The Relationship Between Mental Illness Stigma and Self-Labeling

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Objective: One way that stigma may interfere with treatment-seeking is its impact on whether an individual self-labels as someone with mental illness (MI). While identifying and labeling oneself as experiencing MI is an important early step in seeking treatment, self-labeling may also make individuals more susceptible to the negative effects of internalized, anticipated, and experienced stigma. In the present study, we examined the relationship between MI stigma and self-labeling. We hypothesized that endorsement of stereotypes, prejudice, and discrimination would be higher among those individuals who do not self-label and that those who did self-label would endorse higher levels of anticipated, internalized, and experienced stigma.

Method: We conducted a survey of stigma and mental health via MTurk. The sample included 257 individuals who met criteria for a current probable diagnosis of depression, generalized anxiety, or posttraumatic stress disorder (PTSD). We compared those individuals who responded "yes" to ever experiencing MI (n = 202) to those who responded "no" (n = 52) on demographic variables, mental health symptoms and treatment history, and stigma.

Results: Individuals who did not self-label as having MI were more likely to be younger, male, and single. They also endorsed higher levels of stereotypes, prejudice, discrimination, and experienced stigma. Self-labelers endorsed more internalized stigma than those who did not self-label.

Conclusions and Implications for Practice: Findings suggest that associations between stigma and self-labeling are complex. Consistent with modified labeling theory, stigma may both act as a barrier to adopting a label of MI and increase vulnerability to stigma if the label is adopted.

Impact and Implications

Individuals who do not self-label as having a mental illness (MI) endorse higher levels of stereotypes, prejudice, discrimination, and experienced stigma; individuals who self-label as having MI endorse higher levels of internalized stigma compared to nonself-labelers. Stigma may therefore act both as a barrier to adopting a label of MI and increase vulnerability to stigma if the label is adopted.

Keywords: mental illness, stigma, self-labeling, labeling

Identifying, acknowledging, and labeling oneself as experiencing a mental illness (MI) are important early steps in seeking treatment (Schomerus et al., 2019; Stolzenburg et al., 2017). However, labeling is also a key component of the stigmatization process (Link & Phelan, 2001). Individuals hold their own stereotypes and prejudices about what it means to have a MI that may impact whether they self-label as someone with a MI. Further, individuals who have been labeled as having a MI may become the target of stereotyping, prejudice, and discrimination, or they may internalize or anticipate stigma from others. Stigma negatively impacts mental health symptoms (Link et al., 1997), self-esteem (Link & Phelan, 2001; Verhaeghe et al., 2008), life satisfaction (Rosenfield, 1997), economic well-being (Link, 1987), attitudes toward help-seeking (Pattyn et al., 2014; Schomerus & Angermeyer, 2008), and treatment-seeking itself (Vogt et al., 2014). Given the potential consequences of a MI label, MI stigma may therefore serve as a significant barrier to self-labeling as someone with MI (Stolzenburg et al., 2017).

MI stigma is multidimensional and complex and therefore there are a number of different stigma mechanisms that may impact selflabeling. The MI Stigma Framework (Fox, Earnshaw, et al., 2018) identifies and describes stigma mechanisms that are relevant to both individuals with and without a MI, including stereotypes (negative beliefs about people with MI), prejudice (emotional reactions to those with MI), discrimination (negative behaviors directed toward people with MI), and perceived stigma (perceptions of what others think, feel, and behave towards people with MI). Stereotypes, prejudice, discrimination and perceived stigma often precede onset of MI, as individuals have likely developed an awareness and knowledge of their culture's and society's conceptions of MI before experiencing MI symptoms (Link et al., 1989). Other important stigma mechanisms include anticipated stigma (concern about being the target of stereotypes, prejudice, and discrimination because of MI), experienced stigma (experiencing discrimination related to having a MI), and internalized stigma (applying the negative stereotypes of MI to the self). Anticipated, experienced, and internalized stigma become relevant to individuals when they experience MI symptoms, when they have been labeled as having MI, or when they self-label as having a MI.

MI labeling serves as a trigger that sets off the stigmatization process in both individuals with and without MI. In the general public, MI labeling can result in stigma-related emotional and behavioral responses directed toward those individuals who have been labeled with MI, including anger, fear, perceptions of dangerousness, social distance, and discrimination (Abdullah & Brown, 2011; Angermeyer & Matschinger, 2005; Corrigan, 2000; Kroska et al., 2014). According to modified labeling theory (MLT; Link et al., 1989), when someone has been labeled (by others) as having MI, cultural conceptions of what it means to have a MI become personally relevant and can lead to negative consequences, including worsening of mental health symptoms, decreased self-esteem, and decreased economic stability (e.g., decreased income, unemployment). In a classic study of MLT, Link (1987) found that the extent to which people expect to be devalued and discriminated against was associated with several negative outcomes including demoralization, income loss, and unemployment, but only among people who had been labeled "mentally ill."

There is a rich an informative body of literature examining the relationship between MI stigma and labeling (Link & Phelan, 2017). Most of this body of work focuses on the correlates and consequences of MI labels that have been applied by others (e.g., clinicians, health care professionals) to someone experiencing, or described as experiencing, MI. For example, experimental and quasi-experimental work often uses a vignette paradigm describing a person with MI and either labeling or not labeling the person as experiencing MI. Participants are then asked to make ratings and judgments about the individual described in the vignette with the hypothesis that those who read a vignette with a labeled individual will judge (stigmatize) that person more harshly compared to nonlabeled individuals.

While we know a great deal about the relationship between MI stigma and labeling, we know less about the relationship between MI stigma and *self-labeling*. We define self-labeling as an individual acknowledging they have, or are currently experiencing MI that is interfering with their daily lives. Acknowledging one's symptoms as MI is an important step in seeking treatment, and thus understanding the relationship between self-labeling and stigma is critical to improving treatment-seeking rates among individuals experiencing MI.

Much of the recent work on stigma and self-labeling has been done by Schomerus and his colleagues (Horsfield et al., 2020; Schomerus et al., 2019; Stolzenburg et al., 2017). They propose a four-step process for self-labeling that begins with one being aware that they are experiencing symptoms (symptom awareness), then recognizing those symptoms may be part of an illness (symptom appraisal), identifying that those symptoms may be part of a MI (self-identification), and finally, concluding that they have MI (self-labeling; Stolzenburg et al., 2017). In a community sample of individuals with untreated MI, more than half of sample did not self-label as having a MI, while an additional 13% self-labeled their depressive symptoms as part of a physical illness (Horsfield et al., 2020).

Stolzenburg et al. found that support for discrimination and implicit attitudes were associated with lower self-identification, while social distance and support for discrimination were both negatively correlated with self-labeling. Horsfield et al. (2020) found that personal stigmatizing attitudes (i.e., agreement with the stereotypes of MI), social distance, and support for discrimination were all lowest in individuals who self-labeled as having MI, and highest in individuals who labeled their symptoms as part of a physical illness. Schomerus et al. (2019) extended their work by demonstrating the negative impact of stigma and self-identification on help-seeking longitudinally. They show that stigma, specifically support for discrimination, interferes with help-seeking early in the process by its effect on self-identification. Self-identification was directly or indirectly related to perceived need, help-seeking intentions, and weakly related to later help-seeking behavior.

The work of Schomerus and colleagues demonstrates the importance of stereotypes and discrimination on self-labeling. The process by which stereotypes, prejudice, and discrimination affect selflabeling may operate unconsciously, affecting whether an individual can see themselves as someone with MI. For example, the stereotypes of MI that a person holds may serve as a heuristic they judge themselves against when experiencing MI symptoms (Earnshaw et al., 2012; Slovic, 1987). If a person believes that people with MI are dangerous or weak-minded, but don't perceive themselves as dangerous or weak-minded, they may be less likely to label themselves as having a MI. However, stereotypes, prejudice, and discrimination are only three stigma mechanisms that may affect self-labeling. There are other stigma mechanisms, namely, anticipated, experienced, and internalized stigma that may be related to self-labeling, albeit in a different way than stereotypes, prejudice, and discrimination.

Consistent with MLT, people with MI may not self-label because they fear the social rejection and discrimination associated with having a MI (Corrigan, 2004; Corrigan et al., 2014; Link et al., 1987). The fear of social rejection and discrimination is referred to as anticipated stigma (Quinn & Chaudoir, 2009). Studies using Link's Perceived Discrimination and Devaluation (PDD) scale (Link et al., 1987), which contains items designed to assess the extent to which people with MI expect to be rejected or discriminated against due to their status as someone with MI, have shown that the PDD is negatively associated with self-esteem (Link et al., 2001) and self-stigma (Brohan et al., 2010). To our knowledge, no studies have examined the link between anticipated stigma and selflabeling. However, not self-labeling as someone with MI may be an active choice to avoid becoming a target of stigmatization.

Relatedly, label avoidance may also be a way to avoid experiencing discrimination as a result of having a MI. Farrelly et al. (2014) found that nearly 88% of their sample had experienced at least one instance of discrimination related to their MI in the past year, with the most common experiences related to being shunned or avoided, or discrimination related to making or keeping friends. Similarly, a cross-sectional survey study of individuals with depression in 35 countries found that 80% reported experiencing discrimination in at least one life domain in the past year. Experienced discrimination was associated with decreased likelihood of disclosing depression, and increased likelihood of concealing MI (Lasalvia et al., 2013). In a study of adolescents with MI, Moses (2009) also found that those who self-labeled reported more rejection experiences related to MI compared to those adolescents who did not self-label or who were unsure about labeling. Label avoidance may also prevent individuals from experiencing internalizing stigma and its associated negative consequences (Stolzenburg et al., 2017). Internalized stigma, sometimes referred to as self-stigma, occurs when people apply the negative stereotypes of a social identity to the self (Corrigan et al., 2006; Ritsher et al., 2003). Internalized stigma is associated with worsening mental health symptoms, decreased self-esteem (Del Rosal et al., 2020; Livingston & Boyd, 2010) and decreased treatment-seeking (Fox, Smith, & Vogt, 2018). To date, the only study examining internalized stigma and self-labeling found that among adolescents, self-labeling was positively associated with self-stigma (internalized stigma) and higher depressive symptoms (Moses, 2009). Individuals who do not label themselves as having a MI may not experience the negative consequences of internalized stigma.

Finally, demographic characteristics may also influence the decision to self-label as someone experiencing MI. Men, racial and ethnic minorities, and individuals with lower income and/or lower education are less likely to engage mental health services (Evans-Lacko et al., 2018; Narendorf & Palmer, 2016) or perceive a need for care (Villatoro et al., 2018), and may therefore be less likely to self-label as having MI. According to self-labeling theory (Thoits, 2005), individuals who are from economically and racial advantaged groups may be more likely to self-label compared to those who are less advantaged because they have more resources for seeking treatment. Consistent with self-labeling theory, Moses (2009) found that higher socioeconomic status was associated with self-labeling among adolescents. In their study of self-labeling, Stolzenburg et al. (2017) found that age was positively associated with self-labeling, but did not find differences related to gender or education.

The purpose of the present study is to compare individuals who self-label to those who do not self-label on MI stigma mechanisms in a sample of individuals who meet criteria for a probable MI (depression, generalized anxiety, or posttraumatic stress disorder [PTSD]). We expand on previous research by including not only measures of stereotypes, prejudice, discrimination and perceived stigma, but also measures of internalized, anticipated, and experienced stigma. We compare self-labelers and non-self-labelers on demographics, MI symptoms and treatment history, and stigma. We hypothesize that self-labelers will endorse higher levels of anticipated, internalized, and experienced stigma, while nonlabelers will endorse more stereotypes, prejudice, and discrimination.

Method

Participants

Participants were recruited via Amazon Mechanical Turk (MTurk). The study was limited to adults aged 18 or older who resided in the United States. After removing duplicates (n = 8 cases from six participants), 797 participants completed the screening and 631 were sent a link to a follow-up survey. A total of 446 participants with an MI history were sent a link to the survey and 411 completed it (92% response rate). For the purpose of the present study, the analysis sample (n = 257) was limited to individuals who met criteria for a current probable MI using established cutoff scores for depression (Kroenke et al., 2001; PHQ-9 score \geq 10), generalized anxiety (Spitzer et al., 2006; GAD-7 score \geq 10), or PTSD (Weathers et al., 2013; PCL score \geq 33).

Measures

Demographics

Participants answered demographic questions including their age, gender, education, marital status, income, veteran status, and race/ ethnicity.

Mental Health Symptomatology

Depressive symptoms were assessed with the nine-item *Patient Health Questionnaire-9* (PHQ-9; Kroenke et al., 2001). Anxiety symptoms were measured with the seven-item *Generalized Anxiety Disorder Scale* (GAD-7; Spitzer et al., 2006). Posttraumatic stress symptoms were measured with the 20-item *PTSD Checklist-5* (PCL; Weathers et al., 2013). Internal consistency reliability was high for all three measures ($\alpha = .80$, $\alpha = .81$, $\alpha = .94$, respectively).

Mental Health Diagnosis and Treatment History

Participants were asked if they had ever experienced a mental health problem with the question:

Have you ever experienced a mental health problem or a period of mental distress lasting at least two weeks? A mental health problem is defined as any emotional or psychological problem that impacted your ability to function in your family, relationships, or workplace. You do not need to have been diagnosed by a healthcare professional or sought treatment.

Participants who responded "yes" were classified as "self-label MI"; those who responded negatively were classified as "did not self-label MI." Participants were also asked if they had ever been diagnosed with a mental, psychological, or emotional health problem during the past month, past year, or in their lifetimes. Participants who indicated experiencing a MI, or those who said they had been diagnosed with MI, were also asked whether or not they had received any of 13 different types of mental health treatment during their lifetime, the past year, the past 6 months, or currently. For the present study, we dichotomized treatment history (ever received MI treatment vs. no treatment history).

Personal and Perceived Stereotypes

The *Depression Stigma Scale* (DSS; Griffiths et al., 2004, 2008) measures both personal (participant's own attitudes) and perceived (participant's perceptions of others' attitudes) stigma associated with depression. For the purpose of the present study, items were modified to refer to "mental health problems" instead of depression. Most of the items in the DSS assess stereotypes of MI (e.g., "Most people believe that people with mental illness are unpredictable"). However, three items measure personal or perceived discrimination (e.g., "Most people would not vote for a politician they knew has a mental illness"). We therefore removed the discrimination items from the summed composite so that the total scores only reflect endorsement or personally held or perceived stereotypes. Internal consistency reliability was high for both personal ($\alpha = .82$) and perceived stereotypes ($\alpha = .82$).

Prejudice

The *Prejudice Toward People with Mental Illness* scale (PPMI; Kenny et al., 2018) was used to measure prejudicial attitudes and beliefs toward people with MI. The scale contains 28 items answered on a 9-point scale (-4 to 4, *very strongly disagree* to *very strongly agree*), items were summed to create a composite score where higher scores indicate more prejudice. Internal consistency reliability was high ($\alpha = .90$).

Discrimination

Four items from the *Reported and Intended Behavior Scale* (RIBS; Evans-Lacko et al., 2011), measured on a 5-point scale (1 = *strongly agree*, 5 = *strongly disagree*), were used to assess how comfortable people would be interacting with someone with a mental health problem in increasing levels of closeness. Items were summed to create a composite score where higher scores indicate more endorsement of intended discrimination. Internal consistency reliability was high ($\alpha = .87$).

Internalized Stigma

The six-item Alienation subscale from the *Internalized Stigma* of *Mental* Illness scale (ISMI; Ritsher et al., 2003) was used as a measure of internalized stigma. Items were measured on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree), with higher scores indicating more internalized stigma. Internal consistency reliability was high ($\alpha = .81$).

Anticipated Stigma

The Questionnaire on Anticipated Discrimination (QUAD; Gabbidon et al., 2013) is a 14-item scale that assess the extent to which participants are concerned about being the target of discrimination because of their mental health problem. Items were measured on a 4-point Likert scale (1 = strongly disagree, 4 = strongly agree), with higher scores indicating more anticipated stigma. Internal consistency reliability was high ($\alpha = .93$).

Experienced Stigma

The *Discrimination and Stigma Scale* (DISC; Brohan et al., 2013) contains 21 items and assesses the number of discriminatory events a person has experienced because of their mental health problem. Items are measured using a 4-point Likert scale (1 = not at all, 3 = a lot). Internal consistency reliability was high ($\alpha = .97$).

Procedure

Participants first completed an online screening survey containing demographic questions and an assessment of current and past mental health symptomatology and treatment history. Participants were then separated into two groups based on their current and past mental health status ("no MI history" vs. "MI history") and invited to complete a follow-up survey. The follow-up survey for both groups contained measures of stereotypes, prejudice, discrimination, perceived stigma, attitudes toward mental health treatment, self-efficacy, social support, and barriers to mental health care (latter four not discussed in the present article). The follow-up survey for individuals with a MI history also included measures of anticipated, internalized, and experienced stigma. Participants were compensated for participating (\$1.00/screening, \$2.0/No MI history survey, \$4.00/MI history survey). The questionnaire and methodology for this study was approved by the institutional review board of Massachusetts General Hospital and all participants provided informed consent electronically.

Analyses

Statistical analyses were conducted using R (Version 4.0.5). The *compareGroups* package (Subirana et al., 2014) was used to compare individuals who self-labeled as having MI to those who did not self-label. Welch *t* tests were used for continuous variables and chi-square tests for categorical variables. The *effect size* package (Ben-Shachar et al., 2020) was used to calculate Cohen's *ds* for continuous outcomes and Cramer's *V* for categorical outcomes. A logistic regression model with all stigma variables entered simultaneously was used to determine the unique effects of stigma on whether or not an individual self-identified as having a MI.

Results

Of the 257 participants who met criteria for current probable depression, anxiety, or PTSD, 52 (20.2%) responded "no" to the question asking whether they had ever experienced a mental health problem (classified as "did not self-label MI"). Table 1 contains demographics for the sample broken down by whether or not participants endorsed having ever had a MI. Individuals who did not self-label as having a MI were younger (p < .001), and more likely to be male (p = .014) and single (p = .038). There were no other demographic differences between those who self-labeled as having a MI and those who did not self-label.

Table 2 compares mental health symptoms and treatment histories by self-labeling status. There were no differences in the average depression and PTSD scores for the two groups, or in the number of people who met probable criteria for either condition. Those who self-labeled as having a MI had a higher average generalized anxiety (GAD-7) score compared to those who did not self-label (p = .006); however, the percentage of individuals meeting criteria for probable GAD did not differ between those who self-labeled and those who did not (p = .075). Individuals who self-labeled as having a MI were more likely to have ever received treatment (p < .001), to have received treatment in the past year (p = .009), and to be currently receiving treatment (p = .026).

Table 3 compares stigma mechanisms by self-labeling status. Individuals who self-labeled endorsed higher internalized stigma than those who did not self-label (p = .007). Individuals who did not self-label reported higher levels of experienced stigma (p < .001), personal stereotypes (p = .006), prejudice (p = .001), and discrimination (p < .001).

Table 4 contains the results of a logistic regression model examining the unique effects of stigma on whether or not an individual self-identified as having a MI. Internalized stigma was associated with increased likelihood of self-labeling (p < .001), while anticipated stigma and discrimination were associated with decreased likelihood of self-labeling.

Discussion

Self-labeling as someone experiencing MI comes with both positive and negative consequences. Yet, stigma may undermine people's ability or willingness to recognize that they are living with

Accepted Manuscript Version of record at: https://doi.org/10.1037/prj0000552

Table 1

| Demographic | Characteristics I | hv Lahelino | Status |
|-------------|-------------------|-------------|--------|
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| | Did not self-label MI ($N = 52$) | Self-labeled MI ($N = 205$) | | |
|---|------------------------------------|-------------------------------|-------|-----|
| Variable | M (SD)/n(%) | M (SD)/n(%) | р | d/V |
| Age | 29.8 (6.69) | 34.0 (8.97) | <.001 | 50 |
| Gender | × , | | .01 | |
| Male | 41 (78.8%) | 115 (56.1%) | | |
| Female | 11 (21.2%) | 87 (42.4%) | | |
| Trans female | 0 (0.00%) | 1 (0.49%) | | |
| Nonbinary | 0 (0.00%) | 2 (0.98%) | | |
| Education | | | .88 | .08 |
| High school graduate | 4 (7.69%) | 21 (10.3%) | | |
| Some college or vocational/technical training | 9 (17.3%) | 40 (19.6%) | | |
| College graduate (2 or 4 year) | 32 (61.5%) | 110 (53.9%) | | |
| Some graduate/professional school | 1 (1.92%) | 10 (4.90%) | | |
| Graduate or professional degree | 6 (11.5%) | 23 (11.3%) | | |
| Income | | | .15 | .18 |
| \$0-\$20,000 | 14 (26.9%) | 32 (15.6%) | | |
| \$20,001-\$40,000 | 15 (28.8%) | 57 (27.8%) | | |
| \$40,001-\$60,000 | 15 (28.8%) | 48 (23.4%) | | |
| \$60,001-\$80,000 | 4 (7.69%) | 32 (15.6%) | | |
| \$80,001-\$100,000 | 1 (1.92%) | 18 (8.78%) | | |
| \$100,000+ | 3 (5.77%) | 18 (8.78%) | | |
| Marital status | | | .04 | .19 |
| Single/not married | 30 (58.8%) | 85 (41.5%) | | |
| Married/partnered | 21 (41.2%) | 120 (58.5%) | | |
| Employment status | | | .75 | .05 |
| Working | 49 (96.1%) | 189 (93.1%) | | |
| Not working | 2 (3.92%) | 14 (6.90%) | | |
| Military/veteran status | | | .73 | .04 |
| Never served | 44 (84.6%) | 178 (87.7%) | | |
| Currently serving in military | 4 (7.69%) | 11 (5.42%) | | |
| Veteran or retired from service | 4 (7.69%) | 14 (6.90%) | | |
| Race/Ethnicity | | | .54 | .12 |
| Asian | 4 (7.69%) | 12 (5.85%) | | |
| Black | 3 (5.77%) | 20 (9.76%) | | |
| Hispanic | 3 (5.77%) | 4 (1.95%) | | |
| Multiracial | 1 (1.92%) | 5 (2.44%) | | |
| Native American | 3 (5.77%) | 8 (3.90%) | | |
| White | 38 (73.1%) | 156 (76.1%) | | |

Note. p value based on Welch t test or chi-square test. MI = mental illness. d = Cohen's d. V = Cramer's V.

MI and therefore self-label. Moreover, self-labeling may make one vulnerable to the effects of stigma. Engaging in label-avoidant behaviors may therefore be a self-protective strategy to avoid the negative effects of stigma. Consistent with our hypotheses, we found that individuals who self-labeled as having a MI endorsed more internalized stigma, while individuals who did not self-label endorsed more stereotypes, prejudice, and discrimination. However, contrary to our hypotheses, there were no differences between groups on anticipated stigma, and individuals who did not self-label reported more experienced stigma. Logistic regression analysis demonstrated that internalized and anticipated stigma, as well as discrimination, uniquely predicted whether or not someone self-labeled as having a MI.

Several demographic differences emerged between those who self-labeled and those who did not. Those who did not self-label were more likely to be younger, male, and single, compared to self-labelers. Our finding related to age differences in self-labeling is consistent with Stolzenburg et al. (2017) who also found that individuals who were younger were less likely to self-label. However, our findings diverge from previous research in that we did not

find differences related to income, but did find differences related to gender. Nevertheless, our results are consistent with epidemiological findings of age and gender differences in MI treatment-seeking. Adults aged 18–44 have the lowest rates of receiving mental health treatment (Terlizzi & Norris, 2021), and younger adults (Age 18–25) have the lowest treatment-seeking rates compared to all other age-groups (Substance Abuse & Mental Health Services Administration [SAMHSA], 2019). Men are also less likely to seek or receive MI treatment (Terlizzi & Norris, 2021). It is possible that these observed disparities in MI treatment-seeking may be explained, in part, by demographic differences in self-labeling.

An intersectional stigma framework may be helpful for guiding future work in this area. An intersectional stigma framework acknowledges that MI stigma intersects with other forms of stigma, such as stigma associated with gender, race, and other social statuses (Berger, 2010). At the individual level, the framework recognizes that individuals' experiences of, reactions to, and impacts of stigma are shaped by their unique positionality in relation to the multiple forms of stigma they may experience, perceive, or even perpetuate. Results of this study are consistent with previous work identifying

Accepted Manuscript Version of record at: https://doi.org/10.1037/prj0000552

 Table 2

 Mental Health and Treatment History by Labeling Status

| | Did not self-label MI | Self-labeled MI | | |
|--------------------------------------|-----------------------|-----------------|-------|-----|
| Variable | M (SD)/n(%) | M (SD)/n(%) | р | d/V |
| Depressive Sx (PHQ) | 13.8 (5.20) | 13.8 (5.22) | .984 | .00 |
| Posttraumatic stress Sx (PCL) | 35.0 (16.0) | 36.9 (17.2) | .445 | 11 |
| Generalized anxiety Sx (GAD-7) | 9.79 (4.50) | 11.7 (4.47) | .006 | 44 |
| Probable depression (PHQ ≥ 10) | | | .691 | .04 |
| No | 11 (21.2%) | 36 (17.6%) | | |
| Yes | 41 (78.8%) | 169 (82.4%) | | |
| Probable PTSD (PCL \geq 33) | | . , | 1.000 | .00 |
| No | 22 (42.3%) | 86 (42.0%) | | |
| Yes | 30 (57.7%) | 119 (58.0%) | | |
| Probable GAD (GAD-7 \geq 10) | | . , | .075 | .12 |
| No | 22 (42.3%) | 58 (28.3%) | | |
| Yes | 30 (57.7%) | 147 (71.7%) | | |
| Any MH treatment (ever) | | . , | <.001 | .29 |
| No | 36 (69.2%) | 70 (34.1%) | | |
| Yes | 16 (30.8%) | 135 (65.9%) | | |
| Any MH Tx in the past year | | | .026 | .15 |
| No | 40 (76.9%) | 121 (59.0%) | | |
| Yes | 12 (23.1%) | 84 (41.0%) | | |
| Current MH treatment | | | .009 | .17 |
| No | 43 (82.7%) | 128 (62.4%) | | |
| Yes | 9 (17.3%) | 77 (37.6%) | | |
| Dropped out of Tx | | | .174 | .18 |
| No | 7 (70.0%) | 31 (41.9%) | | |
| Yes | 3 (30.0%) | 43 (58.1%) | | |

Note. p value based on Welch t test or chi-square test. MI = mental illness; Sx = symptoms; PHQ = Patient Health Questionnaire; PCL = Posttraumatic Stress Checklist; GAD-7 = generalized anxiety disorder-7; PTSD = posttraumatic stress disorder; GAD = generalized anxiety disorder; MH = mental health; Tx = treatment.

gender differences in MI stigma (Fox et al., 2015; Schroeder et al., 2021), and suggesting that experiences and impacts of stigma change over the life course (Earnshaw et al., 2022). However, we were unable to fully examine racial and ethnic differences and the intersection of race and gender in the present study due to the small sample size of self-labelers. Future work should take other forms of

Table 3 Average Mental Illness Stigma Scores by Labeling Status

| | Did not self-label MI | Self- labeled MI | | |
|--|--|--|--------------|------------------|
| Variable | M (SD) | M (SD) | р | d |
| Internalized stigma (ISMI-alienation) | 13.3 (6.67) | 16.0 (4.08) | .007 | 57 |
| Anticipated stigma (QUAD) | 21.3 (11.3) | 19.8 (10.0) | .398 | .14 |
| Experienced stigma (DISC) | 35.0 (15.5) | 23.7 (17.6) | <.001 | .65 |
| Perceived stereotypes (DSS) | 14.3 (4.21) | 15.1 (5.07) | .283 | 15 |
| Stereotypes (DSS) Prejudice (PPMI) Discrimination (BIBS) | 11.4 (6.04) 127 (25.2) 10 3 (3 58) | 8.82 (6.54) 112 (32.1) 7.80 (3.72) | .009 .001 | .39 .47 67 |
| Distrimination (RIDS) | 10.5 (5.50) | (| 2.001 | .07 |

Note. p value based on Welch t test. d = Cohen's d. ISMI = Internalized Stigma of Mental Illness scale; QUAD = Questionnaire on Anticipated Discrimination; DISC = Discrimination and Stigma Scale; DSS = Depression Stigma Scale; PPMI = Prejudice toward People with Mental Illness scale; RIBS = Reported and Intended Behavior Scale

stigma into account when seeking to understand associations between stigma and self-labeling among specific groups.

The differences in stigma endorsement between those who selflabel and those who do not suggest that to be the most effective stigma interventions need to be tailored to where individuals are in the treatment-seeking process, beginning with whether they acknowledge and label themselves as experiencing MI. Interventions that target stereotypes, prejudice, and willingness to discriminate may be helpful for people experiencing symptoms but not yet able to self-label, and point to the importance of antistigma campaigns that target public attitudes. For example, the Time to Change campaign in the United Kingdom was associated with an increase in positive attitudes toward MI (Evans-Lacko et al., 2014). However, we do not know the impact of such campaigns on selflabeling or help-seeking (Henderson et al., 2013). Further, larger campaigns designed to impact knowledge, stereotypes, and prejudice do not necessarily impact individuals with MI who may be vulnerable to anticipated, internalized, and experienced stigma. After someone has self-labeled as having MI, stigma interventions that target internalized and anticipated stigma are needed in order to lessen the negative impact of these stigma mechanisms on people with MI.

An interesting finding to emerge from the present study was that we did not find group differences on anticipated stigma. We hypothesized that those who self-labeled would endorse more anticipated stigma because they have adopted the label and may therefore be more concerned about being the target of stigmatization. However, those individuals who did not self-label endorsed

Table 4

Logistic Regression Modeling Predicting Mental Illness Self-Labeling

| | | Self-labeled MI | |
|--------------------------------|-------|-----------------|-------|
| Predictors | OR | 95% CI | р |
| Intercept | 1.56 | [0.12, 23.70] | .740 |
| Internalized stigma | 1.31 | [1.12, 1.55] | <.001 |
| Anticipated stigma | 0.89 | [0.82, 0.95] | .001 |
| Experienced stigma | 0.98 | [0.94, 1.01] | .195 |
| Perceived stereotypes | 1.06 | [0.96, 1.18] | .217 |
| Stereotypes | 0.95 | [0.85, 1.05] | .350 |
| Prejudice | 1.01 | [0.99, 1.03] | .368 |
| Discrimination | 0.87 | [0.78, 0.96] | .008 |
| R ² _{Tjur} | 0.157 | | |

Note. MI = mental illness; OR = odds ratio; CI = confidence interval. Tjur's coefficient of determination is a pseudo R^2 measure appropriate for generalized linear models with a binary outcome. Model results do not change when controlling for age, gender, and education.

similar levels of anticipated stigma compared to self-labelers suggest that avoiding the MI label may be an active attempt to avoid experiencing stigma. In fact, when controlling for the effects of the other stigma mechanisms in the logistic regression model, anticipated stigma emerged as a unique and significant predictor of self-labeling. This finding is consistent with MLT (Link et al., 1987) that suggests that people engage in label-avoidant behaviors because they fear being a target of stigmatization. Further, contrary to previous research (Moses, 2009), in the group comparison results, individuals who did not self-label also reported more experienced discrimination related to their mental health compared to individuals who self-labeled. Experiencing stigma has been shown to be associated with increased anticipated stigma (Quinn et al., 2015). Despite not labeling themselves as having MI, they still reported experiencing and anticipating stigma related to their mental health problem.

In the present study, 20% of participants currently experiencing MI symptoms did not self-label as having a MI. Interestingly, 30% of those who did not self-label reported they had received mental health treatment at some point in their lives, and 17% were currently in treatment. In contrast, Horsfield et al. (2020) found that half of their sample did not self-label, and almost half of those who did not self-label had been in treatment. The differences in these percentages may be due to differences in sample recruitment. We used a convenience sample via MTurk, while Horsfield et al. recruited people in their community experiencing at least mild to moderate depression. But what both of these studies demonstrate is that there is a substantial number of people who, despite experiencing symptoms and acknowledging they have received mental health treatment, do not label themselves as having a MI. Not accepting or adopting the label is consistent with MLT (Link et al., 1987), as well as several studies showing that adults sometimes reject the psychiatric labels that have been applied to them, particularly when those labels are associated with negative stereotypes (Camp et al., 2002; Ritsher & Lucksted, 2000). There is a need for more qualitative or mixed methods studies to better understand how people conceptualize the label of MI, and how stigma influences those conceptualizations. Just as treatment-seeking is a process, so too may be the decision to label oneself as having a MI. Understanding how stigma

interferes with the self-labeling process is key to designing and successfully implementing targeted stigma interventions.

Limitations

There are several limitations to the present study. We used a convenience sample from MTurk that was limited to individuals living in the United States. Therefore, findings from this study may not generalize across cultures, as MI stigma can vary crossculturally (Abdullah & Brown, 2011). It is also possible that the sample of MTurk workers in this study are not demographically or clinically representative of the larger U.S. population. Research on the demographic characteristics of Turkers suggests that they are more similar to the general population than other online convenience samples (Casler et al., 2013). However, research on how Turkers differ clinically from other community and convenience samples is mixed (Chandler & Shapiro, 2016). Some studies find that Turkers endorse lower levels of depression and anxiety (Veilleux et al., 2015), while others find they endorse higher levels (Arditte et al., 2016; McCredie & Morey, 2019). Despite potential demographic and clinical differences, MTurk is an effective tool for efficiently collecting high-quality data (Chandler & Shapiro, 2016; McCredie & Morey, 2019).

Another limitation to note is that this study was cross-sectional, limiting our ability to speak to causal relationships among variables. However, our results are consistent with the limited longitudinal research available on MI stigma and self-labeling (Horsfield et al., 2020; Schomerus et al., 2019; Stolzenburg et al., 2017). We also limited our examination of MI to self-reported depression, generalized anxiety, and PTSD. However, the relationship between MI stigma and self-labeling may vary across the different types of MI. We were not able to do between group comparisons by MI condition due to the relatively small number of people who self-labeled with MI. Nevertheless, the relationship between stigma and self-labeling may be even stronger for serious MI (e.g., schizophrenia) or alcohol and substance use disorders where stereotypes of dangerousness are particularly strong, and may be weaker for mental health conditions that are less stigmatized or where individuals are not perceived to be responsible for their MI (e.g., PTSD).

We limited the present study to individuals who met current criteria for a probable diagnosis of depression, anxiety, or PTSD, and these participants completed measures of anticipated, experienced, and internalized stigma. However, according to theories of internalized stigma, in order to internalize stigma, one must accept the stereotypes associated with MI and then apply them to the self (Corrigan & Watson, 2002; Link et al., 1989; Ritsher et al., 2003). If an individual is internalizing stigma, it could be argued that they have necessarily accepted the label of MI. It could therefore be the case that individuals who do not label themselves as having MI cannot internalized stigma. However, there may be a difference between accepting a label publicly (on a survey, in this case), versus accepting the label internally. If participants who did not self-label did not internalize stigma, we might expect to see floor effects and a lack of variability on the internalized stigma measure for that group, but that was not the case. Many participants in the non-selflabelers group still endorsed internalized stigma. This suggests that they do acknowledge the MI label internally, but were not willing to say "yes" when asked if they had ever experienced a mental health problem. Qualitative research is needed to better understand this contradiction and when internalized stigma becomes relevant to individuals experiencing MI in the self-labeling process.

Conclusions

Untreated MI continues to be a significant public health issue. Epidemiological data suggest that less than half of adults and adolescents experiencing MI in the past year received any treatment (SAMHSA, 2021). Identifying and understanding barriers to mental health care remains vitally important in order to improve treatmentseeking rates and quality of life for individuals experiencing a mental health problem. The decision to seek MI treatment is an ongoing process that can be impacted by stigma in multiple ways. Self-labeling is an important step in the treatment-seeking process, and understanding how stigma may impact self-labeling is important to designing, targeting, and implementing stigma interventions that can ultimately improve the well-being of people experiencing MI.

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