juvenile Sexual Offenders:  
An Investigation of the Prevalence and related Crime Associated with  
Mood Altering Substances ..... 1

REFERENCES..... 15

II. Specialization and Versatility of Criminal Behavior: Comparing Juvenile  
Sexual and Nonsexual Offenders’ Substance Use and related Criminality.... 18

REFERENCES..... 39

III. Substance Use and Criminal Behavior among Juvenile Sexual Offenders:  
An exploratory study examining the relationship between criminality and  
the use of Mood Altering Substances..... 43

REFERENCES..... 60

Examining substance use and abuse among juvenile sexual offenders: An investigation of  
the prevalence and related crime associated with mood altering substances

Deborah Ann Caserta

Smith College School for Social Work

## Abstract

This study investigates the frequency of variables such as drug related crimes associated with alcohol and drug use among a population of 325 adjudicated male juvenile sexual offenders. As noted in literature (Lightfoot & Barbaree, 1993), the patterns and prevalence of substance use among this population has been studied in prior research. However, previous research has yielded a lack of agreement regarding whether substance use is a significant problem among juvenile sexual offenders. The literature on adult sexual offenders is introduced in order to clarify that substance use and related crime may be significant among this population. Fehrenbach, Smith, Monastersky, & Deisher (1986) found little or no association with substance use among sexual offenders while other research (Van Ness, 1984) has suggested that substance abuse is a significant problem and substances may be used by sexual offenders in order to prepare for a sexual or nonsexual crime. The findings of this present study have suggested that juvenile sexual offenders have high rates of substance use, including, but not limited to cigarette, alcohol, and high percentages of drug selling among this population. Treatment and research implications are explored.



## Article I

Examining substance use and abuse among juvenile sexual offenders: An investigation of the prevalence and related crime associated with mood altering substances

### Literature Review

Juvenile sexual offending is a significant problem that requires continuous investigation. One area of focus, which currently lacks substantial empirical investigation, is the relationship between juvenile sexual offending and the use or crime associated with chemical substances (Lightfoot & Barbaree, 1993). Some research suggests that substance use is frequently associated with juvenile sexual offending (Tinklenberg, Murphy, Darley, Roth, & Kopell, 1974; Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981; Van Ness, 1984; Mio, Nanjundappa, Verleur, & De Rios, 1986; Vinogradov, Dishotsky, Doty, & Tinklenberg, 1988; Hsu, & Starzynski, 1990). Other research contradicts these findings and also argues that the relationship between substance use and juvenile sexual offending is spurious (Lightfoot & Barbaree, 1993). In addition, the majority of the research on juveniles presented above lacked control groups and also used convenience samples, which limits generalizability to the large population of adolescent sexual offenders.

In support of the relationship between substance use and juvenile sexual offending, Van Ness (1984) found that 55% of adolescent rapists abuse substances prior to their offense. Moreover, these findings suggest that alcohol and drugs could have been used in order to prepare for the committing of the offense (Van Ness, 1984).

Vinogradov, Dishotsky, Doty, & Tinklenberg (1988) found that the majority of rapists

sampled in their study reported regular use of substances. The majority of the rapes were reported to be committed under the influence of one or more substances. Marijuana was reported by a high number of sexually offending youth as the substance used on the same day that the rape was committed. Contrary to this finding, other research has suggested that assaults, including sexual assaults have little association with marijuana use (Tinklenberg, Murphy, Darley, Roth & Kopell, 1974). Substance related assaults, including sexually aggressive assaults, were strongly associated with alcohol and secobarbital, as well as in combination with other substances (Tinklenberg, Murphy, Darley, Roth, & Kopell, 1974). A more extensive follow-up study yielded similar results, suggesting that sexually assaultive youth (i.e. rapists) used alcohol and/or in combination with other substances immediately prior to the rape episode (Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981). In addition, Researchers have also found a relationship between parental substance abuse and the adolescent sexual offender's use (Mio, Nanjundappa, Verleur, & De Rios, 1986; Hsu & Starzynski, 1990).

Contrary to the above literature supporting the relationship between substance use and juvenile sexual offending, other research has argued that there is little or no association between the two variables. With regards to the commission of the sexual offense, Fehrenbach, Smith, Monastersky, & Deisher (1986) found that only 6% of 173 juvenile sexual offenders or their victims used any type of substances at the time of the sexual offense. Other studies have yielded similar results (Groth, 1977; Awad, Saunders, & Levene, 1984; Fagan & Wexler, 1988; Awad & Saunders, 1989) concluding that the prevalence of substance use among adolescent sexual offenders is uncommon.

Substance abuse *related* criminality is also a concern among juvenile sexual offenders. Burton, Hedgepeth, Ryan, & Compton (2003) found that 60% of treated adolescent sexual offenders were committed nonsexual crimes, such as illicit drug use.

Finally, and notably, many treatment programs for sexually offending youth do not include treatment for substance use or related crime (Burton, Smith-Darden, & Frankel, 2006). These issues need to be addressed in treatment accordingly which depend on the type of crime committed. For example, treatment for sexually abusive youth who abuse substances would differ from youth who sold drugs for monetary gain.

In summary, the limited research that has been conducted in this area have yielded inconsistent results and further research needs to be conducted in order to clarify if and whether there is a meaningful relationship between substance use or crime associated with illegal drugs and juvenile sexual offending.

In a sample of 332 juvenile sexual offenders, this paper will examine the prevalence of alcohol and drug use before and after the sexual offense was committed, parental substance abuse patterns, and illicit drug selling.

### Methods

After consents were obtained, confidential data were collected from sexual and nonsexual offending youth from six residential facilities in a Midwestern state. Data were collected from 332 adjudicated juvenile sexual offenders. Demographics and non standardized measures of sexual arousal and aggression were collected in this study on juvenile offenders.

The average age of the juvenile sexually offending youth sample ( $N = 332$ ) was 16.70 years ( $SD = 1.65$  years). On average, sexual offenders were currently in the 9<sup>th</sup>

grade ( $SD = 1.63$  years). Fifty percent of juvenile sexual offenders indicated their race as being Caucasian ( $n = 156$ ), 29% African American ( $n = 90$ ), and 13% Other ( $n = 43$ ).

On a 7 point scale of modus operandi, (1 = babysat or played with victims; 2 = threats; 3 = threats and babysat/games; 4 = force; 5 = force and babysat/games; 6 = force and threats; and 7 = force and threats), juvenile sexual offenders reported an average of 2.44 ( $SD = 2.08$ ) ranging from 1-7.

On a 14 point scale indicating the severity or complexity of sexual crimes committed, (1 = exposure; 2 = fondling; 3 = exposure and fondling; 4 = oral sex; 5 = exposure and oral sex; 6 = oral sex and fondling; 7 = oral sex, exposure, and fondling; 8 = penetration with penis, digits or objects; 9 = penetration and exposure; 10 = penetration and fondling; 11 = penetration, exposure, and fondling; 12 = penetration and oral sex; 13 = penetration, exposure, and oral sex; 14 = penetration, exposure, fondling, and oral sex) juvenile sexual offenders reported an average of 8.55 ( $SD = 4.29$ ).

### Measures

*Behavioral questions regarding substance abuse.* Both groups were surveyed using The Millon Adolescent Clinical Inventory (MACI) (Millon, 1993) which is devised for youths in treatment or in correctional institutions. The MACI is based on Millon's theory of the patterns in personality (Millon & Davis, 1996), and its scales comprise 160 True-False questions. Respondents were expected to answer "True" or "False" to items such as "I would never use drugs, no matter what" and "Drinking seems to have been a problem for several members of my family." Based on Millon's (1993) validity scoring procedures, data from eight juveniles were not used for this study. The subscales comprising the MACI had acceptable inter-item reliability with Cronbach's alphas

ranging from .68 for the Unruly scale to .86 for the Self Demeaning scale, with the exception of the forceful scale ( $\alpha = .35$ ) which due to poor reliability, was not used in further studies.

*Delinquent, nonsexual behavior.* To assess for criminal behavior in youth, Elliot, Huizinga, and Ageton's (1985) self reported delinquency measure (SRD) was utilized. This scale comprised of 32 items, comprising of a "Selling Drugs" subscale asking questions such as "sold marijuana/pot/weed/hash" and had youth rate these items on a 7 point scale (1 = Did not do) to (7 = 2-3 times a day). One question that differs from this likert 1-7 point scale pertains to sexually abusive youths only, which asks whether they have ever used alcohol or illicit drugs in their criminal offenses (1 = yes; 2 =no; or does not apply). The subscales that comprised the SRD had acceptable inter-item reliability, with the exception of Drug Use ( $\alpha = .46$ ) which was not used in further analyses.

*Questions regarding substance use before and after crime committed.* The Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) surveys whether youths had endured traumatic experiences throughout their childhood. Non-standardized questions regarding alcohol and drug use before and after criminal offenses were asked using a 5 point scale (1=never) to (5=always). The subscales have acceptable inter-item reliability, including, but not limited to Sexual Abuse ( $\alpha = .83$ ), Physical Abuse ( $\alpha = .91$ ), Emotional Abuse ( $\alpha = .90$ ) and Physical ( $\alpha = .76$ ) and Emotional Neglect ( $\alpha = .92$ ).

## Results

### Cigarette Use

In regards to the use of cigarettes and other tobacco products, 71% of sexually abusive youth (n = 296) admitted to using tobacco products. The mean difference on the

frequency of cigarette and other tobacco product use, indicating (1 =did not do; 2 =once a month; 3 =once every 2-3 weeks; 4 =Once a week; 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times a day) is ( $M = 4.51$ ,  $SD = 2.69$ ) among sexual offenders.

### Alcohol Use

Sixty-one percent of the sample ( $n = 298$ ) reported that they consumed alcohol. In testing the mean frequency of alcohol use, indicating (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 =once a week, 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times per day), is ( $M = 3.13$ ,  $SD = 2.26$ ) among sexual offenders.

Moreover, 31% of the sample ( $n = 270$ ) responded “True” to the MACI item, “drinking seems to really help me when I’m feeling down.”

Thirty-eight percent of the sample ( $n = 297$ ) responded to the SRD item, “drunk in a public place.” In testing the mean difference regarding the frequency of being drunk in public (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day) is  $M = 2.25$ ,  $SD = 2.00$ .

The sample ( $n = 330$ ) ( $M = 2.02$ ,  $SD = 1.37$ ) reported consuming alcohol before their criminal offense occurred. A 5-point scale was used to measure the frequency of use (1= never; 2= sometimes; 3=usually; 4=most of the time; 5= always).

The sample ( $n = 329$ ) also indicated that they used alcohol after their criminal offense ( $M = 1.77$ ,  $SD = 1.27$ ). A 5-point scale was used to assess the frequency of use (1= never; 2=sometimes; 3= usually; 4= most of the time; 5=always).

### Other Illicit Drug Use

Fifty-three percent of the sample ( $n = 297$ ) reported that they smoked marijuana ( $M = 3.28$ ,  $SD = 2.59$ ). A 7-point scale was used to measure the frequency of marijuana

use (1 =did not do; 2=once a month; 3= once every 2-3 weeks; 4=once per week; 5= 2-3 times per week; 6= once a day; 7= 2-3 times per day).

Twelve percent of the sample (n=298) reported the use of “inhalants.” The mean frequency of inhalant use (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day) is ( $M = 1.38$ ,  $SD = 1.24$ ).

Twelve percent of the sample (n=297) reported cocaine or crack use ( $M = 1.33$ ,  $SD = 1.09$ ). The frequency of cocaine and crack use was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Twenty-three percent of the sample (n = 300) reported that they had used “other drugs.” In testing the mean difference on the frequency of “other drug” use, (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day), is ( $M = 1.78$ ,  $SD = 1.68$ ).

#### Drug Use Before and After Criminal Offenses

Forty eight percent of juvenile sexual offenders (n = 331) ( $M = 2.18$ ,  $SD = 1.50$ ) reported that they used drugs before their criminal offenses occurred. This question was asked using a 5-point scale (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

Forty one percent of the sample (n = 331) ( $M = 1.93$ ,  $SD = 1.39$ ) reported that they used drugs after the commission of their criminal offense. A 5-point scale was used to measure frequency (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

### Used Substances in a Criminal Act

Fifteen percent of juvenile sexual offenders ( $n = 255$ ) reported yes to ever “...using drugs or alcohol in their criminal offenses (e.g. got them drunk or high).”

### Illicit Drug Sales

Thirty eight percent juvenile sexual offenders ( $n = 298$ ) reported that they sold marijuana ( $M=2.65$ ,  $SD=2.43$ ). The frequency of marijuana selling was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Twenty eight percent of the sample ( $n = 298$ ) reported that they had sold “hard drugs” (i.e. heroin, cocaine, and LSD) ( $M = 2.08$ ,  $SD = 2.07$ ). The frequency of the selling of “hard drugs” was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

### Family Substance Abuse and Drug Sales

Forty six percent of juvenile sexual offenders ( $n = 316$ ) (responded “Yes” to the question having a “...parent with alcohol or drug problem.” Twenty four percent of the sample ( $n = 323$ ) ( $M = 1.54$ ,  $SD = 1.15$ ) also reported their “parents being too high or drunk to take care of the family.” Using a True-False MACI item, 55% of the sample ( $n = 299$ ) responded “True” to the statement “drinking seems to have been a problem for several members of my family.” A yes/no question revealed that 23% of the sample ( $n = 311$ ) also reported that their parents have sold drugs.



### Chemical Substance Treatment History

Thirteen percent of sexual offenders (n = 304) reported having been in a community substance abuse program and fourteen percent of sexual offenders (n = 304) reported having been in a residential substance abuse treatment program.

### Discussion

The results indicate that cigarette and other tobacco use is prevalent among the majority of sexual offenders. The findings also suggest a significant prevalence of alcohol use among juvenile sexual offenders, which disagrees with some of the previous literature, conducted on this population (Fagan & Wexler, 1988; Awad, Saunders, & Levene, 1984). In other prior literature conducted on sexual offenders, some of these findings support a high frequency of alcohol use among juvenile sexual offenders (Van Ness, 1984). Research has found both sexual offenders and nonsexual offenders to have significantly high and equivalent frequencies of alcohol use (Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981).

Juvenile sexual offenders have also reported high frequencies of alcohol use before and after their sex offenses. Prior literature involving sexual offenders and a control group of nonsexual offenders support this finding of rapists using alcohol prior to their offense (Van Ness, 1984). Vinogradov, Dishotsky, Doty, & Tinklenberg (1988) found that adolescent rapists engage in poly use of chemical substances (e.g. alcohol with conjunction with marijuana) during their offense. In this study, 53% of sexual offenders reported they smoked marijuana. Over half of sexual offenders have reported marijuana use in some capacity, which has been indicated in some of the previous research conducted (Vinogradov, Dishotskym Doty, & Tinklenberg, 1988; Tinklenberg, Murphy,

Murphy, & Pfefferbaum, 1891). In this study, findings also indicated that 15% of sexual offenders responded yes to ever “using drugs or alcohol in their criminal offenses.”

Sexual offenders reported moderate frequencies of inhalant use. This finding has not been indicated in any of the previous research and should be revisited in future research.

Sexual offenders reported a high incidence of having a parent with a drug or alcohol problem and have experienced a parent to be “to high or drug to take care of the family.” Similar findings have also been indicated in previous research (Hsu & Starzynski, 1990; Mio, Nanjundappa, Verveur, & De Rios, 1986) suggesting that substance related problems among the parents of juvenile sexual offenders is worth further investigation.

## Implications

### *Research*

In previous research, alcohol use was indicated for certain types of sexual offenders (i.e. rapists) than other types of sexual offenders, such as child molesters in adolescents (Hsu & Starzynski, 1990). In future analyses, sexual offenders who engage in specific types of sexual offenses should be control for to see whether substance use is more prevalent among certain groups. Sexual offenders also differed regarding their racial identity, indicating that half of sexual offenders identified as Caucasian. Further analyses should investigate whether race influences responses among offenders from different racial backgrounds. Van Ness (1984) has suggested that sexual offenders may report substance abuse issues as a means to excuse their sexual offending in some way. When conducting future research, questions should be devised to address this issue in order to obtain more accurate responses if indeed this is the case. Finally, peer influences

and connections should be examined since this may indicate specific juvenile offenders who are at risk to abuse substances.

### *Treatment*

The post treatment sexual recidivism rate for sexually abusive youth is quite low. However, juvenile sexual offenders are actually 3-4 times more likely to re-offend non-sexually, such as engaging in drug related activity (Burton, Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000). In recognition of this fact, it is surprising that sexual offender treatment programs lack substance abuse treatment for juveniles (Burton, Smith-Darden, & Frankel, 2006) who may be at risk for abusing substances or engaging in drug related crimes, such as drug selling. Clearly, substance abuse programs need to be integrated into sexual offender treatment programs since these youths may be at risk for abusing substances in the future. To decrease the likelihood of youths who are at risk of leaving treatment and using substances, educating them in outside resources, such as Alcoholics Anonymous may also be helpful. Separate, but related programs should also address other types of illicit drug related crime, such as drug selling, since this may not involve the same type of intervention as youths who are abusing substances themselves. Some youth may feel the need to sell drugs without having the desire to use substances in order to achieve financial or social gain.

### *Limitations*

This paper analyzed sexual offenders only, as intended. Future analyses will investigate whether sexual offenders differ in terms on the variables described above when a comparison group of nonsexual offenders is introduced. This survey used self reports, collecting responses from offenders' only, which may increase the likelihood of

deception. Measuring substance abuse is always difficult and fraught with potential error. As mentioned, questions regarding peers could have been helpful when examining the influence this may have on offenders' substance use and relate criminality. Although data were collected from several facilities in a Midwestern state, it is limited to that state only. Data from similar populations should also be collected from other geographic locations.

## References

- Awad, G. A. & Saunders, E. B. (1989). Adolescent child molesters: Clinical observations. *Child Psychiatry and Human Development, 19*, 195-206.
- Awad, G. A., Saunders, E., & Levene, J. (1984). A clinical study of male adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology, 28*, 105-115.
- Burton, D. L., Hedgepeth, M. A., Ryan, G., & Compton, D. (n.d.) *The relationship of trauma to nonsexual crimes committed by adolescent sexual abusers*. Manuscript submitted for publication.
- Burton, D. L., Smith-Darden, J., & Frankel, S. J. (2006). Research on adolescent sexual abuser treatment programs. In Barbaree, H.E & Marshall, W.L. (Eds.), *The Juvenile Sex Offender, 2<sup>nd</sup> ed.* (pp. 291-312). New York, NY: Guilford Press.
- Elliot, D. S., Huizinga, D., Ageton, S. S., (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage.
- Fagan, J. & Wexler, S. (1988). Explanations of sexual assault among violent delinquents. *Journal of Adolescent Research, 3*, 363-385.
- Fehrenbach, P. A., Smith, W., Monastersky, C., & Deisher, R. (1986). Adolescent sexual offenders: Offender and offense characteristics. *American Journal of Orthopsychiatry, 56*, 225-233.
- Groth, A. N. (1977). The adolescent sexual offender and his prey. *International Journal of Offender Therapy and Comparative Criminology, 21*, 249-254.

- Hsu, L. K., & Starzynski, J. (1990). Adolescent rapists and adolescent child sexual assaulters. *International Journal of Offender Therapy and Comparative Criminology, 34*, 23-30.
- Leguizamo, A. (2000). Juvenile sex offenders: An object relations approach. *Dissertation Abstracts International 613-B*.
- Lightfoot, L. O., & Barbaree, H. E. (1993). The relationship between substance use and abuse and sexual offending in adolescents. In H.E. Barbaree, W.L. Marshall, & S.M. Hudson (Eds.), *The Juvenile Sex Offender* (pp. 203-224). New York, NY: The Guilford Press.
- Millon, T. (1993). *Millon adolescent clinical inventory: Manual*. Minneapolis, MN: National Computer Systems.
- Millon, T., Davis, R. (1996). *Disorders of Personality DSM-IV and Beyond*. New York: John Wiley & Sons.
- Mio, J. S., Nanjundappa, G., Verleur., D. E., & De Rios, M. D. (1986). Drug abuse and the adolescent sex offender: A preliminary analysis. *Journal of Psychoactive Drugs, 18*, 65-72.
- Rada, R.T. (1975). Alcoholism and forcible rape. *American Journal of Psychiatry, 132*, 444-446.
- Tinklenberg, J.R., Murphy, P.L., Darley, C.F., Roth, W.T., & Kopell, B.S., 1974. (1974). Drug involvement in criminal assaults by adolescents. *Archives of General Psychiatry, 30*, 685-689.

Tinklenberg, J.R., Murphy, P., Murphy, P.L., & Pfefferbaum, A. (1981). Drugs and criminal assaults by adolescents: A replication study. *Journal of Psychoactive Drugs, 13*, 277-287.

Van Ness, S.R. (1984). Rape as instrumental violence: A study of youth offenders. *Journal of Offender Counseling, Services & Rehabilitation, 9*, 161-170.

Vinogradov, S., Dishotsky, N.I., Doty, A.K., & Tinklenberg, J.R. (1988). Patterns of behavior in adolescent rape. *American Journal of Orthopsychiatry, 58*, 179-187.

Specialization and versatility of criminal behavior: An investigation comparing juvenile  
sexual and nonsexual offenders' substance use and related criminality

Deborah Ann Caserta

Smith College School for Social Work



## Abstract

This study investigates the prevalence of substance use and related criminality among a population of 325 juvenile sexual and 170 nonsexual offenders. This study also begins to investigate whether sexual and nonsexual offenders specialize in a “cluster” of criminal behaviors and as their needs evolve, their crimes are more diverse in nature. A pencil and paper survey was used to collect data from juvenile sexual and nonsexual offenders. The findings suggest that sexual offenders have significantly higher frequencies on various items than nonsexual offenders, including alcohol use, the use of inhalants, and “other drug” use compared to nonsexual offenders. The relationship between substance use among sexual offenders and their sexual crimes committed is also investigated. Results suggest that sexual offenders who used alcohol and drugs when committing a criminal act had significantly higher sexual perpetration scores. Findings also suggested that a significant portion of the number of sexual abuse victims reported by sexual offenders can be predicted by drug use. Treatment and research implications are explored.

## Article II

### Specialization and versatility of criminal behavior: An investigation comparing juvenile sexual and nonsexual offenders' substance use and related criminality

#### Literature Review

The prevalence of juvenile criminal offending continues to be a problem that affects our society today. Data from the Federal Bureau of Investigation indicates that adolescents account for 16% of violent crimes committed, 14% of aggravated assaults, 18% of sexual crimes, and 19% of rapes (Synder & Sickmund, 1999). Furthermore, alcohol, in some capacity, has been related to one half to two thirds of severe crimes such as homicide and other serious assaults committed by juvenile offenders (Martin, 2001). The relationship between mood altering substances and sexual offending has been debated and findings in the literature are inconsistent with regards to adolescent sexual offenders (i.e. rapists and pedophiles) (Lightfoot & Barbaree, 1993). Substance abuse and dependence has been viewed as a risk factor for juvenile nonsexual offenders, but a causal relationship between substance abuse and violent behavior and/or sexual aggressive behavior has been highly debated (Testa, 2002; Fergusson, Lynskey, Horwood, 1996).

#### *The Nature of Criminal Offenses among Juvenile Sexual and Nonsexual Offenders*

It is important to explore the versatility and specialization of crimes in juvenile offenders in order to understand the diversity of crimes committed. The application of Rational Choice Theory is an attempt to explain an offender's reasons for specializing in

or diversifying their criminal behavior (Guerette, Stenius, & McGloin, 2005; Cornish & Clarke, 1986). Instead of viewing specialization and versatility of crime as two opposing categories, offenders tend to specialize in “clusters” of criminal activity that are similar in nature, while diversifying their criminal behavior to satisfy their needs (Guerette, Stenius, & McGloin, 2005; Cornish & Clarke, 1986; Colvin & Pauly, 1983). Needs include achieving financial gain or fulfilling the need of committing crimes against others, both which involve skills an offender has obtained through experience and convenience. Crimes committed for monetary gain include the trafficking of illegal drugs. Status offenders, which consist of offenders who commit crimes that reflect their legal status as adolescents, such as running away from home and truancy, are less likely to engage in more serious delinquent criminal behavior as they age (Datesman & Aickin, 1984). Furthermore, status offenders’ crimes tend to decrease in seriousness of offense over time. (Kempe, 1988; Datesman & Aickin, 1984).

#### *Criminality among Adult Sexual Offenders*

The degree of seriousness of delinquent criminal behavior in juveniles and adults has been linked to conduct problems and antisocial behavior in childhood (Moffitt, Caspi, Harrington, & Milne, 2002). Juvenile sexual offenders who exhibited antisocial and impulsive behaviors were also more likely to re-offend than those who did not possess these traits (Waite, Keller, McGarvey, Wieckowski, Pinkerton, & Brown, 2005). Moffitt, Caspi, Harrington, & Milne (2002) examined life-course-persistent (LCP) offenders, or adult offenders who demonstrated antisocial and conduct problems in childhood and compared them to adolescent limited (AL) offenders whose onset of antisocial behavior began in adolescence. The results indicated that LCP offenders who

displayed antisocial behavior in childhood were more likely to display substance abuse dependence, drug related criminal behavior among other traits (e.g. elevated psychopathy, financial constraints, mental health issues, substance abuse dependence, drug related criminal behavior, and violent crime) compared to AL offenders. The authors mention that other risk factors include neurological deficits as well as environmental factors related to inadequate parenting, poverty, and dysfunctional family bonds (Moffitt, Caspi, Harrington, & Milne, 2002).

#### *Criminality among Juvenile Sexual Offenders*

Fergusson, Lynskey, & Horwood (1996) found a significant relationship between violent offending (i.e. assault, fighting) and alcohol abuse. These juvenile nonsexual offenders were also more likely to have risk factors including parental substance abuse behavior. Kelley, Lewis, & Sigal (2004) found similar findings related to the risk factors associated with juvenile sexual offenders. These authors noted that significant risk factors for juvenile sexual offenders who enter treatment include dysfunctional family relations, parents who abuse substances, sexual and physical abuse, and substance use and abuse. These risk factors can also affect treatment success and pose a high risk of sexual or nonsexual re-offense (Kelley, Lewis, & Sigal, 2004).

#### *The Degree of Specialization of Crimes among Adult and Juvenile Sexual Offenders*

Assumptions have been drawn to distinguish differences between adult sexual and nonsexual offenders. It has been widely assumed that adult nonsexual offenders are more versatile in their offending than adult sexual offenders, who have been categorized as “specialist offenders” (Smallbone, Wheaton, Hourigan, 2003; Smallbone & Wortley, 2004; Lussier, 2005). However, it should be noted that certain adult sexual offenders,

such as child molesters tend to specialize in that particular field of criminality, whereas rapists are more likely to be versatile in their offending (Lussier, LeBlanc, & Proulx, 2005).

Contrary to this belief regarding patterns among adult sexual offenders, in reality they commit many different types of crimes, including nonsexual crimes. Adult and juvenile sexual offenders benefit from treatment and the recidivism rate for youths to recommit sexual crimes is low. However, juvenile sexual offenders are more likely to commit other nonsexual crimes, such as drug related offenses (Burton, Hedgepeth, Ryan, & Compton, 2003). Therefore, treatment for juvenile sexual offenders need to address these issues while in treatment for their sexual offenses since the risk of nonsexual re-offense is significantly higher (Burton, Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000). Primary crimes for sexual offenders have been identified as committing crimes to obtain illicit drugs and engaging in substance use (Peugh & Belenko, 2001).

When reviewing the literature, some limitations to studies were observed. First, reported crime reported figures do not capture the actual prevalence of juvenile sexual offending since many crimes committed are underreported and remain undetected. However, self reported information can improve the accuracy of data pertaining to offending when attempting to gain an accurate picture of the variety and prevalence of criminal offenses (Barbaree, Hudson, & Seto, 1993). Secondly, many of the previous studies conducted do not have control groups, or lack comparisons between juvenile sexual and nonsexual offenders. More literature that assesses different types of criminal activity associated with substance abuse among sexual and nonsexual offenders would be beneficial. Lastly, many of these studies lacked clear definitions as they relate to

substance related offenses and behaviors. For example, some studies categorized drug use and drug sales as one category, rather than measuring these variables separately. Drug use may affect re-offense outcome differently than drug sales. Implications for treatment may also be different with regards to whether an offender is selling drugs, buying/using drugs, or both.

In a sample of juvenile offenders, this paper will examine parental and familial relationships among youth, family members who sold or abused substances, youth's alcohol and drug abuse patterns, and differences in drug selling patterns between juvenile sexual and nonsexual offenders.

### Methods

After consents were obtained, confidential data were collected from sexual and nonsexual offending youth from six residential facilities in a Midwestern state. Data were collected from 332 adjudicated juvenile sexual offenders and 170 nonsexual offending youths using multi-paged pencil and paper surveys. Demographics and measures of sexual arousal and aggression were collected in this study on juvenile offenders.

The average age of the juvenile sexually offending youth sample ( $N = 332$ ) was 16.70 years ( $SD = 1.65$  years) with no differences between groups ( $t(323) = 1.46$ ,  $p = .145$ ). On average, both groups were currently in the 9<sup>th</sup> grade ( $SD = 1.63$  years), with no difference between groups on grade level ( $t(319) = .986$ ,  $p = .325$ ). The two groups differed regarding racial identity ( $\chi^2(4) = 5.7$ ,  $p = .000$ ) with 50% of juvenile sexual offenders indicating their race as being Caucasian ( $n = 156$ ), 29% African American ( $n = 90$ ), and 13% Other ( $n = 43$ ). In comparison, 38% of nonsexually

delinquent youth reported their race as Caucasian (n =60), 56% African American (n = 90), and 4% Other (n = 7).

On a 7 point scale of modus operandi, (1 = babysat or played with victims; 2 = threats; 3 = threats and babysat/games; 4 = force; 5 = force and babysat/games; 6 = force and threats; and 7 =force and threats), juvenile sexual offenders reported an average of 2.44 ( $SD = 2.08$ ) ranging from 1-7.

On a 14 point scale indicating the severity or complexity of sexual crimes committed, (1 = exposure; 2 = fondling; 3 = exposure and fondling; 4 = oral sex; 5 = exposure and oral sex; 6 = oral sex and fondling; 7 = oral sex, exposure, and fondling; 8 = penetration with penis, digits or objects; 9 = penetration and exposure; 10 = penetration and fondling; 11 = penetration, exposure, and fondling; 12 = penetration and oral sex; 13 = penetration, exposure, and oral sex; 14 = penetration, exposure, fondling, and oral sex) juvenile sexual offenders reported an average of 8.55 ( $SD = 4.29$ ).

### Measures

*Behavioral questions regarding substance abuse.* Both groups were surveyed using The Millon Adolescent Clinical Inventory (MACI) (Millon, 1993) which is devised for youths in treatment or in correctional institutions. The MACI is based on Million's theory of the patterns in personality (Million & Davis, 1996), and its scales comprise 160 True-False questions. Respondents were expected to answer "True" or "False" to items such as "I would never use drugs, no matter what" and "Drinking seems to have been a problem for several members of my family." Based on Millon's (1993) validity scoring procedures, data from eight juveniles were not used for this study.

*Delinquent, nonsexual behavior.* To assess for criminal behavior in youth, Elliot, Huizinga, and Ageton's (1985) self reported delinquency measure (SRD) was utilized. This scale comprised of 32 items, comprising of a "Selling Drugs" subscale asking questions such as "sold marijuana/pot/weed/hash" and had youth rate these items on a 7 point scale (1 = Did not do) to (7 = 2-3 times a day). One question that differs from this 1-7 point scale pertains to sexually abusive youths only, which asks whether they have ever used alcohol or illicit drugs in their criminal offenses (1 = yes; 2 =no; or does not apply). This subscale and others, which include Alcohol Use and Drug Use, have acceptable inter-item reliability.

*Questions regarding substance use before and after crime committed.* The Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) surveys whether youths had endured traumatic experiences throughout their childhood. Non-standardized questions regarding alcohol and drug use before and after criminal offenses were asked using a 5 point scale (1=never) to (5=always).

*Social Desirability.* The Balanced Inventory of Desirable Responding (BIDR) (Kroner & Weekes, 1996) was used, comprising of 42 items, which required a response ranging on a 1-7 point scale (1 = Not True; 7 = Very True). Two subscales comprise the BIDR. The Impression Management subscale provides items that may suggest that respondents are reporting more or less favorable responses than what is likely to be true. The Self-Deception subscale provides statements that may illicit defensive responses. BIDR provides statements such as "I never regret my decisions" and "I never swear." The scores on these subscales have been used to assess the differences between groups on social desirability scores.



## Results

### Cigarette Use

In regards to the use of cigarettes and other tobacco products, 71% of sexual offenders ( $n = 296$ ) admitted to using tobacco products compared to 65% of nonsexual delinquent youths ( $n = 142$ ). In testing the mean difference on the frequency of cigarette and other tobacco product use between sexual ( $M = 4.51$ ,  $SD = 2.69$ ) and nonsexual offenders ( $M = 4.23$ ,  $SD = 2.79$ ), both groups (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 = Once a week; 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times a day) responded similarly ( $t = .998$ ,  $df = 436$ ,  $p = .32$ ).

### Alcohol Use

Sixty-one percent of sexual offenders ( $n = 298$ ) reported that they consumed alcohol compared to 48% of nonsexual offenders ( $n = 141$ ). In testing the mean frequency of alcohol use, (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 = once a week, 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times per day), sexual offenders ( $M = 3.13$ ,  $SD = 2.26$ ) sexual offenders reported a significantly greater frequency ( $t = 2.56$ ,  $df = 437$ ,  $p = .011$ ) of alcohol consumption than nonsexual offenders ( $M = 2.56$ ,  $SD = 2.50$ ).

Moreover, juvenile sexual offenders ( $n = 270$ ) were marginally more likely to respond “True” to the MACI item, “Drinking seems to really help me when I’m feeling down” (31% of sexual offenders) compared to 20% of their nonsexual offender counterparts ( $n = 106$ ) ( $\chi^2 (1) = 4.03$ ,  $p = .045$ ).

Thirty-eight percent of sexual offenders ( $n = 297$ ) ( $M = 3.13$ ,  $SD = 2.26$ ) responded to the SRD item, “drunk in a public place” compared to 30% of nonsexual

offenders ( $n = 141$ ) ( $M = 2.19$ ,  $SD = 2.00$ ). In testing the mean difference regarding the frequency of being drunk in public (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day), there was no statistical significance between groups ( $t = .30$ ,  $df=436$ ,  $p = .76$ ).

#### Alcohol Use Before and After Criminal Offenses

Juvenile sexual offenders ( $n = 330$ ) ( $M=2.02$ ,  $SD=1.37$ ) reported significantly more alcohol use ( $t = 2.78$ ,  $df=487$ ,  $p = .006$ ) before their criminal offense occurred than nonsexual offenders ( $n=159$ ) ( $M=1.68$ ,  $SD=1.08$ ). A 5-point scale was used to assess the frequency of use (1= never; 2= sometimes; 3=usually; 4=most of the time; 5= always).

Juvenile sexual offenders ( $n = 330$ ) ( $M=2.02$ ,  $SD=1.37$ ) were marginally significantly more likely to use alcohol after their criminal offense ( $t = 1.89$ ,  $df = 487$ ,  $p = .059$ ) than their nonsexual offending counterparts ( $n = 160$ ) ( $M=1.55$ ,  $SD=1.05$ ). A 5-point scale was used to measure the frequency of use (1= never; 2=sometimes; 3= usually; 4= most of the time; 5=always).

#### Other Illicit Drug Use

Fifty-three percent of sexual offenders ( $n = 297$ ) reported that they smoked marijuana compared to 57% of nonsexual offenders ( $n = 140$ ). Similarly, there was no significant difference ( $t = .132$ ,  $df = 435$ ,  $p = .90$ ) between the sexual offenders ( $M=3.28$ ,  $SD=2.59$ ) and nonsexual offenders ( $M=3.31$ ,  $SD=2.55$ ) on the frequency of marijuana use (1 =did not do; 2=once a month; 3= once every 2-3 weeks; 4=once per week; 5= 2-3 times per week; 6= once a day; 7= 2-3 times per day).

Twelve percent of sexual offenders ( $n = 298$ ) reported the use of “inhalants” compared to 8% of nonsexual offending youth ( $n = 141$ ). In testing the mean frequency

of inhalant use, indicating (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day), sexual offenders ( $M=1.38$ ,  $SD=1.24$ ) sexual offenders reported significantly greater use of “inhalants” than nonsexual offenders ( $M= 1.13$ ,  $SD= .65$ ) ( $t = 2.20$ ,  $df = 437$ ,  $p = .03$ ).

Twelve percent of sexual offenders ( $n = 297$ ) reported cocaine or crack use compared to 9% of nonsexual offending youth ( $n = 141$ ). There was no significance difference ( $t = 1.3$ ,  $df = 436$ ,  $p = .20$ ) between sexual offenders ( $M=1.33$ ,  $SD=1.09$ ) and nonsexual offenders ( $M=1.20$ ,  $SD= .77$ ) on the frequency of cocaine/crack use, indicating (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Twenty-three percent of sexual offenders ( $n = 300$ ) reported that they had used “other drugs” compared to 12% of nonsexual offenders ( $n = 139$ ). In testing the mean difference on the frequency of “other drug” use (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day), sexual offenders ( $M=1.78$ ,  $SD=1.68$ ) reported significantly greater frequency of use of “other drugs” ( $t = 2.41$ ,  $df = 437$ ,  $p = .02$ ) than nonsexual offenders ( $M=1.4$ ,  $SD=1.23$ ).

#### Drug Use Before and After Criminal Offenses

Juvenile sexual offenders ( $n = 331$ ) ( $M=2.18$ ,  $SD=1.50$ ) reported approximately the same frequency of drug use ( $t=1.75$ ,  $df= 487$ ,  $p= .081$ ) as nonsexual offenders ( $n = 158$ ) ( $M=1.92$ ,  $SD=1.51$ ) before their criminal offenses occurred. This question was asked using a 5-point scale (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

Sexually offending youth ( $n = 331$ ) ( $M=1.93$ ,  $SD=1.39$ ) reported the same frequency of drug use after their criminal offense occurred ( $t = 1.41$ ,  $df=486$ ,  $p=.16$ ) as nonsexual offending youth ( $n = 160$ ) ( $M= 1.75$ ,  $SD=1.18$ ). A 5-point scale was used to measure frequency of drug use (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

#### Used Substances in a Criminal Act (Sexual Offenders Only)

Fifteen percent of juvenile sexual offenders ( $n = 255$ ) reported yes to ever “...using drugs or alcohol in their criminal offenses (e.g. got them drunk or high).”

#### Illicit Drug Sales

Thirty-eight percent of sexual offenders ( $n = 298$ ) reported that they sold marijuana compared to 42% of nonsexual offenders ( $n = 140$ ). There was no significant difference ( $t=.69$ ,  $df= 436$ ,  $p= .49$ ) between sexual offenders ( $M=2.65$ ,  $SD=2.43$ ) and nonsexual offenders ( $M=2.82$ ,  $SD=2.54$ ). The frequency of marijuana selling was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Twenty eight percent of sexual offenders ( $n = 298$ ) reported that they had sold “hard drugs” (i.e. heroin, cocaine, and LSD) compared to 30% of nonsexual offenders ( $N=139$ ). There was no significant difference ( $t= 1.29$ ,  $df=435$ ,  $p= .20$ ) between sexual offenders ( $M=2.08$ ,  $SD=2.07$ ) and nonsexual offenders ( $M=2.37$ ,  $SD=2.36$ ). The frequency of the selling of “hard drugs” was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

### Family Substance Abuse and Drug Sales

Forty-six percent of sexual offenders ( $n = 316$ ) were significantly more ( $\chi^2 (1) = 40.6, p < .000$ ) likely to report “Yes” to the question having a “...parent with alcohol or drug problem” compared to 17% of nonsexual offenders ( $n = 166$ ).

Sexual offenders ( $M = 1.54, SD = 1.15$ ) also reported a significantly higher incidence ( $t (475) = 4.63, p < .000$ ) of their “parents being too high or drunk to take care of the family” than nonsexual offenders ( $M = 1.10, SD = .43$ ). Using a True-False MACI item, group was associated with response ( $\chi^2 (1) = 25.69, p < .000$ ) with 55% of sexual offenders ( $n = 299$ ) responding “True” to the statement “drinking seems to have been a problem for several members of my family” compared to 27% nonsexual offenders ( $n = 121$ ).

A yes/no question revealed that 23% of sexually offenders ( $n = 311$ ) also reported a significantly ( $\chi^2 (1) = 11.42, p < .001$ ) higher incidence of parents selling drugs compared to 10% of nonsexual offenders ( $n = 162$ ).

### Chemical Substance Treatment History

Thirteen percent of sexual offenders ( $n = 304$ ) reported having been in a community substance abuse program compared to 12% of nonsexual offenders ( $n = 149$ ). Fourteen percent of sexual offenders ( $n = 304$ ) reported having been in a residential substance abuse treatment program, compared to 15% of nonsexual offenders ( $n = 146$ ).

### Social Desirability

On the impression management subscale in the BIDR, juvenile sexual offenders ( $M =$  were significantly more likely to respond positively ( $t = 4.78, df = 306, p = .000$ ) in an attempt to make themselves look better than their nonsexual offender counterparts ( $M$

=77.96, *SD* = 8.72). However, in the results conducted in this study, the majority of sexual offenders' responses are less healthy than nonsexual offenders' responses in this study. Social Desirability will continue to be control for when further analyses are conducted.

### Summary of Group Analyses

Juvenile sexual offenders reported a significantly greater frequency of alcohol consumption and a greater frequency of alcohol use before and after the commission of their criminal offenses than nonsexual offending youth. Sexual offenders are more likely to agree with the statement that "Drinking really seems to help me when I'm feeling down" than nonsexual offenders. Sexual offenders were also more likely to report significantly higher frequency of inhalant use and the use of other drugs compared to nonsexual offenders. Sexual offenders were more likely to report that they had a parent or family member with an alcohol problem. Moreover, they more frequently reported that they experienced a parent being "...too high or drunk to take care of the family." Sexual offenders also reported a higher incidence of their parents selling illicit drugs than nonsexual offenders. A within group analysis revealed that 15% of sexual offenders reported using drugs in their criminal offenses. Finally, the number of victims sexual offenders reported was found to be marginally predicted by drug use.

There were no differences between sexual and nonsexual offenders with regards to the following; being drunk in a public place, cigarettes and other tobacco product use, marijuana use, cocaine or crack use, selling of marijuana or hard drugs, drug use before or after criminal commission, the relationship between sexual aggression and perpetration/force scores, and any predictive value between number of victims and

alcohol use or drug sales. It is important to note that among the analyses conducted in this study, there were no instances in which nonsexual offenders reported significantly more or more frequent use than sexual offenders.

According to the BIDR measure on social desirability, sexual offenders attempted to report more positive responses than their nonsexual counterparts. However, on the majority of the group comparisons (with the exception of marijuana use), sexual offenders reported worse responses on many of the items and didn't report more positively for the majority of the items surveyed in this study.

### Discussion

The majority of both groups indicated that they use cigarettes and other tobacco products. Although the results were not significantly different between these groups, 71% of sexual offenders compared to 65% of nonsexual offenders smoked cigarettes or used other tobacco products which is a cause for concern. Smoking education and cessation programs should be available to offenders if they are smoking heavily.

The results also indicate significant prevalence of alcohol use among juvenile sexual offenders compared to their nonsexual offending counterparts. Juvenile sexual offenders were also more likely to report alcohol use before and after their sex offenses than nonsexual offenders reported occurring before and after their nonsexual criminal offenses. Prior literature has highlighted the relationship between violent behavior and the use of substances (Fergusson, Lynskey, & Horwood, 1996). Alcohol and other substance use could have exacerbated some of the nonsexual and sexual crimes committed by these youths before the commission of their criminal act. However, the

criminal act committed may have not been violent in nature at the time substances were used. Future analyses should control for the type of crime an offender commits.

Findings also suggest that a majority of both groups reported they smoked marijuana, although in this current study, significant differences were not indicated. Findings also indicated that 15% of sexual offenders responded yes to ever “using drugs or alcohol in their criminal offenses.” The use of substances has been noted as a primary crime for sexual offenders in previous research (Peugh & Belenko, 2001). However, the “crime” of using substances is very different from substance related criminality such as illicit drug selling. Sexual offenders were more likely to use inhalants than nonsexual offenders. Inhalant use among juvenile sexual offenders should be revisited in future research.

In regards to drug selling, thirty-eight percent of sexual offenders reported that they sold marijuana compared to 42% of nonsexual offenders. Twenty eight percent of sexual offenders also reported that they had sold “hard drugs” (i.e. heroin, cocaine, and LSD) compared to 30% of nonsexual offenders. Although neither of analyses yielded significance between groups, a significant portion of both groups did admit to selling marijuana and other hard drugs which is worth investigating in future research. As mentioned, recidivism rates of sexual offenders committed nonsexual crimes, such as drug selling is higher than for sexual crimes (Burton, Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000).

Sexual offenders were more likely to report a higher incidence of having a parent with a drug or alcohol problem and were also more likely to report that they have experienced a parent to be “to high or drunk to take care of the family” than nonsexual



offenders. Juvenile sexual offenders' increase in criminal behavior has been associated with risk factors including dysfunctional family relations, parents who are substance abusers, and the use of substances by the offender (Kelley, Lewis, & Sigal, 2004). Similar risk factors have also been identified for nonsexual offenders (Moffitt, Caspi, Harrington, & Milne, 2002). Family upbringing may be a potential risk factor for adolescents to act out antisocially, such as engaging in substance use.

Sexual offenders who used substances when committing a criminal act had significantly higher perpetration scores. This finding suggests that sexual offenders may use substances to lower their inhibitions to commit a sexual crime. The Rational Choice Theory suggests that offenders' commit crimes that satisfy their needs (Guerette, Stenius, & McGloin, 2005; Cornish & Clarke, 1986; Colvin & Pauly, 1983) which may involve offending in particular "clusters" of offenses. Sexual offenders may choose to perpetrate more often, but need mood altering substances to satisfy growing needs as they commit more offenses.

Finally, a multivariate regression analysis revealed that a small, but significant portion of the number of sexual abuse victims reported by sexual offenders can be predicted by drug use. Various hypotheses can be drawn from this finding. It could mean that sexual offenders who have more sexual abuse victims may engage in other risky behaviors such as drug use. However, what can be considered as other risky behaviors, such as alcohol use or drug sales were not predictive of the number of victims. Therefore, there may be a specific reason as to why this group of sexual offenders significantly use illicit drugs over alcohol or engage in the selling of drugs. Future

analyses should replicate this finding to address whether the number of victims can be predicted by illicit drug use.

The results noted above suggest that many sexual and nonsexual offenders use and sell substances in some capacity. They may specialize in specific types of crimes based on their needs, but as their needs change, they need to evaluate what will satisfy them. These findings suggest that sexual offenders may engage in sexual crimes, but as their needs change, substance use and related crime may be a risk factor for these youths.

The BIDR was used to control for social desirability to measure whether both groups were responding in an attempt to make themselves appear more positive or negative than they actually are. This measure revealed that juvenile sexual offenders attempted to respond more positively than nonsexual offenders. However, they reported less healthy responses than nonsexual offenders on the majority of the variables measured. This implies that sexual offenders actually have been worse on some of the measures than what was reported initially. Social desirability should be controlled for in future analyses.

## Implications

### *Research*

In future analyses, sexual offenders who engage in specific types of sexual offenses should be controlled for to see whether substance use is more prevalent among certain groups. Future analyses should also address whether sexual offenders commit a “cluster” of crimes (such as sexual crimes) while committing other crimes that may be related in some way, such as using drugs while committing a sexually abusive act. Sexual offenders also differed regarding their racial identity, indicating that half of sexual

offenders identified as Caucasian. Further analyses should investigate whether race influences responses among offenders from different racial backgrounds. Prior research has suggested that sexual offenders may report substance abuse issues as a means to excuse their sexual offending in some way (Barbaree, Hudson, & Seto). When conducting future research, questions should be devised to address this issue in order to obtain more accurate responses if indeed this is the case. Finally, peer influences and connections should be examined since this may indicate specific juvenile offenders who are at risk to abuse substances.

### *Treatment*

The post treatment sexual recidivism rate for sexually abusive youth is quite low. However, juvenile sexual offenders are actually 3-4 times more likely to re-offend non-sexually, such as engaging in drug related activity (Burton, Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000). In recognition of this fact, it is surprising that sexual offender treatment programs lack substance abuse treatment for juveniles (Burton, Smith-Darden, & Frankel, 2006) who may be at risk for abusing substances or engaging in drug related crimes, such as drug selling. Clearly, substance abuse programs need to be integrated into sexual offender treatment programs since these youths may be at risk for abusing substances in the future. To decrease the likelihood of youths who are at risk of leaving treatment and using substances, educating them in outside resources, such as Alcoholics Anonymous may also be helpful. Separate, but related programs should also address other types of illicit drug related crime, such as drug selling, since this may not involve the same type of intervention as youths who are abusing substances

themselves. Some youth may feel the need to sell drugs without having the desire to use substances in order to achieve financial or social gain.

### *Limitations*

This survey used self reports, collecting responses from offenders' only, which may increase the likelihood of deception. Measuring substance abuse is always difficult and fraught with potential error. As mentioned, questions regarding peers could have been helpful when examining the influence this may have on offenders' substance use and relate criminality. Although data were collected from several facilities in a Midwestern state, it is limited to that state only. Data from similar populations should also be collected from other geographic locations.

## References

- Abracen, J., Looman, J., & Anderson, D. (2000). Alcohol and drug abuse in sexual and nonsexual violent offenders. *Journal of Research and Treatment, 12*, 263-274.
- Barbaree, H.E., Hudson, S.M., & Seto, M.C. (1993). Sexual assault in society: The role of the juvenile offender. In H.E. Barbaree, W.L. & S.M. Hudson (Eds.), *The Juvenile Sex Offender* (pp. 1-24). New York: Guilford Press.
- Bernstein, D., & Fink, L. (1998). *Childhood trauma questionnaire: A retrospective self-report, manual*. San Antonio, TX: The Psychological Corporation.
- Burton, D.L., Hedgepeth, M.A., Bureau of Juvenile Justice, Ryan, G., & Compton, D. The relationship of trauma to nonsexual crimes committed by adolescent sexual abusers. *Child Abuse & Neglect*.
- Burton, D.L., Smith-Darden, J., & Frankel, S.J. (2006). Research on adolescent sexual abuser treatment programs. In Barbaree, H.E & Marshall, W.L. (Eds.), *The Juvenile Sex Offender, 2<sup>nd</sup> ed.* (pp. 291-312). New York, NY: Guilford Press.
- Colvin, M., & Pauly, J, (1983). A critique of criminology: Toward an integrated structural Marxist theory of delinquency production. *American Journal of Sociology, 89*(3), 513-551.
- Cornish, D., & Clarke, R.V. (1986). Crime as a rational choice. In D. Cornish & R.V. Clarke (Eds.), *The reasoning criminal*. New York: Springer-Verlag.
- Datesman, S.K., & Aickin, M. (1984). Offense specialization and escalation among status offenders. *The Journal of Criminal Law and Criminology, 75*, 1246-1275.

- Elliot, D. S., Huizinga, D., Ageton, S. S., (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage.
- Fagan, J. & Wexler, S. (1988). Explanations of sexual assault among violent delinquents. *Journal of Adolescent Research, 3*, 363-385.
- Fergusson, D.M., Lynskey, M.T., & Horwood, L.J. (1996). Alcohol misuse and juvenile offending in adolescence, *Addiction, 91*, 483-494.
- Guerette, R.T., Stenius, V.M.K., & McGloin, J.M. (2005). Understanding offense specialization and versatility: A reapplication of the rational choice perspective. *Journal of Criminal Justice, 33*, 77-87.
- Kelley, S.M., Lewis, K., & Sigal, J. (2004). The impact o risk factors on the treatment of adolescent sex offenders. *Journal of Addictions and Offender Counseling, 24*, 67-81.
- Kempe, K.L. (1988). Crime severity and criminal career progression. *The Journal of Criminal Law and Criminology, 79*, 524-540.
- Kroner, D. G. & Weekes, J. R. (1996). Socially desirable responding and offense characteristics among rapists. *Violence & Victims, 11*, 263-270.
- Leguizamo, A. (2000). Juvenile sex offenders: An object relations approach. *Dissertation Abstracts International 613-B*.
- Lightfoot, L.O., & Barbaree, H.E. (1993). The relationship between substance use and abuse and sexual offending in adolescents. In H.E. Barbaree, W.L. Marshall, & S.M. Hudson (Eds.), *The Juvenile Sex Offender* (pp. 203-224). New York, NY: The Guilford Press.

- Lussier, P. (2005). The criminal activity of sexual offenders in adulthood: Revisiting the specialization debate. *Sexual Abuse: A Journal of Research and Treatment, 17*, 269-292.
- Lussier, P., LeBlanc, M., & Proulx, J. (2005). The generality of criminal behavior: A confirmatory factor analysis of the criminal activity of sexual offenders in adulthood. *Journal of Criminal Justice, 33*, 177-189.
- Martin, S.E. (2001). Alcohol, youth, and the justice system: Underage drinking as a normative behavior, a status offense, and a risk factor for delinquency. In White, S.O. (Eds.), *Crime and Justice: Handbook of Youth and Justice*. (159-231). New York, NY: Kluwer Academic Plenum Publishers.
- Moffitt, T.E., Caspi, A., Harrington, H., & Milne, B.J. (2002). Males on the life-course-persistent and adolescence-limited antisocial pathways: Follow-up at age 26 years. *Development and Psychopathology, 14*, 179-207.
- Millon, T. (1993). *Millon adolescent clinical inventory: Manual*. Minneapolis, MN: National Computer Systems.
- Millon, T., Davis, R. (1996). *Disorders of Personality DSM-IV and Beyond*. New York: John Wiley & Sons.
- Peugh, J. & Belenko, S. (2001). Examining the substance use patterns and treatment needs of incarcerated sex offenders. *Sexual Abuse: A Journal of Research and Treatment, 13*, 179-195.
- Ryan, G. (1997). The families of sexually abusive youth. In G. Ryan & S. Lane (Eds.), *Juvenile Sexual Offending* (pp. 136-154). San Francisco, CA: Jossey-Bass.

- Smallbone, S.W., Wheaton, J., & Hourigan, D. (2003). Trait empathy and criminal versatility in sexual offenders. *Sexual Abuse: A Journal of Research and Treatment, 15*, 49-60.
- Smallbone, S.W. & Wortley, R.K. (2004). Onset, persistence, and versatility of offending among adult males convicted of sexual offenses against children. *Sexual Abuse: A Journal of Research and Treatment, 16*, 285-298.
- Synder, H.N., & Sickmund, M. (1999, September). *Juvenile offenders and victims: 1999 national report*, Retrieved January 17, 2007 from <http://www.ncjrs.gov/html/ojjdp/nationalreport99/toc.html>.
- Testa, M. (2002). The impact of men's alcohol consumption on perpetration of sexual aggression. *Clinical Psychology Review, 22*, 1239-1263.
- Waite, D., Keller, A., McGarvey, E.L., Wieckowski, E., Pinkerton, R., & Brown, G.L. (2005). Juvenile sex offender re-arrest rates for sexual, violent nonsexual and property crimes: A 10-Year follow-up. *Sexual Abuse: A Journal of Research and Treatment, 17*, 313-331.



Substance use and criminal behavior among juvenile sexual offenders: An exploratory study examining the relationship between criminality and the use of mood altering

Deborah Caserta

Smith College School for Social Work

### Abstract

This study investigated the prevalence of substance use and related criminality among a population of 325 juvenile sexual offenders. The relationship between substance use and sexual and nonsexual criminality was also examined. Results were obtained using pencil and paper surveys given to male adolescent sexual offenders. Results were summarized, suggesting that sexual offenders report high frequencies of alcohol consumption, inhalant use, and the selling of marijuana or other illicit drugs. Findings also indicated sexual offenders who used alcohol and drugs when committing a criminal act had significantly higher perpetration scores. Findings also suggested that a significant portion of the number of sexual abuse victims reported by sexual offenders can be predicted by drug use. Treatment and research implications are explored.

### Article III

## Substance use and criminal behavior among juvenile sexual offenders: An exploratory study examining the relationship between criminality and the use of mood altering substances

### Literature Review

The prevalence of substance abuse among juvenile sexual offenders continues to be a debated topic in the literature. The limited research conducted in this area of study has yielded inconsistent findings regarding whether substance abuse is a significant problem among juvenile sexual offenders (Lightfoot & Barbaree, 1993). Some of the literature suggests that drug and/or alcohol use is a significant problem for juvenile sexual offenders worth addressing (Tinklenberg, Murphy, Darley, Roth, & Kopell, 1974; Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1981; Van Ness, 1984; Mio, Nanjundappa, Verleur, & De Rios, 1986; Vinogradov, Dishotsky, Doty, & Tinklenberg, 1988; Hsu, & Starzynski, 1990) whereas other research suggests a lower and insignificant prevalence of substance abuse among juvenile sexual offenders (many of these studies do not have control groups) (Groth, 1977; Awad, Saunders, & Levene, 1984; Fehrenbach, Smith, Monastersky, & Deisher, 1986; Fagan, & Wexler, 1988; Awad, & Saunders, 1989). However, there has been limited research conducted which explores whether juvenile sexual offenders' substance abuse and associated behaviors are related to their sexual offending. Substance abuse and nonsexual criminality among adult sexual offenders and substance abuse of non-delinquent youth has been researched more

extensively and may offer explanations regarding the patterns of criminality among juvenile sexual offenders.

Nonsexual crimes committed among adult sexual offenders can be based on the offenders' needs and opportunities. For example, an offender may sell illicit drugs for monetary gain and as the offender's needs change over time, their sexual and nonsexual crimes become more versatile in nature (Guerette, Stenius, & McGloin, 2005). Sexual offenders may commit a series of offenses, representing a "cluster" of similar offenses representing the offender's needs. Adult sexual offenders who are involved in drug trafficking may also commit crimes such as burglary to achieve financial gain. Child molesters are typically less versatile in their offenses and are more likely to re-offend involving children as their victims than rapists. A study conducted by Lussier, LeBlanc, & Proulx (2005) also suggests that rapists committed a greater variety of violent crimes and property crimes than child molesters. However, research continues to support the notion that most sexual offenders are selective in their criminal careers rather than versatile (Smallbone & Wortley, 2004; Smallbone, Wheaton, & Hourigan, 2003).

There have been some factors proposed that link sexual offending with substance use in adults. As mentioned, violence used in sexual offending is related to substance abuse, in some capacity (Langevin, & Lang, 1990). Some adult sexual offenders have been found to only abuse substances before their sexual offense. Therefore, treating their substance abuse may be important when attempting to reduce inappropriate sexual behavior (Rada, 1975) or high risk (of re-offense) factors (Langevin & Lang, 1990). Substance abuse treatment may need to be incorporated in sex offender treatment since

many programs lack treatment for substance abuse (Burton, Smith-Darden, & Frankel, 2006).

Returning to juveniles, but to nonsexual delinquents versus sexually abusive youth, explanations have attempted to explore the relationship between juvenile delinquent behavior and substance use/abuse. Fergusson, Lynskey, & Horwood (1996) offer an explanation between the use of alcohol and delinquent behavior (i.e. property and violent crime), which may be due to the psycho-pharmacological effects of alcohol. These effects are believed to be highly associated with delinquent behavior among juvenile offending. Another explanation proposed suggests co-morbidity between substance use and crime involvement, postulating that there may be common risk factors. For example, factors such as family characteristics (i.e. parents' addictive behaviors), peer pressures, and an individual's intellectual capacities could influence or cause substance abuse and/or criminality among offenders (Fergusson, Lynskey, & Horwood, 1996). Research has consistently found that violent crime (i.e. assaults, rape, and homicide) have been linked to substances, especially alcohol. Alcohol abuse has also been associated with sexual coercion in juvenile sexual offenders (Johnson, & Knight, 2000). A significant relationship between sexual aggressive behavior among adolescent sexual offenders and alcohol usage has also been discussed (Testa, 2002). However, understanding of whether there is a direct, indirect, or spurious relationship between the two factors continues to be elusive (Lightfoot & Barbaree, 1993; Testa, 2002).

Following treatment for their sexual offenses, juvenile sexual offenders are at high risk to re-offend, with three to four times the number of arrest for nonsexual crimes, such as drug-related offenses, than sexual crimes. (Burton & Meezan, 2004; Burton,

Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000). Juvenile sexual and nonsexual offenders, who are generally antisocial and impulsive in nature, are more likely to re-offend than juveniles who are not antisocial and impulsive (Waite, Keller, McGarvey, Wieckowski, Pinkerton, & Brown, 2005). Moreover, adult nonsexual offenders who displayed antisocial or conduct related issues throughout childhood are more likely to display a plethora of issues as adults, such as psychopathy, financial problems, drug-related crimes, substance use disorders, and violent crime (Moffitt, Caspi, Harrington, & Milne, 2002).

In a sample of juvenile sexual and nonsexual offenders, this paper will examine the relationship between patterns of substance abuse before, during, and after crimes were committed, and the prevalence of substance related criminality (i.e. drug selling) among juvenile sexual and nonsexual offenders.

### Methods

After consents were obtained, confidential data were collected from sexual and offending youth from six residential facilities in a Midwestern state. Data were collected from 332 adjudicated juvenile sexual offenders using multi-paged pencil and paper surveys. Demographics and measures of sexual arousal and aggression were collected.

The average age of the juvenile sexually offending youth sample ( $N = 332$ ) was 16.70 years ( $SD = 1.65$  years). On average, the youth were currently in the 9<sup>th</sup> grade ( $SD = 1.63$  years). Fifty percent of the juvenile sexual offenders indicating their race as being 50% Caucasian ( $n = 156$ ), 29% African American ( $n = 90$ ), and 13% Other ( $n = 43$ ).

On a 7 point scale of modus operandi, (1 = babysat or played with victims; 2 = threats; 3 = threats and babysat/games; 4 = force; 5 = force and babysat/games; 6 =

force and threats; and 7 = force and threats), juvenile sexual offenders reported an average of 2.44 ( $SD = 2.08$ ) ranging from 1-7.

On a 14 point scale indicating the severity or complexity of sexual crimes committed, (1 = exposure; 2 = fondling; 3 = exposure and fondling; 4 = oral sex; 5 = exposure and oral sex; 6 = oral sex and fondling; 7 = oral sex, exposure, and fondling; 8 = penetration with penis, digits or objects; 9 = penetration and exposure; 10 = penetration and fondling; 11 = penetration, exposure, and fondling; 12 = penetration and oral sex; 13 = penetration, exposure, and oral sex; 14 = penetration, exposure, fondling, and oral sex) juvenile sexual offenders reported an average of 8.55 ( $SD = 4.29$ ).

#### Measures

*Behavioral questions regarding substance abuse.* The youth were surveyed using The Millon Adolescent Clinical Inventory (MACI) (Millon, 1993) which is devised for youths in treatment or in correctional institutions. The MACI is based on Millon's theory of the patterns in personality (Millon & Davis, 1996), and its scales comprise 160 True-False questions. Respondents were expected to answer "True" or "False" to items such as "I would never use drugs, no matter what" and "Drinking seems to have been a problem for several members of my family." Based on Millon's (1993) validity scoring procedures, data from eight juveniles were not used for this study.

*Delinquent, nonsexual behavior.* To assess for criminal behavior in youth, Elliot, Huizinga, and Ageton's (1985) self reported delinquency measure (SRD) was utilized. This scale comprised of 32 items, comprising of a "Selling Drugs" subscale asking questions such as "sold marijuana/pot/weed/hash" and had youth rate these items on a

7 point scale (1 = Did not do) to (7 = 2-3 times a day). This subscale and others, which include Alcohol Use and Drug Use, have acceptable inter-item reliability.

A non standardized question that asked whether the youth have ever used alcohol or illicit drugs in their criminal offenses (1 = yes; 2 =no; or does not apply).

*Questions regarding substance use before and after crime committed.* The Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) surveys whether youths had endured traumatic experiences throughout their childhood. Non-standardized questions regarding alcohol and drug use before and after criminal offenses were asked using a 5 point scale (1=never) to (5=always).

*Social Desirability.* The Balanced Inventory of Desirable Responding (BIDR) (Kroner & Weekes, 1996) was used, comprising of 42 items, which required a response ranging on a 1-7 point scale (1 = Not True; 7 = Very True). Two subscales comprise the BIDR. The Impression Management subscale provides items that may suggest that respondents are reporting more or less favorable responses than what is likely to be true. The Self-Deception subscale provides statements that may illicit defensive responses. BIDR provides statements such as “I never regret my decisions” and “I never swear.” The scores on these subscales have been used to assess the differences between groups on social desirability scores.

## Results

### Summary of the Mean Scores among Juvenile Sexual Offenders

#### *Cigarette Use*

The mean difference on the frequency of cigarette and other tobacco product use, indicating (1 =did not do; 2 =once a month; 3 =once every 2-3 weeks; 4 =Once a week; 5



= 2-3 times a week; 6 = once a day; 7 = 2-3 times a day) is ( $M = 4.51$ ,  $SD = 2.69$ ) among sexual offenders.

#### *Alcohol Use*

In testing the mean frequency of alcohol use, indicating (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 = once a week, 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times per day), is ( $M = 3.13$ ,  $SD = 2.26$ ) among sexual offenders.

Moreover, 31% of juvenile sexual offenders ( $n = 270$ ) responded “True” to the MACI item, “drinking seems to really help me when I’m feeling down.”

In testing the mean difference regarding the frequency of being drunk in public (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 = once a week; 5 = 2-3 times a week; 6 = once a day; 7 = 2-3 times a day) is  $M = 2.25$ ,  $SD = 2.00$ .

Juvenile sexual offenders ( $n = 330$ ) ( $M = 2.02$ ,  $SD = 1.37$ ) reported consuming alcohol before their criminal offense occurred. A 5-point scale was used to measure the frequency of use (1 = never; 2 = sometimes; 3 = usually; 4 = most of the time; 5 = always).

Juvenile sexual offenders ( $n = 329$ ) also indicated that they used alcohol after their criminal offense ( $M = 1.77$ ,  $SD = 1.27$ ). A 5-point scale was used to assess the frequency of use (1 = never; 2 = sometimes; 3 = usually; 4 = most of the time; 5 = always).

#### *Other Illicit Drug Use*

Juvenile sexual offenders ( $n = 297$ ) reported that they smoked marijuana ( $M = 3.28$ ,  $SD = 2.59$ ). A 7-point scale was used to measure the frequency of marijuana use (1 = did not do; 2 = once a month; 3 = once every 2-3 weeks; 4 = once per week; 5 = 2-3 times per week; 6 = once a day; 7 = 2-3 times per day).

The mean frequency of inhalant use among sexual offenders ( $n = 298$ ) (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day) is ( $M = 1.38$ ,  $SD = 1.24$ ) among sexual offenders.

Sexual offenders ( $n=297$ ) reported cocaine or crack use ( $M = 1.33$ ,  $SD = 1.09$ ). The frequency of cocaine and crack use was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Sexual offenders ( $n = 300$ ) indicated on a 7-point scale, (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day), the frequency of “other drug” use among sexual offenders ( $M = 1.78$ ,  $SD = 1.68$ ) among sexual offenders.

#### *Drug Use Before and After Criminal Offenses*

Juvenile sexual offenders ( $n=331$ ) ( $M = 2.18$ ,  $SD = 1.50$ ) reported that they used drugs before their criminal offenses occurred. This question was asked using a 5-point scale (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

Juvenile sexual offenders ( $n = 331$ ) ( $M = 1.93$ ,  $SD = 1.39$ ) also reported that they used drugs after the commission of their criminal offense. A 5-point scale was used to measure frequency (1=never; 2=sometimes; 3=usually; 4=most of the time; 5= always).

#### Criminality Associated with Substance Use

##### *Used Substances in a Criminal Act*

Fifteen percent of juvenile sexual offenders ( $n = 255$ ) reported yes to ever “...using drugs or alcohol in their criminal offenses (e.g. got them drunk or high).”

##### *Illicit Drug Sales*

Thirty eight percent of sexual offenders (n = 298) reported that they sold marijuana (M=2.65, SD=2.43). The frequency of marijuana selling was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

Twenty eight percent of sexual offenders (n = 298) reported that they had sold “hard drugs” (i.e. heroin, cocaine, and LSD) (M = 2.08, SD = 2.07). The frequency of the selling of “hard drugs” was measured using a 7-point scale (1= did not do; 2= once a month; 3= once every 2-3 weeks; 4= once a week; 5= 2-3 times a week; 6= once a day; 7= 2-3 times a day).

#### *Family Substance Abuse and Drug Sales*

Forty six percent of sexual offenders (n = 316) (responded “Yes” to the question having a “...parent with alcohol or drug problem.” Twenty four percent of sexual offenders (n = 323) (M = 1.54, SD = 1.15) also reported their “parents being too high or drunk to take care of the family.” Using a True-False MACI item, 55% of sexual offending youth (n = 299) responded “True” to the statement “drinking seems to have been a problem for several members of my family.” A yes/no question revealed that 23% of sexually offenders (n = 311) also reported that their parents have sold drugs.

#### *Chemical Substance Treatment History*

Thirteen percent of sexual offenders (n = 304) reported having been in a community substance abuse program and fourteen percent of sexual offenders (n = 304) reported having been in a residential substance abuse treatment program.

### Relationship of Substance Use to Sexual Criminality

The relationship between summary scales of the SRD measure and sexual aggression were assessed using the perpetration and force scores. Neither the perpetration nor force scores were significantly related to the alcohol or drug subscales in the SRD.

Sexual offenders ( $n = 217$ ) ( $M=10.81$ ,  $SD=3.52$ ) who used alcohol and drugs when committing a criminal act had significantly higher ( $t = 3.37$ ,  $df= 216$ ,  $p < .001$ ) perpetration scores. However, there were no significant differences between groups on the number of victims ( $n = 309$ ) ( $M=1.29$ ,  $SD=1.79$ ) or total force ( $n = 198$ ) ( $M=3.10$ ,  $SD=2.37$ ) used when committing a sexual crime.

Using a multivariate regression analysis, a small ( $R^2 = .026$ ) but significant portion of the number of sexual abuse victims reported by sexual offenders can be predicted by drug use ( $F = 3.36$ ,  $df = 3$ ,  $p = .019$ ). Neither alcohol use or drug sales were predictive of the number of victims.

### Discussion

The results indicate that cigarette and other tobacco use is prevalent among the majority of sexual offenders. The findings also suggest a significant prevalence of alcohol use among juvenile sexual offenders, which disagrees with some of the previous literature, conducted on this population (Fagan & Wexler, 1988; Awad, Saunders, & Levene, 1984). In other prior literature conducted on sexual offenders, some of these findings support a high frequency of alcohol use among juvenile sexual offenders (Van Ness, 1984).

Juvenile sexual offenders have also reported high frequencies of alcohol use before and after their sex offenses. Prior literature involving juvenile sexual offenders and a control group of nonsexual offenders support this finding of rapists using alcohol prior to their offense (Van Ness, 1984). Vinogradov, Dishotsky, Doty, & Tinklenberg (1988) found that adolescent rapists engage in poly use of chemical substances (e.g. alcohol with conjunction with marijuana) during their offense. In this study, 53% of sexual offenders reported they smoked marijuana. Over half of sexual offenders have reported marijuana use in some capacity, which has been indicated in some of the previous research conducted (Vinogradov, Dishotskym Doty, & Tinklenberg, 1988; Tinklenberg, Murphy, Murphy, & Pfefferbaum, 1891). In this study, findings also indicated that 15% of sexual offenders responded yes to ever “using drugs or alcohol in their criminal offenses.”

An interesting finding revealed that sexual offenders reported high frequencies of inhalant use. This finding has not been indicated in any of the previous research and should be revisited in future research to investigate whether inhalant use frequent among sexually offending youth.

Sexual offenders were more likely to report a higher incidence of having a parent with a drug or alcohol problem and were also more likely to report that they have experienced a parent to be “to high or drunk to take care of the family” than nonsexual offenders. Juvenile sexual offenders’ increase in criminal behavior has been associated with risk factors including dysfunctional family relations, parents who are substance abusers, and the use of substances by the offender (Kelley, Lewis, & Sigal, 2004).

Family upbringing may be a potential risk factor for adolescents to act out antisocially, such as engaging in substance use.

One of findings that are most central to this present study is the relationship between substance use among sexual offenders and perpetration scores. These results suggest that sexual offenders who used substances when committing a criminal act had significantly higher perpetration scores. This suggests a level of versatility since sexual offenders may engage in sexual crimes and in substance use as well. As mentioned, alcohol use has been associated with sexual coercion in some capacity (Johnson & Knight, 2000) which is similar to the finding presented in this study.

Finally, a multivariate regression analysis revealed that a small, but significant portion of the number of sexual abuse victims reported by sexual offenders can be predicted by drug use. Various hypotheses can be drawn from this finding. It could mean that sexual offenders who have more sexual abuse victims may engage in other risky behaviors such as drug use. However, what can be considered as other risky behaviors, such as alcohol use or drug sales were not predictive of the number of victims. Therefore, there may be a specific reason as to why this group of sexual offenders significantly use illicit drugs over alcohol or engage in the selling of drugs. Future analyses should replicate this finding to address whether the number of victims can be predicted by illicit drug use.

The results noted above suggest that sexual offenders use and sell substances in some capacity. They may specialize in specific types of crimes based on their needs, but as their needs change, they need to evaluate what will satisfy them. These findings

suggest that sexual offenders may engage in sexual crimes, but as their needs change, substance use and related crime may be a risk factor for these youths.

### Implications

#### *Research*

In previous research, alcohol use was indicated for certain types of sexual offenders (i.e. rapists) than other types of sexual offenders, such as child molesters in adolescents (Hsu & Starzynski, 1990). In future analyses, sexual offenders who engage in specific types of sexual offenses should be control for to see whether substance use is more prevalent among certain groups. Sexual offenders also differed regarding their racial identity, indicating that half of sexual offenders identified as Caucasian. Further analyses should investigate whether race influences responses among offenders from different racial backgrounds. Van Ness (1984) has suggested that sexual offenders may report substance abuse issues as a means to excuse their sexual offending in some way. Future research should also examine whether sexual offenders have other risk factors such as intellectual disabilities, which have been linked to substance use (Fergusson, Lynskey, & Horwood, 1996). When conducting future research, questions should be devised to address this issue in order to obtain more accurate responses if indeed this is the case. More analyses should be conducted in order to investigate whether co-morbidity between criminality and substance use exists. Finally, peer influences and connections should be examined since this may indicate specific juvenile offenders who are at risk to abuse substances.

### *Treatment*

The post treatment sexual recidivism rate for sexually abusive youth is quite low. However, juvenile sexual offenders are actually 3-4 times more likely to re-offend non-sexually, such as engaging in drug related activity (Burton, Hedgepeth, Ryan, & Compton, 2003; Worling & Curwen, 2000). In recognition of this fact, it is surprising that sexual offender treatment programs lack substance abuse treatment for juveniles (Burton, Smith-Darden, & Frankel, 2006) who may be at risk for abusing substances or engaging in drug related crimes, such as drug selling. Clearly, substance abuse programs need to be integrated into sexual offender treatment programs since these youths may be at risk for abusing substances in the future. To decrease the likelihood of youths who are at risk of leaving treatment and using substances, educating them in outside resources, such as Alcoholics Anonymous may also be helpful. Separate, but related programs should also address other types of illicit drug related crime, such as drug selling, since this may not involve the same type of intervention as youths who are abusing substances themselves. Some youth may feel the need to sell drugs without having the desire to use substances in order to achieve financial or social gain.

### *Limitations*

This paper analyzed sexual offenders only, as intended. This survey used self reports, collecting responses from offenders' only, which may increase the likelihood of deception. Measuring substance abuse is always difficult and fraught with potential error. As mentioned, questions regarding peers could have been helpful when examining the influence this may have on offenders' substance use and relate criminality. Although data were collected from several facilities in a Midwestern state, it is limited to that state



only. Data from similar populations should also be collected from other geographic locations.

## References

- Awad, G.A. & Saunders, E.B. (1989). Adolescent child molesters: Clinical observations. *Child Psychiatry and Human Development, 19*, 195-206.
- Awad, G.A., Saunders, E., & Levene, J. (1984). A clinical study of male adolescent sexual offenders. *International Journal of Offender Therapy and Comparative Criminology, 28*, 105-115.
- Bernstein, D., & Fink, L. (1998). *Childhood trauma questionnaire: A retrospective self-report, manual*. San Antonio, TX: The Psychological Corporation.
- Burton, D.L., Hedgepeth, M.A., Ryan, G., & Compton, D. (n.d.) *The relationship of trauma to nonsexual crimes committed by adolescent sexual abusers*. Manuscript submitted for publication.
- Burton, D.L., & Meezan, W. (2004). Revisiting recent research on social learning theory as an etiological proposition for sexually abusive male adolescents. *Journal of Evidence-Based Social Work, 1*, 41-80.
- Burton, D.L., Smith-Darden, J., & Frankel, S.J. (2006). Research on adolescent sexual abuser treatment programs. In Barbaree, H.E & Marshall, W.L. (Eds.), *The Juvenile Sex Offender, 2<sup>nd</sup> ed.* (pp. 291-312). New York, NY: Guilford Press.
- Fagan, J. & Wexler, S. (1988). Explanations of sexual assault among violent delinquents. *Journal of Adolescent Research, 3*, 363-385.

- Fehrenbach, P.A., Smith, W., Monastersky, C., & Deisher, R. (1986). Adolescent sexual offenders: Offender and offense characteristics. *American Journal of Orthopsychiatry*, *56*, 225-233.
- Fergusson, D.M., Lynskey, M.T., & Horwood, L.J. (1996). Alcohol misuse and juvenile offending in adolescence, *Addiction*, *91*, 483-494.
- Guerette, R.T., Stenius, V.M.K., & McGloin, J.M. (2005). Understanding offense specialization and versatility: A reapplication of the rational choice perspective. *Journal of Criminal Justice*, *33*, 77-87.
- Groth, A.N. (1977). The adolescent sexual offender and his prey. *International Journal of Offender Therapy and Comparative Criminology*, *21*, 249-254.
- Hsu, L.K., & Starzynski, J. (1990). Adolescent rapists and adolescent child sexual assaulters. *International Journal of Offender Therapy and Comparative Criminology*, *34*, 23-30.
- Johnson, G.M., & Knight, R.A. (2000). Developmental antecedents of sexual coercion in juvenile sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, *12*, 165-178.
- Kroner, D. G. & Weekes, J. R. (1996). Socially desirable responding and offense characteristics among rapists. *Violence & Victims*, *11*, 263-270.
- Langevin, R. & Lang, R.A. (1990). Substance abuse among sex offenders. *Annals of Sex Research*, *3*, 397-424.
- Leguizamo, A. (2000). Juvenile sex offenders: An object relations approach. *Dissertation Abstracts International* 613-B.

- Lightfoot, L.O., & Barbaree, H.E. (1993). The relationship between substance use and abuse and sexual offending in adolescents. In H.E. Barbaree, W.L. Marshall, & S.M. Hudson (Eds.), *The Juvenile Sex Offender* (pp. 203-224). New York, NY: The Guilford Press.
- Lussier, P., LeBlanc, M., & Proulx, J. (2005). The generality of criminal behavior: A confirmatory factor analysis of the criminal activity of sexual offenders in adulthood. *Journal of Criminal Justice*, 33, 177-189.
- Millon, T. (1993). *Millon adolescent clinical inventory: Manual*. Minneapolis, MN: National Computer Systems.
- Millon, T., Davis, R. (1996). *Disorders of Personality DSM-IV and Beyond*. New York: John Wiley & Sons.
- Mio, J.S., Nanjundappa, G., Verleur., D.E., & De Rios, M.D. (1986). Drug abuse and the adolescent sex offender: A preliminary analysis. *Journal of Psychoactive Drugs*, 18, 65-72.
- Moffitt, T.E., Caspi, A., Harrington, H., & Milne, B.J. (2002). Males on the life-course-persistent and adolescence-limited antisocial pathways: Follow-up at age 26 years. *Development and Psychopathology*, 14, 179-207.
- Rada, R.T. (1975). Alcoholism and forcible rape. *American Journal of Psychiatry*, 132, 444-446.
- Smallbone, S.W., Wheaton, J., & Hourigan, D. (2003). Trait empathy and criminal versatility in sexual offenders. *Sexual Abuse: A Journal of Research and Treatment*, 15, 49-60.

- Smallbone, S.W. & Wortley, R.K. (2004). Onset, persistence, and versatility of offending among adult males convicted of sexual offenses against children. *Sexual Abuse: A Journal of Research and Treatment*, 16, 285-298.
- Testa, M. (2002). The impact of men's alcohol consumption on perpetration of sexual aggression. *Clinical Psychology Review*, 22, 1239-1263.
- Tinklenberg, J.R., Murphy, P.L., Darley, C.F., Roth, W.T., & Kopell, B.S., 1974. (1974). Drug involvement in criminal assaults by adolescents. *Archives of General Psychiatry*, 30, 685-689.
- Tinklenberg, J.R., Murphy, P., Murphy, P.L., & Pfefferbaum, A. (1981). Drugs and criminal assaults by adolescents: A replication study. *Journal of Psychoactive Drugs*, 13, 277-287.
- Van Ness, S.R. (1984). Rape as instrumental violence: A study of youth offenders. *Journal of Offender Counseling, Services & Rehabilitation*, 9, 161-170.
- Vinogradov, S., Dishotsky, N.I., Doty, A.K., & Tinklenberg, J.R. (1988). Patterns of behavior in adolescent rape. *American Journal of Orthopsychiatry*, 58, 179-187.
- Waite, D., Keller, A., McGarvey, E.L., Wieckowski, E., Pinkerton, R., & Brown, G.L. (2005). Juvenile sex offender re-arrest rates for sexual, violent nonsexual and property crimes: A 10-Year follow-up. *Sexual Abuse: A Journal of Research and Treatment*, 17, 313-331.
- Worling, J.R., & Curwen, T. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Sexual Abuse & Neglect*, 24, 965-982.