"Taking charge" of stigma: Treatment seeking alleviates mental illness stigma targeting men
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Abstract
This research provided a novel experimental test of mental illness stigma and reactions to treatment seeking decisions for male and female targets. In Experiment 1 (N = 420), robust stigma emerged for targets exhibiting major depressive disorder; they were rated as less likeable, competent, and hirable than comparable normatively functioning targets. These results were unaffected by target gender. In Experiment 2 (N = 322), moderated mediation analysis revealed that a depressed male target embodying masculine stereotypes by seeking professional treatment experienced less stigma than an identical male target who did not seek treatment (and respect mediated this difference). For female targets, treatment seeking did not impact respect or stigma. Implications for the gender gap in treatment seeking and relevant interventions are discussed.

Reflecting mounting concerns over persistent mental illness stigma, President Obama issued an executive order expanding Federal programs designed to raise mental health awareness, combat biases experienced by those facing psychological disorders, and help remove barriers to treatment seeking (U.S. Department of Defense, 2014). However, the stigmatization of mental illness appears to have intensified over time (Hinshaw & Stier, 2008; Phelan, Link, Stueve, & Pescosolido, 2000), and is regularly ranked as more severe than nearly every other type of measured stigma (for a discussion, see Hinshaw, 2007). Moreover, some evidence suggests that men may be particularly vulnerable to mental illness stigma (e.g., Johnson, Oliffe, Kelly, Galdas, & Ogrodniczuk, 2012; Phelan & Basow, 2007; Primack, Addis, Syzdek, & Miller, 2010; Schnittker, 2000), which could help account for the large established gender gap in treatment seeking (Addis & Mahalik, 2003; Galdas, Cheater, & Marshall, 2005).

Research on mental illness stigma has frequently taken a correlational approach (for a discussion, see Hinshaw & Stier, 2008; Link, Yang, Phelan, & Collins, 2004), which cannot isolate causal relationships. Thus, experimental manipulations are needed to augment compelling correlational data (Corrigan, 2004). Existing experimental work has focused on reactions to people with psychological disorders relative to those with significant but subclinical distress (e.g., Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999) or physical disorders (e.g., Teachman, Wilson, & Komarovskykaya, 2006) rather than normatively functioning targets. Because individuals suffering from subclinical distress and physical disorders often encounter stigma themselves (Crandall & Moriarty, 1995; Derlega & Chaikin, 1976), these conservative comparisons may actually underestimate mental illness stigma rates.

Additionally, many existing studies do not directly assess the impact of target gender (e.g., Ben-Porath, 2002), or have generated mixed evidence for target gender differences (for a discussion, see Schnittker, 2000). Thus, the magnitude of mental illness stigma and existence of potential gender differences remain unclear, as do effective strategies to combat this stigma. In the current research, we sought to address these gaps by (1) Providing an experimental investigation of mental illness stigma; (2) Exploring whether depressed men encounter more stigma than similar women; and (3) Investigating a method for reducing stigma targeting men.

Mental illness stigma
Stigma has been defined as a “discrediting mark” that sets individuals apart from others (Goffman, 1963; Jones et al., 1984; Link & Phelan, 2001; Link et al., 2004). Despite some recent improvement in awareness of mental health issues (e.g., Angermeyer, Holzinger, & Matschinger, 2009; Highe, Luscombe, Davenport, Burns, & Hickie, 2006), individuals with mental illness continue to experience significant stigma (e.g., Byrne, 1997, 2000; Corrigan, 2004; Corrigan, Kerr, & Knudsen, 2005; Jorm, Korten, Jacomb, Christensen, &

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Henderson, 1999; Link et al., 2004; Phelan et al., 2000; Wahl, 1999). Indeed, the consequences of mental illness stigma often outweigh the impairments associated with psychological disorders themselves (Hinshaw & Stier, 2008; Markowitz, 1998; Sirey et al., 2001). Mental illness stigma is perpetrated by observers (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Gaebel, Baumann, Witte, & Zaske, 2002; Hinshaw & Stier, 2008) and also takes the form of self-stigma, whereby individuals experiencing psychological disorders internalize and express negative attitudes toward their own group (Corrigan, Watson, & Barr, 2006; Gaudiano & Miller, 2012; Rüsch, Angermeyer, & Corrigan, 2005; Teachman et al., 2006).

To effectively explore and combat mental illness stigma, it is necessary to establish a conceptual understanding of the stigmatization process (Phelan & Basow, 2007; Rüssch et al., 2005). Link and colleagues (Link & Phelan, 2001; Link et al., 2004) provide a theoretical framework comprising five distinct components of stigma. In the initial labeling component, differences between groups are identified and viewed as important. For example, while many human variations are considered relatively inconsequential (e.g., hair color, arm length), variability in psychological processes is considered important, resulting in the labeling of some individuals as mentally ill.

Once a group is effectively labeled, the four remaining components—stereotyping, separating, emotional reactions, and status loss and discrimination—often ensue (for a detailed discussion of each component, see Link & Phelan, 2001; Link et al., 2004). For example, individuals with psychological disorders are often stereotyped as dangerous (Angermeyer & Matschinger, 2003; Crisp et al., 2000; Feldman & Crandall, 2007; Link, Cullen, Frank, & Wozniak, 1987; Link et al., 1999; Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999; Phelan et al., 2000) and personally responsible for their illness (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Feldman & Crandall, 2007; Rüssch et al., 2005; Teachman et al., 2006; Weiner, Perry, & Magnusson, 1988). They experience significant social distancing, whereby observers seek to separate and avoid interactions with mentally ill individuals (Angermeyer & Matschinger, 2003; Lauber, Nordt, Falcato, & Rößler, 2004; Link et al., 1999). They also encounter negative emotional reactions, such as anger and fear (Corrigan et al., 2003; Phelan et al., 2000; Weiner et al., 1988). Finally, they may experience status loss and discrimination, such that they are less likely to receive employment opportunities (Farina & Felner, 1973; Farina, Felner, & Boudreau, 1973; Gaebel et al., 2002) and high quality healthcare (Thornicroft, Rose, & Kassam, 2007) relative to individuals without a history of mental illness. Thus, mental illness stigma is a multifaceted process associated with serious consequences.

Previous work on mental illness stigma consists largely of survey-based, nonexperimental (e.g., descriptive or correlational) approaches. For example, 84% of empirical articles on mental illness stigma published between 1995 and 2003 were non-experimental (Link et al., 2004). These studies frequently ask participants to respond to surveys measuring the five components of stigma reviewed above to determine the prevalence of self-reported stigma (e.g., Corrigan, 2004; Gaudiano & Miller, 2012; Pescosolido et al., 1999; Wahl, 1999; Wahl & Harman, 1988). Although these investigations provide invaluable information about the presence and nature of mental illness stigma, they are limited by participants’ willingness and ability to accurately self-report their own mental illness stigma (Hinshaw & Stier, 2008). Moreover, this nonexperimental approach cannot identify causal relationships, and therefore cannot conclusively identify the presence of mental illness as the factor responsible for stigma (Corrigan, 1994). Thus, experimental tests are needed to expand upon compelling correlational data.

Existing experiments on mental illness stigma address these concerns by manipulating the presence of mental illness (i.e., comparing participants’ reactions to targets with mental illness relative to control targets; Link et al., 2004). However, these experiments have utilized control targets experiencing their own potentially debilitating issues, such as physical health problems (Ben-Porath, 2002; Burke, Wang, & Dovidio, 2014, Experiment 1; Detweiler-Bedell, Detweiler-Bedell, Hazlett, & Friedman, 2008; Link et al., 1987) or serious but subclinical levels of distress and “troubled” functioning (Link et al., 1999; Pescosolido et al., 1999; Phelan & Basow, 2007; Schnittker, 2000). Of importance, as these targets also deviate from normative expectations, they are susceptible to their own significant levels of stigma (Crandall & Moriarty, 1995; Derlega & Chaiken, 1976; Jackson, 2005; Slade & Keating, 2009; see Schnittker, 2000, for a discussion of the potential confounds associated with the “troubled person” control). To our knowledge, experimenters have yet to compare mentally ill targets with those displaying normative levels of psychological functioning. As a result, the existing research may reflect conservative tests, and the true magnitude of mental illness stigma remains unclear.

**Gender and mental illness stigma**

Although gender is one of the primary characteristics affecting person perception (Stangor, Lynch, Duan, & Glass, 1992; Zarate & Smith, 1990), the impact of target gender on mental illness stigma is not yet well-understood. Literature reviews of mental illness stigma often do not explicitly discuss the potential role of target gender (e.g., Hinshaw & Stier, 2008; Link & Phelan, 2001; Link et al., 2004). As described above, nonexperimental studies frequently ask participants to self-report their attitudes toward the mentally ill as a general group (rather than mentally ill men and women separately), and therefore do not explore the possible impact of an
individual’s gender on the stigma they experience (e.g., Gaebel et al., 2002; Phelan et al., 2000; Teachman et al., 2006). Among experiments, some do not explore or report target gender effects (e.g., Feldman & Crandall, 2007; Link et al., 1999; Pescosolido et al., 1999; Wright, Jorm, & Mackinnon, 2011), and some include only male targets (e.g., Ben-Porath, 2002; Corrigan et al., 2003) or only female targets (e.g., Burke et al., 2014, Experiment 1; Detweiler-Bedell et al., 2008, Experiments 2 and 3).

A large body of literature on gender stereotyping suggests that men may be more vulnerable to mental illness stigma than comparable women. As observed by many researchers (e.g., Prentice & Carranza, 2002; Rudman, Moss-Racusin, Phelan, & Naults, 2012a; Williams & Best, 1990), gender stereotypes dictate that men are required to exhibit agency (e.g., stoicism, decisiveness, independence) and must not display weakness (e.g., vulnerability, emotionality, dependence); in contrast, women are required to enact communality (e.g., niceness, kindness, warmth) and must not demonstrate dominance (e.g., bossiness, ruthlessness, demandingness). When men and women violate these gender stereotypes, they encounter backlash, or severe social and economic penalties (Brescoll & Okimoto, 2010; Heilman & Wallen, 2010; Heilman, Wallen, Fuchs, & Tamkins, 2004; Moss-Racusin, Phelan, & Rudman, 2010; Rudman, 1998; Rudman & Glick, 1999, 2001; Rudman, Moss-Racusin, Phelan, et al., 2012; Rudman, Moss-Racusin, Glick, & Phelan, 2012).

Mental illness stigma may thus be particularly harsh for men, because experiencing mental illness may be viewed as a violation of men’s gender stereotypes (Mansfield, Addis, & Mahalik, 2003; Moss-Racusin, 2015). For example, a depressed man may be viewed as unable to take charge of his own problems (i.e., insufficiently agentic) and overly emotional (i.e., excessively weak), resulting in robust administration of the five components of stigma discussed above. Consistent with this idea, men often hesitate to seek treatment, as they may view mental illness as particularly incompatible with masculine gender stereotypes and therefore anticipating heightened mental illness stigma (Emslie, Ridge, Ziebland, & Hunt, 2006; Johnson et al., 2012; Mansfield et al., 2003; O’Brien, Hunt, & Hart, 2005; Oliffe & Phillips, 2008; Oliffe, Robertson, Kelly, Roy, & Ogrodniczuk, 2010; Primack et al., 2010). In contrast, because experiencing psychological distress likely does not violate women’s gender stereotypes, the mental illness stigma they encounter may be less severe.

Supporting these ideas, some experimental work finds that male targets encounter harsher mental health stigma relative to comparable female targets. For example, men who disclosed a personal problem were rated as significantly more poorly adjusted than identical women (Derlega & Chaikin, 1976). Similarly, men experiencing major depression, alcohol dependence, and subclinical distress were viewed as more dangerous and encountered more social distancing than identical women (Phelan & Basow, 2007). These results were replicated and also extended to targets experiencing schizophrenia and drug dependence (Schnittker, 2000), as well as social phobia and post-traumatic stress disorder (Reavley & Jorm, 2011).

Other previous work contradicts these patterns. Some experiments find no target gender effects (e.g., Burke et al., 2014, Experiment 2; Jorm et al., 1999), and others reveal greater stigma for women relative to men. For example, Wirth and Bodenhausen (2009) argue that mental illness stigma should be reduced when targets experience psychological disorders that are atypical for their gender group (e.g., men experiencing depression and women experiencing alcohol abuse), because these unexpected gender-atypical cases are more likely to be viewed as genuine. Supporting this idea, they found that depressed men were met with less negative affect, more sympathy, and higher helping intentions than the identical women. Thus, due to the relative under-examination of gender and the existing contradictory body of evidence that does exist, the role of target gender in mental illness stigma remains unclear.

**Gender and mental health treatment seeking**

One particularly important consequence of mental illness stigma is its ability to impede the utilization of needed mental health care (Corrigan, Druss, & Perllick, 2014). Treatment under-utilization is of great concern because mental health treatment is associated with positive outcomes such as greater psychological functioning, increased self-esteem, and decreased hopelessness (Handley et al., 2013; Smith & Glass, 1977). However, the threat of experiencing stigma often reduces the likelihood that people will seek and continue needed mental health treatment (Corrigan, 2004; Peris, Teachman & Nosek, 2008; Sirey et al., 2001). For example, the perception of mental illness stigma predicted discontinuing treatment among older adults diagnosed with depression (Sirey et al., 2001).

Of importance, men appear to be particularly vulnerable to the effects of stigma on treatment utilization. Indeed, men of varying ages, nationalities, and racial backgrounds seek mental health services less frequently than women, even when they have comparable emotional problems (Addis & Mahalik, 2003; Galdas et al., 2005). Thus, it is particularly important to explore methods to reduce mental illness stigma targeting men, and ultimately boost men’s rates of treatment utilization.

Although previous research has largely focused on the potential risks associated with treatment seeking (e.g., stigma; Ben-Porath, 2002; Schomerus, Matschinger, & Angermeyer, 2009; Tucker et al., 2013), we propose that treatment seeking
may function as a counterintuitive method for combating mental illness stigma targeting men. As discussed, men encounter backlash when they violate male gender stereotypes calling for autonomy, self-reliance, and problem-solving abilities (e.g., Moss-Racusin, 2015). For example, men who behaved passively and failed to solve the problem of a bad course grade were viewed more negatively than the identical women, and men who actively addressed this problem (Costich, Feinstein, Kidder, Marecek, & Pascale, 1975, Experiment 2). Of importance, actively seeking treatment to address the problem of mental illness may demonstrate the autonomy, self-reliance, and decisiveness that are required of men, while failing to seek treatment may communicate the passivity, weakness, and inaction forbidden for men (Addis & Mahalik, 2003; Em slie et al., 2006; Hernandez, Han, Oliffe, & Ogrodniczuk, 2014; Mansfield et al., 2003; Moss-Racusin, 2015). Thus, taking charge of mental illness by obtaining needed psychological treatment may reaffirm masculine gender stereotypes, thereby alleviating mental illness stigma for men.

In contrast, gender stereotypes require women to enact communality, and forbid them from demonstrating dominance (Rudman, Moss-Racusin, Phelan, et al., 2012; Rudman, Moss-Racusin, Glick, et al., 2012b). Because seeking treatment for psychological disorders does not clearly demonstrate women’s required communality nor forbidden dominance, it should not impact perceptions of women with mental illness. That is, while help seeking may be viewed as more normative for women relative to men and is certainly not forbidden for women (Galdas et al., 2005), seeking help in and of itself does not provide evidence of a woman’s potentially communal nor dominant nature, and thus should not ameliorate nor exacerbate mental illness stigma targeting women. In other words, we suggest that treatment seeking may reduce mental illness stigma to the extent that it allows targets to explicitly demonstrate the appropriate gender stereotypes. Because treatment seeking is not highly relevant to female gender stereotypes, it should not positively or negatively impact mental illness stigma levels for women. In contrast, because treatment seeking allows men with mental illness to enact masculine stereotypes, it should alleviate their experience of stigma.

The current research

We sought to provide an experimental investigation of the magnitude of mental illness stigma and the potential impact of target gender (Experiment 1), and test the novel idea that treatment seeking may serve a protective function for men (Experiment 2). We chose to focus on targets experiencing depression, because this condition is widespread yet under-treated (Centers for Disease Control and Prevention, 2010), and has received comparatively little attention in previous work on mental illness stigma (Ben-Porath, 2002; Burke et al., 2014). Moreover, because depression is perceived as reflecting vulnerability and emotionality (Em slie et al., 2006; O’Brien et al., 2005) and is more frequently diagnosed in women than men (Piccinelli & Wilkinson, 2000), it may be viewed as highly incompatible with male gender stereotypes (Johnson et al., 2012). As a result, men may be particularly at risk for mental illness stigma when experiencing major depression relative to other psychological disorders. Thus, if gender differences in mental illness stigma do exist, they may be likely to emerge in this context.

Additionally, we chose to focus on status loss and discrimination because many previous studies have examined the four other components of mental illness stigma included in Link and colleagues’ framework (Link & Phelan, 2001; Link et al., 2004). Indeed, a systematic review of mental illness stigma literature revealed that stereotyping and labeling have received particular attention, while comparatively little work has examined status loss and discrimination (Link et al., 2004). For example, of the sixty-two experiments on mental health stigma conducted from 1995 to 2003, none assessed the experience of status loss and discrimination (Link et al., 2004, Table 3).

Thus, we attempted to expand upon previous work by examining status loss and discrimination associated with mental illness within a workplace setting relevant for these outcomes. Of importance, stigma in employment settings is a particular concern for depressed patients (Roeloffs et al., 2003). In keeping with a large body of literature investigating professional status loss and discrimination toward other groups (for summaries, see Moss-Racusin, 2015; Rudman & Phelan, 2008), we investigated professional targets’ perceived likeability, competence, and hireability.

Experiment 1

Our goals in Experiment 1 were to (1) provide an experimental test of mental illness stigma by comparing reactions to depressed and normatively functioning targets, and (2) determine whether men and women experience different levels of this stigma. To do so, we exposed participants to a vignette depicting either a male or identical female target who would meet criteria in the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5, American Psychiatric Association, 2013) for major depressive disorder, or a similar male or female target who exhibited normal levels of psychological functioning. We then measured mental illness stigma by assessing participants’ perceptions of the target’s likeability, competence, and hireability. We were guided by one a-priori hypothesis, and one exploratory research question.

Hypothesis: Mental illness stigma will emerge. Specifically, we expected a main effect of target mental health status, with depressed targets rated as less likeable,
competent, and hireable than similar normatively functioning targets. 

**Exploratory research question:** Given the contradictory existing findings discussed above, it was not possible to make an a priori prediction regarding the impact of target gender on mental illness stigma. Instead, we posed an exploratory research question: Do men experience greater levels of mental illness stigma than women when they experience depression? To explore this idea, we tested for main and interaction effects associated with target gender.

**Method**

**Participants and procedure**

Participants (N = 401, 49% female) were fluent English speakers over the age of 18 residing in the United States. Of participants, 72% were White, 7% were Hispanic, 7% were Black, 6% were East Asian, 3% were Southeast Asian, 2% were multiracial, 1% were South Asian, 1% were Native American, and 1% reported another racial background. Additionally, 32% of participants were 18–25 years old, 26% were 26–30, 17% were 31–35, 8% were 36–40, 5% were 41–45, 5% were 46–50, 3% were 51–55, 2% were 56–60, 2% were 61–65, and less than 1% were 66 or older. Of importance, 32% of participants (51% female) reported that they had received treatment for a mental health issue at some point in their lives, while 6.5% of participants (58% female) reported that they had worked in the mental health field at some point in their lives.

The experimental design was a 2 (target mental health status: depressed, normative functioning) × 2 (target gender: male, female) between-subjects full factorial. Participants were recruited through Amazon Mechanical Turk (mTurk), a website through which users can accept and complete human intelligence tasks (HITs) for monetary compensation. Prior studies have suggested that mTurk produces large, relatively diverse samples for social science research (e.g., Buhrmester, Kwang, & Gosling, 2011; Mason & Suri, 2012; Paolacci, Chandler, & Ipeirotis, 2010). Participants were recruited for an experiment entitled “First Impressions,” which was listed under the keywords “Survey” and “Impressions.” The experiment was described as investigating “how individuals form first impressions of people whom they read about.” Participants were told that they would be randomly selected to “read about one person from among the profiles of several different people, who may be experiencing different types of situations.” In keeping with standard research practices, we restricted participants to those who had a previous HIT approval rate of 95% (i.e., 95% of their previous HITs had been completed successfully). Additionally, we required that participants had completed at least 100 prior HITs.

All measures were administered using the program Qualtrics, such that the presentation order of the dependent variable scales and the items within each scale were randomized. After reading the target vignette, participants completed the dependent variable scales, attention and manipulation checks, and demographics. They were then fully debriefed and compensated $0.75, in keeping with established Mechanical Turk compensation rates.

**Materials**

**Target vignettes**

We created a vignette describing a target person displaying symptoms that would meet diagnostic criteria for major depressive disorder according to the DSM-5 (American Psychiatric Association, 2013). Specifically, we modified vignettes used in previous research (Coles, Schubert, Heimberg, & Weiss, 2014; Link et al., 1999) to fit the relevant workplace context. For example, the target was described as “Feeling sad and less interested in doing the things he/she used to enjoy...hasn’t felt like eating and has lost about 10 pounds he/she hadn’t intended to lose...feels tired in the mornings and throughout much of the day...noticed that it’s hard to stay focused and that even minor decisions have felt overwhelming...beginning to feel worthless, and often feels like he/she wants to cry.”

Next, we created a vignette depicting a similar target displaying normative functioning. We removed all language related to depressive symptomatology, and modified remaining language to convey nondepressed functioning. For example, the target was described as having “noticed that he/she is able to stay focused and that even major decisions have felt manageable...beginning to feel that his/her life is ‘on track’ and often feels happy.” Each vignette was attributed to either a male (John) or female (Jennifer) target. Of importance, these names have been used in previous research, for which they were pre-tested to ensure that they did not differ on relevant traits such as perceived intelligence, likeability, and recognize ability (Brescoll & Uhlmann, 2005; Moss-Racusin, Dovidio, Brescoll, Graham, & Handelsman, 2012).

**Likeability**

Participants responded to five items used in previous research (Moss-Racusin et al., 2012; Rudman, Moss-Racusin, Glick, et al. 2012; Pattyn & Bracke, 2013). Items included, “How much do you like this person?” (Moss-Racusin et al., 2012; Rudman, Moss-Racusin, Glick, et al. 2012) and “How willing would you be to make friends with this person?” (Pattyn & Bracke, 2013). For all outcome variables, answers were provided on a scale ranging from 1 (not at all) to 7 (very
much), and averaged to form the indices with greater numbers indicating higher levels of each variable ($\alpha = .94$).

**Competence**

We utilized four items modified from previous research (Moss-Racusin et al., 2012; Rudman, Moss-Racusin, Glick, et al. 2012). For example, “Did this person strike you as competent?” and “How qualified did this person seem?” ($\alpha = .93$).

**Hireability**

We modified three items from previous research (Moss-Racusin et al., 2012; Rudman, Moss-Racusin, Glick, et al. 2012) to assess targets’ perceived hireability. Items included, “If this person were applying for a new job, do you think he/she would be selected for an interview?” and “If this person was applying for a new job, do you think he/she would be hired?” ($\alpha = .95$).

**Attention and manipulation checks**

We included three attention checks administered throughout the survey (e.g., “The answer to this question is 5. Please select 5 for this question”) to ensure that participants were engaged in the materials and responding attentively.

We sought to ensure that participants correctly recalled the gender and mental health status of the target they read about. Manipulation checks included, “What was the gender of the person you read about?” (0 = male, 1 = female), and “What life situation was the person you read about experiencing?” (0 = The person I read about was having trouble concentrating and making decisions, and was feeling sad and worthless, 1 = The person I read about was not having trouble concentrating and making decisions, and was feeling content and valuable).

To check the perceived psychological functioning of the target and thereby to ensure that we successfully manipulated targets’ mental health status, we also modified the CES-D 10 scale (commonly used to assess respondents’ own psychological functioning: Radloff, 1977). This 10 item scale consisted of items such as, “How likely is it that during the past week, the person you read about...Felt bothered by things that don’t usually bother him/her?” “Felt that everything he/she does is an effort?” “Felt hopeless about the future?” etc. Responses were given on a scale ranging from 1 (not at all) to 7 (very much). Responses were averaged to form the psychological functioning index ($\alpha = .92$), with larger numbers representing perceptions of more disordered psychological functioning.

**Results**

**Attention and manipulation checks**

Analyses revealed that 98% of participants passed the first attention check, 98% passed the second attention check, and 99% passed the third attention check. Turning to the manipulation checks, fully 100% of participants reported the correct target gender and mental health status. Moreover, a 2 X 2 ANOVA examining mean differences in target psychological functioning as a function of target mental health status and gender revealed only the expected main effect of target mental health status, $F(1, 3) = 1236.08, p < .001$, $\eta^2 = .76$, such that depressed targets ($M = 5.76, SD = .88$) were viewed as considerably more poorly functioning than normatively functioning targets ($M = 2.15, SD = 1.15$). Neither the main effect of target gender nor the two-way interaction approached significance, $F$s < .04, $p$s > .60, $\eta^2$s < .001, suggesting that the mental health status manipulation was equally effective for male and female targets. Taken together, these results suggest that the independent variables were successfully manipulated.

**Preliminary analyses**

We conducted a series of ANOVAs to determine whether participant demographic variables (gender, racial background, age, and mental health status) impacted each of the three dependent variables. Main and interaction effects associated with participant race and age did not significantly impact results (all $p$s > .21, $\eta^2$s < .005). However, a main effect of participant gender emerged for each dependent variable (all $F$s > 6.65, $p$s < .05, $\eta^2$s < .02), such that women rated all targets as more likeable, competent, and hireable than men. Of importance, no interaction effects associated with participant gender were significant (all $p$s > .10, $\eta^2$s < .007), and the pattern of results was unchanged when we included participant gender as a predictor.

Because only 6.5% (26) of participants reported experience working in a mental health field, we could not meaningfully explore whether this variable impacted results. In contrast, 32% (127) of participants reported receiving treatment for a mental health issue, and we were thus able to examine the impact of this variable. Main effects of participants’ own treatment history emerged, such that participants who had received treatment rated all targets as more likeable and competent than those who had not ($F$s > 6.75, $p$s < .01, $\eta^2$s > .02); however, the main effect of participants’ mental health treatment history was non-significant for hireability, $F(1, 7) = 2.74, p = .10, \eta^2 = .007$. Of importance, no interaction effects associated with this variable were significant (all $p$s > .13, $\eta^2$s < .003), and the pattern of results was unchanged when it was included as a predictor. In the
interest of parsimony, we thus collapsed across participant
gender and treatment history for all subsequent analyses.

**Mental illness stigma**

To assess our Hypothesis and exploratory research question,
we conducted a series of ANOVAs with target gender and
mental health status predicting each dependent variable.
Results are presented in Table 1. In strong support of our
Hypothesis, robust mental health status main effects emerged
for each dependent variable, such that depressed targets were
rated as significantly less likeable, competent, and hireable rel-
ative to similar normatively functioning targets (all
main effect of target gender emerged for likeability,
\(F\) = 5.72, \(p<.01\), \(\eta^2 = .20\), medium, and large effect sizes for \(d\) are .20, .50, and .80, respectively (Cohen, 1988).

| Dependent Variables by Target Mental Health Status and Gender (Experiment 1) |
|----------------------------------|------------------|------------------|
|                                  | Male   | Female          | Male   | Female          |
|                                  | \(M\)  | SD   | \(M\)  | SD   | \(M\)  | SD   | \(t\)  | \(d\)  |
| Likeability                      | 3.72b  | 1.11 | 3.88b  | 1.32 | 5.22b  | .85  | 5.49b  | 1.06 | 14.06*** | 1.42  |
| Competence                       | 3.68b  | 1.08 | 3.71a  | 1.11 | 5.72b  | .83  | 5.72b  | 1.04 | 19.76***  | 1.97  |
| Hireability                      | 3.13a  | 1.11 | 3.19a  | 1.23 | 5.57b  | .90  | 5.59b  | 1.10 | 21.37***  | 2.14  |

Note. \(N\) male depressed = 101, \(N\) male normative = 99, \(N\) female depressed = 101, \(N\) female normative = 99. Means not sharing a subscript differ within each row.

**Target gender differences**

Addressing our exploratory research question, a marginal
main effect of target gender emerged for likeability, \(F(1, 3) = 3.65, p = .06, \eta^2 = .01\), such that female targets
\((M = 4.68, SD = 1.25)\) were rated as marginally more likeable
than male targets \((M = 4.47, SD = 1.44)\) in keeping with a
large body of literature suggesting that women are often viewed as more likeable than men (e.g., Eagly & Mladinic, 1994; Eagly, Mladinic, & Otto, 1991; Moss-Racusin et al., 2012; Rudman & Goodwin, 2004). However, this main effect was not qualified by an interaction with target mental health status, \(F(1, 3) = .24, p = .62, \eta^2 = .001\). Additionally, no main or interaction effects associated with target gender approached significance for competence or hireability (all \(F\)s < .42, all \(p\)s < .01). Thus, there was no evidence that mental illness stigma varied as a function of target gender.

**Discussion**

As predicted, results provided novel experimental evidence of
robust mental illness stigma. Specifically, men and women
experiencing depression were penalized with significantly low-
ered likeability, competence, and hireability relative to similar targets exhibiting normative psychological functioning. Indeed, the large effect sizes obtained here suggest that previous research (utilizing control targets subject to their own stigma) may have underestimated the extent of stigma experi-
enced by people with depression. However, addressing our research question, depressed men and women encountered comparable levels of mental illness stigma. This suggests that male gender stereotypes calling for men to be strong and stoic may not manifest in greater mental illness stigma for men rel-
ative to women. In sum, results revealed that individuals experi-
encing depression face robust mental illness stigma, and that this stigma is not differentially applied to men and women.

**Experiment 2**

Experiment 1 revealed strikingly high levels of mental illness stigma. In Experiment 2, our goal was to explore whether depressed men experience reduced stigma when they behave in line with traditional masculine gender stereotypes (Rud-
man, Moss-Racusin, Phelan, et al. 2012) by seeking treatment (i.e., “taking charge” of their depression). In contrast, as discussed above, although treatment seeking may be viewed as highly normative for women (Galdas et al., 2005), it likely does not provide the clear demonstration of adherence to female gender stereotypes that should reduce stigma (Prentice & Carranza, 2002). Thus, stigma targeting depressed women
should not vary as a function of treatment seeking.

Additionally, we sought to understand the mechanism that might account for the reduction in stigma against male
treatment seekers. Of importance, previous literature has revealed that decreased respect plays a key role in negative reactions to stereotype violators (Brescoll, Dawson, & Uhl-
mann, 2010; Brescoll & Uhlmann, 2008; Heilman & Wallen, 2010). We thus predicted moderated mediation, such that
men (but not women) who behave in line with gender ster-
eotypes by seeking treatment for depression are afforded greater respect than those who do not seek treatment, and

thus experience lower levels of stigma (see the hypothesized model depicted in Figure 1).

To test these ideas, we manipulated target gender and treatment seeking status and again measured mental illness stigma (i.e., target likeability, competence, and hireability), as well as levels of respect afforded to the target. Specific predictions were as follows.

**Hypothesis 1a.** Treatment seeking will alleviate mental illness stigma for men. Specifically, an interaction should emerge between treatment seeking and target gender, such that a male target who seeks treatment for depression will be rated as more likeable, competent, and hireable than an identical man who does not seek treatment.

**Hypothesis 1b.** Treatment seeking will not impact mental illness stigma for women. Specifically, the interaction between treatment seeking and target gender should reveal that female targets who seek treatment are not viewed as more likeable, competent, or hireable relative to female targets who do not seek treatment.

**Hypothesis 2.** Moderated mediation results should reveal that perceived respect accounts for the relationship between treatment seeking and mental illness stigma for male targets only. Specifically, the indirect effect of treatment seeking on mental illness stigma via respect will be significant for the male but not female target (see Figure 1).

**Method**

**Participants and procedure**

As in Experiment 1, participants ($N = 322, 57\%$ female) were fluent English speakers over the age of 18 residing in the United States. Participant racial composition was $76\%$ White, $8\%$ Black, $5\%$ East Asian, $4\%$ Hispanic, $2\%$ Multiracial, $1\%$ South Asian, $1\%$ Middle Eastern, $1\%$ Native American, $1\%$ Southeast Asian, and $1\%$ identified as other. Of participants, $23\%$ were between 18 and 25 years of age, $18\%$ between 31 and 35 years, $15\%$ between 26 and 30 years, $10\%$ between 36-40 years, $9\%$ between 41 and 45 years, $6\%$ between 51 and 55 years, $4\%$ between 46 and 50 years, $6\%$ between 56 and 60 years, $5\%$ between 61 and 65 years, $2\%$ between 66 and 70 years, $1\%$ between 71 and 75 years, and $1\%$ between 76 and 80 years. Finally, $33\%$ of participants ($70\%$ female) had received treatment for a mental health problem, and $6\%$ ($67\%$ female) had worked in the mental health field.

The experimental design was a $2 \times 2$ (target treatment seeking status: yes, no) X 2 (target gender: male, female) between-subjects full factorial. As in Experiment 1, participants were recruited through Amazon Mechanical Turk, and we followed the same recruitment strategies (including the same study name, description, search terms, and participant inclusion criteria). We were careful to exclude any participants who had previously participated in Experiment 1. Following the procedure described in Experiment 1, participants were exposed to the first impressions cover story, read one of the target vignettes, completed all measures, and were fully debriefed and compensated $0.75.

**Materials**

**Target vignettes**

We used the depressed target vignettes used in Experiment 1, but added a manipulation of treatment seeking. In the no treatment seeking condition, the last line read: “John/Jennifer feels that he/she can manage his/her situation on his/her own. He/she has decided he/she does not need to seek the help of a professional psychologist.” In the treatment seeking condition, the last line was: “John/Jennifer feels that his/her situation is more than he/she can manage on his/her own. He/she has decided he/she needs to seek the help of a professional psychologist.”

**Dependent variables**

The likeability ($x = .90$), competence ($x = .87$), and hireability ($x = .92$) scales were identical to those used in Experiment 1.

**Respect**

To assess Hypothesis 2, we added a measure of the perceived respectability of the target, using a three-item scale modified from Heilman and Wallen (2010). Questions included “How respected do you think this individual is?” and “How much do you think this is an individual who gets pushed around?”
Responses were provided on a scale ranging from 1 (not at all) to 7 (very much), and were averaged to form the respect index, with higher numbers indicating greater levels of respect (z = .82).

**Attention and manipulation checks**

We used the same attention checks and target gender manipulation check used in Experiment 1. We assessed the effectiveness of the target treatment seeking status manipulation using the item, “Did the person you read about choose to seek professional mental health treatment? (0 = yes, 1 = no).” We again employed the CESD-10 (Radloff, 1977) to assess targets’ perceived psychological functioning (z = .85).

**Results**

**Attention and manipulation checks**

Consistent with Experiment 1, 97% of participants passed the first attention check, 98% passed the second attention check, 98% passed the third attention check, and 100% passed the gender and treatment seeking manipulation checks. An 2 X 2 ANOVA exploring mean differences in target psychological functioning as a function of target gender and treatment seeking status revealed that neither main effect nor their interaction significantly predicted psychological functioning, all Fs < 2.85, all ps > .10, η²s < .009. Consistent with Experiment 1, this suggests that perceived depression levels did not vary as a function of target gender nor treatment seeking status. In other words, targets were perceived as equally impaired regardless of gender and treatment seeking decisions. Of importance, this addressed the potential concern that our treatment seeking manipulation was inadvertently confounded with disease severity.

**Preliminary analyses**

As in Experiment 1, participant age and race had no effects (all ps > .17, η²s < .003). In contrast to Experiment 1, no main or interaction effects associated with participant gender were significant (all Fs < 2.26, ps > .12, η²s < .004). Finally, consistent with Experiment 1, main effects of participants’ mental health treatment history emerged for targets’ likeability and competence (Fs > 3.53, ps < .06, η²s < .03), such that participants who had received mental health treatment in the past viewed all targets as more likeable and competent than did participants who had not received treatment. No effects associated with participants’ mental health treatment history emerged for hireability, F(1, 7) = .44, p = .51, η² = .000. Once again, participants’ own mental health treatment status did not interact with target gender or treatment seeking for any dependent variable, all Fs < 2.32, all ps > .13, η²s < .002. Thus, as in Experiment 1, we collapsed across participant gender and mental health treatment history for all subsequent analyses.

**Target condition differences**

To assess Hypothesis 1a and 1b, we conducted a series of ANOVAs with target gender and treatment seeking status predicting each dependent variable. Consistent with standard practices to adjust for multiple comparisons, we utilized a Bonferroni correction to examine significant differences between estimated marginal means. As predicted, significant or marginal interactions between target gender and treatment seeking emerged for likeability, F(1, 3) = 4.07, p = .04, η² = .01; competence, F(1, 3) = 2.91, p = .08, η² = .01; and hireability, F(1, 3) = 4.17, p = .04, η² = .01. Supporting Hypothesis 1a’s prediction that treatment seeking would alleviate mental illness stigma for men, Bonferroni-corrected simple effects tests revealed that the male treatment seeking target (M = 4.37, SE = .14) was rated as more likeable than the identical male target who did not seek treatment (M = 3.73, SE = .14), p = .001, mean difference CI (.26, 1.01). Similarly, the male treatment seeker (M = 4.43, SE = .14) was rated as more competent than the identical male who did not seek treatment (M = 3.84, SE = .14), p = .002, mean difference CI (.22, .97). Finally, the male treatment seeker (M = 3.59, SE = .15) was viewed as more hireable than the identical male who did not seek treatment (M = 2.89, SE = .14), p = .001, mean difference CI (.28, 1.13).

In contrast, Hypothesis 1b predicted that treatment seeking would not impact perceptions of female targets. Supporting this idea, Bonferroni-corrected simple effects tests revealed that the female treatment seeking target (M = 4.14, SE = .13) was rated as equally likeable as the identical female target who did not seek treatment (M = 4.04, SE = .13), p = .59, mean difference CI (−.26, .47). Similarly, the female treatment seeker (M = 4.18, SE = .13) was rated as equally competent relative to the identical female who did not seek treatment (M = 4.04, SE = .13), p = .46, mean difference CI (−.23, .50). Finally, the female treatment seeker (M = 3.30, SE = .15) was viewed as equally hireable relative to the identical female who did not seek treatment (M = 3.21, SE = .15), p = .67, mean difference CI (−.32, .50).

**Moderated mediation analyses**

Target likeability, competence, and hireability were highly correlated across target gender and treatment seeking conditions (rs > .65, ps < .001). Thus, to present parsimonious moderated mediation analyses and to maximize statistical power, we formed a composite workplace outcomes variable by averaging the likeability, competence, and hireability indices (z = .94). This workplace outcomes variable was used for all moderated mediation analyses, though the same pattern.
of results was obtained when we ran moderated mediation analyses separately for each dependent variable.

We conducted moderated mediation analyses to determine whether perceived respect accounted for the treatment seeking condition difference observed for male targets. Specifically, we used conditional process analysis to test a moderated mediation model (Figure 1), such that target gender should moderate both Path a between treatment seeking (the independent variable) and respect (the mediator), as well as Path c' between the independent variable (treatment seeking) and the dependent variables (the workplace outcomes of likeability, competence, and hireability). Because respect is broadly linked to positive workplace outcomes for women and men (Brescoll et al., 2010; Brescoll & Uhlmann, 2008; Heilman & Wallen, 2010), we did not expect that target gender would moderate this relationship. In other words, we expected that Path b between respect and workplace outcomes should be significantly positive for male and female targets. In contrast, only men should show links between treatment seeking and respect (Path a), and between treatment seeking and workplace outcomes (Path c'). Thus, we predicted a direct effect and first stage moderation model (Edwards & Lambert, 2007).

Examining the intercorrelations between the independent variable (treatment seeking), mediator (respect), and dependent variable (workplace outcomes) separately by target gender revealed a pattern consistent with the predicted moderated mediation (see Table 2). Specifically, all intercorrelations were significant for the male target, but only the correlation between respect and workplace outcomes was significant for the female target. Thus, we proceeded to test Hypothesis 2’s predicted moderated mediation.

Following best practices, we chose not to test mediation separately by target gender (i.e., the “subgroup approach”) because it reduces statistical power and does not directly examine potential differences in mediation at different levels of the moderator (Edwards & Lambert, 2007). Instead, we conducted a more robust omnibus test of moderated mediation for the full sample by utilizing conditional process modeling (Hayes, 2013). To do so, we employed the PROCESS Macro for SPSS using 5,000 bootstrap samples (Hayes, 2013). In keeping with our hypothesized model (Figure 1), we utilized PROCESS model 8, which tests a direct effect and first stage moderation model (Edwards & Lambert, 2007; Hayes, 2013). Specifically, as shown in Figure 1, we tested for mediation with moderation of Path a between the independent variable (treatment seeking) and mediator (respect), as well as Path c' between the independent variable (treatment seeking) and dependent variable (composite workplace outcomes). See Table 3 for results.

As expected, evidence of moderated mediation emerged. Specifically, the confidence interval of the moderated mediation index did not include zero, Index = .37, SE = .18, 95% confidence interval = .024, .732. This omnibus test of moderated mediation suggests that, as predicted, target gender significantly moderated Path a (treatment seeking → respect) and c' (treatment seeking → workplace outcomes), but not b (respect → workplace outcomes). Moreover, as shown in Table 3 and supporting Hypothesis 2, evidence of mediation emerged for the male target. Specifically, the conditional indirect effect of treatment seeking on workplace outcomes via respect was significant for men (i.e., the confidence interval did not encompass zero). In contrast, as expected, evidence of mediation did not emerge for the female target, in that the confidence interval for the conditional indirect effect included zero.

Discussion

As expected, Experiment 2 revealed that treatment seeking alleviates mental illness stigma for men. Specifically, a male target who chose to seek treatment for depression experienced less stigma than an identical male target who chose not to seek treatment. Supporting the idea that treatment seeking reduces men’s stigma because it embodies masculine gender stereotypes, moderated mediation analyses revealed that perceived respect mediated the treatment seeking condition difference for men, such that a male treatment seeker

<table>
<thead>
<tr>
<th>Path/Effect</th>
<th>B</th>
<th>SE</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>-.62*</td>
<td>.17</td>
<td>-.956, -.282</td>
</tr>
<tr>
<td>b</td>
<td>.75*</td>
<td>.04</td>
<td>.669, .826</td>
</tr>
<tr>
<td>c'</td>
<td>-.18</td>
<td>.12</td>
<td>-.427, .061</td>
</tr>
<tr>
<td>Male target: Conditional indirect effect</td>
<td>-.46</td>
<td>.13</td>
<td>-.710, -.223</td>
</tr>
<tr>
<td>Female target: Conditional indirect effect</td>
<td>.17</td>
<td>.17</td>
<td>-.352, .167</td>
</tr>
</tbody>
</table>

Note. N_male treatment seeking = 79, N_male non-treatment seeking = 78, N_female treatment seeking = 85, N_female non-treatment seeking = 80. Estimates are unstandardized. Conditional indirect effects reflect mediation effects separately for the male and female target; here, confidence intervals that do not include zero reflect significant indirect effects of treatment seeking on workplace outcomes via respect.

*p < .05, **p < .01, ***p < .001,
experienced less stigma because he was more respected than the non-treatment seeker. In contrast, ostensibly because taking charge of problems does not embody female gender stereotypes, women's respect and mental illness stigma were unaffected by treatment seeking decisions.

### General Discussion

The current research provided a novel experimental test of the magnitude and possible gender differences in mental illness stigma by comparing depressed male and female targets to those displaying normative levels of psychological functioning. Supporting our predictions, results revealed strikingly high levels of mental illness stigma, such that depressed targets were viewed as significantly less likeable, competent, and hireable relative to similar well-functioning controls. Of importance, effect sizes for these differences were all very large. Specifically, $d$s ranged from 1.42 to 2.14, and were all well above the established .80 cut off for large effects (Cohen, 1988) and the 1.00 cutoff for very large effects (Hyde, 2005).

As a point of comparison, although weight stigma has been referred to as one of the most robust types of stigma (Puhl & Heuer, 2009), experimental comparisons of overweight and normal-weight targets typically produce smaller effect sizes than many obtained here (e.g., a meta-analysis revealed $d$s ranging from .16 to 1.81, with an overall effect size estimate of weight bias across evaluative workplace outcomes of $d = .52$; Rudolph, Wells, Weller, & Baltes, 2009). Because previous research on mental illness stigma has often utilized nonexperimental designs (Hinshaw & Stier, 2008; Link et al., 2004) or experimental comparisons between depressed targets and controls likely to encounter their own stigma rather than normatively functioning controls (Derlega & Chaikin, 1976; Link et al., 1999; Teachman et al., 2006), prior research may have underestimated the scope of mental illness stigma. The magnitude of the current effects suggests that mental illness stigma stemming from depression may be even more robust than previously assumed (Hinshaw, 2007).

In contrast to some previous work (e.g., Phelan & Basow, 2007; Wirth & Bodenhausen, 2009), our results did not reveal a target gender difference in mental illness stigma rates. As discussed above, a large body of existing literature suggests that because psychological distress is at odds with gender stereotypes calling for men to be strong, stoic, and independent (e.g., Prentice & Carranza, 2002; Rudman, Moss-Racusin, Glick, et al. 2012; Williams & Best, 1990), men may be uniquely vulnerable to mental illness stigma. Researchers have noted that experiencing depression may be viewed as particularly incompatible with stereotypic expectations for men (Mansfield et al., 2003; Moss-Racusin, 2015), and depressed men themselves anticipate high rates of stigma (Emslie et al., 2006; Johnson et al., 2012; Mansfield et al., 2003; O’Brien et al., 2005; Oliffe & Phillips, 2008; Oliffe et al., 2010; Primack et al., 2010). However, we found no evidence that men encounter more mental illness stigma than women when they display symptoms of depression. If replicated, these results may reflect an important piece of good news for men struggling to manage the often-debilitating effects of mental illness in the face of high stigma fears.

Although previous research has focused on the potential risks associated with treatment seeking (e.g., increased stigma and shame; Ben-Porath, 2002; Schommerus et al., 2009; Tucker et al., 2013), our results revealed that treatment seeking can also serve a protective function. Specifically, a man who sought professional mental health care for depression encountered less mental illness stigma than an identical man who chose not to seek treatment. We suggest that because choosing to take responsibility for depression by seeking professional treatment reaffirms gender stereotypes calling for men to take charge and solve problems (Heilman & Wallen, 2010; Moss-Racusin, 2015; Moss-Racusin et al., 2010), it may lessen men's mental illness stigma. Supporting this idea, treatment alleviated men's mental illness stigma to the extent that it increased the respect afforded to them. Additionally, treatment seeking did not impact stigma levels for women, because it does not strongly communicate adherence to female gender stereotypes (Rudman, Moss-Racusin, Phelan, et al. 2012; Rudman, Moss-Racusin, Glick, et al. 2012). Thus, our results provide the first evidence that men may actually skirt some mental illness stigma when they take responsibility for seeking treatment. As discussed below, these findings could lay the groundwork for interventions aimed at increasing men's utilization of mental health services.

### Limitations and Future Directions

Consistent with some previous work (e.g., Burke et al., 2014, Experiment 2; Jorm et al., 1999), we found no evidence of target gender differences in mental illness stigma. In contrast, some previous researchers found evidence that depressed men encounter more stigma than comparable women (e.g., Phelan & Basow, 2007; Reavley & Jorm, 2011; Schnittker, 2000), while still others have found that women encounter more stigma than men (e.g., Wirth & Bodenhausen, 2009). Future research should attempt to replicate and extend the current findings with an eye toward reconciling this existing mixed evidence. For example, it is possible that the existing research has failed to measure and account for an important moderator of the effects of gender on mental illness stigma, resulting in the current mixed findings. Indeed, existing contradictory results may be attributable in part to different psychological conditions and/or dependent variables examined by different researchers. In contrast, inconsistent findings are unlikely to be attributable to sample differences, because the type of participant population (e.g., undergraduate subject pool participants, Mechanical Turk volunteers, and
representative American and Australian general population samples) has not been systematically related to target gender difference results (for examples, see Burke et al., 2014; Jorm et al., 1999; Phelan & Basow, 2007; Reavley & Jorm, 2011; Schnittker, 2000; Wirth & Bodenhausen, 2009).

Thus, whether (or when) men and women differentially experience mental illness stigma remains unclear, and future work is needed to better understand the ways in which gender impacts mental illness stigma. At a minimum, our results suggest that men do not necessarily encounter greater mental illness stigma than women, a fact that has often been assumed by both prior researchers and men themselves (Johnson et al., 2012; Phelan & Basow, 2007; Primack et al., 2010; Schnittker, 2000).

Future work should also directly test our argument that gender stereotypic expectations drive the impact of treatment seeking decisions on mental illness stigma targeting men. That is, we have argued that depressed men are more respected (and thus, encounter less mental illness stigma) when they seek treatment because this active treatment seeking reaffirms important male gender stereotypes (Addis & Mahalik, 2003; Emslie et al., 2006; Hernandez et al., 2014; Mansfield et al., 2003; Moss-Racusin, 2015). The fact that respect emerged as a mediator indirectly supports this idea, because people who behave in gender stereotypic ways are typically afforded higher levels of respect than those who do not (Brescoll et al., 2010; Brescoll & Uhlmann, 2008; Heilman & Wallen, 2010). However, future work should evaluate this argument directly by measuring male stereotypic traits to determine whether these account for treatment seeking men’s enhanced respect and diminished stigma relative to those who do not seek treatment.

Relatedly, future work should measure perceived female stereotypic traits to evaluate our argument that women do not benefit from treatment seeking because it does not reaffirm female gender stereotypes. Again, we do not suggest that treatment seeking is forbidden for women, or that it contradicts female stereotypes (Galdas et al., 2005; Prentice & Carranza, 2002). Instead, we have argued that because treatment seeking does not clearly demonstrate women’s required communality nor forbidden dominance, it should not be relevant to women’s stigma levels. However, researchers should seek to identify strategies that may shield women from mental illness stigma and remove obstacles to treatment seeking. For example, future research could determine whether an explicit communal rationale for treatment seeking may improve reactions to female treatment seekers. Stigma may be reduced for women who reaffirm communal stereotypes by discussing caregiving goals (e.g., getting well to enable caring for family or being present for friends) as one motivation to seek mental health treatment.

It is necessary to examine the extent to which our results generalize beyond the current context. For example, it is unclear whether the same pattern of results would emerge for psychological disorders other than depression. As noted above, depression is more frequently diagnosed in women than men (Piccinelli & Wilkinson, 2000), and reflects levels of emotionality, sadness, and vulnerability that may be particularly at odds with male gender stereotypes (e.g., Emslie et al., 2006; Johnson et al., 2012; O’Brien et al., 2005). Thus, we reasoned that depression should serve as a pertinent test of the current questions, such that if mental illness stigma differentially targets men, it should be particularly likely to do so in the case of depression. Still, future work should test these ideas by comparing different disorders, including those perceived as male stereotypic (e.g., alcohol dependency; Grant, 1997) and gender-neutral (e.g., Obsessive-Compulsive Disorder; Fogel, 2003). Similarly, additional research should examine whether men skirt stigma when they reaffirm gender stereotypes by taking charge of depression using any approach, or whether these results are specific to professional treatment seeking. For example, researchers should examine whether stigma is similarly (or even more effectively) reduced when men choose to take psychotropic medications, talk to a friend, “work it out” in the gym, and so forth., or whether seeking help from a trained mental health professional is uniquely protective.

Results from both experiments suggested that participants who reported a history of their own mental health treatment viewed all targets as more competent and likeable (but not more hirable) than participants who did not report experiencing treatment for mental illness. Of importance, this main effect of participant treatment history did not interact with target mental health status in Experiment 1 nor treatment seeking status in Experiment 2, suggesting that these results do not simply reflect in-group favoritism (whereby participants with a history of mental health treatment might prefer targets with a mental health condition and/or treatment seeking history as a function of their shared in-group membership; Brewer, 1999). Instead, results suggest that participants with a history of psychological treatment viewed all targets more positively, regardless of targets’ mental health or treatment seeking status. To our knowledge, this intriguing finding has not been replicated elsewhere in the literature. However, we join other researchers in speculating that under some circumstances, individuals with a history of mental illness treatment may express more generalized empathy toward others, resulting in globally elevated person perception (Schachter et al., 2008). Future research should explore this possibility by directly measuring the magnitude and impact of empathy toward a variety of targets as a function of participants’ own mental health treatment seeking histories.

However, we caution against drawing strong conclusions from these results without further replication, particularly because participants’ mental illness treatment status was self-
reported. Moreover, we did not measure the type(s) of mental illness that participants had experienced. Thus, it is possible that the current results are affected by variability in self-reporting choices and/or mental illness types, and therefore may not generalize beyond the current context.

Finally, because our results reveal that treatment seeking can alleviate mental illness stigma for depressed men, they could form the basis for much-needed interventions designed to shrink the established gender gap in mental health treatment seeking (Addis & Mahalik, 2003; Galdas et al., 2005). Although our results suggest that depressed men do not encounter higher levels of mental illness stigma than women, men’s (justifiable) concerns that they may encounter high levels of stigma in this stereotype incompatible domain may impede their ability to seek much-needed treatment (Emslie et al., 2006; Johnson et al., 2012; Mansfield et al., 2003; O’Brien, et al., 2005; Oliffe & Phillips, 2008; Oliffe et al., 2010; Primack et al., 2010). Of importance, fear of backlash can prevent individuals from exhibiting behaviors that violate gender stereotypes (e.g., Moss-Racusin & Rudman, 2010; Phelan & Rudman, 2010; Rudman & Fairchild, 2004). If men’s concerns about possible heightened stigma do help explain the existing treatment seeking gender gap, then interventions that educate men about the current findings could boost their treatment seeking. That is, informing men about the experimental evidence suggesting that they are not at heightened risk for mental illness stigma—and that in fact, their stigma risk is reduced when they take charge and seek treatment—could promote men’s treatment seeking.

The growing community of American veterans is a particularly important population among which to test such an intervention. Veterans are particularly likely to report that mental illness stigma undermines their treatment seeking (Green-Shortridge, Britt, & Castro, 2007; Vogt et al., 2014). Self-reliance is an important component of masculine gender stereotypes (Addis & Mahalik, 2003; Vogt, 2011), and may be particularly salient for young male veterans. This population reports that the ability to take care of oneself and not let others’ down are critical components of being a successful soldier, and are also major impediments to psychological treatment seeking (e.g., Quick, Joplin, Nelson, Mangelsdorff, & Fiedler, 1996; Sayer et al., 2009). Moreover, the strict, hyper-masculine military culture appears to exacerbate male veteran’s mental health issues (Jakupcak, Osborne, Michael, Cook, & McFall, 2006) and undermine their treatment seeking (Lorber & Garcia, 2010). Thus, male veterans may be uniquely susceptible to fear of backlash for treatment seeking.

Of concern, although depression, post-traumatic stress disorder, and associated suicidality have risen to alarming rates among veterans (Milliken, Auchterlonie, & Hoge, 2007; Peterson, Luethche, Borah, Borah, & Young-McCaughan, 2007; Pyne, Edlund, Reaves, Fortney, & Mittal, 2008; Sher, Braquehais, & Casas, 2012), their consistent utilization of mental health treatment services remains strikingly low, particularly among younger veterans (Cully et al., 2008; Harpaz-Rotem, Rosenheck, Pietrzak, & Southwick, 2014; Hoge et al., 2014). Unfortunately, existing attempts to increase the utilization of psychological treatment among veterans have been largely unsuccessful (Kuehn, 2009). Thus, an evidence-based intervention aimed at informing male veterans that seeking treatment may actually reduce mental illness stigma (in addition to improving psychiatric symptoms) could potentially improve the quality of—or even save—many lives.

Conclusions

The current results suggest that levels of mental illness stigma remain staggeringly high, and are likely more robust than previously estimated. Because fearing stigma can prevent needed treatment seeking, pervasive mental illness stigma reflects a serious public health concern. However, our results also provide some reasons to be hopeful; despite their heightening fears, men do not appear to encounter higher rates of stigma than women when they exhibit depression. Indeed, taking charge of depression by obtaining needed mental health care reduces stigma for men. Thus, treatment seeking provides an opportunity for men to take charge of both depression itself and the mental illness stigma that often accompanies it. We hope that these results will serve to highlight the importance of understanding the impact of gender on mental health issues, and help remove impediments to accessing beneficial mental health services.

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Alleviating mental illness stigma targeting men


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