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# DEPRESSION STIGMA, RACE, AND TREATMENT SEEKING BEHAVIOR AND ATTITUDES

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## Abstract

This study examined the relationship between internalized and public stigma on treatment-related attitudes and behaviors in a community sample of 449 African American and white adults aged 18 years and older. Telephone surveys were administered to assess level of depressive symptoms, demographic characteristics, stigma, and treatment-related attitudes and behaviors. Multiple regression analysis indicated that internalized stigma mediated the relationship between public stigma and attitudes toward mental health treatment. Within group analyses indicated that the mediating effect of internalized stigma was significant for whites only. Among African Americans, internalized stigma did not mediate public stigma; it was directly related to attitudes toward mental health treatment. The internalization of stigma is key in the development of negative attitudes toward mental health treatment, and future research should focus on this aspect of stigma in both individual and community-based efforts to reduce stigma.

## INTRODUCTION

Goffman (1963) described stigmatized attributes as those that disqualify one from full social acceptance by society. In nearly all societies, some categories of individuals are stigmatized. In the United States, people have been stigmatized on the basis of race, culture, religion, as well as physical or mental disabilities. It is important to understand that stigma is a social construct, because it refers to a process of social rejection, devaluation, and discrimination (Crocker et al., 1998; Goffman et al., 1998; Jones et al., 1985). Mental illness is a stigmatized attribute (Corrigan, 1988; Goffman, 1963; Wahl, 1995; Wahl & Harman, 1989).

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Stigmas about mental illness appear to be widely endorsed by the general public (Corrigan, 2000), and negative depictions of those with mental illness are found in advertising, films, and everyday conversation. Although stigmatizing attitudes are not limited to mental illness, research suggests that stigmatizing attitudes of the general public are more severe for persons with psychiatric conditions than those with physical disabilities (Corrigan et al., 2000; Socoll & Holtgraves, 1992). Unlike those with physical disabilities, people with mental illness are often believed by the public to be in control of their disabilities and responsible for causing them (Corrigan et al., 2000; Weiner et al., 1988). People with mental illness are frequently portrayed as less competent, childlike, and violent (Wahl, 1995), and such views about mental illness may lead to discriminatory behavior. For example, people are less likely to hire persons who are labeled mentally ill (Bordieri & Drehmer, 1986), less likely to lease them apartments (Farina et al., 1974), and more likely to falsely press charges against them for violent crimes (Sosowsky, 1980; Steadman, 1981).

In addition to its negative effect on social opportunities, stigma may also have a negative impact on the individual's self-perceptions. The stigmatized individual may expect others to devalue and reject him (Link, 1987) and may, therefore, conceal their psychiatric history (Alverson et al., 1995). They may also internalize these negative beliefs, one consequence of which is lowered self-esteem (Link et al., 2001; Wright et al., 2000). However, some researchers have argued that people may not agree with others' views of them, and the relationship between stigma and self-esteem is not inevitable (Crocker & Major, 1989; Fine & Asch, 1988). In fact, in their review of the association between stigma and self-esteem, Crocker and Major (1989) found that there was little empirical support for the assumption that stigmatized groups have lower self-esteem than non-stigmatized groups. This is an important finding because it speaks to a possible psychological mechanism by which stigma may influence a person's sense of self, self-worth, behavior, and attitudes.

## Public Versus Internalized Stigma

The stigma of mental illness manifests itself in two ways that can be detrimental to the well-being of individuals living with mental illness: public stigma and internalized stigma (Corrigan & Watson, 2002). Public stigma refers to the negative beliefs, attitudes, and conceptions about mental illness held by the general population, which lead to stereotyping, prejudice and discrimination against individuals with mental health disorders. Internalized stigma refers to the beliefs that members of a stigmatized group have about themselves.

Concerns about the public's attitudes and beliefs about the mentally ill may be associated with unwillingness to seek treatment in those suffering from psychological distress. Indeed, researchers (Cooper et al., 2003; Hoyt et al., 1997; Nadeem et al., 2007; Rost et al., 1993) have demonstrated an inverse relationship between perceived public stigma and care seeking. Findings from these relatively small samples have been supported by additional large population-based samples (Kessler et al., 2001; Leaf et al., 1987; Meltzer et al., 2003). However, some studies suggest that public stigma does not play a prominent role in mental health service utilization (Alvidrez, 1999; Roeloffs et al., 2003).

Current research on the stigmatization of mental illness recognizes that the stigmatization of individuals involves not only the public stereotyping of these individuals, which leads to prejudice, discrimination and unequal outcomes, but also the internalization of these stereotypes by the individuals who are being stigmatized. Living in an environment that sanctions the stigmatization of the mentally ill, persons with mental illness may begin to accept these notions and internalize these stigmatizing attitudes and beliefs that are widely endorsed within society (Corrigan, 1998; Link & Phelan, 2001). These individuals may begin to believe that they are less valued because of their membership within this

stigmatized group and may suffer negative emotional reactions such as diminished self-esteem and self-efficacy.

In addition to public stigma, internalized stigma may be associated with mental health service utilization. Sirey and colleagues (2001) found that individuals who expressed a sense of shame based on their personal experiences with mental illness were significantly less likely to be involved in treatment. In a study of 3,000 community residents, Leaf and colleagues (1987) found that endorsing negative attitudes and beliefs about mental illness was associated with decreased mental health service utilization of those at risk for psychiatric disorder. Few studies have examined both public and internalized stigma, as well as their association with treatment-related attitudes and behavior. Vogel and colleagues (2007) found that the relationship between mental health treatment utilization and perceived public stigma was mediated by internalized stigma and attitudes toward treatment. However, the study sample was comprised of a predominantly white, undergraduate student sample, and symptoms of psychological distress were not measured. In the present investigation, we address the limitations of prior work by including a sample that is diverse in age, education, and one which reported at least mild depressive symptoms.

Research suggests that the stigma of mental illness can impair treatment utilization in two ways: (a) through perceived public stigma, individuals with mental illness may seek to avoid the public label and stigmatization of mental illness by choosing not to seek treatment or to discontinue treatment prematurely; and (b) through internalized stigma, individuals with mental illness may seek to avoid the negative feelings of shame and guilt about themselves by choosing not to seek treatment. These two constructs, public and internalized stigma, are manifested differently within individuals, but they clearly influence each other in their impact on the stigmatized individual. If an individual with mental illness perceives public stigma to be high, then they may be more likely to internalize these negative stereotypes than if they perceive public stigma about mental illness to be low (Corrigan, 2004).

The demonstrated associations among perceived public stigma, internalized stigma, and treatment utilization may be helpful in understanding disparities in mental health service utilization in depressed African Americans and whites. Depression is a common psychiatric disorder, affecting nearly 18.8 million adults or about 9.9% of the United States population in a given year (National Institute of Mental Health, 2003), with lifetime prevalence rates of 21.3% in women and 12.7% in men (Kessler et al., 1994a). Despite similar rates of depression among African Americans and whites (Kessler et al., 1994a), disparities exist in mental health service utilization (Snowden, 2001), with African Americans typically having lower rates of treatment seeking than whites, higher drop-out rates from treatment, and greater use of emergency care. (See Brown & Palenchar, 2004 for review.) Stigma may be a factor that influences treatment seeking behaviors and which may, in part, account for evident disparities. Understanding the role of stigma and mental health service utilization may be particularly important because unlike whites with depression, African Americans with depression have two stigmatizing conditions (race and mental illness). This “double-stigma” (Gary, 2005) may have a negative effect on willingness to seek treatment. However, to date, the relationship between stigma, race and mental health service utilization has received little research attention.

## PURPOSE OF THE STUDY

In the current study, we propose to first examine the relationship between perceived public stigma and internalized stigma as they relate to treatment-related behaviors and attitudes. We hope to gain a more refined conceptual understanding of how stigma affects treatment-related behaviors. Although most studies have examined the impact of perceived public

stigma on various outcomes, we propose that internalized stigma may be as important or even more important to consider. In addition, individuals with two stigmatizing conditions (e.g., race and mental illness) may be less likely to engage in behaviors (e.g., treatment seeking) that might increase the likelihood of being further stigmatized, even if doing so would help with symptoms of psychiatric distress. We hypothesize that

1. internalized stigma and perceived public stigma will be significantly positively correlated;
2. the relationship between public stigma and outcomes of interest (i.e., attitudes toward treatment, current treatment, and intention to seek treatment) will be mediated by internalized stigma;
3. African Americans will be less likely to be in treatment for depression, will have more negative attitudes toward mental health treatment, and will have significantly lower intentions to seek treatment for depression than whites; and
4. race will moderate the relationships among public stigma, internalized stigma (i.e., race×public stigma×internalized stigma), and treatment-related variables (i.e., current treatment, attitudes toward treatment, and intention to seek treatment).

We will also explore, through within-group analyses, whether the mediating effects of internalized stigma hold for African Americans and whites when these factors are analyzed separately for each racial group.

## METHODS

### Recruitment of Participants

Participants were recruited by the University Center for Social and Urban Research at the University of Pittsburgh using random digit dialing telephone sampling methodology in Allegheny County (Pittsburgh) PA. Given the goal of equal numbers of African-Americans and whites in the sample, the area code/exchanges were divided into two strata for sampling: (a) exchanges with less than 25% estimated African American population (the low-density African American stratum), and (b) exchanges with an estimated 25% or higher African American population (the high-density African American stratum). This stratified sampling approach increased efficiency and reduced costs. African Americans from the low-density strata and whites from the high-density strata were eligible to be interviewed.

Data collection was conducted using University Center for Social and Urban Research's computer-assisted telephone interviewing system. A minimum of six calls were made on varying days of the week at different times of the day to maximize the probability of contacting respondents. Upon contact, households were first screened for age and race (the study also required an over-sample of adults aged 60 years or older in addition to the African American over-sample). If respondents were age-eligible and race-eligible, then they were screened for depression symptoms using the Patient Health Questionnaire 9-item Depression Scale (PHQ-9; Spitzer et al., 1999). Only those reporting mild levels of depression symptoms were eligible for the study (PHQ-9 scores of five or higher). In addition, respondents with a history of or a probability of bipolar disorder or substance abuse/dependence in the preceding 6 months were excluded. The full interview, which lasted approximately 30 minutes, was then conducted with eligible respondents.

These procedures resulted in a final sample size of 449 participants distributed as follows: 229 whites (101 aged under 60 years, 128 aged 60 years and older) and 220 African Americans (100 aged under 60 years and 120 aged 60 years and older). To achieve this sample, an extremely labor intensive effort was required. A total of 63,557 telephone

numbers were processed, and nearly 200,000 actual dialings were required (198,599). The majority of this effort was dedicated to the high-density African American strata to achieve the required 50/50 racial quota for the sample.

Across both high-density and low-density strata, 34.4% of households were successfully screened (12,859 total screened households), and 87.2% of those determined to be eligible completed the full interview. It should be noted that many of the ‘‘no contact‘‘ phone numbers may not actually be households, and, thus, the household screening success rate is actually somewhat higher.

## Measures

**Demographic characteristics—**Self reported demographic characteristics included: age, gender, race, marital status, education, employment status, and total family income.

**Clinical characteristics—**The Patient Health Questionnaire (PHQ-9: Kroenke & Spitzer, 2001) was used to characterize severity of the depressive symptoms. Cutpoints have been established that correspond to minimal (score 1–4), mild (score 5–9), moderate (score 10–14), moderately severe (score 15–19), and severe (score 20–27) symptom levels and algorithms developed to establish depressive disorder diagnoses. The PHQ-9 has also been found to be sensitive to change in depressive symptoms over time (Lowe et al., 2004).

**Perceived public stigma—**The 12-item Perceived Devaluation Discrimination Scale (Link, 1982; Link et al., 1991) was used assess the extent to which a person believes that other people will devalue or discriminate against someone with a mental illness. It asks about the extent of agreement on a 6-point Likert scale, ranging from 1 (*strongly agree*) to 6 (*strongly disagree*), with statements indicating that most people devalue current or former psychiatric patients by perceiving them as failures, as less intelligent than other persons, and as individuals whose opinions need not be taken seriously. For this investigation, we adapted the scale so that items referred to “having had depression” rather than “having been treated for a mental illness.” The rationale for this revision is that we thought that views about severe mental illnesses and depression might differ. Also, we wanted to dissociate treatment from the presence of depression. Higher scores indicate more public stigma.

**Internalized stigma—**The Internalized Stigma of Mental Illness Scale (ISMI; Ritsher et al., 2003) assessed internalized stigma. The 29-item, 4-point Likert scale, from 1 (*strongly disagree*) to 4 (*strongly agree*), focuses on the individual’s subjective experience as someone with a mental illness. Subscales assess alienation, stereotype endorsement, perceived discrimination, social withdrawal, and stigma resistance. The ISMI demonstrates excellent internal consistency reliability, test/re-test reliability, and concurrent and discriminant validity (Ritsher et al., 2003). We also revised this scale so that items refer to depression instead of mental illness. Higher scores indicate more internalized stigma.

**Mental health treatment—**Two questions assessed history of mental health treatment. The first question asked, “At any time in the past, have you ever visited a health professional (psychiatrist, psychologist, social worker, mental health counselor, or primary care physician for a problem with your emotional or mental health (15yes or 25no)?” A second question asked, “Are you currently receiving treatment for depression (15yes or 25no)?”

**Intention to seek treatment for depression—**One item evaluated respondents’ intention to seek treatment for depression. Respondents indicated on a 7-point, Likert scale (extremely unlikely to extremely likely) the likelihood of their engaging in this behavior

(i.e., "During the next month, I intend to speak or meet with a health professional to discuss my symptoms of depression").

**Attitudes toward mental health treatment—**Attitudes toward mental health treatment was assessed with a modified version of the Attitudes Toward Mental Health Treatment Scale (ATMHT). The ATMHT comprises 20 items with a 4-point Likert scale, and is intended to reflect an individual's attitude toward professional mental health treatment. The ATMHT is a modified version of the 29-item Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; Fisher & Turner, 1970). Despite its utility and vast usage, several conceptual and methodological concerns have been raised regarding the language and cultural appropriateness of the ATSPPHS. Some identified concerns are the outdated language used and that it only refers to psychiatrists and psychologists as providers of mental health services (Mackenzie et al., 2004). An additional concern is the lack of attention to culturally relevant items for African Americans, which may impact attitudes toward seeking mental health treatment.

To address these concerns, we shortened the original scale, adapted eight original items by incorporating more inclusive and easier to understand language, and added 12 items that reflect issues that may impact African American's attitudes about mental health treatment (e.g., "I feel confident that I could find a therapist who is understanding and respectful of my ethnicity/culture" and "In my community, people take care of their emotional problems on their own; they don't seek professional mental health services"). We developed these items based upon comments endorsed within focus groups we conducted with African Americans who'd experienced depression (Brown et al., 2003; Conner et al., in press). Although the adapted scale refers primarily to psychotherapy, the instructions ask participants to rate their attitudes about seeking mental health treatment from any mental health professional (e.g., psychiatrist, psychologist, social worker, counselor, or primary care physician). Higher scores indicate more positive attitudes about seeking mental health treatment. Internal consistency estimates for this sample were adequate, as indicated by the following Cronbach's alpha for the total sample (.75), (.78) for whites, and (.73) for African Americans, whites, and African Americans, respectively: .75, .78, and .73.

## ANALYSIS PLAN

### Univariate Analyses

Pearson correlation coefficients, chi-square tests, and *t* tests were used to assess univariate relationships between variables.

### Mediation Analyses

Baron and Kenny's (1986) mediational model was used to evaluate whether internalized stigma mediated the relationships among public stigma and attitudes toward treatment, current treatment, and intention to seek treatment. In a mediational model, we would expect both the independent variable (public stigma) and the mediating variable (internalized stigma) to be significantly associated with the dependent variables of interest (i.e., current treatment, intention to seek treatment, attitudes toward treatment). When the mediator is entered into the model, the relationship between public stigma and treatment related-behaviors is diminished.

Four regression models were used to test for full and partial statistical mediation. The first regression model evaluated the association between public stigma and attitudes toward treatment. The second model determined whether there was a significant association between public stigma and internalized stigma. The third regression model examined the

association between internalized stigma and attitudes toward treatment. The final regression model determined whether the statistical significance of public stigma was eliminated or reduced when internalized stigma was controlled in a model predicting attitudes toward treatment. Covariates in all of the models included variables on which African Americans and whites differed (i.e., gender, marital status, education, household income, and past mental health treatment). These analyses were utilized for the entire sample (as described above), and then analyses were conducted separately for African American and whites. The SOBEL SPSS macro (Preacher & Hayes, 2008) was utilized to assess the indirect effects within the mediator model described above. This macro provides regression coefficients in addition to bootstrap confidence intervals, and a SOBEL test for simple mediator models.

### Moderation Analyses

To examine the impact of race on stigma beliefs and treatment-related behavior and attitudes, we completed a logistic regression analysis for the binary dependent variable current treatment and linear regression analyses for the continuous dependent variables (i.e., attitudes toward mental health treatment and intention to seek treatment). Independent variables were entered into each model simultaneously and included the following: demographic characteristics (age, race, gender, education, employment status, income), depressive symptom severity, perceived public stigma score, perceived internalized stigma score, an interaction term for perceived public stigma×perceived internalized stigma, and an interaction term for race×public stigma×internalized stigma. This model also included all possible two-way interactions.

## RESULTS

### Study Participants

As shown in Table 1, the mean age of the sample was approximately 60, with approximately 55% of the sample aged 55 years or older. African Americans comprised almost half of the sample, and more than three-quarters were female. Most participants had completed high school, and less than one-third were currently married or living as married. Approximately two thirds of the sample had an income of less than $35,000. About 50% of the sample endorsed depressive symptoms of at least moderate severity, although only about 20% were currently in treatment for depression, and a similar number intended to seek treatment for depression. However, approximately half of the sample had sought mental health treatment in the past.

### Racial Differences

African Americans and whites in the sample did not differ in mean age or employment status. However, when compared with African Americans, a greater proportion of whites were currently married, had a high school diploma, and had an income of at least $35,000. African Americans and whites also did not differ in depressive symptom severity, or the proportion currently in mental health treatment. However, fewer African Americans had received mental health treatment in the past. African Americans also endorsed more negative attitudes toward depression treatment than whites. Interestingly, African Americans and whites did not differ in their perceived public or internalized stigma or their intention to seek treatment in the future.

### Perceived Public Stigma, Internalized Stigma, and Treatment-Related Behaviors and Attitudes

**Univariate analyses—**As shown in Table 2, Pearson correlation coefficients controlling for depressive severity indicated higher perceived public stigma was significantly associated

with higher internalized stigma as predicted, and the association was of moderate magnitude. Regarding treatment-related behaviors, current treatment for depression and intention to seek depression treatment were not significantly associated with internalized or public stigma. However, more positive attitudes toward mental health treatment were significantly associated with lower levels of public and internalized stigma, current treatment, and higher intention to seek treatment.

**Mediation analyses—**We hypothesized that the relationship between public stigma and treatment related behaviors (current treatment, attitudes toward treatment, and intention to seek treatment) would be mediated by internalized stigma. However, univariate analyses did not fully support this hypothesis. We found that public stigma was not significantly associated with current treatment or intention to seek treatment. Therefore the prerequisites for a mediational relationship among stigma and current treatment as well as intention to seek treatment were not met. Consistent with our hypothesis, internalized stigma mediated the relationship between public stigma and attitudes toward mental health treatment (Table 3). Thus, public stigma is associated with attitudes toward treatment only through its effect on internalized stigma. When the effects of internalized stigma are controlled for, the relationship between public stigma and attitudes toward mental health treatment is eliminated. Past mental health treatment was the only significant covariate in this mediational model, indicating that participants who'd had prior mental health treatment endorsed more negative attitudes toward mental health treatment.

**Within-group analyses—**Regression models with white participants confirmed internalized stigma as a mediator in the relationship between public stigma and attitudes toward treatment (see Table 3). However, this relationship did not hold for African Americans. In the African American subsample, public stigma was not significantly associated with attitudes toward treatment ($r = -.047$. $p < .49$). Thus, the prerequisites for mediation were not met.

**Moderation analyses—**All models that evaluated whether race moderated the relationship between stigma (public×internalized) and outcome variables (current treatment, attitudes toward treatment, and intention to seek treatment) were nonsignificant.

## DISCUSSION

This study sought to investigate the nature of the relationships among public and internalized stigma, race, and treatment-related attitudes and behaviors. Our major findings indicate that internalized stigma mediates the relationship between public stigma and attitudes towards mental health treatment. Although this relationship held for the sample as a whole, within-group analyses (examining African Americans and whites separately) indicated that among African Americans internalized stigma had a direct relationship with attitudes toward treatment. Contrary to our hypotheses, public stigma was not significantly associated with treatment-related behaviors (i.e., current treatment) or intention to seek treatment for depression. Additionally, the relationship between stigma and current treatment, intention to seek treatment, and attitudes toward treatment did not differ by race.

Although stigma has often been hypothesized to have an impact on mental health treatment seeking (USDHHS, 1999), our findings are consistent with other recent studies that found no significant relationship between perceived public stigma and seeking care for mental health problems (Komiti et al., 2006; Roeloffs et al., 2003). In addition, our findings support those reported by Vogel and colleagues (2007), who tested a similar model in a sample of college students and found that the relationship between perceived public stigma for mental health problems and mental health service utilization was mediated by internalized stigma and

attitudes toward mental health treatment. However, no data were reported on the clinical status of their sample of college students, which is important because the need for care may influence both attitudes toward treatment and treatment seeking behavior. In fact, contrary to our expectation, although greater internalized stigma and public stigma were associated with more negative attitudes toward mental health treatment, persons currently in mental health treatment reported not only more depressive symptoms but also more internalized stigma and perceived public stigma. This suggests that although stigma is associated with attitudes toward treatment, the relationship between these attitudinal factors (internalized stigma, perceived public stigma, and attitudes toward treatment) and actual behavior is more complex. For example, Claude Steele's work on stereotype threat (Steele, 1997; Steele & Aronson, 1995) may be relevant here. This theory suggests that when someone who belongs to a negatively stereotyped group (e.g., people with depression) engages in behaviors (being in treatment or thinking about going to treatment) where there is the possibility of being judged or treated according to the negative stereotype, then this situation becomes self-threatening. Therefore, although the depressed person is going to treatment to get well, the actual behavior may activate public stigma and internalized stigma beliefs about depression.

We also made several hypotheses regarding racial differences in treatment-related behaviors and attitudes and the association between stigma and these behaviors. As predicted, and consistent with prior literature, we found that African Americans reported more negative attitudes toward mental health treatment (Cooper-Patrick et al., 1997; Corrigan & O'Shaughnessy, 2007). In fact, in our regression models, prior mental health treatment was associated with more negative attitudes toward treatment, a finding consistent with other literature (Brown et al., 2003; Thompson et al., 2004). However, contrary to our expectation, African Americans and whites did not differ in their current use of mental health treatment or in their intention to seek mental health treatment. Consistent with prior studies, (Kessler et al., 1994a; Neighbors, 1988; Wallen, 1992), African Americans were significantly less likely than their white counterparts to have ever sought mental health treatment. In addition, race did not moderate the relationship between stigma (public and internalized) and treatment-related behaviors and attitudes. Our findings indicate that internalized stigma influences attitudes toward mental health treatment differently in African Americans and whites. Although the role of internalized stigma is a mediational one among whites, the relationship between internalized stigma and attitudes toward mental health treatment among African Americans is direct. Thus, for African Americans' attitudes toward mental health treatment, the influence of stigma is determined by the degree to which African Americans hold negative views about themselves because they have depression, not by how they believe others will judge them. This finding is supported by results reported by Barney and colleagues (2006), who found that although both internalized and public stigma were predictors of intentions to seek mental health treatment, internalized stigma had a stronger association. The results from within-group analyses may have important implications for the development of stigma intervention strategies. Strategies that specifically focus on African Americans may need to utilize a more personalized approach, focusing more on the negative impact the illness of depression has had on the individual's self-identity. Strategies that target a mixed or predominantly white population might focus on both public views about depression and the individual's view of herself.

One factor not considered in this study is the role of coping. We have conceptualized stigma as a possible deterrent to mental service utilization, and hypothesized that this may be particularly the case for African Americans who have two stigmatizing conditions (race and depression). However, our findings do not support this. Research on stigma associated with aging in gay men, addressing the issue of "crisis competence" (Berger, 1996) or "stigma competence" (David & Knight, 2008), may be relevant to this finding in that people who have learned to cope successfully with one stigmatizing condition may have developed

greater self-acceptance and the skills to cope with additional stigmas. Thus, coping effectively with racial stigma may improve one's ability to cope with depression stigma. Future research might explore stigma competence in African Americans and other stigmatized groups who also suffer from depression.

Limitations of the present study include limited information on participants' clinical status. Persons with a diagnosed depressive disorder may have different treatment-related behaviors than those experiencing moderate to high levels of distress, without a clinical disorder. Although our sampling strategy was designed to obtain a community-based sample representative of adults in Allegheny County, our survey techniques limited us to adults who had a phone and were willing to speak with interviewers about depression. Thus, our findings may not be generalizable to those without landline phones and to those who might have more stigmatized beliefs about depression. Also, we did not include other racial/ethnic groups in the sample (e.g., Asian Americans, Latino Americans), so our findings may not be generalizable to these groups. Finally, the use of random digit dialing methodology required that we use a relatively brief assessment, and variables that might influence treatment-related behaviors, like social support, barriers to care, accessibility or mental health care, could not be assessed.

The present research highlights the importance of examining internalized stigma, in addition to perceived public stigma. Future research should further address the nature of the association among internalized stigma, stigma coping strategies, and mental health service utilization. We found that higher internalized stigma was associated with more negative attitudes toward mental health treatment. Thus, the association among internalized stigma and treatment initiation, engagement, and retention may be important factors to examine longitudinally in depression treatment studies. Also, as noted by Rost and colleagues (Rost, 1993), future research on stigma can inform the development of interventions to modify negative attitudes toward mental health treatment.

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## APPENDIX

## Revised Perceived Devaluation Discrimination Scale-Depression

1. Most people would accept a person who has had depression as a friend.
2. Most people believe that a person who has been hospitalized for depression is just as intelligent as the average person.
3. Most people believe that a person who has had depression is just as trustworthy as the average citizen.
4. Most people would accept a person who has fully recovered from depression as a teacher of young children in a public school.
5. Most people believe that entering a mental hospital is a sign of personal failure.
6. Most people would not hire someone who has had depression to take care of their children, even if he or she had been well for some time.
7. Most people think less of a person who has been in a mental hospital for depression.
8. Most employers will hire someone who has had depression if he or she is qualified for the job.
9. Most employers will pass over the application of someone who has had depression in favor of another applicant.
10. Most people in my community would treat someone who has had depression just as they would treat anyone else.
11. Most young women would be reluctant to date a man who has been hospitalized for depression.

12. Once they know a person was in a mental hospital for depression, most people will take his or her opinions less seriously.

Response categories are as follows: 4 (*strongly agree*), 3 (*agree*), 2 (*disagree*) and 1 (*strongly disagree*).

## Revised Internalized Stigma of Mental Illness Scale-Depression

1. I feel out of place in the world because I have depression.
2. Stereotypes about depression apply to me.
3. People discriminate against me because I have depression.
4. I don't talk about myself much because I don't want to burden others with my depression.
5. I feel comfortable being seen in public with an obviously depressed person.
6. Having depression has spoiled my life.
7. People can tell I have depression by the way that I look.
8. Others think that I can't achieve much in life because I have depression.
9. I don't socialize as much as I used to because my depression might make me look or behave ''weird.''
10. In general, I am able to live my life the way I want to.
11. People without depression could not possibly understand me.
12. Depressed people tend to be violent.
13. People ignore me or take me less seriously just because I have depression.
14. Negative stereotypes about depression keep me isolated from the normal world.
15. I can have a good, fulfilling life despite my depression.
16. I am embarrassed or ashamed because I have depression.
17. Because I have depression, I need others to make most decisions for me.
18. People often patronize me, or treat me like a child, just because I have depression.
19. I stay away from social situations in order to protect my family or friends from embarrassment.
20. People with depression make important contributions to society.
21. I am disappointed in myself for having depression.
22. People with depression cannot live a good, rewarding life.
23. Nobody would be interested in getting close to me because I have depression.
24. Being around people who don't have depression makes me feel out of place or inadequate.
25. Living with depression has made me a tough survivor.
26. I feel inferior to others who don't have depression.
27. Depressed people shouldn't get married.
28. People often make fun of me because I have depression.

29. I avoid getting close to people who don't have depression to avoid rejection.
30. I can't contribute anything to society because I have depression.

Response categories are as follows: 4 (*strongly agree*), 3 (*agree*), 2 (*disagree*) and 1 (*strongly disagree*).

## Attitudes Toward Mental Health Treatment-Depression

1. Professional mental health services can effectively reduce mental health problems.
2. If I sought mental health services, it is likely I would find a therapist that I would feel comfortable opening up to.
3. In my community, people take care of their emotional problems on their own; they don't seek professional mental health services.
4. Mental health professionals are well trained.
5. If I were experiencing a mental health breakdown, I am confident that taking medications would provide me with relief.
6. I do not fully trust mental health professionals.
7. I feel confident that I could find a therapist who is understanding and respectful of my ethnicity/culture.
8. Mental health professionals don't really care about you, they are just there for a paycheck.
9. Due to time and financial constraints, seeking mental health services is not a feasible option for me.
10. Professional mental health treatment would not be helpful for me.
11. My family would support me seeking professional mental health services.
12. Mental health services are only effective if your therapist matches your race and/or ethnicity.
13. Most therapists have a lot of book smarts, but no street smarts.
14. I would be comfortable seeing a therapist that is a lot younger than me.
15. I believe that therapy is the most effective way to deal with mental health problems.
16. Most mental health professionals have negative beliefs about the mentally ill.
17. Seeking professional mental health services is a last resort.
18. I would be comfortable seeing a therapist who is of a different race than I am.
19. I know people who have had negative experiences when they sought professional mental health services.
20. I would seek help from my family and friends, before seeking help from a mental health professional.

Response categories are as follows: 4 (*strongly agree*), 3 (*agree*), 2 (*disagree*) and 1 (*strongly disagree*).

## Table 1

Sample Characteristics

| | Total sample (N) | African American (N) | White (N) | p |
|---|---|---|---|---|
| Mean age in years (*SD*) | 59.6 (16.4) (449) | 58.11 (220) | 61.08 (229) | .47 |
| % ≥60 years | 55.2 (449) | 54.5 (220) | 55.9 (229) | .77 |
| % African American | 49.0 (449) | | | |
| % Female | 81.3 (449) | 85 (220) | 77.7 (229) | .05 |
| % Married or living as married | 28.3 (449) | 17.7 (220) | 38.4 (229) | .0001 |
| % At least high school education | 90.6 (449) | 85.5 (220) | 95.6 (229) | .0001 |
| % Employed full-time or part-time | 32.5% (449) | 31.4 (220) | 33.6 (229) | .61 |
| % Income at least $35,000 | 31.6 (415) | 16.5 (200) | 45.6 (215) | .0001 |
| Mean depressive symptom severity (*SD*)[a] | 11.7 (4.2) (449) | 11.8 (4.1) (220) | 11.6 (4.2) (229) | .68 |
| % Currently in mental health treatment | 21 (446) | 17.4 (220) | 24.6 (228) | .07 |
| % Prior mental health treatment | 52.9 (446) | 42.7 (220) | 62.8 (226) | .0001 |
| % Intend to seek treatment for depression | 24.3 (448) | 26.0 (219) | 22.7 (229) | .41 |
| Mean public stigma score (*SD*)[b] | 31.2 (4.5) (423) | 31.3 (4.1) (214) | 31.0 (4.8) (209) | .55 |
| Mean internalized stigma score (*SD*)[c] | 65.5 (11.2) (445) | 65.9 (11) (218) | 65.0(11.4) (227) | .42 |
| Mean attitudes toward mental health treatment score[d] | 55.5 (5.6) (421) | 54.6 (5.7) (209) | 56.3 (5.4) (212) | .002 |

[a] Patient Health Questionnaire (PHQ-9).

[b] Perceived Devaluation and Discrimination Scale.

[c] Internalized Stigma of Mental Illness Scale.

[d] Attitudes Toward Seeking Professional Help Scale.

**Table 2**

Correlation Matrix: Stigma, Depression Severity and Treatment–Related Variables Controlling for Depressive Severity

| | Internalized stigma | Perceived public stigma | Current mental health treatment | Intention to seek mental health treatment | Attitudes toward mental health treatment |
|---|---|---|---|---|---|
| Internalized stigma | – | −.30 | −.07 | .08 | −.32 |
| | | $p<.0001$ | $p<.16$ | $p<.11$ | $p<.0001$ |
| Perceived public Stigma | – | – | −.07 | −.03 | −.14 |
| | | | $p<.15$ | $p<.49$ | $p<.004$ |
| Current mental health treatment | – | – | – | −.36 | −.14 |
| | | | | $p<.0001$ | $p<.005$ |
| Intention to seek Mental health treatment | – | – | – | – | .25 |
| | | | | | $p<.0001$ |
| Attitudes towards Mental health treatment | – | – | – | – | – |

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**Table 3**

Mediation Effects of Internalized Stigma on the Association Between Public Stigma and Attitudes Toward Mental Health Treatment

| | Total sample | | | Whites | | |
|---|---|---|---|---|---|---|
| **Predictor** | **B** | **SEB** | **P** | **B** | **SEB** | **p** |
| *Public stigma to treatment attitudes* | −.072 | .029 | .015 | −.085 | .037 | .023 |
| Gender | −.007 | .025 | .771 | −.021 | .031 | .490 |
| Marital status | .003 | .006 | .589 | .009 | .008 | .273 |
| Education | .013 | .007 | .052 | .013 | .009 | .158 |
| Income | −.002 | .004 | .588 | .002 | .006 | .703 |
| Prior mental health treatment | −.037 | .013 | .004 | −.022 | .013 | .113 |
| *Public stigma to internalized stigma* | .250 | .043 | .0001 | .221 | .055 | .0001 |
| Gender | −.135 | .037 | .0001 | −.110 | .046 | .016 |
| Marital status | .013 | .009 | .162 | .003 | .012 | .831 |
| Education | −.032 | .010 | .001 | −.021 | .014 | .134 |
| Income | −0.10 | .006 | .092 | −.020 | .009 | .026 |
| Prior mental health treatment | −.010 | .019 | .601 | −.012 | .020 | .543 |
| *Internalized stigma to treatment attitudes* | .250 | .043 | .0001 | −.207 | .042 | .0001 |
| Gender | −.135 | .037 | .0001 | −.046 | .030 | .130 |
| Marital status | .013 | .009 | .162 | .011 | .008 | .177 |
| Education | −.032 | .010 | .001 | .009 | .009 | .323 |
| Income | −.010 | .006 | .092 | −.002 | .006 | .686 |
| Prior mental health treatment | −.010 | .019 | .601 | −.022 | .013 | .084 |
| *Mediation effect of internalized stigma* | | | | | | |
| Gender | −.031 | .024 | .198 | −.043 | .030 | .157 |
| Marital status | .006 | .006 | .348 | .010 | .008 | .229 |
| Education | .007 | .006 | .273 | .009 | .009 | .308 |
| Income | −.004 | .004 | .309 | −.002 | .006 | .792 |
| Prior mental health treatment | −.039 | .012 | .002 | −.024 | .013 | .067 |
| Internalized stigma | −.179 | .031 | .0001 | −.043 | .044 | .001 |
| Public stigma | −.027 | .029 | .361 | .042 | .037 | .253 |

*Note.* SEB = Standard Error of Beta.