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Perceived Public Stigma and the Willingness to Seek Counseling: The Mediating Roles of Self-Stigma and Attitudes Toward Counseling

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This study examined the mediating effects of the self-stigma associated with seeking counseling and attitudes toward seeking counseling on the link between perceived public stigma and willingness to seek counseling for psychological and interpersonal concerns. Structural equation modeling of data from 676 undergraduates indicated that the link between perceived public stigma and willingness to seek counseling was fully mediated by self-stigma and attitudes. Perceptions of public stigma contributed to the experience of self-stigma, which, in turn, influenced help-seeking attitudes and eventually help-seeking willingness. Furthermore, 57% of the variance in attitudes toward counseling and 34% of the variance in willingness to seek counseling for psychological and interpersonal concerns were accounted for in the proposed model.

Keywords: public stigma, self-stigma, attitudes, counseling, help seeking

Many people who experience psychological and interpersonal concerns never pursue treatment (Corrigan, 2004). According to some estimates, within a given year, only 11% of those experiencing a diagnosable problem seek psychological services. In addition, fewer than 2% of those who struggle with problems that do not meet diagnosable criteria seek treatment (Andrews, Issakidis, & Carter, 2001). As a result, it is important to develop models that account for the reasons why people do not seek services when experiencing a psychological or interpersonal problem to develop ways to reach out to those in need.

The most often cited reason for why people do not seek counseling and other mental health services is the stigma associated with mental illness and seeking treatment (Corrigan, 2004). Stigma can decrease the likelihood that an individual will seek services even when the potential consequences of not seeking counseling (e.g., increased suffering) are severe (Sibicky & Dovidio, 1986). In fact, in April 2002, during the launching of the New Freedom Commission on Mental Health (http://www.mentalhealthcommission.gov), the president declared that the stigma that surrounds mental illness is the major obstacle to Americans getting the quality mental health care they deserve. This is consistent with the 1999 surgeon general's report on mental health (Satcher, 1999). The surgeon general's report identified the fear of stigmatization as deterring individuals from (a) acknowledging their illness, (b) seeking help, and (c) remaining in treatment, thus creating unnecessary suffering. These commissions and reports stress the importance of better understanding the role of stigma in seeking care so that efforts to reduce stigma can be implemented.

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Stigma Associated With Seeking Counseling

Stigma has been defined as a mark or flaw resulting from a personal or physical characteristic that is viewed as socially unacceptable (Blaine, 2000). The "stigma associated with seeking mental health services, therefore, is the perception that a person who seeks psychological treatment is undesirable or socially unacceptable" (Vogel, Wade, & Haake, 2006, p. 325). The existence of public stigma (i.e., negative views of the person by others) surrounding mental illness and the seeking of psychological services is clear. Past research has found that the public often describes people with a mental illness in negative terms (for a review, see Angermeyer & Dietrich, 2006). For example, survey research has shown that the majority of community respondents report negative attitudes toward people with an identified disorder (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000) and tend to avoid and perceive as dangerous those who are labeled as having been previously hospitalized (Link, Cullen, Frank, & Wozniak, 1987).

Whereas the stigma attached to being a mental health patient may not be the same as the stigma associated with being a counseling client, researchers have found that people tend to report more stigma surrounding counseling clients than nonclients. For example, people labeled as having used counseling services have been rated less favorably and treated more negatively than those who were not labeled (Sibicky & Dovidio, 1986). In scenario-based research, individuals described as seeking assistance for depression were rated as more emotionally unstable, less interesting, and less confident than those described as seeking help for back pain and than those described as not seeking help for depression (Ben-Porath, 2002). As a result, it seems that it is not just having a disorder but seeking psychological services that is stigmatized by the public.

Given the negative perceptions of those who seek psychological services, it is not surprising that individuals hide their psychological concerns and avoid treatment to limit the harmful consequences associated with being stigmatized (Corrigan & Matthews, 2003). Consistent with this, individuals are less likely to seek help

for issues that are viewed negatively by others (Overbeck, 1977). In addition, surveys of undergraduate students have found that those who endorse stigmas of the mentally ill are less likely to seek psychological help (Cooper, Corrigan, & Watson, 2003). Researchers have also found that perceptions of counseling stigma predict attitudes toward seeking counseling (Deane & Todd, 1996; Komiya, Good, & Sherrod, 2000; Vogel, Wester, Wei, & Boysen, 2005) as well as willingness to seek counseling (Rochlen, Mohr, & Hargrove, 1999). Survey research with community samples has also found that the fear of being viewed as crazy is a common barrier to seeking professional help (Nelson & Barbaro, 1985) and that participants who do not seek therapy are more likely to report stigma as a treatment barrier than those who do (Stefl & Prosperi, 1985). Furthermore, the stigma associated with mental illness has been linked to the early termination of treatment (Sirey et al., 2001). In all, there is clear support that awareness of the stigma associated with seeking treatment has a negative influence on people's attitudes toward seeking help and keeps many people from seeking help even when they have significant problems.

The Role of Self-Stigma

Despite the awareness of the relationship between perceived public stigma and the decision to seek treatment, the complex role that stigma plays in this decision-making process is not fully known. Corrigan (1998, 2004) asserted that there are two separate types of stigma affecting an individual's decision to seek treatment. The first, public stigma, is the perception held by others (i.e., by society) that an individual is socially unacceptable. The second, self-stigma, is the perception held by the individual that he or she is socially unacceptable, which can lead to a reduction in self-esteem or self-worth if the person seeks psychological help (Vogel et al., 2006). In other words, the negative images expressed by society toward those who seek psychological services may be internalized (Corrigan, 1998, 2004; Holmes & River, 1998) and lead people to perceive themselves as inferior, inadequate, or weak (Nadler & Fisher, 1986). As a result, people higher in self-stigma may decide to forego psychological services to maintain a positive image of themselves (Miller, 1985).

Whereas the direct relationship of perceived public stigma on one's willingness to seek psychological services is well established, the role of self-stigma has only recently been addressed. Related research, however, has shown that people can internalize negative perceptions when dealing with mental health issues (Link, 1987; Link & Phelan, 2001) and that being labeled mentally ill can lead to lower self-esteem (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). In addition, modified labeling theory asserts that societal devaluation and discrimination toward the mentally ill could directly lead to negative consequences for people's self-esteem if they are labeled, by themselves or others, as having a mental illness or as being in need of psychological care (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989). Consistent with this, perceptions of stigma surrounding mental illness are related to lower self-esteem for those suffering from a mental illness (Link et al., 1987). Research has also shown that individuals are less likely to ask for help from nonprofessional sources, such as friends, if they fear embarrassment (Mayer & Timms, 1970) or if asking for help would lead them to feel inferior or incompetent (Nadler, 1991).

One study has directly measured the role of self-stigma in predicting psychological help-seeking attitudes and willingness to seek counseling (Vogel et al., 2006). This study showed that self-stigma was conceptually different from other, potentially related constructs, such as self-esteem and public stigma, suggesting that self-stigma is potentially unique in the conceptualization of help-seeking behavior. Supporting this, self-stigma uniquely predicted attitudes toward seeking psychological help and willingness to seek counseling above previously identified factors. It is interesting that the role of perceived public stigma in predicting attitudes toward and willingness to seek counseling was reduced when self-stigma was entered into the model. This suggests that self-stigma may mediate the relationship between perceived public stigma and attitudes toward seeking help as well as willingness to seek help. This mediating relationship makes sense, as public stigma's effect on one's decision to seek help may have as much or more to do with the internalization of societal messages about what it means to be mentally ill (Link et al., 1989) or to seek psychological services. The internalization can lead to shame and loss of self-esteem (Link, 1987), and the attempt to avoid those feelings may have the most direct effect on an individual's attitudes toward and willingness to seek counseling. This hypothesis, however, has not been empirically tested; only the direct effects of public and self-stigma on attitudes toward and willingness to seek counseling have been examined. As a result, we do not know the full relative effect of the different types of stigma on the decision to seek psychological help.

Sex Differences in Perceptions of Stigma

Studies consistently find that women are more likely to seek help for emotional issues (Moller-Leimkuhler, 2002) and possess more positive attitudes toward counseling than men (Fischer & Farina, 1995). One reason may be that men perceive greater stigma associated with seeking help. Society considers counseling to be a last resort, something to use only after other sources of support have failed (Angermeyer, Matschinger, & Riedel-Heller, 1999). Such attitudes may be particularly salient for men, who are expected to be stoic, controlled, and self-sufficient (Hammen & Peters, 1977). Consistent with this, adolescents are more willing to refer a girl to get help than a boy (Raviv, Sills, Raviv, & Wilansky, 2000). Thus, men may perceive that there is public stigma associated with their seeking help (Timlin-Scalera, Ponterotto, Blumberg, & Jackson, 2003) and believe that they would be stigmatized for discussing certain issues with a counselor (Martin, Wrisberg, Beitel, & Lounsbury, 1997). Similarly, the emphasis of the traditional male gender role on being independent and in control may lead to increased concerns about the loss of self-esteem associated with seeking help, as it may mean admitting to the inability to handle things on one's own (Addis & Mahalik, 2003). Therefore, if a man believed that he needed counseling, he might experience a greater sense of failure, which would make the act of asking for help particularly difficult. Consistent with this, men have been found to experience greater self-stigma than women regarding help seeking in college settings (Vogel et al., 2006).

The Current Study

Although perceptions of public stigma may play an important role in the help-seeking process, it is difficult to alter, as it may require societal changes. However, interventions designed to reduce or alter the self-stigma associated with seeking help may

encourage people to make use of counseling. Thus, a better understanding of how public and self-stigma relate to the help-seeking process can be used to boost service usage through outreach and educational programs. As a result, the goal of this research is to expand on the previous literature by using structural equation modeling (SEM) analyses to examine the hypothesis that the relationship between perceived public stigma and willingness to seek counseling will be indirectly mediated by self-stigma and attitudes toward seeking help (see Figure 1).

Our approach builds on previous work by Vogel and Wester (2003), who examined a general model of help seeking based on Ajzen and Fishbein's (1980) theory of reasoned action. According to this model, one of the primary determinants of the willingness to seek help is one's attitude toward the counseling process. These attitudes are formed through an evaluation of the expectations the individual has about seeking psychological help (e.g., the degree of public and self-stigma the person experiences). On the basis of this model, the perceptions of stigma (e.g., "If I seek help others will think I am crazy") should influence one's attitudes, which, in turn, should influence one's willingness to seek help (Vogel & Wester, 2003). In addition, because the influence of perceived public stigma on an individual's attitudes and willingness to seek counseling has been found to noticeably decrease with the inclusion of self-stigma in the model and because self-stigma predicts help-seeking attitudes and willingness (Vogel et al., 2006), we specifically hypothesize that the effect of public stigma on help-seeking attitudes will be fully mediated through self-stigma and that self-stigma and then attitudes will fully mediate the effect of public stigma on help-seeking willingness. In particular, public stigma will be positively related to self-stigma, self-stigma will then be negatively related to attitudes toward counseling, and attitudes will, in turn, be positively related to the willingness to seek counseling. Finally, given the need for researchers to further examine potential differences between relations of stigma and help-seeking willingness for women and men, we examine the factorial invariance of the model across sex.

Method

Participants

College students ($N = 680$) recruited from psychology classes at a large midwestern university participated in this study. Participants were evenly split between men and women and were predominantly 1st-year (48%) or 2nd-year (30%) students. The rest were 3rd-year (13%) students, were 4th-year (8%) students, or did not report their year in school (1%). Participants were predominantly European American (90%; Asian American = 4%, African American = 2%, Hispanic = 2%, international = 1%, and other = 1%).

Measures

Perceived public stigma. Perceived public stigma was measured with the 12-item Perceived Devaluation–Discrimination scale (Link et al., 1987). Participants rated from 1 (*strongly agree*) to 6 (*strongly disagree*) the degree to which they believed statements about how most people view current or former psychiatric patients. A sample item is "Most people would not hire a former mental patient to take care of their children, even if he or she had been well for some time." Higher scores represent greater perceived stigma. Estimates of internal consistency range from .76 to .88 among clinical and community samples (Link et al., 1989, 2001). The internal consistency of the scores obtained in the current sample was .83. Validity has been shown through a relationship between this scale and the internal experience of demoralization and lower self-esteem among a community sample 6 months and 24 months later (Link et al., 2001).

Self-stigma. Self-stigma was measured with the Self-Stigma of Seeking Help Scale (SSOSH; Vogel et al., 2006). The SSOSH is a 10-item scale consisting of items such as "I would feel inadequate if I went to a therapist for psychological help." Items are rated on a 5-point, partly anchored scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scale point 3 is anchored by *agree and disagree equally*. Higher scores reflect greater self-stigma. Estimates of the internal consistency range from .86 to .90, and the 2-week test–retest reliability has been reported to be .72 in college student samples (Vogel et al., 2006). The internal consistency of the scores obtained in the current sample was .89. The SSOSH has been shown to have a unidimensional factor structure and evidence of validity through correlations with attitudes toward seeking professional help and intention to seek counseling (rs = −.53 to −.63 and −.32 to −.38, respectively; Vogel et al., 2006). The SSOSH also differentiated college students who sought psychological services from those who did not across a 2-month period (Vogel et al., 2006).

Attitudes toward seeking professional help. Attitudes toward seeking professional help were measured with the Attitudes Towards Seeking Professional Psychological Help Scale (Fischer & Farina, 1995). This is a 10-item revision of the original 29-item measure (Fischer & Turner, 1970), consisting of items such as "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." Items are rated from 1 (*disagree*) to 4 (*agree*), with higher scores reflecting positive attitudes. The revised and original scales are correlated .87, suggesting that they tap into a similar construct (Fischer & Farina, 1995). The revised scale also correlates with previous use of professional help for a problem (r = .39). Estimates of the internal consistency (α = .84) and 1-month test–retest (r = .80) reliabilities have been reported for college student samples. The internal consistency of the scores obtained in the current sample was .80. Fischer and Farina have successfully used the measure to differentiate between college students with serious emotional or personal problems who sought counseling and those with comparable problems who did not. For college students, the scale has a positive association (r = .56) with intentions to seek counseling and correlates negatively (r = −.19) with self-concealment tendencies (Vogel et al., 2005).

Willingness to seek counseling for psychological and interpersonal concerns. Willingness to seek counseling for psychological and interpersonal concerns was measured with the Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975). The ISCI is a 17-item measure wherein respondents rate from 1 (*very unlikely*) to 4 (*very likely*) how likely they would be to seek counseling if they were experiencing the problem listed. Problems include issues such as relationship difficulties, depression, personal worries, and drug problems. Factor analysis of the ISCI supports the existence of three subscales within the measure, labeled Psychological and Interpersonal Concerns (10 items; α = .90), Academic Concerns (4 items; α = .71), and Drug Use Concerns (2

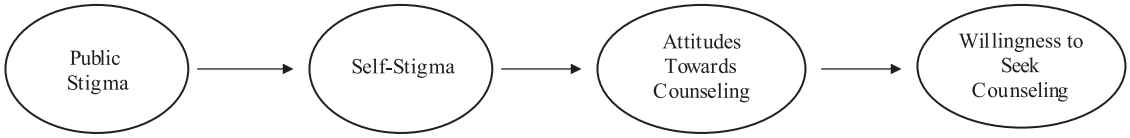

Figure 1. Hypothesized mediated model.

items; $\alpha = .86$), with correlations among the subscales ranging from .18 to .50 (Cepeda-Benito & Short, 1998). To reduce participant burden, we used only the Psychological and Interpersonal Concerns subscale (covering, e.g., loneliness, depression, and inferiority feelings) in the present study. Scale responses are summed, with higher scores indicating a greater likelihood of seeking counseling for psychological and interpersonal concerns. The internal consistency of the scores on the Psychological and Interpersonal Concerns subscale in the current sample was .87. Among college students, the ISCI has been found to correlate with the perceived significance of a current problem and with general attitudes toward seeking help ($r = .36$; Kelly & Achter, 1995).

Procedure

Students were recruited to participate in the study through announcements in their psychology classes and participated voluntarily. These announcements stated that they would be filling out questionnaires about their attitudes and perceptions. Participants attended testing sessions in large groups. After completing an informed consent sheet, participants received a packet containing each of the above measures as well as some demographic questions (i.e., biological sex, year in school, ethnicity). To assess previous use of counseling services, we asked participants whether they "had ever used or are currently using counseling services (Yes/No)." To reduce the potential for order effects, we created three versions of the questionnaire, with the measures randomly presented in each version. After finishing the questionnaire, participants were debriefed and then dismissed. All participants received extra credit in their psychology class for their participation and had been offered an equivalent option (i.e., participate in another experiment or a writing assignment) to earn the extra credit. The University Human Subjects Research Office approved the study procedure.

Results

Preliminary Analysis

Outliers. To check for univariate outliers, we examined the z scores of each of the overall scales (Tabachnick & Fidell, 2001). In two cases (on the ISCI), there were outliers at $p < .001$ (i.e., z scores above 3.29). Thus, we removed these two cases from subsequent analyses. To check for multivariate outliers, we examined Mahalanobis distances among the variables (Tabachnick & Fidell, 2001). Two additional cases were found to be outliers at $p < .001$ (Mahalanobis distance > 18.46) and so were dropped from subsequent analyses ($n = 676$).

Zero-order correlations. Table 1 shows means, standard deviations, and zero-order correlations for the overall scales. As expected, the zero-order correlations showed that perceived public stigma and self-stigma were significantly related to each other, to attitudes toward seeking professional psychological help, and to willingness to seek counseling. Attitudes were also significantly related to willingness to seek counseling.

Table 1
Means, Standard Deviations, and Zero-Order Correlations

Measure	*M*	*SD*	1	2	3	4
1. Willingness	20.6	5.7	—	.50***	−.09*	−.37***
2. Attitudes	25.8	5.4		—	−.12**	−.65***
3. Public Stigma	46.9	9.4			—	.25***
4. Self-Stigma	28.5	7.4				—

Note. $N = 676$. Willingness = Psychological and Interpersonal Concerns subscale of the Intent to Seek Counseling Inventory; Attitudes = Attitudes Towards Seeking Professional Psychological Help Scale; Public Stigma = Perceived Devaluation–Discrimination Scale; Self-Stigma = Self-Stigma of Seeking Help Scale.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Testing Mediated Effects

It is generally agreed that SEM is the preferred method for testing mediation (Frazier, Tix, & Barron, 2004; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). With regard to testing mediation using SEM, Anderson and Gerbing (1988) suggested following a two-step procedure: (a) conducting a confirmatory factor analysis to develop a measurement model with an acceptable fit to the data, and then (b) conducting a structural model to test the hypothesized relationships. We also followed the recommendation of Holmbeck (1997) and compared our hypothesized, fully mediated structural model with a partially mediated structural model to select the best fitting model. We used the maximum likelihood method in the LISREL 8.54 program to examine the measurement and structural models. Four indexes were used to assess the goodness of fit of the models: the comparative fit index (CFI; .95 or greater), the incremental fit index (IFI; .95 or greater), the standardized root-mean-square residual (SRMR; .08 or less), and the root-mean-square error of approximation (RMSEA; .06 or less; see Hu & Bentler, 1999; Martens, 2005).

Item parcels. Following the recommendation of Russell, Kahn, Spoth, and Altmaier (1998), we created observed indicators (parcels) for the latent variables (i.e., perceived public stigma, self-stigma, and attitudes toward and willingness to seek counseling). Three parcels were created for each latent variable (see Table 2 for parcel correlations). The decision to create parcels was based on (a) the desire to meet the assumptions of the maximum likelihood method associated with SEM analyses (i.e., helping to account for possible violations in multivariate normality, which are often problematic when individual items are used) and (b) the desire to reduce the number of parameters that would result if one were to use individual items, thereby improving model fit because of the limited number and better distribution of the parameters (for a discussion, see Russell et al., 1998).[1]

Normality. Because the maximum likelihood procedure we used to test our hypothesized model assumes normality, next we examined the multivariate normality of the observed variables (see Bollen, 1989). The result indicated that the multivariate data were not normal, $\chi^2(2, N = 676) = 212.97$, $p < .001$. Therefore, we report the Satorra–Bentler scaled chi-square (see Satorra & Bentler, 1988) in subsequent analyses.

Measurement model. A test of the measurement model resulted in an excellent fit to the data, scaled $\chi^2(48, N = 676) = 82.96$, $p = .001$ (CFI = .99; IFI = .99; SRMR = .03; RMSEA = .03, 90% confidence interval [CI] = .02, .05). All of the measured

[1] We also used parcels rather than having included additional measures of each construct because many of the measures only had one validated scale (e.g., self-stigma) and because the use of fewer measures reduced participant burden. We created the parcels using separate exploratory factor analyses with the maximum likelihood method on the items making up each of the scales. We rank ordered the items for each subscale on the basis of the magnitude of their factor loadings and successively assigned pairs of the highest and lowest items to a parcel to equalize the average loadings of each parcel on its respective factor.

Table 2
Zero-Order Correlations Among 12 Observed Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Public stigma 1	—	.71	.70	.22	.21	.23	−.10	−.17	−.14	−.08	−.09	−.10
2. Public stigma 2		—	.76	.20	.21	.20	−.01	−.10	−.08	−.06	−.08	−.08
3. Public stigma 3			—	.19	.17	.17	−.04	−.11	−.09	−.04	−.06	−.07
4. Self-stigma 1				—	.71	.75	−.56	−.49	−.52	−.32	−.32	−.40
5. Self-stigma 2					—	.74	−.48	−.43	−.45	−.23	−.23	−.29
6. Self-stigma 3						—	−.55	−.51	−.50	−.27	−.26	−.38
7. Attitude 1							—	.61	.56	.37	.34	.41
8. Attitude 2								—	.61	.37	.38	.43
9. Attitude 3									—	.36	.40	.41
10. Willingness 1										—	.69	.75
11. Willingness 2											—	.70
12. Willingness 3												—

Note. $N = 676$. Absolute values of correlations greater than or equal to .075 were significant at $p < .05$; absolute values of correlations greater than .10 were significant at $p < .01$; absolute values of correlations greater than .13 were significant at $p < .001$. Public Stigma 1, 2, 3 = the three parcels created from the Perceived Devaluation–Discrimination Scale; Self-Stigma 1, 2, 3 = the three parcels created from the Self-Stigma of Seeking Help Scale; Attitude 1, 2, 3 = the three parcels created from the Attitudes Towards Seeking Professional Psychological Help Scale; Willingness 1, 2, 3 = the three parcels created from the Psychological and Interpersonal Concerns subscale of the Intentions to Seek Counseling Inventory.

variables significantly loaded on the latent variables (all ps $< .001$; see Table 3). Therefore, the latent variables appear to have been adequately measured by their respective indicators. Furthermore, the expected correlations among the independent latent variables, the mediator latent variables, and the dependent latent variable were statistically significant (see Table 4).

Structural model. We hypothesized that the effect of perceived public stigma on help-seeking attitudes would be fully mediated through self-stigma and that self-stigma and then attitudes would fully mediate the effect of perceived public stigma on willingness to seek counseling (see Figure 1). The structural model used to test this hypothesis (see Figure 2) showed an excellent fit to the data, scaled $\chi^2(51, N = 676) = 86.09$, $p = .001$ (CFI = .99; IFI = .99; SRMR = .03; RMSEA = .03, 90% CI = .02 to .04).[2] Perceived public stigma significantly predicted self-stigma, and self-stigma predicted attitudes toward seeking counseling, which, in turn, predicted willingness to seek counseling for psychological and interpersonal concerns.[3]

Next, we tested an alternative structural model (a partially mediated model) by adding the direct paths from (a) perceived public stigma to attitudes toward seeking counseling, (b) perceived public stigma to willingness to seek counseling, and (c) self-stigma to willingness to seek counseling.[4] We then used the Satorra–Bentler scaled chi-square difference test (Satorra & Bentler, 2001) to compare these two nested models to determine which model was a better fit to our data. The result of this partially mediated model indicated an excellent fit to the data, scaled $\chi^2(48, N = 676) = 82.86$, $p = .001$ (CFI = .99; IFI = .99; SRMR = .03; RMSEA= .03, 90% CI = .02, .05). However, when these two models were compared, the nonsignificant corrected scaled chi-square difference, $\Delta\chi^2(2, N = 676) = 3.61$, $p = .31$, indicated no differences between these two models. On the basis of the parsimony principle, the hypothesized model was selected as the best model and was used in the subsequent bootstrapping results. It is important to note that perceived public stigma and self-stigma accounted for 57% of the variance in attitudes toward counseling and that 34% of the variance in willingness to seek counseling for psychological and interpersonal issues was explained by perceived public stigma, self-stigma, and attitudes.

Bootstrapping. MacKinnon et al. (2002) recently reported that the standard errors of the indirect effects reported by the LISREL program are not accurate. As a result, Shrout and Bolger (2002) suggested that a more accurate estimate of the standard error of the indirect effect could be calculated with a bootstrap procedure. The bootstrap procedure is an empirical method of determining the significance of statistical estimates (Efron & Tibshirani, 1993). Therefore, in the current study, we used a bootstrap procedure to

[2] Because 115 of the participants had previously sought some type of counseling, we wanted to see whether including these participants in the analyses was altering the results. Therefore, we reran the model with these participants removed. The results were almost identical to those for the full sample, scaled $\chi^2(51, N = 562) = 85.24$, $p = .002$ (CFI = .99; IFI = .99; SRMR = .03; RMSEA = .04, 90% CI = .02, .05). Therefore, we chose to include all participants in the analyses.

[3] The proposed mediation model was a two-stage model in which (a) self-stigma was proposed to fully mediate the relationship between public stigma and attitudes toward seeking counseling (public stigma → self-stigma → attitudes) and (b) attitudes was proposed to fully mediate the relationship between self-stigma and willingness to seek counseling (self-stigma → attitudes → willingness). Therefore, we also ran two additional models that isolated the effects of each mediator (self-stigma and attitudes). The first model showed an adequate fit to the data, scaled $\chi^2(26, N = 676) = 148.78$, $p = .001$ (CFI = .97; IFI = .97; SRMR = .05; RMSEA = .08, 90% CI = .07, .09), as did the second model, scaled $\chi^2(26, N = 676) = 100.56$, $p = .001$ (CFI = .97; IFI = .97; SRMR = .04; RMSEA = .07, 90% CI = .05, .08), providing further support for the proposed two-stage model.

[4] We also assessed whether self-stigma and attitudes were separate mediators or measured one construct. We conducted a model in which self-stigma (SSOSH) and attitudes (Attitudes Towards Seeking Professional Psychological Help Scale) were combined. However, the model did not provide a good fit to the data, scaled $\chi^2(53, N = 676) = 497.78$, $p = .001$ (CFI = .94; IFI = .94; SRMR = .07; RMSEA= .11, 90% CI = .10, .12). This result is not that surprising given that the SSOSH is reported to measure internalized negative perceptions of oneself if one were to seek help, whereas the Attitudes Towards Seeking Professional Psychological Help Scale is reported to measure general positive and negative perceptions of counseling.

Table 3
Factor Loadings for the Measurement Model

Measured variable	Unstandardized factor loading	*SE*	*Z*	Standardized factor loading
Public stigma				
Public stigma Parcel 1	2.84	0.12	23.05	.81***
Public stigma Parcel 2	3.08	0.12	25.63	.88***
Public stigma Parcel 3	2.88	0.12	24.96	.86***
Self-stigma				
Self-stigma Parcel 1	2.73	0.11	25.65	.86***
Self-stigma Parcel 2	2.10	0.08	25.22	.83***
Self-stigma Parcel 3	2.18	0.08	27.47	.88***
Attitude toward counseling				
Attitude 1	1.83	0.08	21.85	.78***
Attitude 2	1.51	0.07	21.95	.77***
Attitude 3	1.53	0.07	22.83	.75***
Willingness to seek counseling				
Intent 1	2.11	0.07	29.05	.85***
Intent 2	1.51	0.06	26.41	.80***
Intent 3	1.69	0.06	30.43	.89***

Note. $N = 676$.
*** $p < .001$.

test the statistical significance of the hypothesized indirect effect. The first step in this bootstrap procedure was to create 10,000 bootstrap samples from the original data set ($N = 676$) by random sampling with replacement. The second step was to run the structural model 10,000 times with these 10,000 bootstrap samples to yield 10,000 estimations of each path coefficient. The third step was to use LISREL's saved output of the 10,000 estimations of each path coefficient to calculate an estimate of the indirect effect. Therefore, we calculated the indirect effect of perceived public stigma on attitudes toward seeking counseling through the mediator of self-stigma by multiplying 10,000 pairs of the path coefficients: (a) from perceived public stigma to self-stigma and (b) from self-stigma to attitudes (i.e., public stigma → self-stigma → attitudes). We calculated the indirect effect of self-stigma on the willingness to seek counseling through the mediator of attitudes toward seeking counseling by multiplying 10,000 pairs of the path coefficients: (a) from self-stigma to attitudes and (b) from attitudes to willingness to seek counseling (i.e., self-stigma → attitudes → willingness). Finally, we calculated the indirect effect of perceived public stigma on the willingness to seek counseling through the mediators of self-stigma and attitudes toward seeking counseling by multiplying 10,000 pairs of the path coefficients: (a) from perceived public stigma to self-stigma, (b) from self-stigma to attitudes, and (c) from attitudes to willingness to seek counseling (i.e., public stigma → self-stigma → attitudes → willingness). The indirect effect is statistically significant at the .05 level if the 95% CI for these estimates does not include zero (see Shrout & Bolger, 2002). The results from 10,000 bootstrap samples showed that the 95% CI for these indirect effects did not include zero, indicating that these indirect effects were statistically significant (see Table 5).

Sex comparison. We examined the invariance of path coefficients for structural paths in the fully mediated model by conducting SEM multiple-group comparison analysis for the female ($n = 339$) and male ($n = 337$) groups. To compare the two models, we conducted a model in which the relations among perceived public stigma, self-stigma, attitudes, and willingness were freely estimated and a model in which the relations were set to be equal for women and men. We then used the corrected scaled chi-square difference test to determine whether these models were equivalent. When we compared these two models, there was a significant corrected scaled chi-square difference, $\Delta\chi^2(3, N = 676) = 8.2$, $p = .04$. Examination of the completely standardized common metric solution suggested that significant group differences were present for the relationship between perceived public stigma and self-stigma ($\beta = .35$ for men and $\beta = .15$ for women). To confirm this, we compared a model in which the relationships among perceived public stigma, self-stigma, attitudes, and willingness were set to be equal for women and men with a model in which public stigma and self-stigma were freely estimated. Again, there was a significant corrected scaled chi-square difference between the models, $\Delta\chi^2(1, N = 676) = 11.2$, $p = .001$. Thus, whereas the relationship between perceived public stigma and self-stigma was present for both women and men, the relationship was stronger for men than for women (see Figure 3).

Discussion

Using SEM, this study provides a new understanding of the ways stigma influences one's decision to seek counseling. Results

Table 4
Correlations Among Latent Variables for the Measurement Model

Latent variable	1	2	3	4
1. Public stigma	—	.27***	−.13*	−.10*
2. Self-stigma		—	−.76***	−.42***
3. Attitudes toward counseling			—	.59***
4. Willingness to seek counseling				—

Note. $N = 676$.
* $p < .05$. *** $p < .001$.

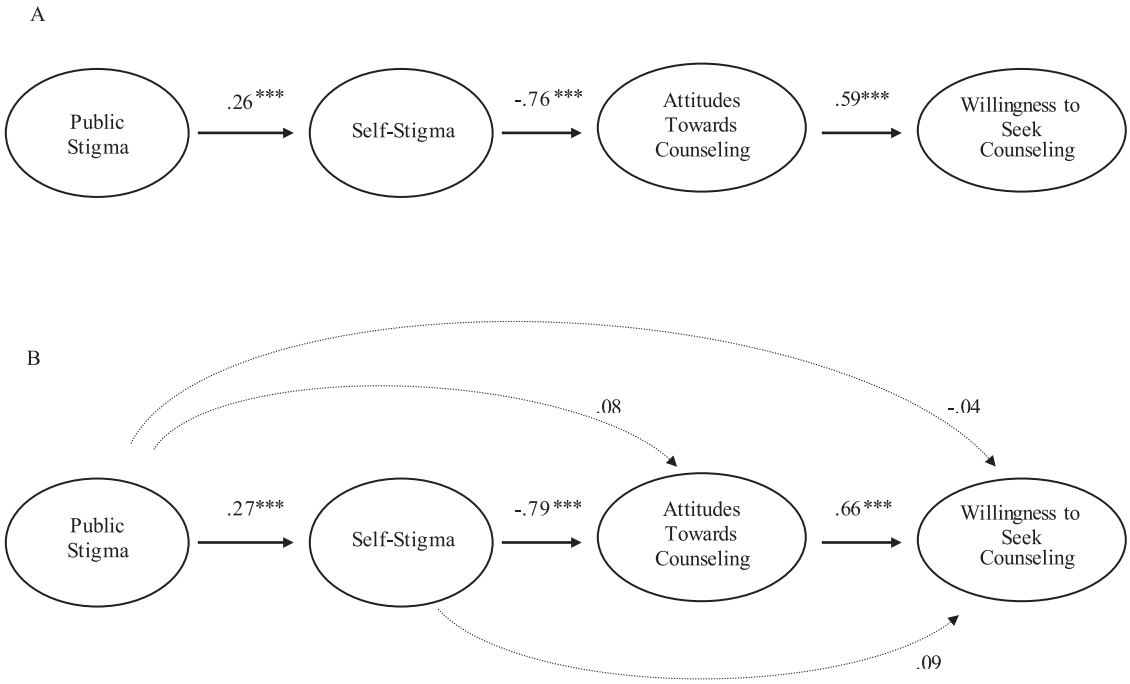

Figure 2. A: Final mediated model. B: Comparison partially mediated model. $^{***}p < .001$.

indicate that perceptions of the public stigma associated with mental illness predicted the self-stigma associated with seeking counseling, which, in turn, predicted attitudes toward seeking help and, finally, willingness to seek counseling services for psychological and interpersonal concerns. In particular, the SEM results support our hypotheses that perceived public stigma is positively related to self-stigma, that self-stigma is negatively associated with the attitudes individuals have toward counseling, and that these attitudes are positively associated with willingness to seek help for psychological and interpersonal concerns. Self-stigma and attitudes were also found to be separate mediators of the relationship between public stigma and one's willingness to seek help, supporting the conceptualization that self-stigma is the internalized negative perceptions of oneself if one were to seek help, whereas attitudes toward seeking counseling are the positive or negative perceptions of counseling in general.

Table 5
Bootstrap Analyses of the Magnitude and Statistical Significance of the Indirect Effect for the Total Sample and for Women and Men

Independent variable	Mediator variables	Dependent variable	β (standardized indirect effect)	*B* (Mean indirect effect)[a]	*SE* of mean[a]	95% confidence interval mean indirect effect[a]
			$N = 676$			
Public stigma →	Self-stigma→	Attitudes	.26 × −.76 = −.20	−.13	.02	−.17, −.08
Self-stigma →	Attitudes →	Willingness	−.76 × .59 = −.45	−.34	.03	−.39, −.30
Public stigma →	Self-stigma → attitudes →	Willingness	.26 × −.76 × .59 = −.09	−.09	.02	−.12, −.05
			Women ($n = 339$)			
Public stigma →	Self-stigma→	Attitudes	.14 × −.74 = −.10	−.06	.04	−.12, −.05
Self-stigma →	Attitudes →	Willingness	−.74 × .58 = −.43	−.33	.03	−.42, −.25
Public stigma →	Self-stigma → attitudes →	Willingness	.14 × −.74 × .58 = −.06	−.04	.02	−.09, −.0003
			Men ($n = 337$)			
Public stigma →	Self-stigma→	Attitudes	.35 × −.77 = −.27	−.17	.03	−.24, −.11
Self-stigma →	Attitudes →	Willingness	−.77 × .65 = −.50	−.34	.03	−.45, −.28
Public stigma →	Self-stigma → attitudes →	Willingness	.35 × −.77 × .65 = −.18	−.12	.02	−.17, −.08

[a] These values were based on unstandardized path coefficients.

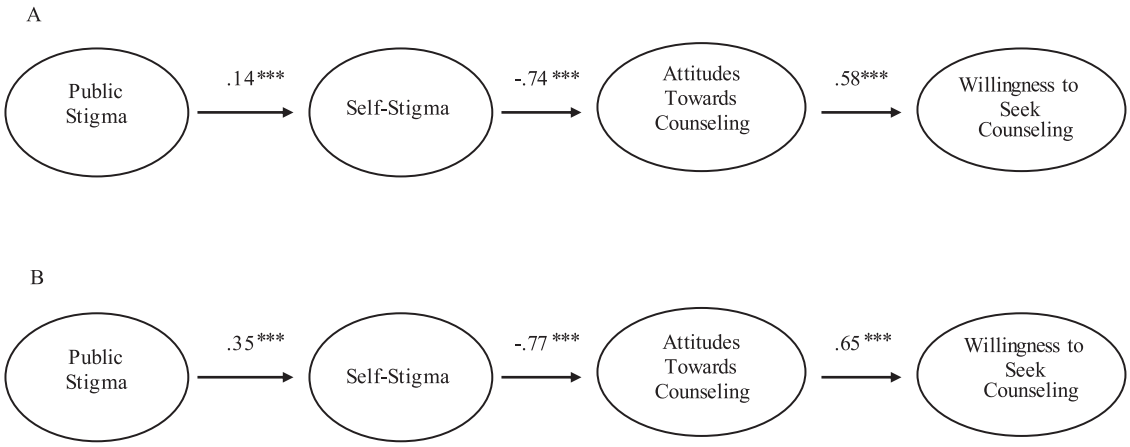

Figure 3. A: Mediated model for women. B: Mediated model for men. $^{***}p < .001$.

The results build on previous work (Vogel & Wester, 2003) by further supporting the use of Ajzen and Fishbein's (1980) theory of reasoned action to understand help-seeking decisions. The theory of reasoned action proposes that intentions are directly based on one's attitude toward a behavior and that, in turn, these attitudes are based on the expectations one has about the outcome of the behavior (e.g., "If I seek help others will think I am crazy"). Consistent with this theory, our model and data suggest that one of the primary predictors of help-seeking willingness is one's attitude toward the counseling process. These attitudes, in turn, are strongly associated with the degree of public and self-stigma one experiences.

These findings also support modified labeling theory (Link et al., 1989). Modified labeling theory asserts that societal perceptions of devaluation–discrimination toward the mentally ill (public stigma) lead to negative consequences for people's self-esteem (self-stigma) if they are labeled (by themselves or others) as having a mental illness. Our model supports the idea that public stigma can lead to negative internalization of the stigma. Furthermore, our findings add to this theory by showing that self-stigma plays a role in the formation of attitudes toward and willingness to seek counseling services. Thus, the present results add to the help-seeking literature by providing, for the first time, empirical evidence that the effect of perceived public stigma on psychological help seeking is mediated by one's internalization of that stigma. According to our data, perceptions of the public's view of those who seek counseling are not as direct a predictor of help-seeking attitudes and willingness as an individual's tendency to internalize this stigma (self-stigma). This idea is particularly salient in this study given that the link between perceived public stigma and attitudes was fully mediated by self-stigma and the link between perceived public stigma and willingness to seek counseling was fully mediated by self-stigma and attitudes. Furthermore, the current model, in which self-stigma was included, accounted for 57% of the variance in help-seeking attitudes, whereas previous studies with just perceived public stigma have tended to account for less variance (e.g., 25% of the variance in attitudes; Komiya et al., 2000). Self-stigma, therefore, is an important predictor of help-seeking attitudes and willingness and a more proximal indicator than perceived public stigma.

In addition, the results of this study shed some light on previous findings that women have more positive attitudes toward counseling (Fischer & Farina, 1995) and are more likely to seek help for emotional issues than men (see Moller-Leimkuhler, 2002). In our study, the relationship between perceived public stigma and self-stigma was stronger for men than for women. Therefore, one reason men may seek counseling less often than women is that men may internalize public stigma more strongly than women. This may be because traditional gender roles lead society to consider counseling as something men are not supposed to need and therefore actually stigmatize men to a greater degree than women for seeking help (Martin et al., 1997). It may also be that traditional gender roles lead men to believe that if they seek counseling they are a failure, which would increase the negative effect of seeking help on their self-esteem (Vogel et al., 2006). Given these findings, future research should continue to examine the role of sex on stigma and help seeking, with particular emphasis on the effect of gender roles on perceptions of public and self-stigma and help-seeking decisions.

Implications

With respect to clinical practice, the results of this study are important because public stigma can be difficult to change (i.e., may require societal level changes). Therefore, knowledge of mediators, such as self-stigma, between public stigma and help-seeking willingness can lead to more practical and efficient interventions designed to encourage people to enter counseling. Thus, although researchers have discussed and tested ways to reduce public stigma, the present results suggest that clinicians may need to address individuals' concerns about the negative perceptions of themselves if they were to need psychological help (see Corrigan, 2004). Changing society's attitudes toward psychological help seeking remains an important step and may be the ultimate goal. However, counselors also should assist those in need by helping them learn how to manage or overcome the negative effects of internalizing stigma.

In line with this assertion, some researchers (e.g., Sirey et al., 2001) have discussed the need to work with the psychological effects of stigma on a potential client. One approach may be to

offer information to those who are experiencing psychological symptoms but have avoided psychological help in the past. Nonthreatening, public workshops based in local communities; Web-based information; and public service announcements might help people identify stigma, develop specific strategies to cope with it, and be more likely to seek counseling. For example, Enright (1997) suggested teaching cognitive–behavioral strategies to individuals to help them learn how to manage stigma and discrimination (see also Holmes & River, 1998). An example of this type of approach for individuals experiencing depression can be seen online (see http://www.bluepages.anu.edu.au; Griffiths, Christensen, Jorm, Evans, & Groves, 2004).

Helping different groups understand self-stigma and its effects and providing options for addressing it might help to promote the use of psychological services for underserved populations. Both public and self-stigma may be different depending on certain demographic factors (e.g., women and men; Bland, Newman, & Orn, 1997). Men, for example, may be particularly concerned that other people will view them as weak (Addis & Mahalik, 2003) or be upset with them for having to seek help for depression (Moller-Leimkuhler, 2002). Certain ethnic and racial minority groups also tend to avoid traditional psychological help, possibly because of concerns about stigma (see Leong, Wagner, & Tata, 1995).

Some evidence also suggests that people may feel less self-stigma if their symptoms are normalized and if they are given an explanation for their symptoms (Schreiber & Hartrick, 2002). People tend to view their problems with less shame and guilt when given information that suggests that their problems (a) are not their fault, (b) are reversible (Rosen, Walter, Casey, & Hocking, 2000), and (c) will improve through treatment (Mann & Himelein, 2004). Because most of the problems that psychologists treat meet these three criteria, those in the helping professions have an important opportunity. By communicating with the public that mental health problems do not need to be internalized as personal incompetence or something shameful, counselors might be able to reach more of those who are suffering.

Limitations and Future Research

There are limitations to the present research that should be noted. First, the sample consisted of mostly (50%) 1st-year college students, which limits our ability to generalize to other age groups. Second, the sample was 90% Caucasian, and different cultural backgrounds may lead to differences in the importance of stigma in help-seeking decisions. For ethnic minorities, the relationship between public stigma and help seeking might be more or less pronounced. For example, self-stigma may or may not play as important a role in groups that are more collectivistic. Until the present findings can be replicated with diverse samples, they should be applied cautiously. The present results are also correlational and do not show causation. Longitudinal studies or experimental designs (e.g., providing psychoeducation to reduce stigma) are needed to show that one's beliefs about public or self-stigma actually directly cause or inhibit help seeking. Similarly, future investigations could explore actual help-seeking behaviors. Although attitudes have been shown to be an important indicator of intentions and future behavior (Ajzen & Fishbein, 1980), determining whether public and self-stigma are predictors of actual help-seeking behavior is an important next step. In addition, our sample was not chosen on the basis of psychological distress. Thus, although this is the first study to explore the mediating effect of self-stigma, future studies should explore the validity of this model with a clinically distressed sample. For example, future studies could include a global symptom measure and then examine the analyses separately for the portion of the sample that scores greater than the clinical cutoff. Related to this, future research should also examine models that include the relationships among these variables and other potential mediating factors, such as personality and attachment style. These investigations could help to focus interventions and would be important in efforts to understand and mitigate the effects of both public and self-stigma (Corrigan, 2004).

A final limitation to this study involves the use of the 12-item Perceived Devaluation–Discrimination Scale (Link et al., 1987, 1989), because it focuses on the public stigma surrounding being a former mental patient. People may differentiate between seeking help for a mental disorder or being in a psychiatric hospital and seeking help for problems at a counseling center. Thus, the public stigma measured by the scale may have a less clear association with the public stigma associated with seeking counseling at a counseling center. Thus, although the Perceived Devaluation–Discrimination Scale is a widely used scale and there was a significant relationship between it and self-stigma in this study, future studies could expand the present results by using a different scale that is more applicable to the attitudes and stigma associated with seeking help at a counseling center.

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