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# Gender Differences in the Determinants of Prison Rule Violations

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## Abstract

This article addresses gender differences in the extent and explanation of inmate misconduct. The study employs nationally representative prisoner survey data to assess gender-specific explanations of prison rule violations. The gender-specific factors include prior victimization, diagnosed mental disorders, and the amount of inmate contact with their families via visits and phone calls. Logistic regression models support gender-specific explanations of inmate misconduct but also identify other factors of general importance. The policy implications of gendered pathways in prison misconduct are discussed.

## Keywords

female inmates, prison rule violations, gender differences

## Introduction

This article addresses the issue of gender differences in the determinants of inmate misconduct. In 2012, American federal and state correctional

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institutions housed nearly 1.6 million prisoners (Glaze & Herberman, 2013). Although inmate population growth has slowed in recent years, the management of prisoners remains a formidable challenge. In addition, the growth of female prisoners has outpaced that of male prisoners (West, 2010). National data show that from 1990 to 2012, female incarceration increased by 130%, compared with the male incarceration rate increase of 93% (Beck & Harrison, 2001; Glaze & Herberman, 2013). In 2012, there were 108,866 women in state and federal prisons (Carson & Golinelli, 2012). Despite the growth in women's incarceration, few studies on adjustment and violence in prison have included female inmates (Gover, Perez, & Jennings, 2008; Warren, Hurt, Loper, & Chauhan, 2004). This is unfortunate in light of evidence of differences in the origins of female and male criminality (Byrd & Davis, 2009; Glaze & Maruschak, 2009).

Using nationally representative subsamples of state and federal prisoners, this research compares the determinants of male and female prison rule violation. Along with variables conventionally employed in models of adjustment to prison, this study also includes gender-specific factors such as prior victimization, the presence of mental disorders, and the amount of contact that inmates have with their families and friends through visits and phone calls. Identifying gender-specific determinants of prison rule violations can inform efforts to improve women's adjustment to prison.

## Literature Review

Research on inmate misconduct has important implications for correctional policy and practice (Jiang & Fisher-Giorlando, 2002). Prisoners' misconduct is an important indicator of inmates' overall adjustment to prison life and it helps determine prisoner classification (Cao, Zhao, & Van Dine, 1997; Steiner & Wooldredge, 2009). Prison rule violations are costly with respect to victim harm, disruption, and facility disorder as well as the physical and emotional toll on prisoners, prison staff, and prisoners' families (Jiang & Fisher-Giorlando, 2002).

Prior studies have focused nearly exclusively on male inmates, explaining prison behavior via importation and deprivation theories. This research has identified a number of individual and institutional factors that impact prisoners' adjustment and misconduct. While we do not test these theories, we integrate them into gender-specific explanations to derive a more comprehensive model.

The deprivation model of misconduct focuses on the impact of what Sykes (1958) called "the pains of imprisonment." This theory highlights aspects of the prison environment and prisoners' circumstances that sustain and

promote a process of “prisonization.” Subsequent tests of this theory have employed variables such as overcrowding, time incarcerated, and facility size (Cao et al., 1997; Gendreau, Goggin, & Law, 1997; Huebner, 2003). By contrast, the importation model focuses on prisoners’ norms, values, and antisocial behavior that existed prior to incarceration that were imported into the prison (Irwin & Cressey, 1962). This theory has been tested subsequently related to variables such as age, race, gender, employment history, or criminal history (Cao et al., 1997; Harer & Steffensmeier, 1996; Huebner, 2003; Jiang & Fisher-Giorlando, 2002).

Although importation and deprivation theories have been examined widely, they have also faced heavy criticism from correctional researchers for their limited practical implications (Huebner, 2003; Jiang & Fisher-Giorlando, 2002). Tests of these theories have yielded mixed results (Harer & Steffensmeier, 1996; Jiang & Fisher-Giorlando, 2002). Moreover, the models fail to incorporate the unique experiences and characteristics of female inmates. For example, we uncovered no research studies that simultaneously tested gender-linked “imported” risk factors such as prior victimization, drug dependence, and mental health problems, and gender-linked “deprivation factors” such as lack of contact with families while incarcerated.

### *Research on Female Inmates and Institutional Misconduct*

Previous studies collectively and consistently demonstrate that younger, single, less educated, African American, and previously incarcerated men have a greater likelihood of committing prison violations (Cao et al., 1997; Cunningham & Sorensen, 2007; Deng, 2004; Drury & DeLisi, 2010; Huebner, 2003; Jiang & Fisher-Giorlando, 2002; Jiang & Winfree, 2006). In addition, many scholars suggest other predictive variables of inmate misconduct among male prisoners such as drug use, length of sentence, employment inside or outside of the prison, and prior prison violence (Cunningham & Sorensen, 2007; Harer & Steffensmeier, 1996; Huebner, 2003; Jiang, 2005).

Some of the observed predictors of male prison misconduct discussed above may not be as salient for female prisoners. Scholars have called for more research on women’s unique experiences and behavior while in prison (Bloom, Owen, & Covington, 2003; Chesney-Lind, 1998; Chesney-Lind & Mauer, 2002; Gido & Dalley, 2009; Sharp, 2003). Although both male and female prisoners are more likely to be poor, single, and disproportionately racial minorities, female prisoners tend to be older than male prisoners. In addition, a majority of female inmates are incarcerated for drug-related offenses (Carlson, Shafer, & Duffee, 2010; Widom, 1989). Women who are involved with the criminal justice system often bear the impact of the “triple

threat” of substance abuse, trauma due to sexual abuse and violence, and mental disorders (Bloom & Covington, 2009; Chesney-Lind, 1998; Dalley & Michels, 2009; DeHart, 2008; Greene, Haney, & Hurtado, 2000; Raj et al., 2008). These characteristics may affect prison adjustment and coping skills differently for females than for males.

Research on incarcerated women also suggests that motherhood is central to women’s self-concept and adjustment during incarceration (Berry & Eigenberg, 2003; Dalley, 2002; Enos, 2001; Ferraro & Moe, 2003). Many incarcerated mothers attempt to construct an identity as “good mothers” and maintain relationships with their children via “mothering from prison.” Women use standards of good mothering to elevate their status and disassociate themselves from other inmates whom they view as unsuitable mothers (Celinska & Siegel, 2010; Enos, 2001). This strategy of selective association may be a protective factor with respect to prisoner conduct that is not as accessible to male inmates.

As indicated earlier, most research on prisoners’ adjustment and prison rule violations has focused on men (Drury & DeLisi, 2010; Warren et al., 2004; Worrall & Morris, 2011). Only a small number of studies were found to compare male and female inmates. Most of these studies suggest that women adjust more easily to prison than men and that they engage in less violence (Craddock, 1996; Harer & Langan, 2001; Jiang & Winfree, 2006; Warren et al., 2004).

Craddock (1996) conducted one of the first studies on prison misconduct that distinguished male and female prisoners. She found convergent patterns with respect to types of misconduct for both sexes, but females committed a disproportionately small share of rule infractions. She called for additional research to examine factors predicted to be of particular importance to female misconduct, such as mental health and contacts with family and friends while in prison.

Three studies are especially relevant to the identification of gender-specific explanations of prison misconduct. Jiang and Winfree (2006) used the variable of “social support” to predict male and female inmate adjustment. They found that phone calls decreased the frequency of violations for both sexes, while being married reduced the number of violations only for males. Other social support factors (number of children, mail, and visits by children) had no significant impact on adjustment for either sex. Thompson and Loper (2005) indicated that female inmates with long- and medium-term sentences had a higher number of institutional infractions than those with short-term sentences. The authors posited that isolation from families and children for longer periods led to anger and misbehavior. In the third study, Gover et al. (2008) found that, in contrast to male prisoners,

prior incarceration experience, net of age, surprisingly predicted less prison misconduct. They suggested that women with prior incarceration history were more responsive to correctional sanctions than men. They also found that the length of imprisonment increased the probability of only females' misconduct (the evidence for males was inconsistent). They theorized that female inmates had to cope with more stressors than male inmates. Specifically, prior sexual and physical abuse, mental health issues and separation from children and families may lead to more institutional misconduct, and their negative impact only worsens with time. In summary, prior research, although highly fragmented, contributes to our understanding of gender differences in the extent and determinants of inmate misconduct and the centrality of the motherhood role in coping with separation from their children. However, gender-specific models of prison adjustment remain underdeveloped. The present study improves upon and extends this prior research by employing a national inmate survey and the most inclusive set of posited gender-specific predictors to date, including contacts with family members, prior victimization, mental health issues, and drug involvement. These variables have stronger theoretical grounding than those utilized in prior research, and we hypothesize that they will differentially affect male and female misconduct. Both qualitative and quantitative research indicate that these factors are related to female offending and are disproportionately prevalent among female inmates (Bloom & Covington, 2009; Carlson et al., 2010; Casey-Acevedo & Bakken, 2002). To reiterate, we do not aim to test a specific theory of prisoners' misconduct, but rather aim to assess the importance of gender-specific explanations of prison adjustment and misconduct while controlling for established predictors of prison rule violation.

## **Data and Method**

The present study utilizes the 2004 Survey of Inmates in State and Federal Correctional Facilities (SISFCF; Bureau of Justice Statistics, 2007). The data, collected from 18,185 prison inmates, are the most recent from the SISFCF program. Nearly 80% (14,499) of the sample were state inmates and the remaining 20% (3,868) were federal inmates. The 2004 SISFCF adopted a two-stage sampling procedure by which a representative sample of prisons was selected in the first stage and a representative sample of inmates within sampled prisons was selected in the second stage (Inter-University Consortium for Political and Social Research [ICPSR], 2007). The response rates for state and federal inmates were 89.1% and 84.6%, respectively. As the purpose of our analysis was to uncover statistical correlates of prison rule violations, unweighted data are used to facilitate meaningful significance tests. The time

elapsed between prison admission and survey interview is included in the multivariate analysis as a control variable to remove the confounding effect from noncomparable time-at-risk across research subjects.

Rule-breaking is operationalized as both the prevalence and the variety of infractions. While most studies focus on the prevalence, disaggregating prison rule violations by type will allow for identifying factors that predict different categories of misconduct (Gover et al., 2008). The first dependent variable is a dichotomous indicator that identifies inmates who had been written up or found guilty of breaking any of the prison rules since their current prison admission. The second dependent variable, however, is a continuous indicator that measures the number of rule-breaking categories in which each respondent had engaged since his or her current prison admission. These rule-breaking categories include drug violations, alcohol violations, possession of weapons, possession of stolen goods, possession of other authorized substance, verbal assault on prison staff, physical assaults on prison staff, verbal assault on other inmates, physical assault on other inmates, escape or attempted escape, being out of place, order disobedience, and other major infractions (Table 1).

The selection of independent variables is guided by the theoretical and empirical literature on prisoner conduct and adjustment and gender-specific explanations of offending. The 24 independent variables represent seven major categories: demographics, history of victimization, criminal history, current legal status, substance use and mental health status, prison program participation, social support and time at risk of rule breaking.

We focus on variables that are theorized to differentially predict male and female prisoners' adjustment to prison life and prison misconduct. Accordingly, *history of physical and sexual abuse* variables and the *diagnosis of a major psychotic disorder* are included as proxies for the prevalence of childhood trauma and mental health problems, which disproportionately afflict female inmates. Likewise, to address the central role of motherhood among women inmates, we included the *number of children*, the *frequency of phone calls* made and received, and the number of *visits* from family members and friends—the only social and family support variables available in the data set. To assess the relative salience of drug and alcohol problems among incarcerated women, *currently serving time for drug offense* and *substance abuse or dependence before admission* are included.

First, bivariate correction analyses were conducted to assess the correlations among the two variables. Second, multivariate regressions analyses were conducted to model the prevalence (logistic regression) and variety of prison rule-breaking (ordinary least square [OLS] regression). Attention is focused on the odds ratios of statistically significant predictors in the

**Table 1.** Description of Variables ( $N = 18,185$ ).

Variables	$n$ (%)	$M$ ( $SD$ )
<b>Dependent variable</b>		
Ever found guilty of breaking any rule since admission	8,300 (45.6%)	—
Number of types of rule-breaking	—	0.9 (1.6)
<b>Independent variables</b>		
<b>Demographics</b>		
Age (years)	—	35.8 (10.5)
Race (Black)	7,498 (41.2%)	—
Ethnicity (Hispanic)	3,438 (18.9%)	—
Marital status (married)	3,368 (18.5%)	—
Gender (female)	3,888 (21.4%)	—
Education: had high school diploma or GED	6,568 (36.1%)	—
Number of minor children	—	1.0 (2.6)
<b>History of victimization</b>		
Ever sexually abused as a minor	421 (2.3%)	—
Ever physically abused as a minor	4,189 (23.0%)	—
<b>Criminal history</b>		
Age at first arrest (years)	—	18.6 (6.3)
Ever shot at or attacked with a knife	10,111 (55.6%)	—
Number of prior incarcerations	—	1.4 (2.8)
<b>Current legal status</b>		
Violent offense (currently serving time for)	4,790 (26.3%)	—
Drug offense (currently serving time for)	3,587 (19.7%)	—
Length of current sentence (years)	—	8.9 (8.4)
<b>Substance use and mental health status</b>		
Substance abuse or dependence before admission	10,136 (55.7%)	—
Ever diagnosed with a major psychiatric disorder	4,884 (26.9%)	—
<b>Prison program participation</b>		
Participated in substance abuse treatment since admission	5,045 (27.7%)	—
Participated in vocational/educational programs since admission	8,594 (47.3%)	—
Participated in mental health treatment since admission	3,683 (20.3%)	—
Participated in religious services or activities in the past week	10,305 (56.7%)	—
<b>Social support</b>		
Number of hours working onsite in the past week	—	38.3 (22.7)
Number of phone calls made and received in last week	—	2.1 (4.1)
Number of visits received in the last month	—	2.1 (4.1)
<b>Time at risk of rule-breaking</b>		
Time spent in this facility since admission (months)	—	16.4 (3.5)

Note. GED = general educational development.



Multivariate model. Inmates with rule violations are contrasted with those without rule violations; an odds ratio above 1 implies that rule-violating inmates are more likely to be exposed to a particular factor than controls, and a ratio of less than 1 means that the opposite is true. If the ratio is close or equal to 1, it signals that the odds of exposure are very similar in the two groups.

## Results

Rule violations seem to be a common occurrence among state and federal inmates. Nearly half (45.6%) of all surveyed inmates had been found guilty of breaking prison rules. Women made up slightly more than one fifth (21.4%) of the sample. Results from a chi-square test yielded that the prevalence rate of infractions among female inmates was 38.3% as compared with the male rate of 47.6% ( $p < .001$ ). In addition, we found that women averaged 1.96 infractions per violator as compared with the rate of 2.27 infractions per violator found among men. Women prisoners were not only less likely to break rules but also did so less frequently than men.

### *Bivariate Findings*

We first explored the gender differences in the nature of rule violations. At the descriptive level, important gender variations in the reasons for disciplinary infractions were found among rule violators. Females recorded fewer infractions in nearly all 15 categories with the exception of the verbal assault on another inmate (see Table 2). However, women and men did not differ in the ranking of the most and least common types of rule-breaking. Both were most likely to be written up for order disobedience, being out of place, and possession of other authorized substance, and were least likely to be found guilty of escape or attempted escape, possession of stolen property, and alcohol violations.

### *Multivariate Findings*

As expected, gender was the strongest predictor of the odds of breaking prison rules. Holding all other variables constant, being a female reduced the likelihood of engaging in rule-breaking by 24.8%. As shown in Table 3 (the last column), race (being Black), a history of gunshot or stab injuries, a lengthier prison sentence, current conviction for a violent offense, substance use disorders, participation in vocational or educational programs, and participation in mental health or substance abuse treatment, and being ever

**Table 2.** Comparison of the Nature of Rule Violations ( $N = 18,185$ ).

Nature of violations	Male inmates ( $n = 14,297$ )	Female violators ( $n = 3,888$ )
Drug violations	848 (5.9%)***	75 (1.9%)***
Alcohol violations	403 (2.8%)***	20 (0.5%)***
Possession of a weapon	513 (3.6%)***	15 (0.4%)***
Possession of stolen property	160 (1.1%)*	28 (0.7%)*
Possession of other unauthorized substance	1,750 (12.2%)***	354 (9.1%)***
Verbal assault on prison staff	1,127 (7.9%)***	164 (4.2%)***
Physical assault on prison staff	384 (2.7%)***	58 (1.5%)***
Verbal assault on another inmate	625 (4.4%)	173 (4.4%)
Physical assault on another inmates	1,734 (12.1%)***	303 (7.8%)***
Escape or attempted escape	118 (0.8%)**	16 (0.4%)**
Being out of place	1,945 (13.6%)***	433 (11.1%)***
Order disobedience	3,050 (21.3%)***	694 (19.8%)***
Other major violations	458 (3.2%)***	50 (1.4%)***
Other minor violations	1,226 (8.6%)**	270 (6.9%)**
Other violations	823 (5.8%)*	194 (5.0%)*

Note. The percentages do not add up to 100% because any violator can have multiple violations.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

physically abused significantly increased the likelihood of rule-breaking among both male and female inmates.

Given that findings for the full sample were mainly driven by male inmates, who accounted for 78.6% of the 18,185 subjects, our discussion focuses on findings from male and female subsamples.

Among incarcerated men and women, the following six variables decrease the likelihood of infractions: age (each year increase), marital status (being married), age at first arrest (each year increase), participation in religious services, prison-based employment (working onsite), and number of phone calls made or received. Thus, men and women who were older, those who were married, those who began their criminal career at a later age, those who were more involved in prison-based religious activities, those who were working while incarcerated, and those who received more phone calls from friends and family were much less likely to break prison rules.

Six factors significantly predicted prison rule-breaking among male inmates but not among female inmates. Male inmates who self-identified as

**Table 3.** Logistic Regression on the Prevalence of Rule-Violation (Yes/No).

Variables	Males (n = 14,297)		Females (n = 3,888)		All (N = 18,185)	
	B (SE)	Odds ratio	B (SE)	Odds ratio	B (SE)	Odds ratio
<b>Demographics</b>						
Age	-.008 (.002)***	0.992	-.021 (.004)***	0.981	-.010 (.002)***	0.990
Race: Black	.138 (.043)***	1.148	.381 (.084)***	1.457	.191 (.038)***	1.210
Ethnicity: Hispanic	-.064 (.018)***	0.938	-.041 (.036)	0.952	-.059 (.016)***	0.943
Marital status: married	-.349 (.049)***	0.706	-.377 (.095)***	0.679	-.353 (.043)***	0.702
Gender: Female	—	—	—	—	-.285 (.045)***	0.752
High school diploma or GED	-.125 (.040)***	0.882	-.135 (.078)	0.881	-.130 (.035)***	0.878
Number of minor children	.010 (.007)	1.010	.009 (.012)	1.010	.009 (.006)	1.010
<b>History of victimization</b>						
Ever sexually abused	-.069 (.156)**	0.933	-.134 (.156)	0.903	-.085 (.110)	0.919
Ever physically abused	.253 (.051)***	1.288	.109 (.080)	1.117	.207 (.042)***	1.230
<b>Criminal history</b>						
Age at first arrest	-.037 (.004)***	0.964	-.025 (.006)***	0.974	-.034 (.003)***	0.967
Ever shot or stabbed	.467 (.039)***	1.596	.350 (.078)***	1.446	.441 (.035)***	1.554
Number of prior incarcerations	.002 (.007)	1.002	0.11 (.013)	1.008	.005 (.006)	1.005
<b>Current legal status</b>						
Violent offense	.467 (.042)***	1.608	.662 (.100)***	2.013	.512 (.039)***	1.668
Drug offense	-.321 (.050)***	0.726	-.132 (.088)	0.889	-.279 (.043)***	0.757
Length of current sentence (years)	.020 (.002)***	1.021	.032 (.006)***	1.031	.022 (.002)***	1.022
<b>Substance use and mental health status</b>						
Substance abuse or dependence	.190 (.039)***	1.209	.353 (.083)***	1.391	.224 (.035)***	1.250
Major psychiatric disorder	.114 (.055)*	1.121	-.011 (.099)	0.978	.090 (.048)	1.095

(continued)

Table 3. (continued)

Variables	Males (n = 14,297)		Females (n = 3,888)		All (N = 18,185)	
	B (SE)	Odds ratio	B (SE)	Odds ratio	B (SE)	Odds ratio
Participation in prison programs						
Participated in substance use treatment	.256 (.042) <sup>***</sup>	1.291	.217 (.083) <sup>**</sup>	1.233	.253 (.038) <sup>***</sup>	1.288
Participated in VOCED programs	.749 (.037) <sup>***</sup>	2.116	.683 (.074) <sup>***</sup>	2.044	.735 (.033) <sup>***</sup>	2.086
Participated in mental health treatment	.422 (.062) <sup>***</sup>	1.525	.675 (.101) <sup>***</sup>	1.978	.491 (.053) <sup>***</sup>	1.634
Participated in religious activities						
No. of hours working onsite in past week	-.128 (.037) <sup>**</sup>	0.880	-.171 (.080) <sup>*</sup>	0.857	-.139 (.034) <sup>***</sup>	0.870
Social support						
No. phone calls in past week	-.012 (.005) <sup>***</sup>	0.988	-.022 (.009) <sup>*</sup>	0.976	-.014 (.004) <sup>***</sup>	0.986
No. visits in past month	.020 (.013)	1.020	-.062 (.031) <sup>*</sup>	0.940	.005 (.012)	1.005
Time at risk of rule-breaking						
Time in prison	.009 (.005)	1.009	.005 (.011)	1.005	.008 (.005)	1.008
Nagelkerke R <sup>2</sup>	.182 <sup>***</sup>		.223 <sup>***</sup>		.194 <sup>***</sup>	
Overall hit ratio	66.1%		70.4%		67.0%	

Note. GED = general educational development; VOCED = vocational-educational.

\*p < .05. \*\*p < .01. \*\*\*p < .001.

**Table 4.** Multiple Regression on the Variety of Rule-Breaking Among Violators ( $n = 8,150$ ).

Variables	Males ( $n = 6,694$ )		Females ( $n = 3,888$ )		All ( $n = 8,150$ )	
	B (SE)	$\beta$	B (SE)	$\beta$	B (SE)	$\beta$
<b>Demographics</b>						
Age	.000 (.002)	-.001	-.018 (.004)***	-.114	-.003 (.002)	-.017
Race: Black	.161 (.048)**	.045	.272 (.083)**	.090	.182 (.042)***	.052
Ethnicity: Hispanic	.029 (.021)	.018	.100 (.038)**	.072	.039 (.019)	.024
Marital status: Married	-.234 (.060)***	-.046	-.227 (.104)*	-.054	-.224 (.053)***	-.045
Gender: Female	—	—	—	—	-.221 (.053)***	-.049
High school diploma or GED	-.185 (.047)***	-.048	.058 (.080)	.019	-.133 (.041)**	-.036
Number of minor children	-.005 (.008)	-.007	-.002 (.009)	-.005	-.003 (.006)	-.006
<b>History of victimization</b>						
Ever sexually abused	.240 (.160)	.017	.231 (.153)	.037	.262 (.117)*	.024
Ever physically abused	.116 (.053)*	.026	.111 (.079)	.037	.088 (.045)	.022
<b>Criminal history</b>						
Age at first arrest	-.046 (.005)***	-.127	-.016 (.007)*	-.067	-.041 (.004)***	-.123
Ever shot or stabbed	.394 (.047)***	.102	.126 (.078)	.042	.342 (.041)***	.093
Number of prior incarcerations	-.006 (.008)	-.010	-.009 (.012)	-.019	-.007 (.007)	-.012
<b>Current legal status</b>						
Violent offense	.267 (.045)***	.072	.451 (.089)***	.134	.298 (.041)***	.081
Drug offense	-.372 (.063)***	-.072	-.232 (.094)*	-.064	-.346 (.054)***	-.071
Length of current sentence (years)	.010 (.002)***	.054	.019 (.005)***	.096	.011 (.002)***	.059
<b>Substance use and mental health status</b>						
Substance abuse or dependence	.276 (.045)***	.075	.140 (.085)	.045	.253 (.040)***	.071
Major psychiatric disorder	.090 (.060)	.022	-.012 (.100)	-.004	.070 (.052)	.019

(continued)

**Table 4. (continued)**

Variables	Males (n = 6,694)		Females (n = 3,888)		All (n = 8,150)	
	B (SE)	$\beta$	B (SE)	$\beta$	B (SE)	$\beta$
<b>Participation in prison programs</b>						
Participated in substance use treatment	.222 (.046) <sup>***</sup>	.058	-.140 (.080)	-.046	.153 (.040) <sup>***</sup>	.041
Participated in VOCED programs	.359 (.043) <sup>***</sup>	.099	.191 (.077) <sup>*</sup>	.063	.325 (.038) <sup>***</sup>	.092
Participated in mental health treatment	.323 (.064) <sup>***</sup>	.074	.466 (.100) <sup>***</sup>	.157	.350 (.055) <sup>***</sup>	.088
Participated in religious activities	-.096 (.042) <sup>*</sup>	-.027	-.280 (.080) <sup>***</sup>	-.088	-.125 (.038) <sup>**</sup>	-.036
No. of hours working onsite in past week	.004 (.001) <sup>***</sup>	.050	.001 (.002)	.017	.004 (.001) <sup>***</sup>	.049
<b>Social support</b>						
No. of phone calls in past week	-.007 (.005)	-.017	-.008 (.009)	-.024	-.007 (.004)	-.018
No. of visits in past month	-.008 (.013)	-.007	.000 (.025)	.000	-.006 (.012)	-.006
<b>Time at risk of rule-breaking</b>						
Time in prison	-.002 (.006)	-.003	.003 (.011)	.006	-.001 (.005)	-.002
R <sup>2</sup>	.180 <sup>***</sup>		.149 <sup>***</sup>		.187 <sup>***</sup>	

Note. Only inmates who had ever been written up for prison rule violations were included in this analysis. GED = general educational development; VOCED = vocational-educational.  
<sup>\*</sup>p < .05. <sup>\*\*</sup>p < .01. <sup>\*\*\*</sup>p < .001.

Hispanics, those who had a high school diploma or general educational development (GED), those who had ever been sexually abused, those who had ever been physically abused, those who are serving time for a drug offense, and those who had ever been diagnosed with a major psychiatric disorder were more likely to have broken prison rules. A history of sexual or physical abuse and a diagnosis of major psychiatric disorders were risk factors of rule-breaking among men, while being a Hispanic, having a high school diploma or GED, and serving time for a drug conviction protected them from infractions. Yet, against expectations, none of these variables affected the odds of rule-breaking among women.

Only one predictor of prison rule violations was significant exclusively among female inmates: *Number of visits from family members and friends in the past month* ( $p = .049$ ). Each visit decreased the likelihood of breaking prison rules by 6.0% among incarcerated women, which suggests a greater need for social support to achieve behavioral stability among female inmates.

Some unexpected positive effects on rule-breaking of participation in some types of prison-based treatment programs are noteworthy. While substance abuse contributed to rule violations for males and females, participation in programs addressing this health problem unexpectedly appears to have generated opportunities for more rule violations for males and females. Similarly, participation in the mental health treatment programs and vocational-educational programs led to more prison infractions for both sexes. By contrast, involvement in religion programs and working onsite had preventive effects for both groups.

Although male rule-breaking had more significant predictors than female rule-breaking (20 vs. 15), the selected predictors explained more of the variance and correctly predicted more of the rule-breaking among women inmates than among men inmates.

With respect to the variety of infractions, we observed the null effect of social support on the variability of infractions among female rule violators (see Table 4). While the number of phone calls in the past week and the number of visits from family and friends in the past month significantly reduced the odds of a female inmate becoming a rule breaker, neither factor was protective against diversification of rule-breaking among women violators.

Six factors uniquely and independently predicted the variety of rule-breaking among male violators. Having a high school diploma reduced the number of infractions, whereas having a history of physical abuse, ever being shot or stabbed, being dependent on substances, having participated in substance abuse treatment since prison admission, and getting involved in prison-based employment significantly widened the variability of infractions

among male prisoners. Two predictors of variability in rule-breaking were operative only for women: age and being Hispanic.

Nine variables explained the range of rule-breaking for both sexes. Five of these correlates were risk factors that led to a more versatile rule-breaking behavior: being Black, serving time for a drug offense, having a long prison sentence, having participated in a vocational or educational program since admission, and having participated in mental health counseling or treatment since admission. Four protective factors significantly depress the versatility among rule breakers from both gender groups: being married, having a younger age of criminal onset, serving time for a drug conviction, and having participated in religious activities since admission.

## Discussion

To gauge inmates' adjustment to prison life and to identify key risk factors for prisoners' misconduct, scholars often examine correlates of prison rule violations. Until recently, the literature on prison infractions focused nearly exclusively on male prisoners. When both sexes are included in analyses, researchers tend to assume that their male-oriented theoretical explanations of rule-breaking behavior also apply to women. By contrast, the present study focused on factors that distinguish the characteristics and formative experiences of female and male offenders. In our study, we employed and analyzed a large national survey of the state and federal male and female inmates. Similarly to most of prior literature, we found gender to be a fundamental factor in prison rule violations (Craddock, 1996; Harer & Langan, 2001; see also Cao et al., 1997, for the opposite findings). We found that females committed a statistically significant smaller number of infractions than male prisoners. We also found that the differences in the prevalence of rule violations among females depended heavily on a much smaller number of correlates, whereas the same behaviors among males appeared to have been caused by a wider, and more diverse, range of background and environmental factors. In keeping with prior literature and importation theory, we observed that younger, single, Black prisoners, who were physically abused in the past, who had a substance abuse or dependence problem, who were serving a lengthier prison sentence, and who were convicted of a violent offense were more likely to violate prison rules.

On the contrary, we found that both female and male inmates *who during last week reported working more hours onsite and had a higher number of phone calls* were less likely to commit prison infractions. These findings suggest that some activities related to easing the pains of imprisonment as described by deprivation theory have a positive impact on prisoners and lead



to a smaller number of prison rule violations. They also confirm the findings reported by Jiang and Winfree (2006) who found that phone calls made to or receive from children statistically significantly reduced the odds of rule violations per month.

Surprisingly, participating in the mental health treatment and in the vocational-educational programs is related to a higher probability of prison rule violations. These findings differ from the results reported by a few prior studies on prison-based educational programming that claimed fewer prison rule violations were predicted by program participation (e.g., McCorkle, Miethe, & Drass, 1995). However, Jiang and Winfree (2006) found that prison program participation had no impact on rule violations. In contrast to aforementioned studies and as reported earlier, we discovered differential impact on inmate misconduct based on the type of the program. We suggest that taking part in some in-prison activities may lead to more contacts with other prisoners, thus increasing the probability of physical altercations and infractions. In addition, participating in mental health treatment implies mental health problems, which, at least for males in our study, is related to a higher number of violations.

The literature on female offenders and inmates suggests variables that may differentially impact male and female prisoners. Some results failed to conform to our expectations. For example, although female inmates report more incidents of abuse in childhood, both prior sexual abuse and physical abuse were unrelated to prison rule violations for females. On the contrary, sampled males who were physically abused as children were more likely to violate prison rules, while the variable *being ever sexually abused* seemed to reduce the risk of infractions. This issue should be further explored in the future research.

Mental health problems were operationalized in two ways: having a major psychiatric disorder and participation in mental health treatment. While we unexpectedly found no relationship between having a psychiatric disorder and the odds of prison rule violation for females, we found a positive relationship for males. This unexpected difference could partially reflect the greater administration of psychotropic drugs to female prisoners (Harris & Lurigio, 2009). However, both males and females who were in mental health treatment were more likely to commit infractions. These results suggest that although many incarcerated women exhibit mental health problems, these problems do not necessarily lead to more rule-breaking in prison. This issue also merits further investigation.

Finally, we included a set of variables designed to capture the particular salience of parenting for female inmates. A much greater share of incarcerated women were primary caregivers before incarceration and continue to

parent from prison while incarcerated (Celinska & Siegel, 2010; Glaze & Maruschak, 2009; Hoffman, Byrd, & Kightlinger, 2010; Mumola, 2000). Parenting from prison is made possible via phone calls, visits, and mails. Therefore, in addition to the number of children (which did not impact prison rule violations for either males or females), we also included the number of phone calls and the number of visits—variables that represent not only parenting from prison but also the social support that inmates receive while incarcerated. A higher number of phone calls made and/or received in the past week reduced rule-breaking behaviors among both sexes. It is consistent with previously reported findings by Jiang and Winfree (2006). However, whereas other researchers did not detect a relationship between visits and prison infractions, we found that the number of visits was a protective factor for female but not for male prisoners. As we predicted, women seem to rely more on support provided by their families and children than do men (see also Jiang & Winfree, 2006, for discussion on social support needs between both sexes). In addition, although support provided an effective buffer against becoming a rule violator among women, the same protective factors did not reduce the versatility of rule-breaking. Nonetheless, our findings indicate that visitation reduced the probability of female inmate misconduct and possibly, as some scholars suggest, visitation has long-term positive effects of reducing and delaying recidivism after leaving prison (Bales & Mears, 2008).

There are several limitations of this study. SISFCF data are obtained from self-reports and thus vulnerable to recall and social desirability biases. To minimize these problems, respondents were surveyed in quiet and private interview rooms, and computer-assisted personal interviews were conducted by trained field researchers. In addition, the deprivation model suggests the importance of the prison environment on inmate behavior (e.g., Camp & Gaes, 2005), therefore the inclusion of facility-level variables would have permitted a fuller, hierarchical model specification. However, to protect respondent privacy, most of these facility-level variables are restricted from general dissemination. Also, facility-level information on prison's population density or staff-to-inmates ratio is not available in SISFCF. Next, the social support measures do not differentiate between contacts with children and contacts with other family members. To assess the central role of parenthood, it would be preferable to include the number of phone calls and visits involving their children. Moreover, no variable on mail from family and friends was available. Finally, a variable on depression, the main mental disorder present among incarcerated women (Gido & Dalley, 2009), would have been preferable to a general variable on major psychiatric disorders.

Nevertheless, we were able to replicate key findings regarding a correlation between some demographic factors and prison misconduct, which lends

validity to the study's other findings. Most importantly, this study suggests that future research should look beyond conventional predictors of prisoners' behavior and be sensitive to gender differences in the nature and causes of misconduct. Specifically, it appears that non-Hispanic ethnicity, a high school diploma, prior physical abuse, drug offenses, major psychiatric disorders, participation in substance use treatment and in religious activities affect only male prisoners, while the number of visits in past month affects only female prisoners. We also found that variable of the number of phone calls received in the past week is a protective factor against prison rule violations for both sexes. These results suggest an important role of social support in prisoners' good conduct and adjustment to life in prison.

Thus, the study carries important practical implications for the management of prisoners. It suggests that easing restrictions on visits and phone calls, as well as placing prisoners closer to their homes would have a positive impact on their adjustment and behavior while incarcerated. Phone calls and visits to prison are often a very substantial hassle for families in terms of cost and time; yet reforms in this area could potentially save money spent on responding to misconduct.

Next, it is important to note that participating in activities while incarcerated does not necessarily lead to a smaller number of rule-breaking misconduct. Our results suggest that participating in vocational-educational programs, mental health treatment, and substance use treatment was correlated with a higher probability and a larger variety of prison rule violations for male and female inmates. On the contrary, inmates who worked onsite or participated in religious activities were less likely to violate prison rules. These findings call for a more careful selection of correctional programming. In addition, they suggest that those inmates who are under treatment are also more prone toward rule-breaking—whether because of high levels of mental or dependency problem or enhanced opportunities to clash with other prisoners.

Finally, the policy makers and correctional staff should differentiate between managing male and female prisoners. We found different, sometimes unanticipated, correlates between gender and prison rule violations. Yet, according to some researchers, programs in female prisons continue to be not structured or centered on women (Holtfreter & Morash, 2003).

We hope that future studies would explore further uniqueness of characteristics and experiences evident among male and female prisoners.

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