

Orange Is Still Pink: Mental Illness, Gender Roles, and Physical Victimization in Prisons

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Abstract

Although research has established a very strong relationship between the presence of a psychiatric disorder and victimization in prisons, some gaps remain in our understanding. This study considers the importance of gender differences in this relationship. Estimates based on the 2004 Survey of Inmates in State and Federal Correctional Facilities show that psychiatric disorders have a stronger relationship with victimization among male inmates than among female inmates. Yet the size of the gender difference varies greatly depending on the specific disorder. Depressive disorders have a much stronger relationship with victimization among men than among women, but other disorders, such as psychosis, show no gender difference. Symptom-specific analyses further confirm the nature of the difference. Victimization appears to be based in part on how well symptoms do or do not overlap with traditional gender roles. Male-atypical symptoms (e.g., sadness) have a stronger relationship with victimization among men, whereas female-atypical symptoms (e.g., anger) have a stronger relationship with victimization among women. Gender-neutral symptoms (e.g., hallucinations and delusions) have an equivalent relationship between genders. Further analyses suggest that these gender differences are not explained (with some exceptions) by verbal or physical provocation. These findings are interpreted in light of the literature on the nature of social control in men's and women's prisons as well as the literature on stigma.

Keywords

gender, stigma, social control, incarceration

Although criminologists have known for years about the scope of violence in prisons, a clearer picture is beginning to emerge regarding its character and determinants. Recent reports reveal a good deal of targeted predation, especially against inmates with psychiatric disorders. Inmates with such disorders are victimized at considerably higher rates (Blitz, Wolff, and Shi 2008; Pare and Logan 2011; Wolff, Blitz, and Shi 2007), a risk paralleled by the additional risk for victimization found in the general community (Teplin et al. 2005). Empirical estimates from prisons indicate a six-month victimization rate of around 35 percent for men and 24 percent for women and, further, suggest a 60 to 70 percent elevated risk

for inmate-on-inmate violence resulting from mental illness (Blitz et al. 2008). Much of this evidence pertains to general physical victimization, although reports on sexual victimization reach similar conclusions (Beck et al. 2013).

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This form of predation gains further significance when considering the large number of inmates suffering from psychiatric disorders (James and Glaze 2006). In this regard, there is a strong institutional component. The number of persons with psychiatric disorders in prison has increased over time, whereas the number in psychiatric hospitals has declined, leading some analysts to characterize prisons as a new functional equivalent (Lamb and Weinberger 1998; Shenson, Dubler, and Michaels 1990; Torrey 1995). Although evidence for a direct exchange between these institutions is weak, a relationship of some kind is apparent in the characteristics of inmates. It is reflected, for example, in the percentage of inmates with mental health problems who also have had contact with other institutions (James and Glaze 2006). It is also reflected simply in the high prevalence of disorders. In 2005, more than half of all prison inmates had a mental health problem, and of those, nearly a quarter had three or more prior incarcerations (James and Glaze 2006).

Much is already known about mental illness and victimization in prison, but this study looks into the association between the two in a deeper fashion, focusing on gender differences. Gender has generally been overlooked in previous studies, but research has made an indirect argument for its relevance. This study demonstrates gender's centrality. It does so by gradually unpacking the overall association between the presence of any psychiatric disorder and victimization, first, by allowing for associations with specific disorders rather than the presence of any disorder and, second, by allowing for associations with specific symptoms that cross-cut these disorders. It then tests whether gender differences reflect provocative behaviors. Although the most common association reported in research is between the presence of any mental illness and victimization, the unfolding presented here reveals that the overall association obscures a good deal of contingency on the basis of gender. Moreover, the pattern of these contingencies suggests that victimization occurs as much on the basis of deviance from conventional gender roles as on the basis of psychiatric disorder per se. Research on social control in prisons helps to clarify the findings.

BACKGROUND

Understanding whether there are gender differences in the consequences of psychiatric disorders

involves first understanding why psychiatric disorders are related to victimization in general. There are a variety of ways to explain this relationship, but Pare and Logan (2011) usefully divide the possibilities into two categories: those involving stigma and those involving provocation. In the case of stigma, those with psychiatric disorders are victimized because their disorder signals weakness or represents deviance from the subcultural norms of prison (or some combination of both). In this way, the stigma interpretation alerts scholars to how others regard mental illness as much as how the individuals who experience mental illness behave (Link and Phelan 2001). In the context of a prison, further consideration is given to how the prison environment is a form of cultural *discipline* (Foucault 1995), enforcing norms that might be shared by the larger culture but that take an especially severe form in prison. There is considerable evidence for the power of prison culture. Sykes and Messinger (1960), for example, identify the prison code as the primary basis upon which social relationships in prison are organized. Ireland (2000), too, emphasizes the importance of conformity to behavioral expectations. Insofar as the symptoms of psychiatric disorders depart from the expectation of being, for example, strong or self-controlled, prisoners with psychiatric disorders may be the targets of aggression.

Yet victimization can also be a simple product of provocation. In contrast to a stigma-based interpretation, the provocation argument emphasizes the nature of symptoms rather than how those symptoms are interpreted by others. For this reason, it is possible that victimization is the result of antagonistic behaviors—both verbal and physical—from those suffering from psychiatric disorders. Because not all disorders involve provocative behaviors, the relationship between psychiatric disorders and victimization will vary depending on the specific disorder. Pare and Logan (2011) explore this possibility and find that personality disorders and psychosis have especially strong relationships with victimization, in part, because they involve provocative behaviors.

Of course, the reason why psychiatric disorders are associated with victimization is not purely provocation or stigma. The two likely work hand in hand, as Pare and Logan (2011) make clear. Nonetheless, their framework can be applied to understanding gender differences in the relationship between psychiatric disorders and victimization. Furthermore, their framework alerts us to the

different types of stigma associated with psychiatric disorders among men and women as well as the different sorts of disorders men and women experience. Regardless of what interpretation is correct, there are reasons to expect gender differences. Yet the two interpretations lead to somewhat different hypotheses regarding the nature of those differences.

Gender Differences in the Consequences of Psychiatric Disorders

To date, studies have only obliquely addressed the importance of gender. Using the same data we will employ, Pare and Logan (2011) explore different forms of vulnerability in prison and conclude that psychiatric disorders are strongly related to victimization. They do not, however, explore gender differences. Some studies explore gender as a matter of course, but they do not make it a focus. In an examination of sexual victimization, for instance, Wolff, Blitz, and Shi (2007) stratify their models by gender. They find that mental illness is associated with sexual victimization among both men and women, although men are more likely to be assaulted by officers, whereas women are more likely to be assaulted by other inmates. In another study, the same authors find similar results for physical victimization (Blitz et al. 2008). And, again, they emphasize that mental illness and victimization are related among both genders.

These studies are effective in their task, but they do not sit comfortably alongside literatures that highlight the importance of gender in a variety of other ways, whether with respect to the nature of social control in men's and women's prisons or the different kinds of stigma attached to disorders (Zaitzow and Thomas 2003). At a minimum, exploring the relationship between the presence of any psychiatric disorder and victimization obscures the fact that there are gender differences in the composition of disorders men and women suffer from (Kessler, Chiu, et al. 2005; Rosenfield and Mouzon 2013). In general, the prevalence of psychiatric disorders is higher among female inmates (James and Glaze 2006), but the overall gender difference is not apparent for every specific disorder. Studies of jail inmates find a lifetime prevalence of any severe disorder around 9.5 percent for men (Teplin 1990) and 18.5 percent for women (Teplin, Abram, and McClelland 1996) but find especially large differences for major depression and smaller differences for

schizophrenia and mania. International meta-analyses find similar patterns, with a higher prevalence of depression among women but a lower prevalence of personality disorders (Fazel and Danesh 2002).

Distinctions among types of disorders are important irrespective of whether one regards the relationship between psychiatric disorders and victimization in terms of provocation or stigma. If victimization is a product of provocation, the relationship between disorders and victimization might be stronger among men than among women because of the types of disorders men tend to have. In general, women are more likely to suffer from internalizing disorders, where symptoms are directed inward, whereas men are more likely to suffer from externalizing disorders, where symptoms are directed outward (Rosenfield and Mouzon 2013). Disorder-specific vulnerability of this sort is part of the literature on prison victimization, although its implications are not always elaborated. In their book on maladaptive behavior in prisons, for example, Toch and Adams (2002) emphasize the importance of "acting out," but in a chapter dedicated to mental illness among female inmates, their analysis shifts to "acting in." If provocation is important, acting out might instigate more conflict, and therefore, the relationship between psychiatric disorders and victimization might be larger among men.

If victimization is a product of stigma, however, different expectations emerge. In this case, there might be no overall gender difference but limited gender differences for specific disorders. In this interpretation, victimization might be greater among those whose symptoms are regarded as deviant in some fashion. Because of the importance of deviance, conventional gender roles emerge as a potentially important consideration. For example, the stigma of depression might be greater among men than among women if depression is regarded as weakness. By the same token, the stigma of externalizing disorders might be greater among women, especially if such disorders are characterized by aggression. Previous research has found something similar with respect to how mental health professionals evaluate symptoms in men and women (Loring and Powell 1988). Although these ideas are based on broadly prevailing gender norms, most studies of prison culture conclude that traditional gender roles do not disappear at the gate and, indeed, that the enforcement of gender codes might be especially

strong in prisons. J. Thomas (2003), for example, urges prison scholars to consider gender more thoroughly and states directly that “doing gender becomes an integral part of control” (p. 9). This type of control is evident in a variety of ways. Some studies point to the culture of hypermasculinity among male inmates, wherein masculinity is defined in opposition to femininity and supported by force (Pemberton 2013; Toch 1998). Kuper (2005), similarly, outlines the psychological characteristics of what she calls “toxic” masculinity in male prisons, noting the importance of not displaying any emotions apart from anger (p. 718). Parallel features of a gendered culture routinely appear in prison ethnographies. Jones and Schmid (2000), for instance, find that predatory violence is more common against men who reveal weakness or histories of past victimization, thereby violating prison codes regarding toughness. Trammell (2012), likewise, notes the tight connection between masculinity and social control, wherein masculinity is conveyed in a highly stylized manner (p. 22).

A parallel form of control is apparent in women’s prisons as well, albeit of a different kind. Although female inmates might ordinarily be regarded as having forsaken traditional gender roles by virtue of their criminal behavior, they nonetheless appear to adhere to gendered scripts when in prison (Malloch 1999). The nature of control in women’s prisons is accordingly quite different than in men’s. Lutze (2003), for example, argues that social control among female inmates centers not on stripping inmates of femininity but rather on restoring it, including an emphasis on weakness and passivity (p. 187). In place of a culture of hostility and suspicion, she finds an ethic of nurturing, including the creation of fictive family structures that allow for the “mothering” of younger inmates (see also Trammell 2012). Whereas the culture of men’s prisons centers on predation between potential enemies, the culture of women’s prisons centers on emotional support among fellows (Zaitzow 2003). Altogether these studies reveal that although rates of victimization might be lower in women’s prisons than in men’s, the significance of gender as an organizing concept is much the same.

Research Questions

This literature suggests the importance of considering gender differences in the relationship between psychiatric disorders and victimization.

In what follows, we explore gender-specific effects of any psychiatric disorder, those of a variety of specific disorders, and a variety of specific symptoms that cross-cut these disorders. The provocation and stigma interpretations lead to different expectations about what differences will be largest. We ask four questions:

1. Is there a gender difference in the relationship between the presence of *any* psychiatric disorder and victimization?
2. Does the gender difference reflect the different types of disorders men and women typically suffer from?
3. Is the gender difference specific to only certain types of disorders, reflecting how well the symptoms map onto to traditional gender roles?
4. Can any gender difference be explained by provocative behavior?

DATA

Data were drawn from the nationally representative cross-sectional Survey of Inmates in State and Federal Correctional Facilities (SISFCF; U.S. Department of Justice 2004). Conducted periodically since 1974, the surveys are unparalleled in size and scope, especially compared to other studies of correctional populations. We use the most recent publically available data, collected between 2003 and 2004. Fielded by the Bureau of Justice Statistics and the Census Bureau, the study included 14,499 inmates in state prisons and 3,686 inmates in federal prisons. This sample provides a considerable improvement over previous studies that have struggled with power issues, including studies with fewer than 8,000 subjects and only 564 women (Blitz et al. 2008; Wolff, Blitz, and Shi 2007). Sampling proceeded through a two-stage design, with prisons selected in the first stage and inmates therein in the second. In the first stage, male and female prisons were separated into two sampling frames. Once separated, prisons were selected proportionate to their size, meaning larger prisons had a greater likelihood of selection. At the second stage, inmates were selected randomly within prisons but with an oversampling of nondrug offenders in order to ensure an adequate subsample. Our analyses use survey weights to adjust for sampling characteristics, including sampling at the facility level and

nonresponse. Nonresponse in the second stage was 10.2 percent among state inmates and 13.3 percent among federal inmates. Interviews were carried out face-to-face using computer-assisted personal interviews.

Dependent Variable: Victimization

The dependent variable is whether respondents, since admission, have been “injured in a fight, assault, or incident in which someone tried to harm [them].” This is a broad category. The question narrows the domain of incidents to intentional ones, but it admits a variety of injuries. Subsequent questions asked about the nature of these injuries, but the sample size for these specific injuries are small and likely contaminated by measurement error. For instance, fewer than 30 inmates explicitly reported sexual assault. Based on the prevalence of sexual assault reported in other surveys focused on measuring assault more accurately (Beck et al. 2013), it is likely that some respondents in the SISFCF were, in fact, sexually assaulted but reported that incident only under the blanket “intentional injury” question. Although our dependent variable is capacious, it permits a more statistically powerful analysis.

Primary Independent Variables: Psychiatric Disorders

Our key independent variables pertain to psychiatric disorders and symptoms. We use two types of measures. Our first pertains to diagnosed disorders. Respondents were first asked, “Have you ever been told by a mental health professional, such as a psychiatrist or psychologist, you had a depressive disorder?” (which we refer to as depressive disorder). This was followed by identically phrased questions regarding five other categories of disorder: manic depression, bipolar disorder, or mania (referred to as bipolar disorder); schizophrenia or another psychotic disorder (referred to as psychotic disorder); posttraumatic stress disorder (referred to as PTSD); another anxiety disorder, such as a panic disorder (referred to as anxiety); and a personality disorder, such as an antisocial or borderline personality disorder (referred to as a personality disorder). Responses were coded into discrete presence/absence variables for each disorder, although our initial models include a variable indicating the presence of any of the six disorders.

The second type of measure pertains to the presence of specific symptoms apart from a diagnosis. These symptoms were drawn from an adaptation from the *DSM-IV* Structured Clinical Interview, which emulates how a clinician would make a diagnosis based on the criteria described in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association 1994; First et al. 2002). Respondents were asked whether or not they experienced a variety of symptoms during the past year. From these questions, discrete presence/absence symptom experiences were coded. Any sadness was indicated by “feeling numb or empty inside, giving up hope for your life or your future, or feeling like no one cared about you.” Any psychomotor agitation or retardation (referred to, for simplicity, as agitation) was indicated by “feeling like you talked or moved more slowly than usual, had periods when you could not sit still, times your thoughts raced so fast that you had trouble keeping track of them, or an increase or decrease in your overall activity compared to your usual level of functioning.” Any delusions/hallucinations was indicated by “feeling that other people could read your mind; that things do not seem real, like you are in a dream; that other people are able to control your brain or your thoughts; seeing things other people say are not there; hearing voices other people could not hear; or feeling that anyone other than corrections staff has been spying on you or plotting against you.” Any anger was indicated by “losing your temper easily, being angry more than usual, hurting or breaking things on purpose, or thinking a lot about getting back at someone you have been angry at.” Categorizations of this sort have been employed in previous studies using the SISFCF (James and Glaze 2006).

By design, the symptom-specific questions reflect current experiences. One important consideration, however, is the possibility that the psychiatric disorders are the result of prison victimization rather than the cause. To adjust for this possibility, we eliminate from consideration those disorders that were diagnosed within the last year, based on a question asking when diagnosed respondents were most recently diagnosed. This form of statistical adjustment provides only a blunt correction, but it is necessary in the context of cross-sectional data.

Table 1. Distribution of Covariates by Gender (N = 18,185).

Variable	Male	Significance of Difference	Female
Victimized (since admission)	0.16	***	0.08
Race			
White	0.34	***	0.44
Black	0.41	***	0.33
Hispanic	0.19		0.16
Other	0.06		0.07
Age	35.51		35.85
Married	0.17	*	0.19
Height (inches)	69.85	***	64.67
Disability	0.17	*	0.19
Education (years)	10.86	***	11.18
Any visits (during past month)	0.29	**	0.33
Violent offense	0.32	***	0.20
Young victim (under 12)	0.05		0.04
Prior incarceration	0.50	***	0.38
Ever homeless	0.08	***	0.12
Both parents	0.44		0.44
Ever sexually abused	0.06	***	0.40
Physical abuse of another inmate	0.13	***	0.08
Verbal abuse of another inmate	0.05		0.05

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).

Note: All summary statistics are weighted.

p* < .05. *p* < .01. ****p* < .001 (two-tailed test of mean differences between males and females).

Provocation Measures

Respondents were asked about violations of prison rules. Two of these questions serve as our provocation variables. Respondents were asked, “Since your admission, have you been written up or found guilty of verbal assault on another inmate?” They were asked the same question regarding physical assault. From these questions, we coded two discrete covariates regarding verbal abuse and physical assault of another inmate.

Controls

When it comes to understanding vulnerability in prison, psychiatric disorders of course are not the only consideration. Victimization in prison is related to other characteristics. Pare and Logan (2011) develop a set of covariates relevant to understanding the general issue of vulnerability. In addition to psychiatric disorders, they emphasize disability and physical size. Other studies highlight the importance of earlier homelessness and sexual victimization (Hiday et al. 1999) as well as offense-related characteristics, including whether the offense was violent or perpetrated against a juvenile (James and

Glaze 2006). Understanding the association between psychiatric disorders and victimization, thus, requires controlling for related sources of vulnerability, many of which will be positively correlated with psychiatric disorders. For demographic characteristics, we control for respondents’ race, age (including both age and age squared), years of education, height in inches, and whether they have any disability. For social integration, we control for whether they received any visitors and whether they are currently married. For offense characteristics, we control for whether they were sentenced for a violent offense and whether their victim was under the age of 12. And for background characteristics, we control for whether respondents were raised in a two-parent household, had ever been incarcerated before, had ever been homeless, and had ever been sexually abused. We also control for days in prison, using the natural log.

RESULTS

The results proceed sequentially across the tables, gradually addressing the four research questions. Tables 1 and 2 are descriptive. Table 1 presents

Table 2. Distribution of Psychological Disorders by Gender ($N = 18,185$).

Variable	Male	Significance of Difference	Female
Panel A: Any diagnosis			
Present	.22	***	.47
Past	.14	***	.25
Panel B: Disorder-specific diagnosis			
Depressive disorder			
Present	.17	***	.38
Past	.10	***	.20
Bipolar disorder			
Present	.08	***	.23
Past	.05	***	.12
Psychotic disorder			
Present	.04	***	.07
Past	.03		.03
PTSD			
Present	.05	***	.14
Past	.03	***	.07
Anxiety			
Present	.06	***	.17
Past	.03	***	.08
Personality disorder			
Present	.05	***	.10
Past	.03	**	.05
Panel C: Symptoms present during last year			
Sadness	.40	***	.55
Anger	.39	***	.50
Agitation	.53	***	.64
Delusions/hallucinations	.33	***	.48

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).

Note: All summary statistics are weighted. PTSD = posttraumatic stress disorder.

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed test of mean differences between males and females).

summary statistics for victimization and the control variables, stratified by gender. Among the most important differences is the large gender difference in rates of victimization. Whereas 16 percent of men report victimization, 8 percent of women report the same. Table 2 shows pervasive gender differences in psychiatric disorders and symptoms. The table reveals, first, that the prevalence of psychiatric disorders is considerably higher among women than men. Although our analyses focus on disorders diagnosed at least a year earlier to the survey, the table also presents the prevalence for any diagnosis at any time. Women report more than twice the prevalence of any psychiatric disorder. Panel B shows the overall gender difference pertains to all but one of the

specific disorders composing the any-disorder category, but some of the differences are larger than others. The approximately 11 percentage point difference in the overall prevalence is paralleled by the 10- and 7-point difference in depressive disorders and bipolar disorders. The gender difference in psychotic disorders and personality disorders is quite small. Panel C reveals, however, that when it comes to specific symptoms, women consistently report more symptoms. These differences range from 15 to 11 percentage points.

Table 3 explores our first question: Is there a gender difference in the relationship between the presence of any psychiatric disorder and victimization in prison? The coefficients are from

Table 3. Logistic Regression Models of Victimization on Any Diagnosis, Interactions with Gender, and Controls (N = 18,185).

Variable	Model 1		Model 2		Model 3	
	b	SE	b	SE	b	SE
Any diagnosis	0.656***	.063	0.415***	.070		
Any Diagnosis × Female	−0.422**	.142	−0.427**	.149		
Female	−0.355**	.113	−0.556***	.127	−0.666***	.127
ln(days in prison)	0.608***	.026	0.760***	.036	0.763***	.035
Federal prison			−0.506***	.136	−0.522***	.137
Age			−0.074***	.015	−0.071***	.015
Age ² /100			0.039*	.017	0.035*	.018
Race (reference: white)						
Black			−0.357***	.066	−0.409***	.065
Hispanic			−0.012	.083	−0.062	.082
Other			0.035	.105	0.015	.104
Married			−0.200**	.071	−0.207**	.071
Height			0.001	.007	0.003	.007
Disability			0.401***	.072	0.454***	.070
Education			−0.006	.011	−0.006	.011
Any visits			−0.147*	.058	−0.153**	.058
Violent offense			0.150**	.058	0.153**	.058
Young victim			−0.222*	.112	−0.212	.112
Prior incarceration			0.133**	.050	0.143**	.050
Ever homeless			0.352***	.088	0.387***	.087
Both parents			−0.083	.057	−0.087	.057
Ever sexually abused			0.659***	.092	0.714***	.091
Constant	−6.008***	.188	−4.971***	.623	−5.034***	.621

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).
*p < .05. **p < .01. ***p < .001 (two tailed).

logit models predicting victimization, and the primary coefficients of interest pertain to the main effects of gender and any psychiatric disorder along with their multiplicative interaction. The interaction term estimates the magnitude of the gender difference directly, in reference to female inmates, so a negative coefficient would mean a smaller coefficient for women. The first model includes no controls, apart from the number of days in prison, but reveals both a strong main effect of psychiatric disorders on victimization and a strong interaction effect between gender and any diagnosis. The relationship between psychiatric disorders and victimization is generally weaker among women than among men. Expressed in terms of the weighted prevalence of victimization, among men with a disorder, 25 percent report victimization, relative to 14 percent without a disorder; whereas among women with a disorder, 10 percent report victimization, relative

to 7 percent without a disorder (results not shown). Of course, this relationship is vulnerable to other influences, so Model 2 introduces the control variables. For comparison, Model 3 estimates the control variables without the diagnosis variable or the interaction. Although the relationship between any diagnosis and victimization is reduced somewhat in Model 2, both the main and interaction effects remain significant. Furthermore, in this model, the main effect and the interaction effect are proportional in size, suggesting that the presence of any disorder matters only among men (.415 + −.427 = −.012).
Table 4 explores our second question: Does the gender difference reflect the different types of disorders men and women typically suffer from? In so doing, it also addresses the third question: Is the gender difference specific to only certain types of disorders, reflecting how well the symptoms map onto to traditional gender roles? If

Table 4. Logistic Regression Models of Victimization on Specific Disorders and Interactions with Gender ($N = 18,185$).

Variable	Models without Comorbidity		Models with Comorbidity	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Main effects				
Depressive disorder	0.424***	.081	0.342***	.098
Bipolar disorder	0.418***	.103	0.192	.120
Psychotic disorder	0.069	.145	−0.300	.162
PTSD	0.315*	.144	0.037	.161
Anxiety	0.332**	.126	0.090	.139
Personality disorder	0.542***	.119	0.413**	.134
Interactions with female				
Depressive disorder	−0.527**	.165	−0.572***	.166
Bipolar disorder	−0.498**	.193	−0.514**	.195
Psychotic disorder	−0.151	.324	−0.158	.335
PTSD	−0.644*	.326	−0.663*	.330
Anxiety	−0.546*	.262	−0.602*	.260
Personality disorder	−1.020***	.280	−1.085***	.280

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).

Note: In the models without comorbidity, the coefficient for each disorder and its interaction is estimated in a separate equation. Models adjusting for comorbidity are the same but include the main effects of all the other disorders. All the models adjust for the main effect of female, duration of incarceration, type of prison, age, age squared, race, marital status, height, disability, education, visitation in prison, violent offending, young victim, prior incarceration, ever being homeless, growing up in a two-parent household, and having ever been sexually abused. Coefficients for these covariates are not reported.

* $p < .05$. ** $p < .01$. *** $p < .001$ (two tailed).

compositional differences were the explanation, there would be an interaction between gender and any diagnosis, but there would not be meaningful interactions between gender and specific diagnoses. Table 4 reveals that the magnitude of the gender difference varies considerably between disorders. Table 4 presents two specifications. In the first, each of the disorders is introduced independently into the model. In the second, all the disorders are included simultaneously. This adjusts for comorbidity but at the cost of multicollinearity. Tetrachoric correlations among the disorders are very high: with a range of .84 (between depressive disorder and bipolar disorder) to .57 (between psychosis and PTSD). Table 4 presents models with and without comorbidity. Each model tests only one interaction. Although the adjustments for comorbidity display some of the classic symptoms of multicollinearity—including main effects that switch directions—the gender difference, represented by the interactions, is largely the same. There are significant interactions with gender for most disorders, but an interaction is

not apparent for psychotic disorder, the least gender-typed disorder in the set. The remaining disorders contain a range of symptoms, some of which would be considered consistent with gender types and others that would not. For instance, in some phases, bipolar disorder is characterized by symptoms very similar to depression. Notably, the interaction with bipolar disorder is smaller than that for depression. To unpack these disorders further, it is useful to consider specific symptoms.

Table 5 presents the same type of analysis but for specific symptoms rather than disorders. The table reveals more clearly how the victimization of male and female inmates depends on whether the disorders they suffer from have symptoms that deviate from gender norms. Table 5 reveals that some symptoms have stronger relationships with victimization *among women*. The main effects suggest that among men, all four of the symptoms are relevant: They are all significantly different from zero. Yet two of the interactions are significant: Whereas sadness is more strongly associated with victimization among men than

Table 5. Logistic Regression of Victimization on Disorder Symptoms and Interactions with Gender (N = 18,185).

Variable	b	SE
Main effects		
Sadness	.337***	.065
Anger	.425***	.063
Agitation	.179**	.060
Delusion/hallucinations	.242***	.064
Interactions with female		
Sadness	-.614**	.195
Anger	.426*	.168
Agitation	.023	.201
Delusion/hallucinations	.181	.189

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).
Note: Model is adjusted for the main effects of female, duration of incarceration, type of prison, age, age squared, race, marital status, height, disability, education, visitation in prison, violent offending, young victim, prior incarceration, ever being homeless, growing up in a two-parent household, and having ever been sexually abused. Coefficients for these covariates are not reported.
p* < .05. *p* < .01. ****p* < .001 (two tailed).

women (*b* = -.614), anger is more strongly associated with victimization among women than men (*b* = .426). Of the eight relationships presented in the table (the four main effects for men and the four main effects plus interactions for women), the coefficient for anger among women is the largest. The remaining symptoms—agitation and delusions/hallucinations—have no natural gender typing, and their coefficients are not significantly different between men and women.

One explanation for these gender differences is that these symptoms, even when present in both men and women, result in different behaviors. It is possible, for example, that women who report anger simply report more hostility than men who report the same. Testing this possibility, our fourth question asks whether provocative behaviors explain the gender differences we have thus far found. Table 6 presents coefficients from the same models estimated in Tables 4 and 5 but includes the two provocation measures: verbal abuse and physical abuse of another inmate. Both influences matter. In a basic model predicting victimization (results not shown), both

Table 6. Logistic Regression of Victimization on Disorders and Symptoms with Interactions and Adjusting for Provocation (N = 18,185).

Variable	b	SE
Panel A: Disorder models		
Main effects		
Depressive disorder	.377***	.084
Bipolar disorder	.394***	.111
Psychotic disorder	-.035	.163
PTSD	.296	.153
Anxiety	.287*	.136
Personality disorder	.389**	.131
Interactions with female		
Depressive disorder	-.476**	.167
Bipolar disorder	-.496**	.191
Psychotic disorder	-.048	.367
PTSD	-.479	.326
Anxiety	-.490	.280
Personality disorder	-.903**	.327
Panel B: Symptom models		
Main effects		
Sadness	.362***	.070
Anger	.302***	.065
Agitation	.145*	.064
Delusion/hallucinations	.228***	.068
Interactions with female		
Sadness	-.738***	.207
Anger	.479**	.170
Agitation	.006	.214
Delusion/hallucinations	.157	.199

Source: Survey of Inmates in State and Federal Correctional Facilities (U.S. Department of Justice 2004).
Note: Coefficients based on the models presented in Tables 4 and 5 but include verbal and physical provocation. All models are also adjusted for the main effects of female, duration of incarceration, type of prison, age, age squared, race, marital status, height, disability, education, visitation in prison, violent offending, young victim, prior incarceration, ever being homeless, growing up in a two-parent household, and having ever been sexually abused. Coefficients for these covariates are not reported.
p* < .05. *p* < .01. ****p* < .001 (two tailed).

coefficients are significant (*b* = .449 for verbal abuse and *b* = 1.587 for physical abuse, *p* < .001). In general, though, the results are similar when controlling for provocation, suggesting that provocation is not the explanation for all the differences. Two of the interactions, however, are no longer significant with these controls and

deserve further comment. Controlling for provocation reduces the interactions between gender and PTSD (from $-.644$ to $-.479$) and gender and anxiety (from $-.546$ to $-.490$) to statistical insignificance. This reflects the underlying correlations. Among women, the tetrachoric correlation between PTSD and provocation are smaller (.013 for verbal abuse and $-.022$ for physical abuse) than they are for men (.193 and .089, respectively). A similar pattern is apparent for anxiety disorders (for women, .073 and .031, and for men, .160 and .104). In general, though, the role of provocation seems limited, and in one case, the interaction between gender and sadness is larger with controls for provocation.

DISCUSSION

Although the relationship between mental illness and victimization in prison has been established in prior research, the present study reveals the moderating influence of gender. These interactions suggest that the connection between mental illness and victimization partly reflects divergence from conventional gender roles in addition to the symptoms of mental illness per se. Research should consider this pathway further, especially because the meaning of psychiatric disorders in prison has generally not been a major part of the literature.

The evidence for an implicit gender code lies in the patterns of interactions—those that are significant interpreted in light of those that are not—and their apparent insensitivity to controls for provocation. Although other interpretations for these interactions are possible, they are generally inadequate. If, for instance, a renunciation of violence and an ethic of care prevailed in women's prisons, we would find the effects of mental illness to be consistently smaller among women than among men. We do not, however, find such a uniform pattern. Similarly, if gender mattered only because men experienced more externalizing disorders and women experienced more internalizing disorders, then we would find gender differences in the effects of *any* disorder, but no gender difference once this category was unpacked into specific disorders. This, too, was not apparent in the data. At the same time, these interactions are largely insensitive to controls for physical or verbal provocation. To be sure, the main effects of the disorders are reduced somewhat, so these influences are

not irrelevant to understanding victimization, but most of the interactions with gender remain robust. The exceptions are PTSD and anxiety, which are associated with more aggressive behaviors among men than among women. Some of the patterns for other disorders, however, are inconsistent with prior speculation. The results for psychosis, for example, are inconsistent with the idea that threat-related delusions, like those associated with psychosis, are associated with different behaviors in the men and women who suffer from these disorders. Some argue that men respond to delusions with violence, whereas women respond to delusions with tend-and-befriend behaviors (Teasdale, Silver, and Monahan 2006). Because the present study does not explore tending behaviors, it does not test this idea completely or directly, but it nonetheless fails to find that the symptoms of psychosis occasion more victimization in men.

Although they are not a focus of our study, the control variables minimize the relevance of a few other explanations. For instance, if the vulnerability associated with mental illness in men's prisons was due merely to the greater prevalence of violent offenders, the interactions we find would not be significant once violent offenses were controlled for. Similarly, the greater vulnerability found in men's prisons could reflect their longer sentences; women with mental illness would have the same risk as men if only they served the same amount of time. Number of days in prison is, in fact, very strongly associated with the risk of victimization (and serves as an offset in our models), but this does not account for the interactions.

The findings speak to other dimensions of the prison culture literature. For instance, a good deal of research focuses on the distinction between *prisoner* culture and *prison* culture (Hayner and Ash 1939). An especially important theme in this regard centers on whether prisoners bring prison culture with them—an *importation* model—or whether prison culture is a product of its own organization—a *deprivation* model (C. Thomas 1977). Although this debate is not central to our study—we are, after all, arguing for continuity between prison culture and nonprison culture, at least with respect to gender—it is important to point to a potentially sharp and informative distinction. Many female inmates enter prison as deviants from traditional gender roles; arrest and incarceration are themselves regarded as contrary to traditional forms of femininity (Trammell

2012, p. 105). Insofar as incarcerated women are importing a culture, then, it might be a more unorthodox one. Yet, even allowing for this, female inmates face elements of a traditional gender culture while incarcerated. In this light, it is a remarkable testament to the power of prisons that even the most transgressive individuals therein are unable to shake some of its more conventional aspects.

Limitations

Although we have sought to uncover new features of the relationship between psychiatric disorders and prison victimization, some aspects of the altercation remain unclear. For one, our measure of provocation cannot account for all the ways in which a person might provoke someone. Other aspects of the results, however, suggest that provocation is not the entire story and that a more encompassing measure would not necessarily produce more evidence. For instance, we can assume some symptoms are probably more strongly associated with provocation than others. In particular, the effects of personality disorders and psychosis likely reflect the behavior of victims more than the effects of depressive disorders or anxiety do (e.g., Link et al. 1999). Yet we find some consistency across the different symptoms we explored. Among men, for example, all four symptoms are associated with victimization, and depressive disorders, in fact, have the second largest relationship within the set.

A related complication stems from considering alternatives to provocation. Following previous research, we have framed provocation in terms of acting out or antagonizing other inmates. But another explanation for why some disorders are associated with victimization is that they induce passivity. In this vein, some studies emphasize how mental illness compromises the ability of individuals to perceive and respond to threats (Hiday 1995; Marley and Buila 2001; Silver 2002; Teplin et al. 2005). In this interpretation, inmates with psychiatric disorders are vulnerable not because they provoke others but because their disorders prevent them from adequately protecting themselves. Testing for this possibility would require more information on the circumstances surrounding victimization, although it is notable that the symptoms most closely associated with passivity, like sadness, are not uniformly more risk producing.

Other unobserved features of the incident are also important, including its dynamics and participants. We explored whether the respondent was *ever* injured while in prison, although the number of incidents would more precisely reveal the depth of predation. Similarly, it is unclear who was involved in the altercation. In most cases, other inmates are the likely perpetrators, although prison staff can be involved as well. Although who is responsible for the injury need not change the interpretation we provide, it is an important consideration. Relevant to this point, previous research on prisons finds that administrative sanctioning tends to be gendered in ways that overlap with our interpretation of the data. Guards enforce passive behavior among female inmates but allow more aggressive behavior among men (Bosworth 1999). Consistent with this idea, rates of punishment for infractions are often higher in women's prisons, even though the actual infractions might be weaker (Howe 1994). This pattern reflects a long history. Female offenders have long been regarded as "fallen women" who could be rehabilitated by stricter adherence to traditional notions of femininity, whereas male offenders have often been regarded as predatory and, therefore, as wards to be incapacitated rather than redeemed (Heffernan 2003).

There are also some limitations related to our measures of psychiatric disorder. All our indicators of psychiatric disorders represent *diagnosed* disorders. Yet most people who meet the clinical criteria for a psychiatric disorder will not seek treatment and, therefore, will not be diagnosed by a professional (Kessler, Demler, et al. 2005). It would be useful, then, to measure true prevalence—using lay diagnostic instruments—rather than clinical prevalence. This is especially relevant given evidence for a diagnostic bias pertaining to gender (Loring and Powell 1988). If, for the same symptoms, clinicians are more likely to diagnose depression in women than in men, the actual character of depressive disorders might differ between men and women in ways that lead to different relationships with victimization. Our symptom-based variables do not suffer from this problem, but a full consideration of clinical ascertainment would be useful.

It is also important to emphasize the complexities of gender, not all which were we able to explore. Our models test for interactions with gender using a female dummy variable. This is consistent with an institution that itself enforces a binary

conception of sex. Nonetheless, the situation of transgender and intersexed inmates presents acute difficulties that ought to be explored further (Pemberton 2013). By the same token, the victimization of gay men in male prison facilities is often especially severe (Mariner 2001). To be sure, both of these examples could be subsumed under a more general framework. For example, it is possible the situation of transgender inmates represents an especially severe instantiation of the processes we describe here with respect to men and women: Their deep divergence from traditional conceptions of gender results in severe violence. Similarly, if part of the victimization of gay men stems from their vulnerability against a hypermasculine prison culture, then their situation is consistent with the general situation we describe. Our study began with the premise that what has gone missing from the literature is not an appreciation of vulnerability per se but a more precise sense of what constitutes that vulnerability. And in this regard, we have argued that gender is important because it is relevant to the prison code. Nonetheless, it will be important for future research to assess the situation of lesbian, gay, bisexual, and transgender populations specifically and uniquely.

CONCLUSION

The results of this study are consistent with the idea that psychiatric disorders are important for understanding victimization but push for greater appreciation of the role of gender. This focus has been neglected. In the first chapter of a volume on gender-related control in prisons, J. Thomas (2003) strikes a hesitant tone when he states, "Surely it cannot be plausible that heterosexual norms and gender roles can be a means of oppressive control in prisons" (p. 1). He then goes on to summarize the abundant evidence for this claim. Yet his statement betrays a lingering uncertainty regarding the role of gender in prisons. In institutions fundamentally about surveillance, discipline, and oppression, it might appear unusual to elevate gender-related control to the foreground rather than relegate it to one of many features of the background. Yet studies routinely reveal its importance, and the current study adds one more piece.

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