Research Report

The Role of Gender in Mental-Illness Stigma

A National Experiment

James H. Wirth¹ and Galen V. Bodenhausen²

¹Purdue University and ²Northwestern University

ABSTRACT—The stigma of mental illness imposes substantial costs on both the individuals who experience mental illness as well as on society at large. Understanding the psychological underpinnings of this stigma is therefore a matter of practical and theoretical significance. In a national, Web-based survey experiment, we investigated the role played by gender in moderating mental-illness stigma. Respondents read a case summary in which the gender of the person was orthogonally manipulated along with the type of disorder; the cases reflected either a male-typical disorder or a female-typical disorder. Results indicated that when cases were gender typical, respondents felt more negative affect, less sympathetic, and less inclined to help, compared to when cases were gender atypical. This pattern can be explained by the fact that gender-typical cases were significantly less likely to be seen as genuine mental disturbances.

Combating the stigma associated with mental illness has become a top federal priority in the United States because the social costs associated with this stigma are considerable (President’s New Freedom Commission on Mental Health, 2003). Persons with current or remitted mental illness face discrimination in many forms (Hinshaw & Stier, 2008; Thornicroft, 2007), and mental-illness stigma creates a potent psychological barrier to treatment seeking (Corrigan, 2004). The present research examined one social factor that might moderate the magnitude of mental-illness stigma, namely gender roles.

Stereotypes about persons with mental illnesses focus on violence/dangerousness and dependency/incompetence (Ottati, Bodenhausen, & Newman, 2005). These dimensions map onto sex-role stereotypes, in that males are more likely than females to be stereotyped as violent, while females are more likely than males to be stereotyped as dependent. We examined the question of whether the sex of a person with a mental illness moderates the degree of stigma (s)he experiences. Previous research suggests that women are generally subjected to less mental-illness stigma than men (e.g., Farina, 1981), but this research did not consider the degree to which mental illness symptoms map onto gender expectations. The symptomatology of certain mental illnesses is stereotypically and epidemiologically more associated with men than women (e.g., many externalizing disorders, alcohol dependency; Grant, 1997), whereas other disorders are more associated with women than men (e.g., major depression; Kessler, 2003). How might the gender typicality of a person’s mental illness symptoms moderate stigma?

We examined two competing hypotheses. One hypothesis derived from prior research showing that negative, stereotypical behavior elicits harsher reactions than when the same negative behavior is not stereotypical of the actor (e.g., Bodenhausen, 1988; Bodenhausen & Lichtenstein, 1987; Gordon, 1990). When a person commits a stereotypically unexpected infraction, attributions for the behavior tend to focus on situational or uncontrollable causes, leading to greater sympathy and leniency (e.g., Bodenhausen & Wyer, 1985). In contrast, when the behavior is stereotypical, it tends to be attributed to personal traits of the actor, a pattern that enhances blame and stigmatization (Weiner, 1995). For example, Gordon (1990) found that when a Black American was accused of a white-collar crime (embezzlement), his behavior was commonly attributed to a situational cause, whereas when the same actor was said to have committed a blue-collar crime (burglary), it was attributed to dispositional causes; this attributional pattern reversed for White defendants. By this logic, individuals who display mental illness symptoms that are counterstereotypical with respect to their gender should be subject to reduced stigmatization, because their psychological problems will tend to be attributed to external circumstances or factors beyond their control.
Alternatively, research also suggests that people tend to punish gender deviance (e.g., Costrich, Feinstein, Kidder, Maracek, & Pascale, 1973). From this perspective, behaving in a gender-atypical way may itself be a source of stigmatization, and "backlash" may ensue (Rudman & Fairchild, 2004). If so, individuals who display gender-atypical mental illness symptoms may be stigmatized to a greater extent than persons who display gender-typical symptoms. To investigate these rival perspectives, a national survey experiment was conducted.

**METHOD**

**Participants**
A sample of 186 participants (54% female, 46% male; mean age = 47 years, skewness = 0.22, age range = 18–89 years) was drawn from the nationally representative Knowledge Networks Panel; panel members are recruited by random-digit dialing and participate in research studies in return for free internet access. The sample was ethnically diverse, including Caucasians (73%), African Americans (13%), and Hispanics (9%), among others. Respondents’ annual household income was assessed in categorical increments and ranged from less than $5,000 to more than $175,000, with the modal categorical response being $40,000 through $49,999 (skewness = 0.26). Educational attainment was also diverse (highest completed level: less than high school, 15%; high school, 24%; some college, 33%; one or more college degrees, 29%).

Surveys were completed online in the participants’ homes. Data from 4 participants who took less than 4 min to complete the survey were excluded, because it was highly implausible that the survey materials could be read and completed with any degree of thoughtfulness within that time frame. Because the experimental manipulations occurred at the beginning of the survey, unusually long survey-completion times (presumably reflecting interpolated, extraneous activities) were also considered problematic; data from 10 participants who took more than 32 min to complete the survey (which was completed by pilot-test subjects in less than 15 min) were also excluded, leaving a final sample of 172 participants.

**Design and Materials**
Participants read a case summary of a person experiencing a mental illness. The person was identified by name (Karen or Brian) as male or female, and the symptom profile and diagnosis was either male-typical (alcohol abuse) or female-typical (major depression). Pretesting confirmed that these disorders were viewed by laypeople as clearly sex-linked. Symptoms were described in lay language based on criteria in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IVR; American Psychiatric Association, 2000), and corresponding psychiatric labels were provided in the case file.

After reading the case summary, participants completed a range of rating scales designed to assess stigmatization of the target. They provided ratings of their affective reactions to the case on 6-point scales (1 = not at all, 6 = very much) for each of the following emotions: anger, concern, irritation, disgust, sympathy, annoyance, pity, and dislike. Next they provided self-ratings of how likely they would be to help the target (four items: offering the person emotional support, giving the person advice, performing a small favor for the person, and offering to help in general) on a 6-point response scale (1 = not at all likely, 6 = very likely). In addition, they were asked to indicate on 7-point Likert-type rating scales (1 = strongly disagree, 7 = strongly agree) how much they agreed that the target person is experiencing a genuine mental disturbance, that the problem likely has a biological cause, that the problem reflects a character defect, and that the problem is quite unusual. Participants subsequently completed ancillary individual difference measures that were examined as possible moderators of stigmatization, including a measure of sex-role traditionalism, endorsement of the Protestant work ethic, and personal contact experiences involving persons with mental illnesses; because these measures did not qualify the reported findings, they will not be discussed further.

**RESULTS**
All measures were analyzed in between-subjects analyses of variance (ANOVA) as a function of disorder (alcoholism vs. depression) and target sex (Brian vs. Karen); participant sex was also included in the analyses but, except as noted, did not qualify the findings reported here.

**Affective Reactions**
The eight affect ratings were subjected to a principal components analysis with a promax rotation, which produced two components having eigenvalues > 1: negative affect (anger, irritation, annoyance, disgust, and dislike), capturing 52.7% of the variance in affect ratings, and sympathetic affect (sympathy, concern, and pity), capturing 20.2% of the variance. We con-

---

1We also analyzed the data using a much more conservative criterion, by which only participants who took more than 24 hr to complete the experiment were eliminated (N = 3), and results for the stigma measures remained similarly significant, except for one higher-order interaction effect involving participant sex, which changed to marginal significance.

2These names were selected based on evidence that they have equivalent connotations regarding a wide range of variables other than gender (see Kasof, 1993).

3Specifically, a pilot sample (N = 30 participants) rated 10 mental disorders on whether they are more associated with men or women, based on a diagnostic label and brief description of typical symptoms. They also rated the severity of each disorder. The selected disorders differed in terms of gender typicality but not severity.

4As have other researchers, we found anger, disgust, and dislike to be highly correlated emotional reactions in the context of prejudice and stigma (e.g., Dijker, 1987; Mackie, Devos, & Smith, 2000; Stangor, Sullivan, & Ford, 1991).
structured corresponding composite measures by averaging the items comprising the negative affect component (α = .93) and the sympathetic affect component (α = .65).

Feelings of anger, disgust, and dislike constitute primary indicators of stigma. Analysis of the negative-affect composite revealed a main effect of disorder, such that alcoholism elicited greater negative affect (M = 3.00) than did depression (M = 1.29), F(1, 162) = 72.87, p < .001. However, target sex interacted with disorder, F(1, 162) = 8.04, p = .005; as shown in Table 1, negative affect was greater when the case was gender typical (i.e., male alcoholism and female depression) than when it was gender atypical (i.e., female alcoholism and male depression). The sympathy composite revealed a reverse pattern. There was a marginal main effect of disorder, such that alcoholism elicited less sympathy (M = 3.30) than depression (M = 4.10), F(1,163) = 2.99, p = .09, but more important, there was again a significant Disorder × Target Sex interaction, F(1,163) = 5.72, p = .02. The means in Table 1 show that sympathetic reactions were stronger for the gender-atypical cases than the gender-typical ones. Affectively speaking, mental-illness stigma was significantly less pronounced in gender-atypical cases.

Helping Inclinations
As another window on stigma, we assessed participants’ willingness to help the target. The four helping items were averaged to create a composite measure of helping inclinations (α = .84). Analysis of this composite revealed a marginal main effect of disorder, with greater willingness to help in the case of depression (M = 5.05) than in the case of alcoholism (M = 4.81), F(1, 164) = 3.65, p = .06. Again, there was also a significant Disorder × Target Sex interaction, F(1, 164) = 4.69, p = .03.

The means in Table 1 reveal that helping inclinations were stronger for gender-atypical disorders than for gender-typical disorders. However, this pattern was qualified by a higher-order interaction with participant sex, F(1, 164) = 4.85, p = .03. To examine the nature of this interaction, we analyzed helping inclinations separately for male and female participants. For the men, a significant Disorder × Target Sex interaction was obtained, F(1, 75) = 6.49, p = .01. This interaction followed the same pattern as all of the previous measures (see Table 1); that is, men were significantly less inclined to help in gender-typical cases than in gender-atypical cases. For women, however, there were no significant effects, and women were relatively inclined to help across all cases (all ps > .25). This pattern comports with the literature indicating that women are socialized to be generally helpful in the kinds of caring interpersonal contexts that were sampled by our helping measure (e.g., offering emotional support, providing advice; see Eagly and Crowley, 1986, for a review).

Belief Measures
As a possible window onto the underlying cause of the tendency for stigma to be greater for gender-typical cases, several beliefs about the case were assessed. The first item measured the extent to which the problem was viewed as a genuine mental disturbance. Depression (M = 5.29) was viewed as a mental disturbance to a greater extent than alcoholism (M = 4.57), F(1, 163) = 9.21, p = .003. More important, there was a significant Disorder × Target Sex interaction, F(1, 163) = 4.71, p = .03; as shown in Table 1, gender-atypical problems were more likely to be seen as a mental disturbance than were gender-typical problems.

A second measure assessed the extent to which respondents believed the problem had a biological cause. In this case there was a marginally significant Disorder × Target Sex, F(1, 162) =

<table>
<thead>
<tr>
<th>Case study</th>
<th>Alchoholism</th>
<th>Depression</th>
<th>Gender-typical</th>
<th>Gender-atypical</th>
<th>Effect size (d) for gender typicality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Male target</td>
<td>Female target</td>
<td>Male target</td>
<td>Female target</td>
<td>Male target</td>
</tr>
<tr>
<td>Negative affect</td>
<td>3.25 (0.17)</td>
<td>2.74 (0.18)</td>
<td>1.29 (0.17)</td>
<td>1.76 (0.17)</td>
<td>2.50 (0.15)</td>
</tr>
<tr>
<td>Sympathetic affect</td>
<td>3.52 (0.10)</td>
<td>4.08 (0.10)</td>
<td>4.25 (0.10)</td>
<td>3.96 (0.17)</td>
<td>3.76 (0.13)</td>
</tr>
<tr>
<td>Inclination to help</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All participants</td>
<td>4.62 (0.13)</td>
<td>4.99 (0.13)</td>
<td>5.15 (0.13)</td>
<td>4.96 (0.13)</td>
<td>4.02 (0.11)</td>
</tr>
<tr>
<td>Male participants</td>
<td>4.32 (0.23)</td>
<td>5.03 (0.22)</td>
<td>5.21 (0.23)</td>
<td>4.78 (0.22)</td>
<td>4.56 (0.20)</td>
</tr>
<tr>
<td>Female participants</td>
<td>4.92 (0.14)</td>
<td>4.96 (0.16)</td>
<td>5.08 (0.14)</td>
<td>5.14 (0.14)</td>
<td>5.03 (0.10)</td>
</tr>
<tr>
<td>Problem is due to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mental disturbance</td>
<td>4.32 (0.23)</td>
<td>4.83 (0.24)</td>
<td>5.55 (0.24)</td>
<td>5.03 (0.23)</td>
<td>4.68 (0.18)</td>
</tr>
<tr>
<td>Problem has a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biological cause</td>
<td>3.85 (0.20)</td>
<td>4.68 (0.20)</td>
<td>4.15 (0.20)</td>
<td>4.25 (0.19)</td>
<td>4.08 (0.14)</td>
</tr>
</tbody>
</table>

Note. Standard deviations are given in parentheses. For each case, participants rated their affective reactions on 6-point scales (1 = not at all, 6 = very much), rated how likely they would be to help the target on a 6-point scale (1 = not at all likely, 6 = very likely), and used 7-point Likert-type rating scales (1 = strongly disagree, 7 = strongly agree) to indicate how strongly they agreed that the target person was experiencing a genuine mental disturbance and that the problem likely has a biological cause.
3.38, \( p = .068 \). The means in Table 1 indicate that gender-atypical disorders were more likely to be viewed as having a biological cause than were gender-typical ones. Given that the perception of biological causation is associated with reduced attributions of personal responsibility for a psychological disorder (e.g., Phelan, Cruz-Rojas, & Reiff, 2002), this pattern may help account for the reduced stigma evident in response to the gender-atypical cases.

The two other belief measures did not produce any reliable effects involving the target sex variable. They revealed only that alcoholism is seen as reflecting a character defect to a greater extent than depression (\( M_s = 4.06 \) vs. 2.38, respectively), \( F(1, 163) = 23.49, p < .001 \), and that the alcoholism case was viewed as more unusual than the depression case (\( M_s = 3.16 \) vs. 2.66, respectively), \( F(1, 162) = 5.03, p = .03 \).

**DISCUSSION**

These results paint a consistent picture that gender-atypical mental illnesses elicit more favorable reactions than gender-typical ones. When people deviate from gender scripts in this context, it suggests the existence of a genuine mental disturbance, and one which may have a biological cause. These beliefs bear on the perceived controllability of the stigmatized condition, such that the target is likely to be seen as less personally responsible for his or her disorder (Phelan et al., 2002; Weiner, Perry, & Magnusson, 1986). In turn, perceivers experience less negative affect, greater sympathy, and (among men) greater inclinations to help the person. Conversely, gender-typical mental illness symptoms may lend themselves readily to blaming the victim for enacting more extreme forms of “typical” behavior patterns associated with their gender, presumably implying more personal responsibility.

On a priori grounds, it seemed equally possible that gender-atypical disorders would evoke greater stigma, but this was clearly not the case. Stigmatizing individuals for gender deviance is certainly a real phenomenon, but it may be most evident in situations in which the dominant motivation is to defend existing social roles against modification (Rudman & Fairchild, 2004). Such motivation was apparently not prominent in the current context; instead, perceivers seemed primarily motivated to understand why the disorder was occurring, and they used gender typicality as a factor in their attributional analysis, as noted above.

In summary, gender does appear to be a factor in mental-illness stigma, and stigma-busting strategies (Corrigan & Penn, 1999) might profit from consideration of the contribution made by gender stereotypes to the discrimination faced by persons experiencing psychological disorders. The current research focused on the reactions of lay persons, and it is important to determine whether similar patterns characterize the reactions of mental health professions and, indeed, of persons with mental illnesses themselves (i.e., self-stigma; see Corrigan & Watson, 2002).

**Acknowledgments**—This research was made possible by the Time-Sharing Experiments for the Social Sciences program, National Science Foundation Grant 0094964 (Diana Mutz and Arthur Lupia, principal investigators).

**REFERENCES**


(Received 6/17/08; Revision accepted 8/22/08)
Dear Author,

During the copy-editing of your paper, the following queries arose. Please respond to these by marking up your proofs with the necessary changes/additions. Please write your answers clearly on the query sheet if there is insufficient space on the page proofs. If returning the proof by fax do not write too close to the paper's edge. Please remember that illegible mark-ups may delay publication.

<table>
<thead>
<tr>
<th>Query No.</th>
<th>Description</th>
<th>Author Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Queries</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>