



Published in final edited form as:

J Clin Psychol. 2010 April ; 66(4): 394–409. doi:10.1002/jclp.20659.

Perceived Barriers to Psychological Treatments and Their Relationship to Depression

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Abstract

In spite of repeated calls for research and interventions to overcome individual and systemic barriers to psychological treatments, little is known about the nature of these barriers. To develop a measure of perceived barriers to psychological treatment (PBPT), items derived from 260 participants were administered to 658 primary care patients. Exploratory factor analysis on half the sample resulted in 8 factors, which were supported by confirmatory factor analysis conducted on the other half. Associations generally supported the criterion validity of PBPT scales, with self-reported concurrent use of psychotherapy and psychotherapy attendance in the year after PBPT administration. Depression was associated with greater endorsement of barriers. These findings suggest that the PBPT may be useful in assessing perceived barriers.

Keywords

barriers; psychotherapy; primary care; referral; access to care

The efficacy of a wide variety of psychological and behavioral interventions for psychiatric problems (e.g. depression, anxiety, etc), tobacco and substance abuse, obesity, pain, insomnia, as well as many other behavioral and medical conditions has been clearly established (Anderson, 2004). Psychological interventions are increasingly desirable in the eyes of patients. For example, up to two thirds of depressed primary care patients would prefer psychological treatments to pharmacotherapy (Bedi et al., 2000; Brody, Khaliq, &

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The authors have no conflicts of interest to report.

Thompson, 1997; Churchill et al., 2000; Dwight-Johnson, Sherbourne, Liao, & Wells, 2000; O'Mahen & Flynn, 2008; Priest, Vize, Roberts, Roberts, & Tylee, 1996). However, in spite of the desirability of such services, only around 20% of patients referred for psychological treatments ever enter treatment (Brody et al., 1997; Weddington, 1983), and of those, nearly half drop out before completion (Wierzbicki & Pekarik, 1993). Such large inconsistencies between stated interest and actual follow-up suggest that substantial barriers both to initiating and to adhering to psychological interventions exist (Hollon et al., 2002; Wells et al., 2002). Barriers to receiving mental health and behavioral care have been identified as a major problem in the delivery of such services, and the need for research in this area has frequently been voiced (Hollon et al., 2002; President's New Freedom Commission on Mental Health, 2003).

Although the need to better understand barriers to psychological care is clear, research aimed at understanding the nature of these barriers is scarce. A few studies have examined the barriers to mental health utilization in general (Sareen et al., 2007; Wong et al., 2006); however, these have not distinguished psychological from pharmacological therapy. This distinction is important, because psychological treatments may be associated with barriers that are distinct from pharmacotherapy. For example, the frequency of visits or the intimacy of the encounter could pose unique obstacles for some patients. Two seminal studies examined specific barriers to psychotherapy, but they focused on somewhat circumscribed populations, such as non-depressed people with histories of depression (Blumenthal & Endicott, 1996), distressed women in a gynecology clinic at a public hospital (Alvidrez & Azocar, 1999), women in the perinatal period (O'Mahen & Flynn, 2008), military, and college students (Britt et al., 2008; Mackenzie, Knox, Gekoski, & Macaulay, 2004). We conducted the first survey of perceived barriers to psychological care in a broad sample of primary care patients, using eight items gleaned from previous studies (Mohr et al., 2006). Structural barriers (e.g., transportation problems, time constraints, cost) were far more prevalent than emotional barriers (e.g., concern about what others might think, discomfort talking about problems with a therapist).

These efforts to measure perceived barriers to psychological care have had several shortcomings. Barriers have been measured by single items, which have not been obtained in any systematic way. As such, it is not clear if these studies have captured the variety and breadth of barriers. None of these studies have examined whether these items have any validity whatsoever. Understanding the nature of these barriers, their breadth and frequency, and the factors that may be associated with them is a critical step in beginning to overcome them.

The purpose of the present study was to develop a comprehensive measure of perceived barriers to psychological intervention and to evaluate its relationship to a principal reason for referral to psychotherapy. Specifically, the aims of this study were as follows: (a) to develop a comprehensive set of items that reflect perceived barriers to psychological treatments; (b) to examine the factor structure and reliability of the measure of perceived barriers; (c) to examine the relationship between this measure and concurrent/future psychotherapy use, as indicators of concurrent and predictive validity; and (d) to examine the relationship between perceived barriers and depression. We select depression because it is the main indicator for referral to psychotherapy from primary care, and because, as noted above, although many depressed primary care patients indicate an interest in psychotherapy, few actually follow up on the referrals. We evaluated this measure in a primary care clinic because this is the de facto site where depression is identified and from which referrals to mental health specialists are made (Regier et al., 1993).

Methods

Participants

Patients were recruited from the clinic of Northwestern University's Division of General Internal Medicine under a protocol approved by the Northwestern Institutional Review Board. Packets containing the survey, consent forms, and a self-addressed stamped envelope were mailed to 3,265 English-speaking adult patients so that they arrived within the week after their appointment with their primary care physician. Patient lists were generated using electronic medical records and approved by the patients' physicians. Each participant who sent back a completed survey was sent a \$10 check. Patients who completed the survey were re-contacted 1 year later by mail and asked to complete a brief follow-up survey. Patients who completed these questions were again paid \$10.00.

Assessments

The following assessments were all conducted at baseline unless otherwise indicated.

Demographics—Demographics were collected by self-report. Items included age, gender, relationship status, and ethnicity.

History of psychotherapy—This was assessed with a single question, "Have you ever been in individual counseling or psychotherapy?" and was included in analyses to control for the effects that previous psychological treatment experience might have on perceptions of barriers.

Concurrent psychotherapy—Concurrent psychotherapy was assessed with a single question: "Are you currently in individual psychotherapy or counseling?"

Subsequent psychotherapy—This was assessed at one-year follow-up with the question, "Have you attended individual counseling or psychotherapy during the past year?"

Health status—Health status was measured using an item from the Short Form Health Survey (SF-36): "In general, would you say your health is...." Patients were provided the following response choices: 1 (*excellent*), 2 (*very good*), 3 (*good*), 4 (*fair*), 5 (*poor*). The SF-36 is commonly used to assess health-related quality of life (Ware, Kosinski, & Keller, 1994).

Depression—Depression was assessed by self-report using the 8-item Patient Health Questionnaire (PHQ-8; Kroenke et al., 2009), which is identical to the PHQ-9 (Kroenke, Spitzer, & Williams, 2001), except that the item evaluating suicidality is removed. The PHQ-8 has been demonstrated to be reliable and valid (Corson, Gerrity, & Dobscha, 2004; Kroenke et al., 2009). For analyses requiring a dichotomous indication of depression, a cutoff score of 10 or higher was used, because this is the score at which referral for counseling or psychotherapy is recommended (The MacArthur Foundation's Initiative on Depression and Primary Care, 2004). The cutoff of 10 is substantially similar using the PHQ-8, compared to the PHQ-9 (Ackermann et al., 2005; Corson et al., 2004).

Perceived Barriers to Psychological Treatment (PBPT)—The PBPT comprised 27 items that identify potential barriers to attending weekly sessions for psychological or behavioral treatment. Items were derived from a previous survey, in which 260 primary care patients were asked to rate eight barriers identified from a literature review (Mohr et al., 2006). As part of this survey, patients were asked to describe additional barriers in writing that were not included in the survey. Eight clinicians (two primary care physicians, five

psychologists, and one social worker) reviewed these barriers and then condensed them into specific items. The clinicians also added a few items. Wording of the final items was achieved by consensus (four of the clinicians condensed and wrote the items together, the other four clinicians reviewed and edited this work, and all clinicians continued to edit items until consensus was reached).

Each item asked patients to “rate the degree to which different kinds of problems might get in the way of seeing a counselor or a therapist.” This wording was designed to focus the patient’s attention on the interference with treatment access, rather than on the general severity of the problem. Counseling and psychotherapy were defined as weekly sessions in a counselor’s or therapist’s office that lasts approximately 50 minutes. Items were worded so that the participant could rate how difficult each potential barrier would make it for him or her to attend weekly appointments. Response choices comprised the following: 5 (*impossible*), 4 (*extremely difficult*), 3 (*moderately difficult*), 2 (*slightly difficult*), or 1 (*not difficult at all*).

Consistent with previous work (Mohr et al., 2006), we used summed scores and a dichotomous scoring method. Summed scores may be useful if perceived barriers are conceptualized as continuous, such as the level of difficulty a person must overcome to get to an appointment. Barriers can also be conceptualized dichotomously as being sufficient to prevent access to care versus not being sufficient to prevent access to care. A single barrier may be sufficient to prevent access to care. That is, the effect of barriers may be invoked by a threshold and not be additive. Accordingly, the dichotomous scoring method that categorizes items endorsed as making it extremely difficult or impossible to attend psychotherapy as “substantial barriers,” while items endorsed as moderately difficult, slightly difficult, or not difficult at all are coded as not posing a barrier. A scale is determined to reflect a substantial barrier if one or more items in that scale are coded as being a substantial barrier (Mohr et al., 2006).

Statistical Analyses

Comparisons between survey respondents and non-respondents—The electronic medical record system permitted comparison of returned and unreturned surveys on age, gender, and ethnicity. These analyses employed *t* tests and χ^2 tests.

Scale construction—To identify and cross-validate a factor structure for the PBPT, the overall sample was split such that cases were randomly selected for either exploratory factor analysis or confirmatory factor analysis (CFA). An initial factor structure was obtained for the PBPT through ordinary least squares exploratory factor analysis with direct quartimin rotation, using the comprehensive exploratory factor analysis software package (Browne, Cudeck, Tateneni, & Mels, 2008). Two methods were utilized to determine the number of included factors: examination of model fit based on root mean squared error of approximation (RMSEA; Steiger & Lind, 1980, June), following the recommended fit guidelines of Browne and Cudeck (1993), and interpretability of rotated factor solutions. Items with loadings of magnitude .30 or greater were initially included. Additionally, residual correlations were considered for theoretically sensible modifications. Following establishment of a factor structure through EFA, this structure of large loadings and the single correlated residual was cross-validated on the other half of the sample with CFA, using the SAS CALIS procedure (SAS Institute Inc., 2008). All resulting PBPT subscale scores were examined for associations with demographics, including age, gender, ethnicity, and relationship status, using Pearson correlations and *t* tests. Degrees of freedom were estimated when equal variance could not be assumed.

Criterion validity—Criterion validity of the total PBPT score and subscales was examined using concurrent psychotherapy for concurrent validity, and subsequent psychotherapy for predictive validity. Separate logistic regressions were run for each PBPT score with either concurrent psychotherapy or subsequent psychotherapy attendance as the dependent variables, controlling for demographic variables and depression.

PBPT and depression—Depression was tested as a predictor of perceived barriers using a series of hierarchical multiple regression analyses. It was predicted that depression would be associated with higher barriers, after controlling for demographic variables, health status, and previous psychotherapy. These analyses were repeated with the dichotomously scored PBPT using logistic regression to facilitate interpretation.

Results

Participants

A total of 690 (21.13% of 3,265 mailed out) surveys were returned with signed consent documents, and of those, 32 surveys were not usable (incomplete data, uninterpretable markings, etc.), leaving 658 (20.1%) participants who provided usable surveys. Demographics and baseline variables are displayed in Table 1. Data from the medical records permitted a comparison of age, gender, and ethnic differences between patients who returned the surveys and those who did not. Patients who returned the packets were younger ($M = 51.05$, $SD = 15.46$) than those who did not ($M = 53.48$, $SD = 16.41$), $t(3,263) = -3.43$, $p = .001$, were more likely to be female, (70.8% vs. 63.6%), $\chi^2(1, N = 3,265) = 12.06$, $p = .001$, and varied by ethnicity such that Caucasians were more likely to return surveys compared with African Americans and Hispanics (return rates 23.9%, 17.9%, 11.0% respectively), $\chi^2(5, N = 3,265) = 28.94$, $p < .001$.

Scale Construction

The random selection of cases resulted in 327 cases for the EFA and 331 for the CFA. Examination of fit statistics and interpretability of rotated loadings yielded a solution of eight factors that were supported by cross-validation (see Table 2 for alternative solutions). Of the 27 items, 3 items (2, 3, and 15) were excluded from the EFA because of their low communalities ($< .361$) across a variety of potential solutions ranging from 4 to 10 factors. The eight-factor model, which emerged as the best solution, had acceptable fit (RMSEA = .067; 90% CI = .057–.077). One loading ($\lambda_{6,4} = .307$, the smallest of the qualifying loadings) was subsequently excluded based on unclear interpretability. One correlated residual between items 24 and 25 was accepted based on shared properties. The resulting internal consistency was good (Cronbach's $\alpha = .92$).

Table 3 displays the factors, loadings, and Cronbach's α s. The first factor, "stigma," included seven items that reflected discomfort with the perceived negative meaning that psychological treatment would carry, as well as fear of judgment from others and from oneself. The second factor, "lack of motivation" included two barriers related both to general and to therapy-focused pursuit of goals. The third factor, "emotional concerns," included three items pertaining to undesirable emotion expected to emerge in or from therapy. The fourth factor, "negative evaluations of therapy," included four items related to the belief that interaction with a therapist would be unhelpful or deleterious. The fifth factor, "misfit of therapy to needs," included four items addressing concerns that therapy was an unjustifiable luxury or that one's problems were poorly suited for therapeutic intervention. The sixth factor, "time constraints," included two items reflecting competing activities. The seventh factor, "participation restriction," included four items focusing on physical and transportation problems associated with attending therapy. The eighth factor, "availability of

services,” included two items that highlighted barriers to finding suitable therapy options. Four items cross-loaded on two factors. Subscale scores were then created by summing all items within each of the eight factors. All subscales demonstrated adequate internal consistency ($\alpha = .71-.89$).

One of the items (number 3-cost of psychotherapy) excluded from the factor analysis was subsequently added to the total PBPT scale. Although this item was not included in any of the instrument subscales, previous research demonstrating cost of therapy to be a primary barrier to receiving treatment (Mohr et al., 2006) justified its inclusion in the overall scale. Inclusion of this item did not adversely affect internal consistency of the total PBPT. Full sample mean scores for each of the eight factors, the item on cost, as well as the mean total PBPT score are presented in Table 4.

This structure of large loadings and the single correlated residual was cross-validated on the other half of the sample with CFA (Table 2), using the SAS CALIS procedure (SAS Institute Inc., 2008). This solution also had acceptable fit (RMSEA = .069; 90% CI = .062-.076; Comparative Fit Index [CFI] = .917), suggesting that the configural solution emerging from the EFA was valid.

Demographic Differences in Perceived Barriers

There were no gender differences on the total PBPT, or on the eight subscale scores (all $ps >.068$). However, women endorsed greater barriers with regard to the cost ($t(400) = -3.53, p = .000$). Participants with African American, Latino/a, or other ethnicity reported greater total PBPT scores ($t(450) = 2.76, p = .006$), greater lack of motivation ($t(443) = 3.14, p = .002$), emotional concerns ($t(460) = 2.69, p = .008$), Participation restriction ($t(446) = 4.22, p = .000$) and lack of availability of services ($t(476) = 2.41, p = .016$) compared to participants who reported Caucasian ethnicity. Other PBPT subscales were not related to whether participant reported race ($ps >.16$). In comparing relationship status, groups of participants were collapsed into married or partnered (married and living with significant other) and not partnered (single, divorced, widowed) categories because of insufficient numbers of participants in some relationship categories. Participants without partners endorsed significantly greater total PBPT score ($t(654) = 2.68, p = .008$), stigma concerns ($t(654) = 2.26, p = .024$), lack of motivation ($t(655) = 2.28, p = .023$), negative evaluations of therapy ($t(655) = 2.42, p = .016$), participation restrictions ($t(654) = 2.83, p = .005$), and cost ($t(656) = 4.51, p <.001$). Partner status was not related to other PBPT subscales ($ps >.06$). There were small but statistically significant correlations between age and total PBPT score ($r = -.11, p = .005$), stigma ($r = -.08, p = .043$), emotional concerns ($r = -.09, p = .024$), negative evaluation of therapy ($r = -.09, p = .024$), time constraints ($r = -.29, p = .000$), and cost ($r = -.15, p = .000$). Age was not significantly related to lack of motivation, misfit of therapy to needs, participation restriction, or availability of services (all $ps >.16$).

Criterion Validity

Concurrent validity—Because perceived barriers to care could be expected to be associated with lower rates of utilization of psychotherapy, we evaluated current receipt of psychotherapy as a criterion validity variable. A total of 90 (13.8%) reported that they were currently in psychotherapy. After controlling for demographics, including age, gender, ethnicity (Caucasian vs. non-Caucasian), relationship status (partnered vs. non-partnered), and depression, patients with lower barriers in time constraints ($OR = .83, p = .006$), misfit of therapy to needs ($OR = .88, p = .007$), availability of services ($OR = .88, p = .04$), or cost ($OR = .78, p = .009$) were more likely to report current psychotherapy attendance. Current psychotherapy attendance was not statistically related to stigma, lack of motivation,

emotional concerns, negative evaluation of therapy, participation restriction, or total PBPT score (all $ps > .09$).

Predictive validity—As further test of criterion validity for the scale, we repeated the logistic regressions on 395 individuals who responded to a 1-year follow-up survey (60.0% of baseline sample), which asked whether they received psychotherapy in the previous year. Ninety-eight (24.8%) reported receiving psychotherapy in the year after their completion of the original survey. After controlling for the same set of variables, including depression, patients reporting higher scores on stigma ($OR = .94, p = .026$), emotional concerns ($OR = .86, p = .02$), misfit of therapy to needs ($OR = .84, p = .001$), time constraints ($OR = .86, p = .035$), and total PBPT score ($OR = .98, p = .039$), were less likely to report attending psychotherapy during the year after their completion of the PBPT. Psychotherapy during the subsequent year was not statistically related to the remaining PBPT scores (all $ps > .15$).

Impact of Depression on Perceived Barriers

We tested predictors of the total PBPT and subscale scores using hierarchical multiple regression analyses. Demographics (i.e., age, gender, relationship status, and ethnicity) were entered in the first step, general health status was entered in the second step, previous history of psychotherapy was entered in the third step, and current symptoms of depression were entered in the fourth step. Depression was a significant independent predictor of higher total scores on the PBPT ($\beta = .34, p < .001$), as well as higher scores on stigma ($\beta = .30, p < .001$), lack of motivation ($\beta = .42, p < .001$), emotional concerns ($\beta = .37, p < .001$), negative evaluation of therapy ($\beta = .21, p < .001$), misfit of therapy to needs ($\beta = .18, p < .001$), participation restriction ($\beta = .23, p < .001$), availability of services ($\beta = .23, p < .001$), and cost ($\beta = .24, p < .001$). Depression scores were not related to time constraints ($p = .14$).

To facilitate interpretation of these findings, PBPT items were dichotomized, based upon previous work (Mohr et al., 2006). As described in the Methods section, this scoring is based on the assumption that any single barrier can prevent access to psychotherapy and that beyond that threshold additional barriers cannot have any effect. We used a PHQ-8 cutoff of 10 to identify patients who could be expected to be referred for psychological treatment. Table 4 displays the percentages of patients reporting significant perceived barriers to initiation and regular attendance of psychotherapy, presented for the full sample, as well as by depression status. Among all patients, 55.5% reported at least one perceived barrier on the total PBPT score, which would make it extremely difficult or impossible to participate in psychotherapy. Among depressed patients ($PHQ \geq 10$), 78.4% reported one or more barriers, in contrast to 49.6% of non-depressed. Regarding the PBPT subscales, among all patients, between 7.6 to 21.6% of patients reported at least one barrier in each of the eight subscales. Among patients who were depressed, 19 to 36% of them endorsed at least one barrier. In contrast, among patients who were non-depressed, the range was between 4 to 20% for the subscales.

Table 4 shows the results of the logistic regression analyses of the effects of having a PHQ-8 of 10 or greater on the dichotomous PBPT subscales after controlling for demographics, history of psychotherapy, and health status. Depression was associated with increased likelihood of a substantial barrier based on the total PBPT ($OR = 2.94, p < .001$). This means that the odds of reporting at least one perceived barrier for people with PHQ-8 scores of 10 or greater were 2.94 times the odds for people with PHQ-8 scores under 10. With regard to PBPT subscales, depression predicted the dichotomized scores for stigma ($OR = 2.89, p < .001$), lack of motivation ($OR = 3.43, p < .001$), emotional concerns ($OR = 3.37, p < .001$), negative evaluation of therapy ($OR = 2.08, p = .005$), participation restriction ($OR = 1.89, p = .014$), availability of services ($OR = 1.77, p = .018$), and cost ($OR = 1.89, p = .008$).

Similar to the multiple regression, depression scores were not related to time constraints ($p = .64$). Unlike the multiple regression analyses, depression was only marginally associated with misfit of therapy to needs ($OR = 1.66, p = .057$).

Discussion

This study extended our previous work by developing and evaluating a comprehensive assessment of perceived barriers to receiving psychological and behavioral care. Items were generated by both primary care patient reports of perceived barriers to psychological care and clinicians. An EFA produced eight factors using 24 of the original 27 items. This factor structure was confirmed by a CFA. The internal reliabilities of the measure and subscales were good to very good. Of the three items that did not meet criteria for inclusion in the measure, one was the cost of therapy. Because there is so much literature indicating that cost is one of the most common barriers, we included the cost item in the total PBPT score and included the single cost item in subsequent analyses.

Many of the subscales met at least one of the standards for criterion validity. Time constraints and misfit of therapy to needs met predictive validity, in that they predicted self-reported psychotherapy use in the year after completion of the PBPT, and concurrent validity, as they were related to the concurrent report of psychotherapy attendance. The total PBPT score, as well as greater endorsement of barriers related to stigma and emotional concerns, demonstrated predictive validity, while cost and availability of services showed concurrent validity. Lack of motivation, negative evaluation of therapists, and participation restriction were not significantly related to concurrent or subsequent receipt of psychotherapy. This might suggest that these constructs or the items contained in those factors do not constitute barriers to treatment. However, interpreting null effects is difficult. Lack of motivation is a symptom of depression and is associated with many of the psychological conditions that increase interest in receiving psychotherapy. Thus, lack of motivation may be associated with other symptoms, which, in concert, create more complex effects that could cause some people to seek psychological help and, at the same time, create barriers. The lack of an association between participation restriction and concurrent or subsequent psychotherapy attendance may be related to the fact that this study was conducted in an urban area with available public transportation and paratransit services that could mitigate the effect that disability and transportation problems might have on access. The lack of an association between negative evaluation of therapists and concurrent or future use of psychotherapy services is somewhat puzzling, although it is consistent with recent findings, which report that attitudinal variables, including negative attitudes toward psychological services and mental health providers, are not significant barriers to psychological care (Mackenzie, Scott, Mather, & Sareen, 2008; Mohr et al., 2006; O'Mahen & Flynn, 2008; Sareen et al., 2007).

A growing number of studies are examining technology-assisted interventions aimed at overcoming barriers to receiving traditional face-to-face care. Many trials have examined treatments delivered by telephone that are aimed at overcoming barriers to care (Mohr, Vella, Hart, Heckman, & Simon, 2008). The Internet has also been increasingly investigated as a treatment delivery medium that can overcome barriers to face-to-face care (Spek et al., 2007; Strecher, 2007). The barriers that these media purport to overcome are primarily structural, providing services into a person's home, and in some cases at potentially minimal costs. Although there are growing numbers of studies examining the efficacy of these media, the assumption that they overcome barriers to face-to-face treatments remains, not to mention the possibility that they may create new ones largely unexamined. Tools to measure barriers such as the PBPT may facilitate our understanding of what limits access to treatment and what types of interventions overcome those limitations.

A principal aim of the study was to examine the relationship between the PBPT and depression. Given the paradox that psychotherapy is presumably desired by patients (Dwight-Johnson et al., 2000) but patients rarely follow up on referrals (Brody et al., 1997; Weddington, 1983), we investigated whether depression itself was associated with perceived barriers to psychological treatment. We found that greater levels of depression were consistently associated with increased perceived barriers in the total PBPT score, as well as most of the subscales, with the exception of time constraints. These findings are consistent with our previous study (Mohr et al., 2006). There are multiple possible explanations for these findings. This association may be partially driven by negative depressive biases in the perception of barriers (e.g. everything seems like more of a struggle) and decreased motivation associated with depression. That is, depression may increase patients' perceptions of the severity of existing barriers and decrease the motivation to take the steps necessary to engage in psychological treatment. It is possible that chronic depression could directly increase objective barriers to care, for example, by decreasing socioeconomic status and, thereby, increasing cost-related barriers. Depression might also be associated with greater frequencies in objective barriers via the association between depression and chronic disabling illness. Although we controlled for health status, this was a self-report assessment and may not accurately reflect disease status. Regardless of the nature of the relationship, these findings suggest that not only are perceived barriers to psychological intervention common (particularly structural barriers), but depression can actually increase the magnitude of the perceived barriers, which, in turn, may decrease utilization of psychological services.

This study has a number of limitations. First, and most important, only 21% of patients who were contacted responded, leaving open the possibility of sampling bias. Indeed, with 14% of the sample indicating that they were receiving psychotherapy at the time they completed the survey, this group may have been overrepresented. Responders also differed somewhat from non-responders on several demographic variables. Accordingly, frequencies must be interpreted cautiously. A second limitation is that this study was performed in a single clinic. Thus, these perceived barriers may be locally determined to some extent. Although the results of this survey were remarkably similar to a previous study in another urban area (Mohr et al., 2006), rural areas or cities with less public transportation may produce different barriers, and there may be geographic differences in attitudes toward psychotherapy. A third limitation is that many of the factors had only two items, which likely reduces reliability. Indeed, cost, an important barrier, is only a single item. Subsequent work should develop and validate additional items so that there are at least three items per scale. A fourth limitation is that the cross-sectional nature of these data precludes causal inferences. Thus, it is possible that the perception of barriers could lead to discouragement and increased symptoms of depression. It is also possible that unmeasured constructs such as socioeconomic status could be affecting both perceived barriers and depression. A fifth caveat is that this study examined individual psychotherapy only, and results should not be generalized to other forms of mental health treatment such as pharmacotherapy. Finally, we emphasize that this was a study of perceived barriers and does not represent the impact of actual barriers. Certainly for some barriers, such as the availability of psychological services within a reasonable distance, objective barriers are critically important. But for many of the barriers evaluated here, including time constraints, the impact of symptoms, and even to some extent cost, it is not clear whether objective or perceived barriers would be more closely associated with utilization.

In spite of its weaknesses, this study represents, to the best of our knowledge, the first attempt to systematically evaluate perceived barriers to receiving psychological care. It is an axiom of clinical practice, whether in medicine or psychology, that one should assess before intervening. Similarly, in clinical research aimed at overcoming barriers, it is likely helpful to understand the problem before designing fixes. Although future work on the PBPT will be

required, including rounding out some of the subscales with additional items, this work takes a step forward in developing a reliable and comprehensive method of measuring perceived barriers. We hope that this article and this line of research will lead to more informed and better targeted methods of overcoming these barriers.

Acknowledgments

This article was funded in part by NIMH RO1 grant MH59708 to David C. Mohr, Ph.D.

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Table 1
Demographic Characteristics of Study Participants (N = 658)

	<i>n</i>	%	Mean	<i>SD</i>
Age			50.9 (Range 518–87)	15.42
Female %	461	70.1		
Race/ethnic background				
African American	189	28.7		
Asian American	17	2.6		
Caucasian	396	60.2		
Latino/a	35	5.3		
Multiracial	15	2.3		
Other	6	0.9		
Relationship status				
Single	211	32.1		
Married/living with partner	300	45.6		
Divorced	100	15.2		
Widowed	47	7.1		
PHQ-8 (Depression)			5.68	5.44
Previously received psychotherapy	327	50.2 ^a		
Currently receiving psychotherapy	90	13.8 ^b		
Health status			2.79	1.04
Subscale mean scores				
1. Stigma (7 items)			1.50	.70
2. Lack of motivation (2 items)			1.52	.81
3. Emotional concerns (3 items)			1.45	.72
4. Negative evaluations of therapy (4 items)			1.59	.82
5. Misfit of therapy to needs (4 items)			1.58	.76
6. Time constraints (2 items)			1.95	1.02
7. Participation restriction (4 items)			1.53	.80
8. Availability of services (2 items)			1.88	1.04
9. Cost (1 item)			2.42	1.32
Total PBPT score			1.62	.58

PHQ-8 = patient health questionnaire; PBPT = perceived barriers to psychological treatment. To permit comparability across subscales, mean and SD are calculated as the sum of a scale divided by number of items.

^aMissing = 6.

^bMissing = 4.

Table 2
Fit Statistics for the Sequence of Factor Analyses of Perceived Barriers to Psychological Treatment Items

Factors ^b	Exploratory factor analyses					Confirmatory factor analyses ^a				
	χ^2	df	RMSEA	RMSEA 90% CI	CFI	χ^2	df	RMSEA	RMSEA 90% CI	CFI
1	2356.833	252	.160	[.154, .166]	.849	Analyses not conducted due to unacceptable fit indices				
2	1345.850	229	.122	[.116, .129]	.920					
3	1187.003	207	.121	[.114, .127]	.930					
4	878.202	186	.107	[.100, .114]	.950					
5	734.491	166	.102	[.095, .110]	.959	942.167	237	.095	[.089, .101]	.832
6	530.410	147	.089	[.081, .098]	.973	873.162	229	.092	[.086, .099]	.846
7	433.718	129	.085	[.076, .094]	.978	690.675	223	.080	[.073, .086]	.888
8	277.040	112	.067	[.057, .077]	.988	564.834	219	.069	[.062, .076]	.917
9	192.481	96	.056	[.044, .067]	.993	552.673	212	.070	[.063, .077]	.919

RMSEA = root mean squared error of approximation; CI = confidence interval; CFI = Comparative Fit Index.

^aAll confirmatory factor analyses include an estimated correlated residual parameter between items 24 and 25.

^bAnalyses were discontinued after the 9-factor solution due to negligible improvement in fit and evidence of overfactoring.

Table 3
 Loadings for the 8-Factor Exploratory Solution of Perceived Barriers to Psychological Treatment Items

	Factors								Corrected item-total correlation
	1	2	3	4	5	6	7	8	
1. Stigma									
24. Concerns about being judged	0.73	0.11	0.05	0.03	-0.02	-0.03	-0.05	0.12	0.69
27. Concerns about documentation in insurance	0.61	-0.09	0.00	0.02	0.09	0.19	0.08	-0.11	0.70
22. Stigma of family/friends knowing	0.53	0.18	0.04	0.02	0.06	0.12	0.08	-0.15	0.74
23. Discomfort talking to someone I don't know	0.53	0.05	0.28	-0.05	0.10	0.04	0.00	0.06	0.67
25. Counselor would not care about me ^a	0.47	0.14	-0.07	0.35	0.10	-0.14	0.06	0.05	0.73
26. Counseling means I can't solve problems myself ^a	0.46	-0.13	0.22	-0.01	0.32	0.00	0.05	0.03	0.58
20. Being seen while emotional ^a	0.39	0.23	0.34	0.04	-0.01	0.01	-0.07	0.08	0.65
2. Lack of motivation									
19. Difficulty motivating self	0.02	0.94	0.02	0.00	0.00	0.00	0.04	0.02	0.70
18. Lack of energy or motivation	0.04	0.48	0.24	0.05	0.09	0.08	0.15	-0.06	0.70
3. Emotional concerns									
16. Concerns about upsetting feelings in counseling	0.02	0.00	0.90	0.01	0.01	0.03	0.04	0.04	0.72
17. Talking about problems makes them worse	0.05	0.12	0.72	0.10	0.06	0.04	0.01	0.00	0.74
20. Being seen while emotional ^a	0.39	0.23	0.34	0.04	-0.01	0.01	-0.07	0.08	0.63
4. Negative evaluation of therapy									
12. Distrust counselors	0.03	0.04	0.04	0.70	0.16	-0.02	-0.03	0.14	0.59
11. Bad experiences with counselors	0.01	0.00	0.11	0.79	-0.09	0.09	0.16	-0.08	0.78
13. Would not expect counseling to be helpful ^a	0.02	0.14	0.00	0.44	0.47	0.04	-0.08	0.06	0.68
25. Counselor would not care about me ^a	0.47	0.14	-0.07	0.35	0.10	-0.14	0.06	0.05	0.65
5. Misfit of therapy to needs									
13. Would not expect counseling to be helpful ^a	0.02	0.14	0.00	0.44	0.47	0.04	-0.08	0.06	0.57
14. Attending counseling would feel self-indulgent	0.06	0.08	0.17	0.10	0.56	-0.02	0.01	0.14	0.59
21. My problems are not bad enough	0.06	-0.02	0.01	-0.07	0.69	0.12	0.12	-0.03	0.65
26. Counseling means I can't solve problems myself ^a	0.46	-0.13	0.22	-0.01	0.32	0.00	0.05	0.03	0.52
6. Time constraints									
4. Interference from daily responsibilities	0.00	0.00	0.09	-0.01	0.07	0.80	-0.03	0.05	0.55

	Factors								Corrected item-total correlation
	1	2	3	4	5	6	7	8	
7. Difficulties getting time off work	0.02	0.02	-0.10	0.08	-0.05	0.67	-0.04	0.05	0.55
7. Participation restrictions									
9. Physical symptoms (fatigue, pain, breathing problems)	-0.01	0.10	0.00	0.04	0.02	0.01	0.83	0.01	0.79
8. Difficulty walking or getting around	-0.01	-0.05	0.05	0.01	0.01	-0.06	0.92	0.04	0.78
10. Illness making it hard to leave home	0.04	0.08	-0.06	0.12	0.04	0.08	0.50	0.12	0.60
1. Problems with transportation	0.10	0.23	-0.18	-0.07	-0.03	0.17	0.43	0.11	0.55
8. Availability of services									
5. Lack of available counseling/psychotx	-0.03	0.02	0.02	-0.04	0.02	0.06	0.07	0.88	0.58
6. Don't know how to find counselor/therapist	0.16	-0.09	0.02	0.31	-0.07	0.09	0.07	0.44	0.58
Eigenvalues	9.82	2.39	1.51	1.31	0.98	0.91	0.87	0.74	
Chronbach's alpha (total PBPT $\alpha = .92$)	0.89	0.82	0.83	0.84	0.77	0.71	0.84	0.73	
Items excluded									
15. Anxiety about going far from home									
3. Cost of psychotherapy									
2. Caregiving responsibilities									

PBPT = perceived barriers to psychological treatment.

* Indicates items that load onto two scales. These items are counted in the scoring of both scales, but are counted only once in the total PBPT score.

Table 4
 Logistic Regression for the Relationship Between PBPT and Depression, Controlling for Demographics, History of Psychotherapy and Health Status

Dichotomous	Frequencies (at least 1 barrier)				Logistic regression											
	Full sample (N = 658)		PHQ < 10 (N = 524)		PHQ ≥ 10 (N = 134)		History of individual therapy				Health status				PHQ	
	N	%	N	%	N	%	Exp (b)	CI for	Exp (b)	CI for	Exp (b)	CI for	Exp (b)	CI for	Exp (b)	CI for
1. Stigma (7 items)	116	17.6	72	13.7	44	32.8	.58*	.38	.89	1.14	.90	1.45	2.89*	1.74	4.79	
2. Lack of motivation (2 items)	50	7.6	22	4.2	28	20.9	.89	.48	1.67	1.66*	1.16	2.37	3.43*	1.74	6.78	
3. Emotional concerns (3 items)	52	7.9	25	4.8	27	20.1	.59	.32	1.10	1.55*	1.10	2.19	3.37*	1.73	6.58	
4. Negative evaluations of therapy (4 items)	109	16.6	71	13.5	38	28.4	.90	.58	1.38	1.20	.94	1.52	2.08*	1.24	3.48	
5. Misfit of therapy to needs (4 items)	113	17.2	81	15.5	32	23.9	.62*	.41	.95	1.08	.85	1.36	1.66	0.99	2.81	
6. Time constraints (2 items)	128	19.5	102	19.5	26	19.4	.86	.57	1.28	1.18	.94	1.49	.88	.52	1.50	
7. Participation restriction (4 items)	113	17.2	69	13.2	44	32.8	.93	.60	1.45	1.90*	1.48	2.45	1.89*	1.14	3.12	
8. Availability of services (2 items)	142	21.6	94	17.9	48	35.8	.93	.63	1.38	1.56*	1.25	1.96	1.77*	1.10	2.85	
9. Cost (1 item)	162	24.6	108	20.6	54	40.3	.68*	.46	1.00	1.40*	1.12	1.73	1.89*	1.18	3.02	
Total PBPT score	365	55.5	260	49.6	105	78.4	.97	.69	1.34	1.35*	1.10	1.60	2.94*	1.81	4.77	

PBPT = perceived barriers to psychological treatment; PHQ = patient health questionnaire; CI = confidence interval. Dichotomous categories: 1 = at least one perceived barrier; 0 = no barrier. History of individual psychotherapy: 1 = previously received individual psychotherapy; 0 = never received individual psychotherapy.

* p<.05.