

Measuring Perceptions of Stigmatization by Others for Seeking Psychological Help: Reliability and Validity of a New Stigma Scale With College Students

David L. Vogel, Nathaniel G. Wade, and Paul L. Ascheman
Iowa State University

Fear of being stigmatized is the most cited reason why individuals avoid psychotherapy. Conceptually, this fear should be strongest when individuals consider the reactions of those they interact with. Across 5 samples, the authors developed the Perceptions of Stigmatization by Others for Seeking Help (PSOSH) scale. In Sample 1 ($N = 985$), the 5 items of the PSOSH were selected ($\alpha = .91$). In Sample 2 ($N = 842$), the unidimensional factor structure of the scale was examined across a diverse sample. In Sample 3 ($N = 506$), concurrent validity was supported through moderate associations with 3 different stigma measures (i.e., public stigma toward counseling, $r = .31$; public stigma toward mental illness, $r = .20$; and self-stigma, $r = .37$). In Sample 4 ($N = 144$), test–retest reliability across a 3-week period was calculated (.82). Finally, in Sample 5 ($N = 130$), reliability ($\alpha = .78$) and validity were explored with a sample experiencing symptoms of psychological distress. Relationships between variables (i.e., public stigma toward counseling, $r = .31$, and self-stigma, $r = .40$) were similar to those in previous samples.

Keywords: public stigma, social stigma, therapy, help seeking, psychological services

Why do people decide not to seek psychological services when they are experiencing a mental health concern? The most cited reason is stigma (Corrigan, 2004). The stigma associated with seeking psychological services is the view that a person who seeks treatment is less socially acceptable (Vogel, Wade, & Haake, 2006). Researchers have shown that people have less favorable opinions of (i.e., stigma toward) clients than nonclients. For example, in one study an individual described as having sought treatment was regarded less favorably, and reacted to more negatively, than was an individual who was described as not seeking treatment (Sibicky & Dovidio, 1986). Similarly, a person described as seeking treatment for depression was regarded as more emotionally unstable, less interesting, and less confident than was an individual described as seeking treatment for back pain and than an individual described as having depression but not seeking treatment (Ben-Porath, 2002). Therefore, the public seems to stigmatize the act of seeking psychological services. As a result, an individual may avoid treatment in order to reduce the consequences associated with stigma (Corrigan, 2004). Not surprisingly, people report fewer intentions to seek help for a problem stigmatized by others (Overbeck, 1977), and perceptions of stigma predict attitudes toward seeking counseling (Komiya, Good, & Sherrod, 2000).

The literature shows a number of important effects of stigma on help-seeking attitudes and intentions. However, previous studies have all measured perceptions of the degree to which the public

would stigmatize an individual. As such, they have measured perceptions about the views of society and have not assessed the perception of stigma present in a person's direct social group (i.e., those he or she interacts with). For example, the Devaluation–Discrimination scale (Link, Cullen, Frank, & Wozniak, 1987), a widely used measure of stigma, starts each of its questions with “Most people would . . .” and, as such, measures general beliefs about how society would treat (discriminate against or devalue) someone. Similarly, the Stigma of Seeking Professional Psychological Help scale (Komiya et al., 2000) phrases questions broadly, such as “People will see . . .” Thus, this scale assesses beliefs about the general public's perception of those seeking counseling.

This distinction between the stigmatization present in society and that present among one's social network is important, because a person may be affected more by stigmatization among those he or she interacts with than by that which exists in the general population. For example, an individual may recognize that seeking psychological services is stigmatized by society but also feel that his or her particular social network is supportive of those seeking help. In this situation, the person would be expected to be more likely to seek services, because those he or she personally knows are less likely to react negatively. In turn, greater stigmatization by one's social network may have an additive effect with societal stigma, making help seeking even less likely.

Consistent with these assertions, the influence of an individual's social network has been implicated as a key element in the decision whether to seek psychological treatment (Vogel, Wade, Wester, Larson, & Hackler, 2007). For example, one's social group has been found to play an influential role in whether an individual seeks services when distressed (Angermeyer, Matschinger, & Riedel-Heller, 2001). Furthermore, Cameron, Leventhal, and Leventhal (1993) found that 92% of those who sought care

David L. Vogel, Nathaniel G. Wade, and Paul L. Ascheman, Department of Psychology, Iowa State University.

Correspondence concerning this article should be addressed to David L. Vogel, Department of Psychology, Iowa State University, W112 Lagomarcino Hall, Ames, IA 50011-3180. E-mail: dvogel@iastate.edu

talked to at least one person about their problem before seeking professional help. Thus, perceived stigmatization by those a person interacts with may play an important role in whether an individual self-discloses about a problem and whether the individual seeks psychological services.

Purpose of the Study

Despite the influence that stigmatization by one's social network might have on the decision to seek psychological services, no study has directly examined the level of stigma in one's social network. One reason for this important omission is that no measure of the stigmatization present in an individual's social network is currently available. Without such a measure, it is difficult to examine whether avoidance of professional help is related to the desire to avoid stigmatization by those the individual interacts with or to other factors. Furthermore, it is difficult to assess the effectiveness of interventions designed to reduce the effect of stigmatization on those seeking psychological services without an adequate measure. Therefore, the goals of this investigation were to (a) develop a scale of stigmatization that measures the perception of whether seeking psychological help would be stigmatized by people the person interacts with; (b) examine the reliability, factor structure, and validity of the scale scores among college populations; and (c) begin to examine the role that stigmatization by those the person interacts with plays in the help-seeking process.

Method

Participants

Sample 1: Scale development. In Sample 1, participants were 985 college students (54% female). Of these, 49% were 1st-year students, 30% were sophomores, 13% were juniors, and 7% were seniors. The sample consisted of 89% European Americans, 3% African Americans, 3% Asian Americans, 2% Latino/Latina Americans, 2% multiracial Americans, and 1% international students.

Sample 2: Confirmatory factor analysis. In Sample 2, participants were 842 college students (53% female). Of these, 52% were 1st-year students, 27% were sophomores, 14% were juniors, and 7% were seniors. The sample consisted of 51% European Americans, 14% Asian Americans, 10% African Americans, 8% Latino/Latina Americans, 8% multiracial Americans, 1% Native Americans, and 8% international students.

Sample 3: Concurrent validity. In Sample 3, participants were 506 college students (53% female). Of these, 50% were 1st-year students, 28% were sophomores, 13% were juniors, 7% were seniors, and 2% did not report their year. The sample consisted of 92% European Americans, 4% Asian Americans, 2% Latino/a Americans, 1% African Americans, >1% multiracial Americans, and < 1% international students.

Sample 4: Test-retest reliability and validity. In Sample 4, participants were 144 college students (63% female). Of these, 58% were 1st-year students, 25% were sophomores, 10% were juniors, and 7% were seniors. The sample consisted of 88% European Americans, 5% Asian Americans, 3% African Americans, 1% Latino/Latina Americans, 2% multiracial Americans, and 1% international students.

Sample 5: Clinical Sample. Participants were 130 college students who met cutoff criteria for experiencing clinical problems and level of functioning. Due to a scoring error, we were unable to match participants with their demographic information. However, participants were similar to previous samples regarding gender, ethnicity, and year in school.

Procedures

Data were collected over the course of a 2-year period at a large midwestern university. Before data collection began, university institutional review board approval was obtained. All participants gave informed consent before answering the study questions, were informed that participation was voluntary, and were given a debriefing statement at the end of their participation. All participants received 1–2 extra credit points for their participation. Participants were contacted through classes and participated in groups. All of the samples were unique; no participant's data were used in more than one sample. To assess test-retest reliability, we had participants in Sample 4 complete the survey at two time points 3 weeks apart and provided them with an ID number so that their Time 1 data could be linked to their Time 2 data. At Time 1, there were 297 participants; at Time 2, there were 144 participants (49% retention rate). For Sample 5 (clinical sample), 1,132 participants originally volunteered, but only 130 (12%) met the clinical cutoff criteria (see *Other Measures* section below) and were included in the analyses.

Item Development

Twenty-one items were created to reflect how the stigma associated with seeking treatment might be reflected in the social reactions of others. The items were developed by David L. Vogel and Nathaniel G. Wade, who have conducted research in the help-seeking and stigma area for more than 5 years and who are also licensed counseling psychologists who have worked with clients on issues of stigmatization and fears of how others view them for seeking psychological help. Items reflected the different types of social reactions that others could have (behavioral, as in "Say something negative about you to others"; emotional, as in "Be angry with you"; and cognitive, as in "Think you posed a risk to others"). Using the Flesch Reading Ease formula (Klare, Rowe, St. John, & Stolurow, 1969), we found that the readability of the items was 79.03 (the readability of 13- to 15-year-olds), and thus items were understandable to college students (see Table 1 for wording of items). Participants read the statement "Imagine you had a problem that needed to be treated by a mental health professional. If you sought mental health services, to what degree do you believe that the people you interact with would ____." and then responded to each item with a 5-point scale ranging from 1 (*not at all*) to 5 (*a great deal*) such that higher scores indicated greater perceived stigma from those the person interacts with.

Other Measures

Stigma of Seeking Professional Psychological Help (SSPPH; Komiya et al., 2000). The five-item SSPPH assesses perceptions of the societal stigma associated with seeking professional help.

Table 1
Factor Loadings for the Items of the PSOSH Using Two Factor-Analytic Approaches

Item	EFA			PCA		
	Factor loading	Initial model	Extraction	Factor loading	Initial model	Extraction
<i>Think of you in a less favorable way</i>	.818	.666	.669	.825	1.000	.680
<i>Think bad things of you</i>	.795	.632	.633	.805	1.000	.648
<i>React negatively to you</i>	.786	.670	.618	.797	1.000	.634
<i>See you as seriously disturbed</i>	.780	.636	.608	.791	1.000	.625
<i>Think you posed a risk to others</i>	.767	.663	.588	.779	1.000	.607
Think you were crazy	.763	.620	.583	.776	1.000	.602
Be scared of you	.756	.595	.571	.769	1.000	.591
See you as weak	.741	.593	.549	.756	1.000	.571
Like you less	.732	.554	.535	.747	1.000	.558
Say something negative about you to others	.728	.564	.530	.744	1.000	.553
Be ashamed of you	.718	.596	.516	.735	1.000	.540
Treat you like a child	.714	.508	.510	.731	1.000	.534
See you as less attractive	.705	.525	.496	.722	1.000	.521
Believe you were unpredictable	.690	.499	.476	.708	1.000	.502
Think it was your fault	.677	.504	.458	.696	1.000	.484
Deny you access to a job	.670	.468	.449	.690	1.000	.476
Believe you were more violent and dangerous	.653	.482	.426	.673	1.000	.453
Be angry with you	.640	.490	.409	.660	1.000	.436
Be uncomfortable around you	.639	.435	.409	.660	1.000	.436
Treat you differently	.603	.391	.364	.626	1.000	.392
Believe that you could not handle things on your own	.596	.366	.355	.619	1.000	.383

Note. Items in italics were retained for the final scale. PSOSH = Perceptions of Stigmatization by Others for Seeking Help scale; EFA = exploratory factor analysis; PCA = principal components analysis.

Items are rated from 1 (*strongly disagree*) to 4 (*strongly agree*). A sample item is "People tend to like less those who are receiving professional psychological help." The SSPPH correlates with attitudes toward seeking therapy and has a reported internal consistency of .73 in college samples (Komiya et al., 2000). The SSPPH was used in Samples 3 ($\alpha = .77$) and 5 ($\alpha = .79$).

Devaluation-Discrimination (DD; Link et al., 1987). The 12-item DD scale assesses the general perception of being devalued or discriminated against (effects of stigma) by society if one were a psychiatric patient. Participants rate from 1 (*strongly agree*) to 6 (*strongly disagree*) the degree to which they believe *most* people devalue or discriminate against psychiatric patients. Six items are reverse-scored. 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." Internal consistency has been reported to be .88, and the scale has been shown to predict lower self-esteem in community samples 24 months later (Link et al., 2001). The DD scale was used in Sample 3 ($\alpha = .84$).

Self-Stigma of Seeking Help (SSOSH; Vogel et al., 2006). The 10-item SSOSH assesses threats to one's self-evaluation for seeking psychological help. Items are rated from 1 (*strongly disagree*) to 5 (*strongly agree*), with five items reverse-scored. A sample item is "I would feel inadequate if I went to a therapist for psychological help." The SSOSH predicts attitudes and willingness to seek counseling, and internal consistencies range from .86 to .90 in college samples (Vogel et al., 2006). The SSOSH was used in Samples 3 ($\alpha = .89$) and 5 ($\alpha = .87$).

Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF; Fischer & Farina, 1995). Attitudes toward seeking psychological help were measured with the

ATSPPHS-SF. Ten items are rated from 1 (*disagree*) to 4 (*agree*), with five items reverse-scored. A sample item is "If I believed I was having a mental breakdown, my first inclination would be to get professional attention." The scale is correlated with previous use of professional help for a problem, and the internal consistency has been reported to be .84 in a college sample (Fischer & Farina, 1995). The ATSPPHS-SF was used in Sample 4 ($\alpha = .87$).

Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM; Barkham et al., 2001). The 34-item CORE-OM includes these four subscales for assessing psychological functioning: Problems (12 items), Functioning (12 items), Well-being (4 items), and Risk (6 items). Participants rate the frequency with which they have experienced the symptoms listed (e.g., Problems: "I have felt panic or terror"; Functioning: "I have felt unable to cope when things go wrong") on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*most or all of the time*). A mean score is then calculated by dividing the total score by the number of items completed. The subscales can be used individually or as a total score. To focus on clinically relevant problems and functioning and to be brief, we used the Problems and Functioning subscales only. Internal reliabilities have been estimated for the Problems (.88-.90) and Functioning (.86-.87) subscales and the CORE-OM correlates with measures of psychological distress among clinical populations (Barkham et al., 2001). The reported clinical cutoffs for the Problems (female = 1.62, male = 1.44) and Functioning (female = 1.30, male = 1.29) subscales were used to select participants in Sample 5. To ensure a clinically relevant sample, we selected only those who met both cutoff points.

Results

Sample 1: Scale Development

Our goal was to develop a measure—useful to researchers and clinicians—to rate how much those who interact with an individual seeking psychological help feel that there is a stigma attached to it. Examination of the multivariate normality of the data showed that the data were not skewed and were not severely kurtotic (West, Finch, & Curran, 1995). Therefore, we conducted an exploratory factor analysis with SPSS (Version 11.0.3) on the 21 items in Sample 1 in order to empirically evaluate the items and determine the underlying factor structure on the basis of the data we collected. Because using the K1 rule (i.e., eigenvalues > 1) might lead us to overestimate the number of factors for retention, we used parallel analysis (Hayton, Alle, & Scarpello, 2004). This resulted in the adoption of a one-factor model that accounted for 51.2% of the variance (see Table 1 for factor loadings). The component matrix showed that all 21 items loaded at .6 or above on the factor ($\alpha = .96$ for the 21 items). We also examined if the resulting number of factors and loading of items would be the same with a principal components approach rather than an exploratory factor approach. The results were virtually identical to those with the adoption of a one-factor model, accounting for 53.5% of the variance and having similar loadings of the items (see Table 1 for all factor loadings). Although the results supported the usefulness of all the items, we believed that a 21-item measure would not be as practical to researchers and clinicians, because longer measures are difficult to incorporate into survey research and are less likely to be used by clinicians. We therefore selected the five highest loading items to be retained in the scale. In this sample, the internal consistency was .89 for the five items. According to the internal consistency ratings proposed by Ponterotto and Ruckdeschel (2007), both versions of the scale would be deemed excellent, supporting the use of the briefer version. We named the five-item scale the Perception of Stigmatization by Others for Seeking Help (PSOSH), and this version was used in the subsequent samples (see data in Table 2).

Sample 2: Confirmatory Factor Analysis

To further examine the factor structure, we next conducted confirmatory factor analysis of Sample 2 with the maximum likelihood method in LISREL (Version 8.54; Jöreskog & Sörbom, 1999). As suggested by Hu and Bentler (1999), three indexes were used to assess the goodness of fit of the models: the comparative fit index (CFI; values of .95 or greater indicate a model that fits the data well), the root-mean-square error of approximation (RMSEA;

a value of .06 or less indicates a model that fits well), and the standardized root-mean-square residual (SRMR; values of .08 or less indicate a good-fitting model). Because the maximum likelihood procedure assumes normality, we examined the multivariate normality of the data. The result indicated that the data were not normal, $\chi^2(2, N = 842) = 402.23, p < .001$. Therefore, the Satorra and Bentler (1988) scaled chi-square was used. The results indicated that the data fit the one-factor model found in Sample 1, scaled $\chi^2(4, N = 842) = 14.82, p < .001, CFI = .99, SRMR = .02, RMSEA = .06$ (90% confidence interval = .03, .09). The factor loadings are presented in Table 3.

Next we examined the invariance of the one-factor model across the Caucasian and racial/ethnic minority participants. To compare the two groups, we conducted one model in which the items loading on the scale were freely estimated and another model in which the items loading were set to be equal across the two groups. We then used the corrected scaled chi-square difference test to determine whether these models were equivalent. When these two models were compared, there was no significant corrected scaled chi-square difference, $\Delta\chi^2(5, N = 842) = 3.29, p > .05$. The factor loadings for the two groups can be seen in Table 3. Consistent with this finding, the internal consistencies for the PSOSH for the total sample and for each racial/ethnic group were similar (total sample .89, Caucasian .90, African American .90, Latino/a .90, Asian American .88, Native American .89, multiracial American .86, international student .83), and analysis of variance also indicated no differences in the overall means across the racial/ethnic groups ($p > .05$).

Sample 3: Concurrent Validity

The internal consistency of the five-item PSOSH in Sample 3 was .88. Furthermore, as expected, the scores on the PSOSH were moderately positively associated with scores on the two help-seeking stigma measures (i.e., public stigma for help seeking as measured with the SSPPH, $r = .31, p < .001$, and self-stigma for help seeking as measured with the SSOSH, $r = .37, p < .001$) and the public stigma of mental illness measure (i.e., the DD, $r = .20, p < .001$). These results support the validity of this measure.

Differentiating stigmas. Whereas the moderate correlations between the PSOSH and other measures of stigma suggest that it measures a unique aspect of stigma, we wanted to examine whether the items of the PSOSH were distinct from the items of the other stigma measures. We conducted a principal axis factor analysis in which we included the 5 items from the PSOSH as well as the items from the two measures of public stigma (5 items from the SSPPH and 12 items from the DD) and the 10 items from the self-stigma scale (SSOSH). All items were standardized before analysis. The analysis resulted in a six-factor model (see Table 4) accounting for 58.6% of the variance. Most importantly, after Oblimin rotation, the 5 PSOSH items all loaded above .6 on a single factor and did not load on any other factor above .1. In addition, no items from other scales loaded above .1 on the PSOSH. Each item from the SSPPH and SSOSH also loaded on only a specific factor and no other factors. The DD scale loaded across the other factors. These results suggest that PSOSH represents a distinct aspect of stigma.

Predicting self-stigma. Next we examined the role of the PSOSH in predicting self-stigma (SSOSH scores). Previous re-

Table 2
Size, Means, Standard Deviations, and Internal Consistency
Estimates Across Samples

Sample	<i>N</i>	<i>M</i>	<i>SD</i>	α
1	985	10.6	4.4	.89
2	842	10.7	4.4	.89
3	506	10.9	4.5	.88
4	144	9.9	3.7	.85
5	130	10.9	3.9	.78

Table 3
Factor Loading Results From the Confirmatory Factor Analysis for Sample 2

Item	Unstandardized factor loading	SE	z	Standardized factor loading ^a
1. React negatively to you	0.70***	0.03	21.7	.70 (.75, .66)
2. Think bad things of you	0.78***	0.03	25.2	.76 (.80, .71)
3. See you as seriously disturbed	0.93***	0.03	30.7	.82 (.82, .83)
4. Think of you in a less favorable way	0.94***	0.03	32.8	.86 (.88, .84)
5. Think you posed a risk to others	0.77***	0.03	35.3	.72 (.73, .72)

Note. Researchers do not need to obtain permission to use this Perceptions of Stigmatization by Others for Seeking Help (PSOSH) scale. Items are listed in the order in which they appear on the scale. The PSOSH should be administered with these instructions: "Imagine you had an academic or vocational issue that you could not solve on your own. If you sought counseling services for this issue, to what degree do you believe that the people you interact with would ___." Responses to the above items are as follows: 1 = *Not at all*; 2 = *A little*; 3 = *Some*; 4 = *A lot*; 5 = *A great deal*. Items are summed so that higher scores reflect greater perceptions of stigma by those close to the person seeking psychological help.

^a Factor loadings in parentheses are for the model with the Caucasian ($n = 436$) and racially/ethnically diverse ($n = 406$) participants, respectively.

*** $p < .001$.

search has shown that public stigma predicts self-stigma (Vogel, Wade, & Hackler, 2007). Therefore, if we developed a unique scale of stigma, we would expect the PSOSH, over and above other measures of public stigma, to predict self-stigma. A hierarchical regression was used in which gender (1 = male, 2 = female) and the two previously developed measures of public stigma (the SSPPH and the DD) were entered into the first step of the regression. Then the PSOSH was entered into the second step. The dependent variable was self-stigma (SSOSH). The initial model was significant, $F(3, 468) = 38.1$, $R = .44$, $R^2 = .20$, $p < .001$, as was the full model with the PSOSH included, $F(4, 468) = 40.4$, $R = .51$, $R^2 = .26$, $p < .001$. Importantly, with the addition of the PSOSH the results showed a significant improvement over those of the original model ($\Delta R^2 = .07$, $p < .001$). As hypothesized, over and above scores on the other variables included in the model (SSPPH: $B = 0.81$, $SE B = 0.11$, $\beta = .34$, $p < .001$; DD: $B = 0.01$, $SE B = 0.03$, $\beta = .07$, $p > .05$; gender of participant: $B = 0.14$, $SE B = 0.60$, $\beta = .01$, $p > .05$), scores on the PSOSH ($B = 0.45$, $SE B = 0.07$, $\beta = .26$, $p < .001$) uniquely predicted self-stigma, such that those who perceived greater stigma from those they interact with reported greater self-stigma.

Sample 4: Test-Retest Reliability and Validity

The internal consistency of the PSOSH scores in this sample was .84 at Time 1 and .85 at Time 2. The correlations between scores at Time 1 and Time 2 (3 weeks later) were .77 ($p < .001$). PSOSH scores did not change from Time 1 ($M = 11.30$, $SD = 3.66$) to Time 2 ($M = 11.56$, $SD = 3.78$; $p > .05$). As expected, PSOSH scores were negatively related to attitudes toward seeking psychological help ($r = -.66$, $p < .001$).

Sample 5: Clinical Sample

First, we examined the psychometric properties of the PSOSH with this sample. The internal consistency of the PSOSH scores for this sample was .78. As expected, the scores were also moderately positively associated with scores on the SSPPH (.31, $p < .001$) and the SSOSH (.40, $p < .001$). Next, for this sample as in Sample 3,

we examined the role of the PSOSH, over and above another measure of public stigma (SSPPH), in predicting self-stigma (SSOSH scores). A hierarchical regression was used in which the previous measure of public stigma (SSPPH) was entered into the first step of the regression. Then the PSOSH was entered into the second step. The dependent variable was self-stigma (SSOSH). As before, the initial model was significant, $F(1, 125) = 45.4$, $p < .001$, $R = .52$, $R^2 = .27$, as was the full model, $F(2, 124) = 30.0$, $p < .001$, $R = .57$, $R^2 = .33$, with the PSOSH included. Importantly, with the addition of the PSOSH the results showed a significant improvement over those of the original model ($\Delta R^2 = .05$, $p < .001$). As hypothesized, over and above scores on the SSPPH ($B = 0.90$, $SE B = 0.16$, $\beta = .44$, $p < .001$), scores on the PSOSH ($B = 0.50$, $SE B = 0.15$, $\beta = .26$, $p < .001$) uniquely predicted self-stigma, such that those participants who perceived greater social stigma by those close to them reported greater self-stigma.

Discussion

Across five samples, the PSOSH showed good internal consistency and test-retest estimates, and it showed a good fit with the data among college students. The PSOSH was also found to be related to, but distinct from, other measures of stigma and help-seeking attitudes and to provide unique information for our understanding of self-stigma. Similar reliability and validity estimates were found for the PSOSH with individuals experiencing clinical levels of distress. The development of this new scale provides avenues to assess a unique aspect of the stigmatization of seeking help.

Implications and Directions for Future Research

Although this study provides new evidence that social stigma by those a person interacts with predicts attitudes about psychological help seeking, it is not the end point but rather a new start for this research. Researchers can now explore the relationship between psychological stigma related to social networks and other factors known to affect help seeking. This is particularly true for college

Table 4
Factor Loading Results From the Differentiating Stigmas Analysis From Sample 3

Measure and item	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
PSOSH						
Item 3	.754	-.095	-.015	.019	.044	.055
Item 2	.825	.021	-.041	.040	-.038	.047
Item 1	.842	.002	-.066	-.002	-.018	-.030
Item 4	.880	.055	.056	-.015	.030	.065
Item 5	.781	.008	.009	-.054	-.028	-.083
SSPPH						
Item 1	-.033	.533	-.006	-.080	.033	.101
Item 2	-.039	.651	.242	.104	.017	-.117
Item 3	-.110	.781	-.052	-.068	.094	-.059
Item 4	.098	.658	.144	.065	-.004	-.042
Item 5	-.030	.785	-.081	-.009	.009	.006
SSOSH						
Item 2	-.026	.026	.718	-.121	.046	-.084
Item 4	-.039	-.002	.402	-.015	-.075	.340
Item 5	.010	-.111	.635	-.007	.076	-.315
Item 7	-.038	-.029	.784	.098	.005	.10
Item 9	-.075	-.055	.647	-.036	.040	-.126
Item 1	-.10	.218	.630	-.012	.047	.067
Item 3	-.064	.132	.658	-.032	-.017	.129
Item 6	.022	.161	.735	.002	.019	.122
Item 8	-.060	.041	.754	.062	.007	.195
Item 10	.034	.228	.595	-.148	-.038	-.108
DD						
Item 5	-.029	.108	.086	-.493	-.067	.311
Item 6	.052	-.055	.063	-.767	-.064	-.076
Item 7	.023	.042	-.039	-.763	.116	-.094
Item 9	-.067	-.140	.043	-.595	.180	.241
Item 11	-.020	-.023	.027	-.686	.054	-.259
Item 12	-.080	.109	-.073	-.652	-.006	.125
Item 1	.010	.113	-.044	.026	.809	.029
Item 2	-.044	.024	.020	-.022	.848	-.007
Item 3	.000	.091	-.023	-.027	.876	-.054
Item 4	-.008	-.046	.022	-.078	.804	-.138
Item 8	.010	-.060	.009	-.024	.445	.623
Item 10	-.076	-.036	.080	.016	.607	.139

Note. Data in bold indicate which items loaded in which factor. PSOSH = Perceptions of Stigmatization by Others for Seeking Help scale; SSPPH = Stigma of Seeking Professional Psychological Help scale; SSOSH = Self-Stigma of Seeking Help scale; DD = Devaluation-Discrimination scale.

student samples, which were used as the basis for this scale's development. Understanding the obstacles that college students face in seeking psychological services is an important issue for university administrators and educators. Future research could be used to model the relationships among various related variables and examine possible mediating or moderating factors such as personality, attachment style, or level of distress. Future investigations could also examine the results of treatment, educational programs, and other interventions targeted at reducing social stigma. In addition, future research could examine the role of stigmatization among those a person interacts with in samples outside the university context. Exploring the roles that socioeconomic status, occupation, and life stage play in stigma would create a more inclusive knowledge base that could help refine intervention efforts.

In addition, the current study is only the starting point for examining the impact of problem severity on the perception of stigmatization for seeking help. We found that the PSOSH has adequate psychometric properties for individuals experiencing clinical levels of distress. However, the size of the effect was

small. One possible reason for this is that different issues may elicit different levels of salience and severity. Certain acute issues might make the perceptions of stigmatization more or less due to the social pressures to not seek counseling. For example, people dealing with drug addiction might perceive more social stigma because drug use is illegal and the broader culture has stronger negative stereotypes of drug-dependent individuals. In turn, people dealing with the death of a loved one might perceive the general social stigma as lower because seeking help for grief is more socially sanctioned. This might be the case even if the acute level of distress is similar at a given point in time. Future studies might continue to examine whether stigma is influenced not only by the degree of symptom severity but also the type of personal issues one is experiencing.

The present project also has direct implications for mental health delivery. Changing the social stigma associated with seeking psychological help might provide greater access to treatment for those who could benefit from it. This is certainly worthwhile on college campuses, where the incidence and severity of mental health problems have been significantly increasing in recent years

(Benton, Robertson, Tseng, Newton, & Benton, 2003); however, such change might also benefit those in rural, urban, and suburban communities in unique ways. Assessing and reducing social stigma could potentially have a broad societal impact, not just by relieving mental or psychological distress but by increasing worker productivity and lowering health care costs and crime rates. One excellent example of how psychologists have attempted to reach individuals who typically avoid psychological treatment is the National Institute of Mental Health's "Real Men, Real Depression" campaign. This effort uses broad-based advertisements (print, radio, and television) to educate the public about men and depression. Specifically, this campaign works to reduce the stigma related to psychological services for men who might not otherwise seek help for depression. Guided by future research on stigma, broad campaigns and more focused educational efforts might be able to address the concerns of individuals who avoid needed treatment.

Although assessing and reducing stigmatization toward seeking help at a broad social level is worthwhile, psychologists and other mental health providers might also make effective use of this new scale of social stigma at an individual level. In ongoing therapy, assessing clients' perception of the views of those they interact with might generate some important and useful discussion. For example, such assessment could indicate those who might need to talk through their assumptions and implicit expectations about how others see their mental health treatment. This in turn might allow for these clients to reframe the experience of therapy (e.g., from shameful to courageous), change faulty or unjustified expectations (e.g., seeing that others do not really look down on them for seeking help), or cope with the very real negative reactions they are receiving from significant others. Each of these outcomes could help clients with their presenting-problem concerns by helping to resolve or reduce the perceived stigmatization, allowing them to focus more on the core work of therapy.

Limitations

Although the PSOSH appears to be an adequate measure in terms of reliability, factor structure, and concurrent validity, there are methodological limitations that should be noted. First, the participants in these studies were college students from a single midwestern university; therefore, the psychometric properties of the measure for people residing in other regions of the country or for those who are not college-educated have not been assessed. Future research is needed to assess the utility of the scale in noncollege populations. This may be particularly important if one looks at the means of the total scores across the five samples. In general, these college students were reporting low levels of stigma from those they interact with. Despite these low overall levels, these perceptions of stigma were noteworthy because they significantly added to the overall prediction of self-stigma over and above the other assessed aspects of stigma. As such, even small amounts of stigmatization from one's social network may matter. However, one would expect that college students would likely have fewer perceptions of stigma than would noncollege populations, given that college-educated individuals have more favorable attitudes toward counseling than do non-college-educated individuals (Fischer & Farina, 1995). Therefore, it may be useful to examine the perception of stigma by those a person interacts with among noncollege

populations. Future research could examine the reliability or validity of the PSOSH scores across the different demographic factors of age or socioeconomic status. Furthermore, most of the participants in this study were Caucasian. Therefore, generalization to other ethnic or racial groups may be premature. The data from Sample 2 (which was approximately 50% non-Caucasian) provide some initial support for the validity of the factor structure across a more ethnically and racially diverse sample. However, research may need to further examine the reliability and validity of the PSOSH scores with diverse samples. There might be alternative models that demonstrate equally acceptable fit, particularly for different groups, and caution is urged in interpreting the data until these effects can be examined.

In addition, although in Sample 5 we did examine the utility of the PSOSH among individuals experiencing clinical levels of distress, most participants completed the scale following the instructions "Imagine you are experiencing." Imagining a particularly troubling psychological problem is different from experiencing one and may have limited the range of responses given by participants. Thus, future efforts should continue to examine the utility of the PSOSH with those who have current needs or concerns and who could benefit from more immediate professional help. In particular, the five items developed may not be adequate to capture the range of experienced psychological issues of those currently experiencing distress. As such, future researchers might want to further examine the adequacy of the items not included in the brief scale, by using other approaches such as item response theory on a sample of clinically distressed individuals. It may also be useful to better understand the stigma of those with clinical levels of distress who do seek counseling and those who do not. We were unable to compare participants who did seek help with those who did not, because we did not collect longitudinal data. Future studies could explore the use of the PSOSH in understanding help-seeking behavior over time by adding a longitudinal component to the research. In the current studies, respondents answered the questions on the PSOSH with regard to the perceived responses of "the people you interact with." Future studies might specifically examine who those people are, because the role of stigma may depend on the closeness of the relationship.

It is also worth noting that the participants self-selected to participate in the studies. This self-selection may have led to some biases or been the result of intrinsic differences in participants versus nonparticipants; however, this problem is somewhat mitigated by the consistent internal consistencies across samples. Results of our Sample 3 (test-retest) should also be viewed cautiously because the retention rate was 49%. Again, self-selection into or out of the study following the first measurement time may have influenced the results. However, means for completers and noncompleters were no different at Time 1, suggesting no systematic differences between these groups on the measured variables. Finally, our validity data are based on self-report measures; in future research, the validity of the PSOSH should be substantiated by other assessment methods (e.g., peer reports, observational data) over longer time periods, and larger community samples of those who did seek help and those who did not could be examined.

References

- Angermeyer, M. C., Matschinger, H., & Riedel-Heller, S. G. (2001). What to do about mental disorder help-seeking recommendations of the lay public. *Acta Psychiatrica Scandinavica*, *103*, 220–225.
- Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., Evans, C., et al. (2001). Service profiling and outcomes benchmarking using the CORE-OM: Toward practice-based evidence in the psychological therapies. *Journal of Consulting and Clinical Psychology*, *69*, 184–196.
- Ben-Porath, D. D. (2002). Stigmatization of individuals who receive psychotherapy: An interaction between help-seeking behavior and the presence of depression. *Journal of Social & Clinical Psychology*, *21*, 400–413.
- Benton, S. A., Robertson, J. M., Tseng, W.-C., Newton, F. B., & Benton, S. L. (2003). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice*, *34*, 66–72.
- Cameron, L., Leventhal, E. A., & Leventhal, H. (1993). Symptom representations and affect as determinants of care seeking in a community-dwelling, adult sample population. *Health Psychology*, *12*, 171–179.
- Corrigan, P. (2004). How stigma interferes with mental health care. *American Psychologist*, *59*, 614–625.
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development*, *36*, 368–373.
- Hayton, J. C., Alle, D. G., & Scarpello, V. (2004). Factor retention decisions in exploratory factor analysis: A tutorial on parallel analysis. *Organizational Research Methods*, *7*, 191–205.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55.
- Jöreskog, K. G., & Sörbom, D. (1999). *LISREL 8 User's Reference Guide*. Lincolnwood, IL: Scientific Software International.
- Klare, G., Rowe, P., St. John, M., & Stolurow, L. (1969). Automation of the Flesch reading ease readability formula, with various options. *Reading Research Quarterly*, *4*, 550–559.
- Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology*, *47*, 138–143.
- Link, B., Cullen, F., Frank, J., & Wozniak, J. (1987). Social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology*, *92*, 1461–1500.
- Link, B. G., Struening, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). Stigma as a barrier to recovery: The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services*, *52*, 1621–1626.
- Overbeck, A. L. (1977). Life stress antecedents to application for help at a mental health center: A clinical study of adaptation. *Smith College Studies in Social Work*, *47*, 192–233.
- Ponterotto, J. G., & Ruckdeschel, D. E. (2007). An overview of coefficient alpha and a reliability matrix for estimating adequacy of internal consistency coefficients with psychological research measures. *Perceptual and Motor Skills*, *105*, 997–1014.
- Satorra, A., & Bentler, P. M. (1988). Scaling corrections for chi-square statistics in covariance structure analysis. In *American Statistical Association 1988 proceedings of the business and economic section* (pp. 308–313). Alexandria, VA: American Statistical Association.
- Sibicky, M., & Dovidio, J. F. (1986). Stigma of psychological therapy: Stereotypes, interpersonal reactions, and the self-fulfilling prophecy. *Journal of Counseling Psychology*, *33*, 148–154.
- Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, *53*, 325–337.
- Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, *54*, 40–50.
- Vogel, D. L., Wade, N. G., Wester, S., Larson, L., & Hackler, A. (2007). Seeking help from a mental health professional: The influence of one's social network. *Journal of Clinical Psychology*, *63*, 233–245.
- West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues and applications* (pp. 56–75). Newbury Park, CA: Sage.

Received December 15, 2006

Revision received December 2, 2008

Accepted December 2, 2008 ■

E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at <http://notify.apa.org/> and you will be notified by e-mail when issues of interest to you become available!