

# Breaking the Blue Wall of Silence: Risk Factors for Experiencing Police Sexual Misconduct Among Female Offenders

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Female offenders represent a growing population of high-risk, vulnerable women in the United States. The number of women who are incarcerated or under correctional supervision increased from approximately 600 000 in 1990 to just more than 1.3 million in 2009.<sup>1</sup> Many women involved in the criminal justice system experience stressful life events, suffer from mental disorders, and struggle with substance use problems.<sup>2,3</sup>

Stressful and traumatic life events are common experiences for female offenders. Childhood physical or sexual abuse is such an event and is reported by a large proportion of female offenders<sup>4-6</sup>; according to the Bureau of Justice Statistics, 37% of women in state prisons, 23% of women in federal prisons, 37% of women in jail, and 28% of female probationers were victims of physical or sexual abuse as a minor. These rates exceed the range of 6% to 14% for men in respective facilities and estimates of 12% to 17% for women in the general adult population.<sup>5</sup> Household dysfunction during childhood (e.g., family violence, parental separation or divorce, foster care or adoption placement) is more common among female offenders than women in the general population.<sup>6</sup> In addition, the prevalence of other stressful life events, such as adolescent pregnancy and motherhood, among criminal justice samples is higher than national rates.<sup>6-8</sup>

In addition to their experiences with stressful life events, female offenders have high rates of mental health problems, which have been reported among drug court participants,<sup>2,9-11</sup> jail detainees,<sup>3</sup> felons entering prison,<sup>12</sup> prisoners,<sup>4,13,14</sup> and offenders in prison substance abuse treatment programs.<sup>15,16</sup> Comorbidities, particularly mental disorders and substance use disorders, are common in this population.<sup>14,17-19</sup> For example, Teplin et al. found that more than 80% of jail detainees met

**Objectives.** We assessed the prevalence of and risk factors for trading sex with a police officer among women recruited from drug courts in St Louis, Missouri.

**Methods.** In 2005 to 2008, we recruited women into an HIV intervention study, which surveyed participants about multiple sociodemographic, lifestyle, and risk factors. Regression analyses assessed risk factors for trading sex, a form of police sexual misconduct (PSM).

**Results.** Of the 318 participants, 78 (25%) reported a lifetime history of PSM. Among women who experienced PSM, 96% had sex with an officer on duty, 77% had repeated exchanges, 31% reported rape by an officer, and 54% were offered favors by officers in exchange for sex; 87% said officers kept their promise. Only 51% of these respondents always used a condom with an officer. Multivariable models identified 4 or more arrests (adjusted odds ratio [AOR] = 2.8; 95% confidence interval [CI] = 1.29, 5.97), adult antisocial personality (AOR = 9.0; 95% CI = 2.08, 38.79), and lifetime comorbid cocaine and opiate use (AOR = 2.9 [1.62, 5.20]) as risk factors; employment (AOR = 0.4; 95% CI = 0.22, 0.77) lowered the risk of PSM.

**Conclusions.** Community-based interventions are critical to reduce risk of abuse of vulnerable women by police officers charged with protecting communities. (*Am J Public Health.* 2014;104:338-344. doi:10.2105/AJPH.2013.301513)

criteria for 1 or more lifetime psychiatric disorders.<sup>3</sup> Lifetime prevalence was highest for substance abuse or dependence (70.2%), posttraumatic stress disorder (33.5%), and major depressive episode (16.9%). Another study among drug-dependent female inmates in a substance abuse treatment program reported rates of 43% and 32% for antisocial personality and depression, respectively.<sup>15</sup> Interestingly, the pattern of comorbidity differed such that women with a greater number of drug dependencies had higher rates of antisocial personality and depression than did women dependent on fewer drugs. Studies on gender differences among drug court populations have shown that female drug court participants are more likely than their male counterparts to have mental health problems; specifically, women are more likely than men to report feelings of depression and anxiety<sup>11</sup> and to require referrals for mental health issues.<sup>2</sup> Women who took more risks were also more likely to engage in gambling.<sup>20</sup> Finally,

the rate of female offenders' mental disorder diagnoses exceeds that of the general population, with population prevalence estimates of 6% to 16% for major depressive disorder<sup>17,18</sup> and less than 1% for antisocial personality disorder.<sup>21</sup>

Police sexual violence, including rape, has been explored in a few studies in the criminological literature. Methods of these studies varied and included assessing police officers' perspectives<sup>22</sup> and reviewing publicly available records.<sup>23</sup> In a study of 40 St Louis, Missouri-area police officers, 11 incidents of firsthand knowledge of a "sexual shakedown" were reported; this involved a demand for sexual services from an unwilling citizen who yielded to perceived police authority. However, these 11 incidents represented only a very small proportion of the 8306 total incidents of firsthand knowledge of police sexual misconduct (PSM). The most common type of PSM was nonsexual contact, such as a sexually motivated traffic stop, with 3481 reported incidents.<sup>22</sup>

To understand the complex environmental factors that could affect behavioral change associated with an HIV prevention field trial focused on female offenders, we convened a series of focus groups at a St Louis correctional facility. Quite serendipitously, women shared with us that the sexual abuse experienced as a child with male relatives extended into their adulthood with other men in authority, specifically police officers.<sup>24</sup>

To better understand the life events that affect female drug court participants, we added structured questions to focus on PSM, a neglected area of study masked by a “blue wall of silence”: an unwritten rule among some groups of police officers whereby officers ignore one another’s misconduct.<sup>22,23,25</sup> We compared the experiences of female drug court participants who reported they had traded sex for favors with a police officer with those who did not and assessed sociodemographic characteristics, stressful life events, psychiatric history, and substance use as risk factors for this behavior.

## METHODS

The women in our analyses were participants in the Sisters Teaching Options for Prevention (STOP) project, funded by the National Institute of Nursing Research. The project was a randomized controlled HIV prevention field trial conducted from 2005 to 2008. STOP tested a novel peer-partnered case management strategy to reduce high-risk substance abuse and sexual behaviors among women enrolled in drug court. We invited women who were aged 18 years or older, were under the supervision of a probation or parole officer for a nonviolent offense, and planned to remain in the St Louis area for at least 12 months to enroll in the study. Recruiters were STOP staff who were regularly stationed primarily in 2 St Louis–area drug courts (1 municipal, 1 judicial) during dockets that included women charged with substance-related ordinance violations, most of which were prostitution and “demonstration,” a charge associated with street prostitution and drug sales.

STOP staff approached women about the study and asked if they were interested in hearing more information about participation; they received a flyer about the study, an

informed consent document, and a business card of the staff member for later contact about the study. Women who were not able to participate immediately were asked for 2 phone numbers so they could be recontacted by a team member. More details on the methods and the intervention are available elsewhere.<sup>26,27</sup> After participants gave informed consent, trained interviewers conducted the baseline interview. For most women (73%), STOP was their first health study. Of 520 eligible women, 147 (28%) made an appointment but never appeared; 42 (8%) completed 1 session only, and 12 (2%) could not be relocated for an appointment. Thus, 319 women participated in baseline interviews, representing 61% of eligible women. One participant was excluded because of missing data for the primary variable of interest, yielding a final sample size of 318 female drug court enrollees.

## Measures

Eligible women were scheduled for interviews to be conducted at a research site away from the courts. The 2.5-hour baseline interview took place over 2 separate sessions. It began with a locator form to gather critical follow-up information for recontact. Respondents completed 3 surveys: one focused on demographic information, life events, and PSM; another focused on drug use history; and the third assessed psychiatric disorders. Respondents received \$10 for the entire baseline interview.

The Washington University Risk Behavior Assessment for Women (WU-RBA-W)<sup>28,29</sup> and Substance Abuse Module<sup>30</sup> included questions on sociodemographic measures such as age, race, marital status, education, employment, perceived homelessness, and arrests. They also asked whether the respondent gave birth before age 19 years and whether she lived apart from her biological mother or father for a combined 6 or more years before age 15 years. The STOP study added questions related to police sexual misconduct to the WU-RBA-W after women in focus group sessions in a St Louis correctional facility revealed these actions to us.<sup>24</sup> The section of the WU-RBA-W on trading sex for favors followed 38 questions about types of sex, onset of activities, and the like. Immediately before the PSM questions were 15 questions pertaining to sex exchanged for drugs, alcohol, cash, food, and so on. The final set of questions in this section specifically concerned sex with a police officer and began with, “Have you ever traded sex of any kind with a police officer?” Women who had ever traded sex with a police officer were stratified as PSM positive and women who had not as PSM negative. Interviewers asked PSM-positive women additional questions pertaining to these exchanges (Table 1). To avoid presumptions of judgment by the participants, STOP interviewers did not ask participants whether they reported these exchanges to the police.

The WU-RBA-W also contained the Violence Exposure Questionnaire, which obtained information about physical and sexual abuse

**TABLE 1—Details of Police Sexual Misconduct Among Women Who Reported Trading Sex With a Police Officer: Sisters Teaching Options for Prevention Study, St Louis, MO, 2005–2008**

Variables	Mean (SD) or %
Age first time traded sex with police officer, y	29.5 (7.2)
Traded sex with an officer while he was on duty	96
Traded sex with an officer while he was with a partner or other police officer	24
Traded sex with same officer on > 1 occasion	77
Always used a condom with officer	51
Officer promised not to arrest or charge respondent with a crime in exchange for sex	54
Officer always gave what was promised in exchange for sex	87
Officer forced respondent to have sex	31

Note. Of 318 participants, 78 reported trading sex with officers.

before age 15 years and access to guns (owning a gun, having access to a gun, or ever carrying or packing a gun). To assess sexual abuse, the survey asked whether participants, when they were younger than 15 years, had been touched or kissed in a sexual way when they did not want to be and whether someone forced them to touch or kiss or have sexual intercourse when they did not want to. The survey assessed childhood physical abuse by asking whether participants, when they were younger than 15 years, had ever been “beaten by a parent or a legal guardian so that they needed medical attention.” These items were modified from the Conflict Tactics Scale<sup>31</sup>; previous analyses used these variables to predict adult sex trading.<sup>32</sup>

The Substance Abuse Module assessed lifetime use of cocaine and opiates, with each separately defined as use of the substance more than 5 times. Lifetime substance use was then categorized according to whether the participant used both cocaine and opiates, either cocaine or opiates, or neither.

The Diagnostic Interview Schedule Screener (DIS) version IV,<sup>33–36</sup> a fully structured interview, established the presence or absence of psychiatric disorders, according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*.<sup>37</sup> Because the survey used the screener version of the DIS, it did not apply all possible exclusion criteria. However, the DIS screener provides very high levels of agreement with the full version, because no symptom questions are omitted if needed for deciding the diagnosis of respondents who are just below or just above the diagnostic cutoff. We included only the most prevalent disorders (major depressive disorder, adult antisocial personality) and one that was hypothesized to be associated with taking risks (pathological gambling disorder) in these analyses. We classified antisocial personality disorder with or without conduct disorder as adult antisocial personality.

The WU-RBA-W,<sup>28,29</sup> the Substance Abuse Module,<sup>30</sup> and the DIS-IV<sup>33–36</sup> have each been shown to be reliable and valid instruments among women, substance-using populations, and African Americans. Interviewers used computers to ask the survey questions and to enter the data. Every interview was recorded (with permission) and listened to by a quality

control coordinator to ensure accuracy and fidelity to the protocols.

### Statistical Analyses

We conducted bivariate analyses to examine the association between PSM and variables of interest. We used the  $\chi^2$  test for categorical variables and the Fisher exact test when expected cell counts were less than 5. We used the *t* test for independent samples to examine the association between trading sex with a police officer and continuous variables; when homogeneity of variances was not met, we used the Satterthwaite variance estimator method.

We constructed a series of multivariable logistic regression models to determine the odds of experiencing police sexual misconduct, with a staged-model approach to understand varying levels of risk. The first model examined sociodemographic factors in relation to PSM; the second model added stress factors to significant sociodemographic factors. The third model considered psychiatric disorders and behaviors as well as significant sociodemographic and stress-related factors, and the fourth model examined comorbid substance use factors and all previously significant factors. We collapsed comorbid substance use into 2 categories (e.g., a woman used both cocaine and opiates in her lifetime, compared with using only 1 or neither) for multivariable analyses because of low cell counts. We assessed multicollinearity by examining the tolerance values in each model to ensure independence of explanatory variables. We conducted all analyses with SAS 9.2 (SAS Institute, Cary, NC).

## RESULTS

The mean age of the 318 women who participated in the study was 36.2 years (SD = 9.47 years). Most were African American (70%), and nearly all the rest were White. Education and employment levels were low: only 48% of participants had received a high school or general equivalency diploma, and 42% reported working in the past 12 months. Most women were not currently married (95%), 39% were homeless, and 70% had been arrested 4 or more times in their lifetime. We used 4 arrests as the variable to signify

more involvement with the criminal justice system; the mean number of arrests was 12.3. A total of 93% of participants reported at least 1 of the 4 stressful life events examined. A large proportion of participants (62%) reported a significant separation from 1 or both of their biological parents for 6 or more years in childhood; more than half (55%) reported being sexually or physically abused as a child, with the majority reporting that the abuse was sexual. Many women gave birth as adolescents (41%), which is considered a potential life stressor. Notably, 39% of the participants reported owning a gun, having access to a gun if it was needed, or carrying a handgun. The majority of the female offenders met lifetime criteria for the adult antisocial personality symptom cluster (81%), 39% met lifetime criteria for a major depressive disorder, and 8% met lifetime criteria for pathological gambling disorder. Finally, 30% of participants reported a lifetime history of both cocaine and opiate use, 55% reported cocaine use only or opiate use only, and 15% reported neither cocaine nor opiate use. Thus, nearly all of the women (85%) reported using either cocaine or opiates.

### Police Sexual Misconduct

At baseline, 78 (25%) of the 318 respondents reported having traded sex for favors with a police officer; 240 (75%) said they had not. Interviewers asked women who reported experiencing PSM additional questions about these encounters (Table 1). Participants reported trading sex with a police officer when they were as young as 15 years.

Among PSM-positive women, nearly all (96%) reported having sex with an officer while the officer was on duty; 24% traded sex with an officer while he was on duty and in the presence of another officer. Most of these participants reported trading sex with the same officer on more than 1 occasion (77%); about half (49%) did not always use a condom during sex with a police officer. More than half (54%) reported that an officer promised not to arrest or charge them with a crime if they would have sex with him. According to 87% of women, the officer always adhered to this promise. A total of 31% of the women characterized an encounter with a police officer as rape.

**TABLE 2—Characteristics of Female Drug Offenders, Stratified by Lifetime History of Experiencing Police Sexual Misconduct (Trading Sex): Sisters Teaching Options for Prevention Study, St Louis, MO, 2005–2008**

Characteristics	Women Who Reported Trading Sex With Police (n = 78), Mean (SD) or %	Women Who Did Not Report Trading Sex With Police (n = 240), Mean (SD) or %	P <sup>a</sup>
<b>Sociodemographics</b>			
Age, y	37.6 (7.45)	35.7 (10.01)	.07
African American	56	75	.003
≥ high school diploma or GED	45	50	.44
Employed in past 12 mo	27	47	.002
Unmarried	97	94	.37
Consider self homeless	38	39	.24
Arrested ≥ 4 times	87	65	<.001
<b>Stressful life events</b>			
Biological mother or father absent for combined ≥ 6 y before age 15 y	67	60	.31
Victim of sexual or physical abuse before age 15 y	59	53	.41
Gave birth before age 19 y	40	42	.76
Lifetime gun access	42	38	.49
<b>Lifetime psychiatric history</b>			
Adult antisocial personality	97	76	<.001
Major depressive disorder	40	39	.93
Pathological gambling disorder	9	7	.62
<b>Lifetime cocaine and opiate use</b>			
Both	54	22	<.001
Either	46	58	
Neither	0	20	

Note. GED = general equivalency diploma.

<sup>a</sup>Fisher exact test, except for age, for which we used a *t* test for independent samples (unequal variances).

## Risk Factors

**Bivariate analyses.** As shown in Table 2, women reporting PSM were significantly less likely than women who did not report PSM to be African American (56% vs 75%;  $P = .003$ ) and to have been employed in the past 12 months (27% vs 47%;  $P = .002$ ). PSM-positive participants were more likely than PSM-negative participants to have been arrested 4 or more times (87% vs 65%;  $P < .001$ ). Bivariate analyses did not identify any differences between women who did and did not experience PSM for the measures of stressful life events examined. PSM-positive women were more likely than PSM-negative women to meet criteria for adult antisocial personality (97% vs 76%;  $P < .001$ ). Finally, we observed differences between the groups in their lifetime history of cocaine and opiate use; more than half (54%) of participants who reported PSM, but only 22% of those who did not, used both cocaine and opiates ( $P < .001$ ).

**Multivariable analyses.** We examined our variables of interest in multivariable models (Table 3). In the sociodemographic model, African Americans (adjusted odds ratio [AOR] = 0.4; 95% confidence interval = 0.22, 0.72) and women who were employed in the past 12 months (AOR = 0.4; 95% CI = 0.22, 0.76) were less likely to report experiencing PSM; women arrested 4 or more times were nearly 3 times as likely as other respondents to report experiencing PSM (AOR = 2.7; 95% CI = 1.29, 5.74). In the stressful life events model, none of the stress factors significantly predicted PSM, but African American race, past-year employment, and arrest history remained significant in the direction noted in the previous model. When we added psychiatric history to the model, we identified adult antisocial personality as a risk factor for experiencing PSM (AOR = 12.8; 95% CI = 2.96, 55.10). African American race (AOR = 0.5; 95% CI = 0.28, 0.90), past-year employment

(AOR = 0.4; 95% CI = 0.20, 0.68), and being arrested 4 or more times (AOR = 2.8; 95% CI = 1.29, 5.88) remained significantly associated with PSM. In the final model, which added substance use to the significant factors from the previous models, lifetime comorbid cocaine and opiate use (AOR = 2.9; 95% CI = 1.62, 5.20) was significantly associated with experiencing PSM, as were past-year employment (AOR = 0.4; 95% CI = 0.22, 0.77), 4 or more arrests (AOR = 2.8; 95% CI = 1.29, 5.97), and adult antisocial personality, which was associated with an 8-fold increase in risk (AOR = 9.0; 95% CI = 2.08, 38.79). African American race was not statistically significant in the final model.

## DISCUSSION

Our study may have been the first to systematically assess sex trading between police officers and female offenders with data

**TABLE 3—Risk Factors for Experiencing Police Sexual Misconduct (Trading Sex) Among Female Drug Offenders: Sisters Teaching Options for Prevention Study, St Louis, MO, 2005–2008**

Variables	Sociodemographic Model AOR (95% CI)	Stressful Life Events Model AOR (95% CI)	Psychiatric History Model AOR (95% CI)	Substance Use Model AOR (95% CI)
Age, y	1.0 (0.99, 1.06)			
African American	0.4 (0.22, 0.72)	0.5 (0.26, 0.82)	0.5 (0.28, 0.90)	0.6 (0.33, 1.11)
≥ high school diploma or GED	1.0 (0.57, 1.79)			
Employed in past 12 mo	0.4 (0.22, 0.76)	0.4 (0.23, 0.74)	0.4 (0.20, 0.68)	0.4 (0.22, 0.77)
Unmarried	3.4 (0.67, 16.85)			
Consider self homeless	0.8 (0.45, 1.42)			
Arrested ≥ 4 times	2.7 (1.29, 5.74)	2.9 (1.38, 6.08)	2.8 (1.29, 5.88)	2.8 (1.29, 5.97)
Stressful life events		1.4 (0.77, 2.44)		
Biological mother or father absent for combined ≥ 6 y before age 15 y		0.9 (0.52, 1.62)		
Victim of sexual or physical abuse before age 15 y		0.8 (0.48, 1.48)		
Gave birth before age 19 y		1.2 (0.68, 2.11)		
Adult antisocial personality			12.8 (2.96, 55.10)	9.0 (2.08, 38.79)
Major depressive disorder			0.7 (0.40, 1.28)	
Pathological gambling disorder			1.1 (0.40, 2.91)	
Lifetime cocaine and opiate use				2.9 (1.62, 5.20)
<b>Model statistics</b>				
Wald $\chi^2$ (df)	28.07 (7)	26.22 (7)	35.01 (6)	43.92 (5)
P	<.001	<.001	<.001	<.001

Note. AOR = adjusted odds ratio; CI = confidence interval; GED = general equivalency diploma. Women who did not report trading sex with officers served as the reference category. AORs calculated with multivariable logistic regression.

from the women themselves collected with a standardized, structured method. We found a high rate of PSM, with 25% of female drug court participants reporting a history of trading sex for favors with a police officer. Furthermore, most indicated that they had sex repeatedly with the same officer and did not always use condoms during these encounters, which represents a risk to both parties for HIV and other sexually transmitted infections. Another disconcerting finding was that nearly one third (31%) of the PSM-positive women reported being raped by a police officer.

In multivariable analyses, we found consistent evidence that women who were unemployed, had multiple arrests, had adult antisocial personality, and were lifetime users of cocaine and opiates were at highest risk for trading sex with a police officer. We believe that these risk factors are particularly important because all (cocaine and opiate use, exhibiting symptoms of antisocial and other personality disorders, and actions leading to multiple arrests) tend to co-occur<sup>38</sup> and predict future incarceration and longer sentences.<sup>39</sup> These findings support our expectation that more marginalized

women, with a substantial history of involvement with the criminal justice system, were more likely to be victims of PSM. Women with these characteristics need to protect themselves from vulnerabilities. Interventions targeted at reducing these high-risk behaviors could prove essential.

Almost all of the women who reported PSM in our study (96%) indicated that the misconduct occurred while the officer was on duty; furthermore, 24% reported that another police officer was present during the act. Thus, the PSM could have been terminated or reported for immediate investigation and subsequent discipline. Unwritten rules of secrecy in the force, referred to as the blue wall of silence, are thought to constrain officers' reporting of one another's misconduct. The women involved may be equally unwilling or unlikely to report PSM to the authorities out of fear of retaliation, of being blamed, of not being believed because of their substance use history and criminal justice involvement, or of being arrested and charged with prostitution.

Our findings, which indicated that police officers were engaged in PSM, should serve as

a call to action for law enforcement officials. The historical method of law enforcement's investigation of PSM is instructive: its response to sex trading between officers and those they detain and guard has undergone a dramatic evolution. Historically, the nature of sex transactions made determinations of PSM difficult, because credibility, force versus consent, and relationship status present challenges in any investigation of abuse or victimization. Contemporary law enforcement investigations assume that a reported allegation of abuse has merit, and it is the responsibility of law enforcement to find evidence that supports or refutes an allegation. Police agencies have not always conducted internal investigations in this manner.

The law enforcement community must understand the vulnerability of sex traders in our society and must accept the reality that they are susceptible to abuse and exploitation. Police officers, who have more authority than the general public, could take advantage of sex traders. It is important to consider that PSM is likely perpetrated by a small number of officers who abuse their positions often, rather

than a larger proportion of officers who engage in PSM infrequently. Regardless of the extent of the problem, PSM is an issue that demands attention. Law enforcement agencies and community partners can start by establishing investigative protocols for allegations of PSM, consider vehicles for reporting that empower sex traders to come forward with allegations of abuse, and adopt law enforcement oversight mechanisms to eliminate the problem.

### Limitations

We focused on female drug court participants, and thus our data may not be generalizable to female offenders outside of drug courts, drug-using women in the community, or women in general. Also, our data were derived from self-reports, which can be subject to memory bias; however, it is unlikely that women would forget being solicited or raped by a police officer. We focused only on the exchange of sex between a police officer and a female offender and not on other forms of PSM, such as unnecessary or excessive pat downs.

Participants may have underreported because of embarrassment; however, the questions were part of a 2-visit interview that included questions on many different behaviors that were equally sensitive and incriminating. Our participants were interviewed by professional interviewers who underwent extensive training, including confidence expression, professional demeanor, and careful listening skills. Finally, it could be argued that women in drug court might not be the best informants. We believe the women were reliable reporters because the study's focus was not PSM, participants knew that the data were protected by a National Institutes of Health certificate of confidentiality, and the study team was not affiliated in any way with the police department.

### Conclusions

We carried out the first systematic look at the phenomenon of trading sex with police officers from the women's perspective. These analyses revealed details of an exchange with ethical and HIV risk-related implications and offered insights into an area masked by the blue wall of silence. Much of the current

research on drug courts focuses on drug court completion rates and evaluations of drug court systems in various localities. The studies that have reported on the mental health status of drug court participants have analyzed small samples and have not used standardized instruments. Our study provides additional information on the sociodemographic characteristics, stressful life events, detailed psychiatric history, and comorbid cocaine and opiate use of female drug court participants.

Finally, it is important for police administrators to acknowledge that PSM exists and recognize that, despite their criminal history, women who experience PSM are victims of crime. Although participants reported trading sex for favors with an officer, this is not a fair or appropriate trade, and it cannot be construed as consensual because of the unequal power distribution between the 2 parties. One approach that police administrators could take is to specifically address PSM through the Public Agency Training Council, which has a sample policy for dissemination regarding sexual misconduct by public safety officers.<sup>40</sup> Opening a dialogue with the police chief by jointly disseminating study findings is another way to begin addressing these issues.

We identified an additional risk for vulnerable female offenders: being known to and solicited by police officers charged with protecting communities. Further research should examine the extent of PSM among other populations of women. In addition, drug courts should add community-based interventions to reduce the risk for vulnerable women. Future interventions among criminal justice personnel and substance-using populations should consider a cluster of these factors as helpful in identifying a risk profile for experiencing sexual misconduct by police officers. ■

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### Contributors

L. B. Cottler conceptualized the study, designed the assessments and methods, oversaw all aspects of the study, was principal investigator of the grant, drafted the article, and interpreted the data. C. C. O'Leary assisted in conceptualizing the study and designing assessments and methods, managed the project, and edited the article. K. B. Nickel conducted analyses and assisted with editing the article. J. M. Reingle assisted with analyses and literature review and helped in editing the article. D. Isom helped to edit assessments and conceptualize analyses, and participated in the interpretation of data. All authors read and approved the final article.

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### Human Participant Protection

The Washington University in St Louis institutional review board approved the study protocol.

### References

1. Glaze LE. Correctional populations in the United States, 2009. 2010. Bureau of Justice Statistics. NCJ publication 231681. Available at: <http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=2316>. Accessed February 15, 2011.
2. Weitzel JA, Nochajski TH, Coffey SF, Farrell MG. Mental health among suburban drug court participants. *Am J Drug Alcohol Abuse*. 2007;33(3):475–481.
3. Teplin LA, Abram KM, McClelland GM. Prevalence of psychiatric disorders among incarcerated women. I. Pretrial jail detainees. *Arch Gen Psychiatry*. 1996; 53(6):505–512.
4. Driessen M, Schroeder T, Widmann B, von Schonfeld CE, Schneider F. Childhood trauma, psychiatric disorders, and criminal behavior in prisoners in Germany: a comparative study in incarcerated women and men. *J Clin Psychiatry*. 2006;67(10):1486–1492.
5. Harlow CW. Prior abuse reported by inmates and probationers. 1999. Bureau of Justice Statistics. NCJ publication 172879. Available at: <http://bjs.ojp.usdoj.gov/content/pub/pdf/parip.pdf>. Accessed April 20, 2011.
6. Messina N, Grella C. Childhood trauma and women's health outcomes in a California prison population. *Am J Public Health*. 2006;96(10):1842–1848.
7. Crosby R, Salazar LF, Diclemente RJ, Yarber WL, Caliendo AM, Staples-Horne M. Health risk factors among detained adolescent females. *Am J Prev Med*. 2004;27(5):404–410.
8. Ventura SJ, Mathews TJ, Hamilton BE, Sutton PD, Abma JC; Centers for Disease Control and Prevention. Adolescent pregnancy and childbirth—United States,

- 1991–2008. *MMWR Surveill Summ.* 2011;60 (suppl):105–108.
9. Belenko S. Research on drug courts: a critical review 2001 update. 2001. Available at: <http://www.drugpolicy.org/docUploads/2001drugcourts.pdf>. Accessed March 14, 2011.
  10. Hagedorn H, Willenbring M. Psychiatric illness among drug court probationers. *Am J Drug Alcohol Abuse.* 2003;29(4):775–788.
  11. Gray AR, Saum CS. Mental health, gender, and drug court completion. *Am J Crim Justice.* 2005;30(1):55–69.
  12. Jordan BK, Schlenger WE, Fairbank JA, Caddell JM. Prevalence of psychiatric disorders among incarcerated women. II. Convicted felons entering prison. *Arch Gen Psychiatry.* 1996;53(6):513–519.
  13. Fazel S, Danesh J. Serious mental disorder in 23 000 prisoners: a systematic review of 62 surveys. *Lancet.* 2002;359(9306):545–550.
  14. James DJ, Glaze LE. Mental health problems of prison and jail inmates. 2006. Bureau of Justice Statistics. NCJ publication 213600. Available at: <http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=789>. Accessed April 20, 2011.
  15. Pelissier BM, O'Neil JA. Antisocial personality and depression among incarcerated drug treatment participants. *J Subst Abuse.* 2000;11(4):379–393.
  16. Zlotnick C, Clarke JG, Friedmann PD, Roberts MB, Sacks S, Melnick G. Gender differences in comorbid disorders among offenders in prison substance abuse treatment programs. *Behav Sci Law.* 2008;26(4):403–412.
  17. Regier DA, Farmer ME, Rae DS, et al. Comorbidity of mental disorders with alcohol and other drug abuse. Results from the Epidemiologic Catchment Area (ECA) Study. *JAMA.* 1990;264(19):2511–2518.
  18. Abram KM, Teplin LA, McClelland GM. Comorbidity of severe psychiatric disorders and substance use disorders among women in jail. *Am J Psychiatry.* 2003;160(5):1007–1010.
  19. Hartwell SW. Comparison of offenders with mental illness only and offenders with dual diagnoses. *Psychiatr Serv.* 2004;55(2):145–150.
  20. Wong G, Zane N, Saw A, Chan AK. Examining gender differences for gambling engagement and gambling problems among emerging adults. *J Gamb Stud.* 2013;29(2):171–189.
  21. Lenzenweger MF, Lane MC, Loranger AW, Kessler RC. DSM-IV personality disorders in the National Comorbidity Survey Replication. *Biol Psychiatry.* 2007;62(6):553–564.
  22. Maher TM. Police sexual misconduct: officers' perceptions of its extent and causality. *Crim Justice Rev.* 2003;28(2):355–381.
  23. Kraska PB, Kappeler VE. To serve and pursue: exploring police sexual violence against women. *Justice Q.* 1995;12(1):85–111.
  24. Millay TA, Satyanarayana VA, O'Leary CC, Crecelius R, Cottler LB. Risky business: focus-group analysis of sexual behaviors, drug use and victimization among incarcerated women in St. Louis. *J Urban Health.* 2009;86(5):810–817.
  25. Rothwell GR, Baldwin JN. Whistle-blowing and the code of silence in police agencies: policy and structural predictors. *Crime Delinq.* 2007;53(4):605–632.
  26. Johnson JE, O'Leary CC, Striley CW, Ben Abdallah A, Bradford S, Cottler LB. Effects of major depression on crack use and arrests among women in drug court. *Addiction.* 2011;106(7):1279–1286.
  27. Reingle JM, Striley CW, Small E, Crecelius R, O'Leary CC, Cottler LB. Can courtroom behavior predict recidivism? An assessment of the Courtroom Behavior Check List for women presenting in drug court. *Am J Crim Justice.* 2013;38:520–534.
  28. Shacham E, Cottler LB. Sexual behaviors among club drug users: prevalence and reliability. *Arch Sex Behav.* 2010;39(6):1331–1341.
  29. Needle R, Fisher DG, Weatherby N, et al. Reliability of self-reported HIV risk behaviors of drug users. *Psychol Addict Behav.* 1995;9(4):242–250.
  30. Horton J, Compton W, Cottler LB. Reliability of substance use disorder diagnoses among African-Americans and Caucasians. *Drug Alcohol Depend.* 2000;57(3):203–209.
  31. Straus MA. Measuring intrafamily conflict and violence: the Conflict Tactics (CT) Scales. *J Marriage Fam.* 1979;41(1):75–88.
  32. Vaddiparti K, Bogetto J, Callahan C, Abdallah AB, Spitznagel EL, Cottler LB. The effects of childhood trauma on sex trading in substance using women. *Arch Sex Behav.* 2006;35(4):451–459.
  33. Buchholz KK, Marion SL, Shayka JJ, Marcus SC, Robins LN. A short computer interview for obtaining psychiatric diagnoses. *Psychiatr Serv* 1996;47(3):293–297.
  34. Robins LN, Marcus SC. The Diagnostic Screening Procedure Writer. A tool to develop individualized screening procedures. *Med Care* 1987;25(12 suppl):S106–S122.
  35. Dascau M, Compton WM, Horton JC, Cottler LB. Validity of DIS-IV in diagnosing depression and other psychiatric disorders among substance users. *Drug Alcohol Depend.* 2001;63(suppl 1):S37.
  36. Horton J, Compton WM, Cottler LB. Assessing psychiatric disorders among drug users: reliability of the revised DIS-IV. In: Harris LS, ed. *NIDA Research Monograph: Problems of Drug Dependence 1998*. Bethesda, MD: National Institutes of Health; 1999. NIH publication 99–4395.
  37. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. Washington, DC: American Psychiatric Association; 1994.
  38. Marquart JW, Brewer VE, Simon P, Morse EV. Lifestyle factors among female prisoners with histories of psychiatric treatment. *J Crim Justice.* 2001;29(4):319–328.
  39. Sacks JY. Women with co-occurring substance use and mental disorders (COD) in the criminal justice system: a research review. *Behav Sci Law.* 2004;22(4):449–466.
  40. Reiter L. Handling sexual misconduct by public safety officers is a job for us, not the courts. Public Agency Training Council. Available at: <http://patc.com/weeklyarticles/job-for-us.shtml>. Accessed March 11, 2013.