

IDENTIFYING BARRIERS AND SOLUTIONS TO PSYCHOTHERAPY IN ADULTS WITH  
DEPRESSION

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Dedicated in loving memory to

Bee, Bob, and Charley

IDENTIFYING BARRIERS AND SOLUTIONS TO PSYCHOTHERAPY IN ADULTS WITH  
DEPRESSION

by

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# IDENTIFYING BARRIERS AND SOLUTIONS TO PSYCHOTHERAPY IN ADULTS WITH DEPRESSION

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## ABSTRACT

Research has suggested that adults with depression face a variety of intrinsic and extrinsic barriers to psychotherapy, which results in low initiation rates for psychotherapy. These barriers have been characterized in some detail, but to our knowledge, there has been no previous examination of how adults with depression initiate psychotherapy after first encountering barriers. The primary goals of this study were to assess barriers to psychotherapy endorsed by adults with depression currently receiving psychotherapy and to design and implement a new questionnaire (*Overcoming Barriers to Psychotherapy*) to examine what solutions adults with depression perceive as helpful in overcoming barriers to initiating psychotherapy. This study also aimed to evaluate the respective impacts of 1) demographic variables (race, ethnicity, income), 2) depression symptom severity, and 3) psychosocial functioning on endorsement of intrinsic and extrinsic barriers. An online survey was administered to examine sociodemographic information, depression symptom severity, psychosocial functioning, barriers to psychotherapy, and solutions to barriers in 132 adults with depression currently receiving psychotherapy recruited from a



variety of outpatient settings across the Dallas-Fort Worth metroplex. Results revealed that a higher percentage of extrinsic relative to intrinsic solutions were endorsed for intrinsic barriers, and a higher percentage of intrinsic relative to extrinsic solutions were endorsed for extrinsic barriers. Results indicated that barriers to psychotherapy are more frequently resolved by solutions of different types (e.g., intrinsic barriers resolved by extrinsic solutions). Resolution of barriers to psychotherapy may require adults with depression to rely on solutions that enable them to work around the core difficulty posed by barriers. Both depression symptom severity and psychosocial impairment were associated with overall higher endorsement of intrinsic and extrinsic barriers. A lack of racial and ethnic diversity in the recruited sample prevented examination of the impact of race and ethnicity on endorsement of extrinsic barriers. Future research is warranted to establish psychometrics of the novel study measure to assess solutions to barriers to psychotherapy, and to administer the measure in a more racially and ethnically diverse sample. The solutions to barriers to psychotherapy discussed in this study may help adults with depression to overcome barriers and initiate psychotherapy.

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## LIST OF ABBREVIATIONS

ATTPHS	Attitudes Towards Professional Help Seeking
BACE	Barriers to Access to Care Evaluation
BMHSS	Barriers to Mental Health Services Scale
BPCQ	Barriers to Psychological Care Questionnaire
OBP	Overcoming Barriers to Psychotherapy
PBPT	Perceived Barriers to Psychological Treatment
PHQ-9	Patient Health Questionnaire-9
WSAS	Work and Social Adjustment Scale

# **CHAPTER 1**

## **INTRODUCTION**

Depression is globally recognized as a chronic disease that poses an immense burden to individuals and societies, and affects approximately 300 million people worldwide. Indeed, it is one of the leading diseases associated with disability and global disease burden (Lépine & Briley, 2011). Fortunately, there are a number of evidence-based treatments for depression, of which the two most commonly employed are pharmacotherapy and psychotherapy (Aherne, Fitzgerald, Aherne, Slattery, & Whelan, 2017). In most cases, antidepressant psychotropic medications are the first line treatment option (Olfson, Marcus, Tedeschi, & Wan, 2006). However, they have significant drawbacks including partial response, high relapse rate, unwanted side effects, and low adherence rates (Gloaguen, Cottraux, Cucherat, & Blackburn, 1998; Khawam, Laurencic, & Malone, 2006; ten Doesschate, Bockting, Koeter, & Schene, 2009). Psychotherapy is often the preferred antidepressant treatment among patients, in addition to offering distinct benefits as a treatment for depression (Churchill et al., 2000; Imel et al., 2008).

Not only do adults with depression consistently express a preference for psychotherapy over medication, psychotherapy has been shown to improve self-efficacy, emotion-regulation skills, and interpersonal functioning (Churchill et al., 2000; DeRubeis, Siegle, & Hollon, 2008; Kohlenberg, Kanter, Bolling, Parker, & Tsai, 2002). Moreover, psychotherapy relative to pharmacotherapy has been associated with prolonged remission (Imel et al., 2008). Combined psychotherapy and pharmacotherapy relative to monotherapy remains the most effective treatment for depression as it is associated with lower rates of relapse and better psychosocial outcomes (Cuijpers, Dekker, Hollon, & Andersson, 2009; Cuijpers et al., 2011; Hirschfeld et al.,

2002). Regardless of the high acceptability and multiple potential benefits of psychotherapy as a treatment option for depression, the rates of initiating psychotherapy following referral are very low (Stecker & Alvidrez, 2007). The disconnect between patient preferences and actual initiation rates suggests that there are significant barriers to initiating psychotherapy.

There are a variety of obstacles to initiation of psychotherapy for adults with depression (Mohr et al, 2010; Pepin, Segal, & Coolidge, 2009). Such barriers are related to sociodemographic factors (e.g., age, ethnicity), practical and structural factors (e.g., financial constraints, lack of available services), beliefs and attitudes, illness, supply-side factors (e.g., health care system, provider barriers), and stigma (Alegría et al., 2008; Burns et al., 2003; Clement et al., 2015; Greenberg, 2004; Mojtabai et al., 2011; Wells et al., 2013). A substantial body of research has examined patient perceived barriers to psychiatric treatment globally, while fewer studies have examined barriers specific to psychotherapy. The trend in this literature has been to lump together psychotherapy, medication, and other forms of professional care when investigating barriers to treatment (Mohr et al., 2010). Further, the bulk of these investigations were unsystematic and used a list of barrier items with little or no explanation of methodology (Goodman, 2009). A majority of existing measures that assess treatment barriers examine a single domain of the broad array of barriers to psychotherapy. In fact, there are only a few comprehensive, empirically developed, and psychometrically sound scales that assess barriers to psychotherapy.

There is an absence of studies or measures that have investigated the factors that enable adults with depression to overcome barriers to psychotherapy. It is crucial to understand the solutions that allow individuals to resolve barriers to treatment and ultimately access psychotherapy. By understanding how adults with depression navigate difficult intrinsic and

extrinsic barriers to psychotherapy, researchers, public health programs, and clinicians can more effectively target these barriers and increase access to care.

The remainder of this chapter will explore benefits of psychotherapy as a treatment for depression, the breadth and variety of existing barriers to psychotherapy for adults with depression, and the assessments designed to measure treatment barriers. The review ends with discussion of specific research question and hypotheses.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Burden of Depression**

Depression affects roughly 300 million people worldwide, has a lifetime prevalence that ranges from 10% to 15% in the general population (Lépine & Briley, 2011). Depression imposes an immense burden on individuals, societies, and healthcare services around the world (Druss, Rask, & Katon, 2008). The World Health Organization (WHO) reports that depression is the fourth leading contributor to the global burden of disease and the leading cause of disability as indicated by Years Lived with Disability (YLDs) (World Health Organization, 2017). In addition, depression is estimated to become the second leading contributor to Disability Adjusted Life Years (DALY) for all ages (Reddy, 2010). Depression also carries a high mortality risk for suicide, amounting to a rate 20 times higher than the general population (Bostwick & Pankratz, 2000). Roughly 1 in 2 individuals who have committed suicide had a preexisting primary diagnosis of depression (Reddy, 2010), and close to 800,000 people die from suicide every year.

Depression has been consistently linked with mortality risk by cardiovascular disease and stroke, as well as death by all causes (Lespérance, Frasere-Smith, Talajic, & Bourassa, 2002). In addition to mortality, depression presents substantial functional impairment and increases the risk of absenteeism and decreased workplace productivity, and ultimately results in significant economic burden (Greenberg, Fournier, Sisitsky, Pike, & Kessler, 2015). Only 29%-52% of adults who meet criteria for depressive disorders seek treatment in the first year of illness (Wang et al., 2007), revealing the existence of significant unmet need.

#### **Current Treatments for Depression**

Currently, there are several effective and established treatments for depression. Such treatments include pharmacotherapy (most commonly antidepressant psychotropic medications), psychotherapy, combined treatments (e.g., psychotherapy and antidepressant agents), repetitive transcranial magnetic stimulation (rTMS), electroconvulsive therapy (ECT), and exercise (Aherne et al., 2017; Greer & Trivedi, 2009). Controlled clinical trials have demonstrated the efficacy of multiple mono- and combination antidepressant strategies in the treatment of depression (Dunlop et al., 2011; Goldstein, Mallinckrodt, & Demitrack, 2002; Rush et al., 2006). Use of antidepressant psychotropic medications has become increasingly popular in the United States, with rates increasing nearly 65% over a 15-year time frame (1999-2014) (Pratt, Brody, & Gu, 2017). In most cases, antidepressant medications are the first line treatment for depressive disorders, with the rate of those treated for depression who received an antidepressant medication increasing from 44.6% in 1987 to 79.4% in 1997 (Olfson et al., 2002). In many cases, antidepressant treatment is effective with up to 70% of patients with depression displaying substantial improvement on a depression symptom severity measure (e.g., the Hamilton Rating Scale for Depression (HRSD)) (Al-Harbi, 2012). However, a substantial portion of patients do not benefit from antidepressant medications. 10% to 30% of patients treated with antidepressant medication display treatment-resistant symptoms that are coupled with impairment in overall functioning and poor quality of life (Al-Harbi, 2012). Furthermore, according to the Sequenced Treatment Alternatives to Relieve Depression (STAR\*D) study, 50%-66% of patients with depression have incomplete recovery on an antidepressant medication and only 28%-33% of patients achieve full symptomatic clinical remission (Trivedi et al., 2006). After a failed trial of antidepressant medication, common practice involves optimization of medications (e.g., increasing dosage, change timing of dose, etc.), combination of multiple antidepressant

medications, switching the type or class of antidepressant medications, or augmentation with non-antidepressant medications (Trivedi et al., 2006).

### **Drawbacks of Antidepressant Psychotropic Medications**

Regardless of whether adults with depression achieve symptomatic remission after antidepressant treatment, a significant portion of them relapse, which is defined as a “return of symptoms to the full syndrome criteria for an episode during remission but before recovery (i.e., within eight weeks),” (Frank et al., 1991, p. 852). Results from the Sequenced Treatment Alternatives to Relieve Depression (STAR\*D) trial indicated that at one-year follow up, at least 40% of acute-phase responders relapsed during continuation treatment with antidepressant medications (Rush et al., 2006). Additionally, antidepressant medications present many potential side effects, which many patients find significantly burdensome. Such side effects include weight gain, sexual dysfunction, increased suicide risk, gastrointestinal issues, discontinuation syndrome, sleep disturbances, sedation, and irritability (Khawam et al., 2006). Wouters et al. (2014) conducted a study to examine patients’ trade-off preferences with respect to antidepressant medications in a primary-care setting. Their aim was to examine patients’ trade-offs between symptom relief, relapse prevention, and side effects of antidepressant medications and whether the relative value they placed on each of those variables predicted non-adherence. On average, the patients considered side effects and efficacy to be equivalent, and roughly one out of five patients believed that side effects of antidepressant medications were equally or more important than efficacy. Patients who indicated lower benefit/drawback ratios (e.g., placed more importance on side effects over efficacy) had a higher likelihood of intentional non-adherence. The researchers also found that more than half of the patients placed greater importance on symptom relief than symptom prevention, and a majority (61%) also preferred the addition of

psychotherapy (combined treatment) to medications alone. The authors suggested that patients who experienced symptomatic relief may need closer monitoring for adherence given that they generally placed lower importance on relapse prevention.

The above findings are consistent with research conducted by Aikens, Nease, Nau, Klinkman, & Schwenk (2005), who reported that non-adherence was highest when concerns about antidepressant medications outweighed perceived necessity. In sum, antidepressant medications, although an effective treatment for depression in many cases, are not a panacea. Unfortunately, many patients show no response to antidepressant medications and many experience burdensome side effects that often produce partial or complete nonadherence. Doesschate et al. (2009) reported antidepressant medication nonadherence rates that ranged from 39.7% to 52.7% (average = 46.5%) over 2 years. Olfson et al. (2006) found that early discontinuation of antidepressant medications was extremely widespread, especially in patients with low socioeconomic status. However, they also reported that patients concurrently enrolled in psychotherapy were significantly more likely to continue antidepressant medication treatment beyond one month.

### **Efficacy and Benefits of Psychotherapy in the Treatment of Depression**

Psychotherapy has been demonstrated by several studies and meta-analyses to have equal efficacy to pharmacotherapy in the treatment of depression (Casacalenda, Perry, & Looper, 2002; Cuijpers et al., 2013), including in the short-term acute treatment of major depressive disorder (Casacalenda et al., 2002; Cuijpers et al., 2013; Imel, Malterer, McKay, & Wampold, 2008; Spielmanns, Berman, & Usitalo, 2011). While antidepressant medication treatment of depression is often associated with high rates of dropout, discontinuation, and relapse, evidence-based psychotherapies have been found to have lower relapse and discontinuation rates whether



as a monotherapy or in combination with medication. A recent meta-analysis by Swift, Greenberg, Tompkins, & Parkin (2017) indicated that patients assigned to pharmacotherapy were 1.2 times as likely to drop out of treatment as patients assigned to psychotherapy. Research has found that cognitive behavior therapy has an enduring effect that reduces the risk of depressive relapse and recurrence (Hollon, Stewart, & Strunk, 2006). A meta-analysis of the effects of cognitive therapy found a one-year relapse rate of 25% for adults with depression previously treated with cognitive therapy, which was nearly half the rate for those with prior antidepressant medication treatment (Gloaguen, Cottraux, Cucherat, & Blackburn, 1998). Hollon et al. (2005) indicated that the preventative effects of previous treatment of cognitive therapy amounted to the same benefit as maintenance antidepressant medication treatment. That is, the lasting benefits of psychotherapy can equal the effects of continued medication. Imel et al. (2008) reported similar results finding no significant differences between acute phase psychotherapy for depression and continued antidepressant medication at long-term (15 months) follow-up. This study suggested that the long-term advantages of psychotherapy relative to medication may be attributable to the skill-building aspects of psychotherapy (e.g., lasting benefits associated with trainings on social skills, assertiveness, and communication).

### **Combination Therapy as the Gold Standard Treatment for Depression**

Regardless of the drawbacks of antidepressant medications and the benefits of psychotherapy, combination therapy that involves the co-administration of psychotherapy and antidepressant medication is widely regarded as the gold standard treatment for depression (Blom et al., 2007; Karyotaki et al., 2016). Incorporating results from 16 different studies, Pampallona, Bollini, Tibaldi, Kupelnick, & Munizza (2004) found that psychotherapy combined with antidepressant medication relative to medication alone was associated with greater

improvement in depressive symptoms. Furthermore, these researchers discovered a robust reduction in dropout rate linked with the addition of psychotherapy. As noted above, psychotherapy may have a possible adherence-enhancing function. In a large, multicenter study of 681 patients with depression, Keller et al. (2000) found that 12-weeks of treatment with the combination of Cognitive Behavioral Analysis System of Psychotherapy (CBASP; a time-limited psychotherapy that includes components of cognitive-behavioral psychotherapy and interpersonal psychotherapy) and an antidepressant agent (nefazodone), was more effective than either treatment alone for chronic depression. A meta-analysis by Cuijpers et al. (2009) reported robust significant results that combined treatment inclusive of psychotherapy was more effective than medication alone. This finding suggests that psychotherapy has an additional effect on depressive disorders above and beyond the effects of medication. Similar findings were reported in another study that employed combination maintenance treatment with interpersonal psychotherapy (ITP) and antidepressant agents (Cuijpers et al., 2011).

In addition to overall superiority of combination treatment in terms of symptomatic remission and reduced relapse rates, potential improvement of psychosocial functioning is another benefit of the combination of psychotherapy and medication. Psychosocial functioning may be defined as an individual's ability to engage with others in mutually-gratifying ways, complete activities of daily living, and meet the demands of their community (Mehta, Mittal, & Swami, 2014). Psychosocial impairments are prevalent in patients with current and remitted depression (Lam, Kennedy, McIntyre, & Khullar, 2014) and are quite burdensome (Greer, Kurian, & Trivedi, 2010). In a sample of adults with chronic depression, 37.4% of married patients described their relationship as poor or very poor, and 42% of participants reported moderate to severe impairments in work functioning (Miller et al., 1998).

Hirschfeld et al. (2002) suggested that combined treatment may have an independent impact on psychosocial functioning above and beyond its effect on depressive symptoms. Patients who had received combination therapy (psychotherapy and antidepressant medication) reported better social, work, health, and overall functioning outcomes as compared to those receiving either psychotherapy or medication alone (Hirschfeld et al., 2002). While combination therapy (psychotherapy and antidepressant medication) produced the greatest improvements in psychosocial functioning levels, psychotherapy (as a monotherapy) relative to monotherapy medication produced more favorable psychosocial outcomes. Consistent with these findings, Molenaar et al., (2007) found a moderate advantage of combination therapy (psychotherapy and antidepressant medication) over pharmacotherapy on levels of psychosocial functioning. Scott et al. (2000) found that cognitive behavior therapy had a moderate impact on social functioning in patients with residual depression. This is consistent with claims by psychotherapists that “change and improvement in depressive symptoms occur through working on mastery and competence in the social sphere” (Crowe & Luty, 2005, p. 45). Furthermore, it is increasingly clear that psychosocial functioning and functional recovery are intimately tied to symptomatic remission for adults with depression. In fact, Jha et al., (2016) found that early improvement of psychosocial functioning (at week 6) predicted symptomatic remission at 3 and 7 months.

### **Patient Preferences for Psychotherapy as a Treatment Option**

Several studies have indicated that patients often prefer psychotherapy over antidepressant medications as a treatment option for depression (Churchill et al., 2000; O’Mahen & Flynn, 2008). Churchill et al. (2000) found that about three times as many patients with depression in primary care settings preferred counseling to antidepressant medications, and that this preference was partly related to negative beliefs about the addictiveness of antidepressant

medications and prior positive counseling experiences. Dwight-Johnson, Sherbourne, Liao, & Wells (2000) reported similar results as roughly 2 out of three 3 primary care patients with depression reported a marked preference for counseling over medication. They also indicated that patients with greater knowledge about counseling were more likely to choose counseling. A survey of pregnant women with depression revealed that a majority of participants expressed greater confidence in psychotherapy as a treatment option as compared to antidepressant medications (O'Mahen & Flynn, 2008). In a survey of five private primary care practices, 89% of patients with depression expressed a desire for counseling, 33% expressed desire for medication, and only 5% wanted a referral to a mental health specialist (Brody, Khaliq, & Thompson, 1997). In a recent survey of primary care patients with depression, a majority of participants expressed a strong preference for psychotherapy over either medication, combined treatment (psychotherapy and medications), alternative treatment, self-help literature, or internet-based interventions (Dorow, Löbner, Pabst, Stein, & Riedel-Heller, 2018).

In contrast to these findings, researchers in the STAR\*D study found that only 26% of participants indicated that they were open to assignment to cognitive therapy as an augmentation or switch strategy following a failed trial of an antidepressant medication (Thase et al., 2007). These researchers were surprised that cognitive therapy displayed such a low acceptability given prior research on patient preferences for psychotherapy over antidepressant medications. The first line treatment in this study involved antidepressant medications, and therefore patients preferring psychotherapy as a first option may not have elected to participate in the study. Copayment charges for psychotherapy sessions were not reimbursed in the study, while medications were provided as part of the study. Psychotherapy also required participants to travel off-site to see a psychotherapist and to initially attend twice weekly visits. While acceptance

rates of psychotherapy have been found to be higher than those in this study, it is notable that some participants prefer pharmacotherapy due to overall convenience of this treatment option.

### **Low Initiation Rates for Psychotherapy**

Given the high rates of desirability and acceptability of psychotherapy as a treatment option for adults with depression, rates of initiation to psychotherapy are lower than might be expected. Between 1998 and 2007, there was a significant decline in the proportion of adults with depression who initiated psychotherapy in outpatient settings (Marcus & Olfson, 2010). Regardless of patients' interest in psychotherapy as a treatment option, initiation rates after referral to psychotherapy remain low, with initiation rates as low as 20% following referral (Brody, Khaliq, & Thompson, 1997; Weddington, 1983). In primary care settings, referrals to specialized public or private mental health services may result in few to zero scheduled appointments, and generally low rates of initiation (Fisher & Ransom, 1997; Younès et al., 2005; Younès, Passerieux, Hardy-Bayle, Falissard, & Gasquet, 2008). Due to the existence of such low initiation rates, it is crucial to understand the nature of the various barriers to psychotherapy frequently reported by adults with depression.

### **Barriers to Initiating Psychotherapy**

A significant body of research has been devoted to the investigation of existing barriers to mental health treatment and general help-seeking behaviors, of which a smaller portion has focused on barriers to psychotherapy for adults with depression. There exists a wide range of potential barriers to psychotherapy for adults with depression, including barriers influenced by sociodemographic factors, extrinsic barriers (those that operate outside an individual), and intrinsic barriers (those that operate within an individual) (Alegría et al., 2008; Pepin et al., 2009). Extrinsic barriers include practical/structural barriers (e.g., problems with transportation,

cost), supply-side barriers (those that are influenced by availability of services or provider factors such as knowledge gaps or communication styles), and barriers to treatment of depression in primary care settings, such as underdetection, misdiagnosis, and communication gaps with providers (Alvidrez & Azovar, 1999; Greenberg, 2004; Mohr et al., 2010; Pence, O'Donnell, & Gaynes, 2012). Intrinsic barriers include beliefs, attitudes, and evaluative barriers, fears of psychotherapy, denial, misattribution of depressive symptoms, lack of knowledge or insight into depressive symptoms, psychological distress, illness-related barriers, comorbidity, stigma, and cultural beliefs (Burns et al., 2003; Clement et al., 2015; Hardy, Kelly, & Voeklander, 2011; Komiya et al., 2000; Greenberg, 2004; Mojtabai et al., 2011; Schomerus & Angermeyer, 2008).

### **Role of Sociodemographic Factors in Barriers to Treatment**

An individual's mental health is shaped by a variety of social, economic, and physical environments functioning at various stages of life (World Health Organization, 2014). The unequal distribution of money, power, and resources on a global (or national) level differentially impacts the mental health of individuals based on their particular social conditions. While certain social demographics (e.g., gender, age, ethnicity, race, poverty, access to insurance, work environment) are associated with increased utilization of mental health services, others are associated with lower utilization and greater barriers to mental health care (Elliot, 2015). Simply belonging to a particular sociodemographic group may be associated with greater structural or perceived obstacles to receiving antidepressant treatment. Furthermore, an individual's sociodemographic qualities inherently shape one's beliefs, attitudes, and help-seeking behaviors when navigating obstacles to mental health treatment. For example, belonging to a racial or ethnic minority group has consistently been associated with lower utilization of mental health treatment for depression (Alegría et al., 2008). Also, there are beliefs, attitudes, and help-seeking

behaviors more frequently endorsed by racial or ethnic minorities that either constitute or influence barriers to treatment, including mistrust of healthcare providers, susceptibility to mental health-related stigma, and a tendency to rely on the family unit to resolve emotional concerns (Alegría et al., 2008; Krupnick & Melnikoff, 2012). In summary, sociodemographic factors are simultaneously predictive of mental health utilization and also associated with frequency of certain barriers to psychotherapy. Following is a review of sociodemographic factors that have been linked with either high or low utilization of mental health services or perceived barriers to treatment. While useful to review the impact of each sociodemographic factor separately, it remains clear that they often interact with one another.

### **Socioeconomic status**

Individuals with lower socioeconomic status (e.g., education level, income, occupational prestige) are at elevated risk for having unmet mental health needs (Steele, Dewa, & Lee, 2007). A majority of this unmet need stems from acceptability issues rather than the availability or cost of services. Individuals endorsing acceptability barriers indicated a preference to self-manage depressive symptoms, fears of asking for treatment, and expectations that treatment might be unhelpful (Steele et al., 2007).

### **Education**

Level of education has often been cited as a strong predictor of mental health utilization, including initiating psychotherapy (Donisi et al., 2013; Bijl & Ravelli, 2000; Parslow & Jorm, 2000). Although many studies have identified education as predictive of access to mental health treatment, it is unclear whether education or lack thereof predicts barriers to psychotherapy. Steele et al. (2007) reported that individuals with low-income and lower education levels (particularly those with less than a high school graduation degree) were more likely to indicate

acceptability barriers to treatment (e.g., “preferring to manage [depression] yourself,”; “did not get around to it or did not bother”). However, the construct of “acceptability” was loosely defined in this study. Indeed, items that loaded onto “acceptability” were considerably variable, and there was no provided explanation for item development. Pepin et al. (2009) found that higher education levels were associated with fewer perceived barriers to psychotherapy, although the effect sizes were small. Further research is needed to elucidate the relationship between level of education and perceived barriers to mental health treatment. A small body of research has indicated that level of education may be a predictor of response to cognitive behavior therapy and individuals with lower education were more likely to drop out of treatment (Fournier et al., 2009; Spek, Nyklíček, Cuijpers, & Pop, 2008).

### **Income**

Not only is depression far more prevalent for individuals with low-income as compared to the general population, they are also less likely to seek treatment for depression (Lorant et al., 2003). Krupnick and Melnikoff (2012) identified several barriers to psychotherapy frequently reported by patients with low-income including financial constraints, transportation issues, difficulties obtaining child care, scheduling conflicts with work, limited clinic hours, and inconvenient clinic locations. Furthermore, the researchers listed barriers including mistrust of authority, stigma, and miscommunication or poor therapeutic alliance with providers from higher socioeconomic backgrounds.

### **Gender**

In the following studies reviewed (Clement et al., 2015; Holden, McGregor, Blanks, & Mahaffey, 2012; Judd, Komiti, & Jackson, 2008; Rochlen et al., 2010), gender was not defined explicitly, although implicitly framed in terms of biological sex. Recently, strides have been



made towards use of more inclusive language and terminology with respect to gender and gender identity, including a shift from emphasis of the male/female dichotomy defined by biological sex to socially defined, fluid classifications of gender identity (Gustafsson Sendén, Bäck, & Lindqvist, 2015). As such, the studies referenced in this section defined gender along biological lines and therefore a notable limitation of these results is that they are not sensitive to gender as a socially defined construct. For the purpose of discussion, the term gender is used in this section to refer to biological sex. Gender has been consistently identified as a strong predictor of mental health utilization (Holden et al., 2012; Moller-Leimkuhler, 2002). Holden et al. (2012) claimed through a comprehensive literature review that across all racial and ethnic groups in the United States, women are more likely than men to seek treatment for mental health issues. These researchers reported various substantial barriers to treatment seeking among men including susceptibility to stigma associated with transgressing gender role norms and attitudes of resiliency and self-reliance among African American men. Judd et al. (2008) proposed that for males, gender stereotypes (e.g., displaying strength, self-reliance, stoicism) interact with mental illness stereotypes (e.g., mental illness is a sign of weakness), therefore magnifying the impact of stigma on help-seeking. Rochlen et al. (2010) conducted focus groups with 45 men to identify barriers to diagnosing and treating depression. Participants described gender role norms for men as being in direct conflict or incongruent with their beliefs about appropriate treatment seeking behaviors and their experiences with depression. These researchers described a “male-type or masked depression” (Rochlen et al., 2010, p. 173) that could interfere with the diagnosis of depression and willingness to seek treatment, which consisted of attempts to appear in control and hiding or denial of depressive symptoms. In a systematic review of quantitative and

qualitative studies that investigated the impact of mental health-related stigma, Clement et al. (2015) concluded that stigma had a disproportionately large effect on help-seeking for males.

Women are twice as likely as men to experience depression during their lifetime (Kessler, McGonagle, Swartz, Blazer, & Nelson, 1993) and they generally hold more positive attitudes towards psychotherapy than men (Fischer & Turner, 1970; Rule & Gandy, 1994). Compared with men, women tend to display more open attitudes towards emotions and perceive less stigma associated with psychotherapy (Komiya, Good, & Sherrod, 2000). However, Pepin et al. (2009) found that women reported difficulties with finding a psychotherapist as a barrier more frequently than men. In summary, while depression is more prevalent for women, men appear to encounter more barriers to psychotherapy, largely due to the effect of culturally shaped gender stereotypes and a disproportionately large impact of stigma on help-seeking behaviors.

### **Age**

Age is another barrier for adults who seek mental health services. Researchers have identified several barriers to mental health utilization for older adults (age: 60-90) including stigma, help seeking behaviors, beliefs that depressive symptoms are normal, and fears of psychotherapy (Pepin et al., 2009; Robb, Haley, Becker, Polivka, & Chwa, 2003). Several studies have indicated that lower mental health utilization by older adults may be due to specific help seeking behaviors and attitudes (Hadas & Midlarsky, 2000). For example, older adults may display a tendency to believe they are responsible for solving their own problems and a lower likelihood to consult with mental health providers (Hadas & Midlarsky, 2000; Robb et al., 2003; Waxman, Carner, & Klein, 1984). Also, older adults may be reticent to seek psychotherapy out of a fear that it will undermine their sense of independence and personal control (Hadas & Midlarsky, 2000).

Structural and systemic barriers are also burdensome for older adults. Robb, Chen, and Haley (2002) reported that older adults identify financial issues as the strongest barrier to mental health treatment and they suggested that ageism among mental health providers and government administrations could potentially limit the mental health services available to older adults. Choi and Kimbell (2008) cited structural concerns related to mobility and knowledge about mental illness and services as significant barriers for older adults.

Conversely, others have found that older adults perceive psychotherapy favorably and are not subject to the stigma that has prevailed in previous generations (Zarit & Zarit, 2011). Supporting this notion of generational differences, Currin, Hayslip Jr, Schneider, and Kooken (1998) suggested that young-old (age: 60-74) adults may be less stereotypical and rigid in their perception of mental illness, as compared to old-old (age: 75-90) adults. Additionally, younger adults (age: 17-26) and older adults (age: 60-90) do not appear to differ in their willingness to seek psychological treatment (Segal, Coolidge, Mincic, & O'Riley, 2005).

While it has generally been assumed that older adults hold more negative attitudes towards mental illness than younger adults, recent evidence has suggested that the two age groups may be similar. To address this question, Pepin et al. (2009) examined differences in barriers to psychotherapy endorsed between younger and older adults and found that overall rankings of barriers in terms of perceived burdensomeness were very similar between younger and older adults. Furthermore, stigma was not identified as a primary barrier for either younger or older adults. Overall, young adults perceived insurance concerns, belief about inability to find a psychotherapist, and fears of psychotherapy to be greater barriers than older adults, while older adults expressed more concerns about a psychotherapist's qualifications. Among younger adults, Gulliver, Griffiths, and Christenson (2010) cited significant barriers related to poor recognition

of symptoms (low mental health literacy), embarrassment, and a preference to self-manage symptoms.

### **Race, Ethnicity, and Cultural Considerations**

Psychotherapy is considered the preferred treatment for individuals of racial/ethnic minorities (Miranda, Azocar, Organista, Dwyer, & Areane, 2003). In fact, adults from racial and ethnic minority backgrounds relative to adults from a Caucasian background indicated greater preference for counseling as an antidepressant treatment (Givens, Houston, Van Voorhees, Ford, & Cooper, 2007). However, prior research revealed striking disparities in rates of antidepressant treatment for adults from racial and ethnic minority backgrounds. Even after adjusting for other factors including education, insurance coverage, and poverty, race and ethnicity still have an independent effect on access to antidepressant treatment (Alegría et al., 2008). Significant underdetection of depressive symptoms is one factor that contributes to this problem in access to care. Given that adults from racial and ethnic minority backgrounds often differ in their symptom presentation, clinicians may fail to recognize symptoms of depression or misdiagnose depression (Alegría & McGuire, 2003). Furthermore, given that such adults are overrepresented in low-wage jobs, they may have less opportunity to leave work or request time off for treatment due to lack of employment benefits and reduced workplace flexibility (Diamant et al., 2004). There are limited resources and availability of services within health care safety net settings (e.g., services available to uninsured, Medicaid, at-risk patients), which results in greater barriers to treatment access for adults from ethnic and racial minority backgrounds who experience higher rates of poverty and lower rates of health insurance coverage (Alegría et al., 2008).

Culturally shaped attitudes and beliefs also influence help-seeking behaviors in racial and ethnic minority groups. Specifically, for Latino, Asian, and African American adults, mistrust of

healthcare providers and doubts regarding cultural sensitivity of providers can reduce overall comfort in talking to professionals (Alegría et al., 2008). Racial and ethnic minority family members may be less likely to recognize depressive symptoms or rely on family support to resolve concerns, and may only seek treatment when they feel that their issues are unduly disrupting the family system (Alegría et al., 2008). Among racial and ethnic minority adults, there is evidence that anticipated discrimination and concerns about how others perceive depression (e.g., equating depression with personal weakness) may contribute to lower rates of seeking treatment (Das, Olfson, McCurtis, & Weissman, 2006).

In a seminal qualitative study of 24-mixed sex focus groups ( $n = 201$ ), Thompson, Bazile, and Akbar (2004) examined the attitudes and perceptions of African American adults regarding psychotherapy and psychotherapists. Patients perceived lack of affordability, lack of knowledge, stigma, poor cultural understanding, and mistrust of psychotherapists as the most burdensome barriers to treatment (Thompson, Bazile, & Akbar, 2004). Many participants reported poor or limited knowledge of the signs and symptoms of depression. They expressed ambivalence surrounding the recognition of when depressive symptoms had progressed to the point of necessitating psychotherapy. Both participants with and without a prior history of psychotherapy endorsed beliefs that psychologists were insensitive to or understanding of the African American experience. Many participants suggested that therapists were unduly influenced by negative stereotypes of African Americans and expressed mistrust that therapists could understand African American struggles or provide unbiased treatment. Some believed that even African American therapists were detached from the culture and equally impersonal as non-African American therapists (Thompson, Bazile, & Akbar, 2004).

In terms of mistrust, participants questioned therapists' ability to adequately define the objectives and duration of treatment or to understand their situation. As described above, many perceived psychotherapists as impersonal, elitist, and detached from any activities in the African American community (Thompson, Bazile, & Akbar, 2004). In terms of cultural beliefs, participants reported a tendency for African American adults to rely on the strength of their families to overcome problems like depression, as well as a desire to keep such concerns contained within that support group. Similarly, cultural pressures dictating that African American adults display strength could lead to the denial of mental health problems, which are often perceived as a sign of weakness (Conner et al., 2010). Regardless of whether these perceptions of psychotherapy and therapists are accurate, they influence decision making and impact the ultimate outcome of whether an individual seeks antidepressant treatment. In particular, African American relative to Caucasian elders were likely to be impacted by internalized stigma and therefore endorse less positive attitudes towards antidepressant treatment (Conner et al., 2010).

According to Chen & Rizzo (2010), language barriers constitute the largest barrier for Latino adults accessing psychotherapy and account for the large disparity in access to psychotherapy between Caucasian and Latino adults. Their findings indicated that if language barriers were removed, Latino adults would be twice as likely as Caucasian adults to seek psychotherapy. Sanchez and Watt (2012) pointed out that accurate screening, diagnosis, and treatment depend on linguistically sound interview and that even the use of Spanish interpreters could result in misdiagnosis of depression. These researchers implemented a linguistically adapted collaborative care model for low-income Hispanic adults with depression in a primary care setting. Bilingual care managers, psychiatrists, and primary care physicians worked in

tandem to provide culturally competent services to non-English-speaking Hispanic adults, which resulted in significant improvement in depression outcomes at follow-up. Wells, Lagomasino, Palinkas, Green, and Gonzalez (2013) investigated barriers to depression treatment for low-income, Latino Emergency Department patients. They found that transportation, employment/unemployment status, patient-provider issues, misunderstanding, and miscommunication were the most commonly reported barriers. Patients often cited insufficient time with their physician or a perception that their physician did not listen or care as barriers to antidepressant treatment. Further, several of the patients reported misunderstanding regarding the roles of various treatment providers, causing researchers to suggest that poor health literacy was a potential obstacle to antidepressant treatment (Wells et al., 2013).

In summary, the racial or ethnic that one belongs to predicts access to antidepressant treatment and influences the cultural beliefs and attitudes that individuals are exposed to regarding mental illness and its treatment. These beliefs, in turn, influence an individual's views of what depression is, when it is appropriate to seek psychotherapy for depression, and attitudes towards mental health professionals. While adults from racial and ethnic minority backgrounds tend to prefer psychotherapy as a treatment option, they also endorse a range of cultural beliefs that constitute barriers to seeking help. Furthermore, they appear to be more susceptible to certain practical treatment barriers (e.g., taking time off work for treatment).

### **Extrinsic Barriers**

#### **Practical/Structural Barriers**

Regardless of sociodemographic background, adults with depression report a variety of burdensome practical or structural barriers to treatment such as difficulties with transportation, financial constraints, and lack of available services (Alvidrez & Azovar, 1999; Simon, Fleck,

Lucas, Bushnell, & LIDO Group, 2004; Wells et al., 2013). In a broad sample of primary care patients ( $n = 290$ ) with and without depression, Mohr et al. (2006) found that 56.6% of the participants endorsed one or more practical barriers to psychotherapy, while only 11.1% of the sample reported one or more emotional barriers. Barriers, regardless of type, were endorsed more frequently by individuals with depression than those not meeting criteria for a depressive disorder. Similarly, Mohr et al. (2010) reported that structural barriers (e.g., time constraints, transportation problems) were more prevalent than emotional barriers (e.g., discomfort talking about problems with a therapist, concerns about what others might think). Patients who endorsed barriers related to cost or availability of services relative to those who denied such barriers were less likely to be concurrently enrolled in psychotherapy (Mohr et al., 2010).

Simon et al. (2004) conducted an international (in six countries) primary care study in order to identify predictors of antidepressant treatment (including pharmacotherapy or psychotherapy). Of all the barriers reported by patients, concerns about treatment costs (in particular, out-of-pocket expenses) was the most prevalent obstacle and ranked first or second at every study site. Patients also reported time or distance to treatment, as well as availability of specialty mental health care providers as major obstacles to receiving treatment. Mojtabai (2005) assessed national trends over a five-year period and reported a significant impact of financial barriers on access to counseling. As detailed above, racial and ethnic minority groups may be more likely to report financial barriers due to lack of insurance coverage (Mojtabai, 2005). Also, African American and Latino/a relative to Caucasian individuals have reported that practical barriers to psychotherapy were more burdensome, particularly with respect to difficulty finding counselors and problems with transportation (Mohr et al., 2010).



Practical barriers may be particularly prevalent among certain groups of adults with depression, including women with perinatal depression. O'Mahen and Flynn (2008) endeavored to examine the barriers to treatment for depression in pregnant women during the perinatal period. Participants reported more concern about structural barriers including lack of insurance, inadequate child care, and transportation, than attitudinal (e.g., "do not think I can be helped effectively) or knowledge barriers (e.g., "do not know what treatment might be best for me"). Similarly, Goodman (2009) found that lack of time (65%), stigma (43%), and childcare issues (33%) were the greatest perceived potential barriers to treatment for perinatal depression. Several studies have indicated that patients endorsed practical barriers more frequently than stigma-related barriers (Alvidrez & Azovar, 1999; Simon et al., 2004).

In rural areas, there may be limited mental health providers, which results in difficulty accessing care. In such instances, patients may be forced to compete for and utilize scarce resources (e.g., longer waits for appointments, less frequent visits) (Goldman, Nielsen, & Champion, & Council on Scientific Affairs, American Medical Association, 1999). Steele et al. (2007) reported that individuals living in rural relative to those living in urban areas were more likely to report availability and accessibility barriers to receiving mental health services. Telephone-administered psychotherapy has been demonstrated to be an effective antidepressant treatment option in rural settings, showing promise as a treatment that may reduce availability and accessibility barriers for adults with depression in rural areas (Crowther, Scogin, & Johnson Norton, 2010; Mohr, Hart, & Marmar, 2006).

### **Supply-side Barriers: Provider and Health Care System Barriers**

In a study that investigated barriers to the treatment of depression in cancer patients, Greenberg (2004) highlighted provider uncertainty about diagnosis and treatment as a

burdensome supply-side barrier. Oncologists with limited time and heightened emphasis on physical symptoms often miss cases of depression in patients with cancer. They often asked few questions about emotions, underestimated or failed to recognize depressive symptoms in their patients, or trusted that their patients would seek treatment for depression. This is consistent with other research that indicated that supply-side barriers included physicians' focus on physical complaints, time constraints, and overall missed opportunities to recognize or assess for depression. Other physician barriers may include not taking depression seriously or viewing it as a legitimate illness, deficiencies in interviewing skills, medicalization of symptoms, deficits in knowledge base regarding depression diagnosis or treatment, diagnosis being obscured by comorbidity (resulting in missed diagnoses of depression), and fear of offending patients (Goldman et al., 1999).

Health care system barriers include limited availability of treatment resources, restrictions on access to particular treatments, time constraints, competing demands (e.g., demanding physical conditions that leave less room for attention and treatment of depressive symptoms), fragmentation of care (e.g., mental health specialists not housed in primary care), and limitations on third-party coverage (Goldsmith, Pellmar, Kleinman, & Bunney, 2002).

### **Barriers to Treatment of Depression in Primary Care**

Since depression frequently co-occurs with chronic medical conditions (e.g., diabetes, hypertension, cardiac disease) for which patients seek treatment in primary care, depression is highly prevalent in this setting. Estimates have indicated that between 10% to 14% of patients treated in primary care clinics have depression (Kahalnik et al., 2018). However, recognition of depression is strikingly low in this setting. Indeed, reports have indicated that only half of these patients are identified as having depression. Pence et al. (2012) estimated that 24% of primary

care patients with depression receive treatment, 9% receive adequate treatment, and only 6% achieve symptomatic remission. To address these treatment barriers, Kahalnik et al. (2018) implemented a web-based, self-report software program called VitalSign6 with the intent to create a universal depression screening measure for use in primary care practices (making depression the sixth vital sign). For those patients screening positive, the program assists physicians in monitoring and treating depressive symptoms using measurement-based care (involving systematic assessment of depressive symptoms, side effects associated with antidepressant medication, and antidepressant medication adherence at regular intervals using psychometrically sound scales). Their group demonstrated the usefulness of VitalSign6 in enhancing provider's screening and treatment skills (Kahalnik et al., 2018). As part of the VitalSign6 program, Trombello et al. (2017) demonstrated the efficacy of a behavioral activation teletherapy intervention in treating primary care patients with depression. This behavioral activation teletherapy intervention demonstrated feasibility as an effective adjunct or alternative intervention for use by primary care providers.

Poor practices by primary care physicians in the detection and management of depression have consistently been identified in the health services literature as a weak link in national efforts to improve outcomes for this burdensome condition (Nutting et al., 2002). Despite the reality of physician-centered barriers and health care system problems, physicians tend to perceive barriers to depression care as frequently arising from patient-centered barriers (75.9% of the total barriers reported by physicians), including attitudes, knowledge, belief systems regarding emotional distress, and psychosocial distress (e.g., stressful life events, chaotic family environment) that distract patients from obtaining treatment for their depressive symptoms (Nutting et al., 2002).

Although there is increasing recognition of primary care as the main point of access to mental health treatment for a majority of adults in the United States, as well as doubled efforts to improve the quality of mental health training and access to antidepressant treatment in this setting, patients continue to perceive gaps in care and regard the treatment of depression in primary care skeptically. Incorporating results from fifteen qualitative focus group (N = 146) interviews in three cities, Kravitz et al. (2011), suggested that patients with depression may not disclose concerns or seek treatment due to relational barriers involving negative perceptions of primary care physicians' competence in treating depression, questioning their providers' openness/willingness to discuss such concerns, and their level of trust in disclosing these concerns to their providers. Many of these patients perceived that their physicians lacked sufficient knowledge to treat depression or reported beliefs that their physicians adhered too closely to a reductionist, biomedical model (e.g., depression is merely a chemical imbalance requiring antidepressant treatment). Others reported difficulties in discussing their depression due to feeling that mental health concerns were not within the primary care physicians' domain of treatment (e.g., treatment should solely focus on physical complaints). Certain patients reflected a sense of social distance between themselves and their physicians, which impacted their sense of trust in disclosing their depression. Men from low-income backgrounds in particular reported feeling that their physician was unable to relate to the psychosocial situation/stressors (e.g., "low-income patient vs. rich doctor"), which impacted their depression and provided inadequate care (Kravitz et al., 2011). These researchers suggested that future investigators and clinicians should meet patients where they are, monitor subtle signs of depression in high-risk, low socioeconomic status (SES) populations, and make efforts to

communicate that primary care is a safe setting in which to pursue mental health treatment (Kravitz et al., 2011).

Regardless of increased efforts to improve treatment of depression in primary care settings, counseling is often unavailable in primary care. Additionally, existing referral networks may be over utilized, which results in long waitlists and lack of treatment initiation by primary care patients with depression following referrals (Gum et al., 2006).

### **Intrinsic Barriers**

#### **Beliefs, Attitudes, and Evaluative Barriers**

In contrast to external barriers, several studies have found attitudinal and evaluative barriers to psychotherapy to be more burdensome than structural barriers (Mojtabai et al., 2011; Sareen et al., 2007). For young adults aged between 18 to 29 years, negative beliefs and attitudes about antidepressant treatment were found to be predictive of the intention to not accept a diagnosis of depression (Van Voorhees et al., 2005). Further, these investigators suggested that, particularly in developed countries, negative beliefs and attitudes towards antidepressant treatment may constitute greater barriers to treatment than barriers related to access to care.

Four prevalent and burdensome attitudinal and evaluative barriers include the lack of perceived need for antidepressant treatment, perceived ineffectiveness of antidepressant treatment, low perceived seriousness of depressive symptoms, and preference to self-manage depressive symptoms (Bayer & Peay, 1997; Edlund, Unützer, & Curran, 2006; Mojtabai et al., 2011; Sareen et al., 2007). In the National Comorbidity Survey-Replication, Mojtabai et al. (2011) examined the impact of barriers on treatment initiation and concluded that the largest barrier to mental health treatment involved individuals who wanted to self-manage problems (endorsed by 72.6% of the 1,350 patients), with the second largest barrier being low perceived

need for treatment. Individuals with more severe depressive symptoms were less likely to report low perceived need as a barrier and more likely to report attitudinal/evaluative barriers or structural barriers than those with less severe conditions. These findings are consistent with other research that examined the link between severity of psychiatric symptoms and barriers to seeking treatment (Drapalski, Milford, Goldberg, Brown, & Dixon, 2008; Wang et al., 2007).

Nevertheless, there was a discrepancy between patients' perceived need and measures of symptom severity. A quarter of patients suffering from severe depressive symptoms perceived no need for treatment, believing that their condition would resolve on its own. Roughly two thirds of patients with severe depressive symptoms reported cited a preference to self-manage their problems as a reason for not initiating treatment (Mojtabai et al., 2011).

Blumenthal and Endicott (1996) echoed similar themes. In an attempt to explore the reasons why individuals do or do not seek antidepressant treatment, they interviewed 101 adults meeting criteria for a Major Depressive Episode. The 55% of participants with depression who did not seek treatment cited reasons including not considering it a serious issue or serious enough to warrant treatment, perceiving it as an expected response to a life situation, or believing they could self-manage their major depressive episode (e.g., through ignoring their symptoms, distracting themselves, exercise, or enduring it). A third of these patients stated that they would not seek treatment even if they experienced a similar depressive episode in the future. Treatment seekers, on the other hand, perceived the episode as overly distressing, lasting too long, and disrupting their interpersonal relationships or impairing their overall functioning (Blumenthal & Endicott, 1996).

**Fears of Psychotherapy, Denial, Misattribution of Symptoms, and Lack of Knowledge/Insight**

Individuals are often reluctant to admit, whether to themselves or their physicians, that they are struggling with depressive symptoms. Therefore, they may deny or downplay their symptoms, rationalize them as appropriate given their life circumstances, or misattribute them to general medical conditions (Epstein et al., 2010). While denial of depressive symptoms has often been considered a barrier to treatment, relatively few studies have examined the relationship between such denial and treatment seeking. However, lack of insight into severity of depressive symptoms has been associated with greater length of delay in treatment seeking between onset of depressive symptoms and initial contact with a health professional, resulting in an average length of delay to seek help of 8.2 years (Simon, Willis, & Härter, 2007). Others believe that their depressive symptoms are due to moral shortcomings, displaying an incomplete and poor understanding of the illness (Kangas, 2001). Individuals may be unwilling or unready to accept a diagnosis of depression out of fear of the perceived heavy label that depression carries and thus refuse to initiate treatment. When considering treatment options, some harbor fears of psychotherapy as they perceive it to be overly intrusive, lengthy, expensive, complicated, or overly concentrated on remote childhood experiences (Nelson, 2008). Other attitudinal barriers to psychotherapy include low interpersonal dependency, strong adherence to individualistic attitudes, fear of distressing emotions that arise in the treatment course, resistance to self-disclosure, and tendencies to hide uncomfortable or negative personal information (Bornstein et al., 1993).

Lack of knowledge about depressive symptoms or available treatments constitutes an obstacle to initiation of psychotherapy. Although there have been increased efforts in healthcare to improve mental health awareness for the general public, adults with depression struggle to identify signs of depression and recognize their symptoms as serious enough to warrant

treatment (Thompson, Hunt, & Issakidis, 2004). While there is some evidence that increasing depressive symptom severity is a help-seeking prompt (Thompson, Hunt, & Issakidis, 2004), other studies have indicated that higher severity is unrelated to higher utilization (Mojtabai et al., 2005). On the other hand, receptivity to emotions predicts positive help-seeking attitudes. Komiya et al. (2000) conducted a study that examined the impact of emotional openness as a potential predictor of college students' attitudes towards seeking psychotherapy. The study found that greater emotional openness predicted more favorable attitudes towards seeking help.

### **Psychological Distress as a Barrier to Treatment Seeking**

Psychological distress has often been cited as a predictor of treatment seeking behavior (Hardy, Kelly, & Voeklander, 2011; Mills, Van Hoof, Baur, & McFarlane, 2012). However, Elliot, Westmacott, Hunsley, Rumstein-McKean, and Best (2014) reported that level of self-reported distress was associated with the difficulty experienced by individuals in deciding whether their distress was due to a mental health issue, as well as the difficulty of deciding whether psychotherapy would relieve these issues. As such, psychological distress has a u-shaped relationship with help seeking behavior. It may increase the likelihood of help-seeking up to a certain point, but as it approaches higher levels, it may become a barrier due to the interference of distress on various stages of help-seeking, including determination of whether psychotherapy would resolve one's concerns, finding a psychotherapist, setting an appointment, and ultimately attending psychotherapy (Elliot et al., 2014).

### **Illness-related barriers**

Various illness-related factors including depressive symptom severity, have been linked with barriers to seeking psychotherapy. Adults with more severe depressive symptoms appear to more readily seek treatment (including psychotherapy) than others, while those with milder



symptoms are slower or less likely to seek treatment (Burns et al., 2003; Dew, Dunn, Bromet, & Schulberg, 1998). Also, researchers have found that primary-care patients with depression relative to those without depression report greater perceived barriers to psychotherapy (Mohr et al., 2006; Mohr et al., 2010).

While some barriers to treatment may present to some degree for individuals with any psychiatric disorder, others may be particularly burdensome or even unique to certain illnesses. Common depressive symptoms such as depressed mood, anhedonia, decreased energy, or fatigue may constitute illness-related barriers to treatment that are more prevalent in depression as compared to other illnesses. Further, these symptoms may amplify barriers to treatment such as lack of motivation or participation restrictions related to difficulties leaving home. Lack of motivation associated with depression is a psychological barrier that may negatively impact the perceived value of treatment and reduce the overall likelihood of help-seeking behavior (Rosenstock, 2005). While lack of motivation may be present and act as a barrier to treatment for any disorder, it is often considered a depressive symptom and may be present in up to 23% of patients (Ishizaki & Mimura, 2011). Negative expectations about the future that are common in depression may contribute to the perceived burdensomeness of various treatment barriers.

### **Comorbidity**

Symptoms of comorbid general medical conditions (e.g., hypothyroidism, diabetes, chronic fatigue syndrome) frequently overlap with depressive symptoms that may cause physicians to misdiagnose depression (Noël, 2007). Similarly, Rost et al. (2000) found that physicians and patients were less likely to discuss depression as a potential diagnosis for patients with chronic physical comorbidities. According to the National Comorbidity Survey-Replication Study (2003), more than 68% of adults with mental illness had at least one comorbid medical

illness (Kessler et al., 2003). Nearly three fourths (72.1%) of participants with lifetime Major Depressive Disorder met criteria for one or more other disorders in the Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> edition (DSM-IV), including 59.2% with an anxiety disorder and 24% with a substance use disorder (Kessler et al., 2003). Psychiatric and medical comorbidities are associated with functional impairment, decreased lifespan, decreased quality of life, increased symptom burden, and increased economic burden (Katon, 2003). Many chronic medical conditions require proscribed self-care regimens to prevent disease progression (Katon, 2003). However, depression may decrease the motivation and energy necessary to maintain these self-care behaviors (e.g., adherence to medications), which results in noncompliance and poor health outcomes (DiMatteo, Lepper, & Croghan, 2000). Given that comorbidity is associated with various difficulties including functional impairment, increased financial costs, and increased symptom burden, it follows that it would also present a variety of barriers to the treatment of depression, as well as exacerbation of existing barriers to treatment.

### **Stigma**

Mental health-related stigma is one of the most frequently cited obstacles to help-seeking in the literature on treatment barriers (Clement et al., 2015). Stigmatization of individuals who are mentally ill has been identified as both an emotional and cognitive process involving various steps (e.g., labelling/stereotyping, separating, emotional reactions) that results in discrimination and loss of status for those who are stigmatized (Link & Phelan, 2001). Although it has been generally accepted that stigma inhibits treatment of mental disorders on the whole, studies that have investigated the impact of stigma on help-seeking have produced mixed results. Several studies (Pepin et al., 2009; Simon et al., 2004) have indicated that adults with depression perceive stigma as much less burdensome than practical barriers. Schomerus & Angermeyer

(2008) highlighted the importance of conceptualizing stigma as one factor in a larger system of beliefs and barriers that discourages help seeking. They suggested that it is difficult to pinpoint the impact of stigma on help-seeking for depression, particularly given that there are many points along the path of help-seeking where stigma can arise. Furthermore, different types of stigma (e.g., treatment stigma, internalized stigma, anticipated stigma, and experienced stigma) have unique influences on help-seeking attitudes and behaviors (Clement et al., 2015). Regardless, a significant body of research has substantiated that stigma negatively impacts help-seeking for depression (Barney, Griffiths, Jorm, & Christensen, 2006; Clement et al., 2015; Golberstein, Eisenberg, & Gollust, 2008; Schomerus & Angermeyer, 2008; Schomerus, Matschinger, & Angermeyer, 2009; Wrigley, Jackson, Judd, & Komiti, 2005).

Clement et al. (2015) conducted a systematic review of quantitative and qualitative studies (144 total studies) that examined the impact of mental health-related stigma on help-seeking behaviors. A majority of the studies that were reviewed focused on depression. The study concluded that mental health-related stigma has a small to moderate detrimental effect on help-seeking for individuals with mental illness. Also, they found that treatment stigma (stigma associated with seeking or receiving mental health treatment) and internalized stigma (individual holds stigmatized views about himself/herself) as compared to anticipated stigma (anticipation of being treated or perceived unfavorably) or experienced stigma (personal experience of being treated or perceived unfavorably), were consistently associated with decreased help-seeking.

As part of their review, Clement et al. (2015) compiled data from forty-four studies reporting on stigma barriers, finding that roughly 25% of participants reported stigma as a barrier to help-seeking due to either shame/embarrassment, employment-related discrimination, or negative social judgment. Concerns about disclosure and confidentiality constituted the most

frequently endorsed stigma barrier in this sample (33% of participants). Ranking all types of potential barriers, stigma was ranked fourth out of a total of ten standardized barriers among this population ( $n = 60,036$ ). Stigma was found to have a disproportionately large effect on help-seeking for racial and ethnic minority groups, males, and those in military and healthcare employment occupations.

### **Interactions Between Stigma and Cultural Beliefs**

It is evident that stigma has a differential effect on help-seeking behavior in different populations, which is partly due to the influence of cultural beliefs regarding depression and associated treatment (Schomerus & Angermeyer, 2008). The belief that “doctors are invincible” (Henderson et al., 2012, p. 6) and resulting self-stigmatization may impact help-seeking for health professionals with depression. Hoge et al. (2004) found that Army and Marine soldiers reported significant concerns about stigmatization by others as a result of receiving counseling for depression. Furthermore, those with the most severe depressive symptoms and greatest need for treatment were disproportionately concerned about perceived stigma. Held and Owens (2013) proposed that machismo viewpoints influence the effect of public stigma on help-seeking in veterans and active duty service members.

Gary (2005) suggested that adults from racial ethnic minority groups encounter “double stigma” (Gary, 2005, p. 980) in that systemic racism embedded in the mental health system compounds with public and internalized mental health stigma, and ultimately deters help-seeking behavior. Notably, Thompson, Bazile, & Akbar (2004) identified several stigmatizing beliefs about help-seeking among African Americans (e.g., “If I go to psychotherapy it means I am ‘crazy.’”) Fogel and Ford (2005) suggested that for Asian Americans with depression, interventions to improve help-seeking should target family stigma. In summary, stigmatized

attitudes and cultural beliefs interact fluidly, resulting in differential effects of stigma on help-seeking behaviors depending on cultural context.

### **Anticipated Discrimination and Self-Stigmatization**

Consistent with the findings by Clement et al. (2015), Schomerus et al. (2009) found that internal shame, self-stigmatization, and personal negative attitudes of individuals seeking psychotherapy or medication for depression were much greater indicators of reduced help-seeking than anticipated negative reactions of others. This is consistent with other studies that have failed to discover any interference by anticipated discrimination on help-seeking behaviors (Golberstein, Eisenberg, & Gollust, 2008).

Aside from anticipated discrimination (expecting others to stigmatize mental health issues), adults with depression may harbor discriminatory attitudes towards others with mental illness themselves, which potentially results in negative attitudes towards help-seeking and reduced help-seeking behaviors. Cooper, Corrigan, & Watson (2003) discovered overall lower readiness to seek mental health treatment in those who blame patients with depression as responsible for their condition. Such attitudes may interfere with help-seeking behavior as a result of self-stigmatization. In an attempt to avoid identification with this stigmatized group, individuals may become reluctant to seek treatment and thereby circumvent any negative attitudes about mental illness that could be pointed inwards.

To examine self-stigmatization in adults with depression, Kanter, Rusch, and Brondino (2008) developed the Depression Self-Stigma Scale (DSSS). They found that individuals with greater degrees of self-stigma attempted to hide their depression from others, reported negative beliefs and attitudes about antidepressant treatment, and had a history of negative stigmatizing experiences as a result of their depression. Furthermore, they found that as stigma increased, so

did depressive symptom severity and use of avoidant coping strategies. They suggested a model whereby individuals become depressed, encounter stigma firsthand, and subsequently internalize public stigma. This resulted in avoidant behaviors, such as making concerted efforts to avoid discussion of their depression, which in turn increased social isolation and depressive symptoms.

In contrast to these findings, some researchers have cited anticipated stigma as a significant barrier to help-seeking for adults with depression (Barney et al., 2006; Wrigley et al., 2005). Barney et al. (2006) found that adults with depression were less willing to seek mental health treatment when they expected disapproval by any mental health professional, including psychologists. Wrigley et al. (2005) found evidence that devaluation of adults with depression and perceived discrimination were linked with negative attitudes towards treatment seeking.

### **Efforts to Reduce Barriers at a Systemic Level**

In the United States and across the globe, there have been a number of initiatives aimed towards reducing barriers to the treatment of mental illness, including educational campaigns designed to reduce psychiatric stigma, mental health literacy programs, and programs that target public awareness and recognition of depression (Finkelstein, Lapshin, & Wasserman, 2008; Quinn et al., 2013). A number of these programs, most often originating from professional bodies or non-governmental organizations, have been demonstrated as effective in reducing stigmatizing attitudes towards depression including media campaigns, workplace initiatives, lectures, workshops, and web-based programs (Finkelstein et al., 2008; Griffiths, Christensen, Jorm, Evans, & Groves, 2004). Three approaches have been identified in the literature as characterizing successful anti-stigma programs including education of the public, contact with individuals with mental illness, and social activism (Corrigan, Morris, Michaels, Rafacz, & Rüsch, 2012). In a meta-analytic review of 72 articles that examined the impact of programs

aimed at reducing public stigma in 14 different countries, Corrigan et al. (2012) identified programs involving contact with individuals with mental illness as being the most effective in reducing stigma for adults. Education programs were also deemed effective, while protest and social activism were ineffective at the reduction of stigmatizing attitudes and behaviors. Consistent with these findings, Pinfold, Thornicroft, Huxley, and Farmer (2005) identified contact with individuals with mental health issues as the active ingredient in anti-stigma programs. Stuart (2016) questioned the outcomes of large public education programs and recommended contact-based interventions targeted towards specific cultural groups given cross-cultural differences in stigma.

Henderson, Evans-Lack, and Thornicroft (2013) suggested that while it is possible to influence and improve help-seeking attitudes through such programs, it may be difficult to determine whether these initiatives ultimately produced higher utilization of mental health services. Furthermore, these initiatives were not specifically aimed towards decreasing barriers to psychotherapy. On a global level, very few countries have developed government-assisted programs to make psychotherapy more accessible to the general public. The United Kingdom and Australia health care systems are among the few that provide government-funded psychotherapy programs (Clark et al., 2009; Hickie & Groom, 2002).

### **Overview and Limitations of Studies That Examined Treatment Barriers**

To date, the bulk of studies that have examined barriers to mental health treatment have lumped various forms of interventions together including medication, psychotherapy, combination therapy (psychotherapy and antidepressant medications), or general help-seeking behaviors (e.g., consulting with a GP regarding an emotional concern). Many studies that have examined treatment barriers for adults with depression have utilized items that do not specify the

type of antidepressant treatment that is being evaluated. The overwhelming tendency has been to assess barriers to help-seeking globally and not differentiate between types of antidepressant treatments (Aromaa, Tolvanen, Tuuluri, & Wahlbeck, 2011; Mohr et al., 2010; Sareen et al., 2007; Wong et al., 2006). While some of the barriers encountered along the pathway of treatment seeking may be global to all forms of interventions (e.g., cost may be an obstacle for any fee-for-service treatment), other obstacles may be specific to particular interventions. For example, an identified obstacle of “attending [psycho]therapy would feel self-indulgent” may be a barrier specific to psychotherapy and one that does not translate to other treatments (Mohr et al., 2010). Therefore, in utilizing measures that do not differentiate between type of treatment, there may be barriers that are altogether missed, or difficult to isolate the effects of, given the interference posed by grouping together treatments. Assuming that the same barriers operate for all types of mental health treatment reduces the ability to differentiate and understand the specific difficulties posed by each barrier for a particular treatment. Therefore, while helpful in general, programs aimed at increasing utilization of mental health treatments (e.g., antistigma programs) are targeting barriers in a nonspecific, unfocused manner.

Several studies have attempted to examine specific barriers to mental health treatment without specifying the type of professional or treatment being sought by patients, largely due to use of overly inclusive or nonspecific wording in their surveys. Aromaa et al. (2011) endeavored to evaluate personal stigma and use of mental health services in a general population sample of 5,160 Finnish participants. Participants were asked “have you during the past 12 months used any health services because of mental health problems?” without any attempt to specify the treatment or type of provider (e.g., counselor, psychiatrist, PCP, etc.). Furthermore, study items were also nonspecific and included one assessing perceived public stigma: “The professionals in



health care do not take mental problems seriously.” Without specifying the type of professional, participants may have reflected their general attitudes about the health care setting rather than their attitudes towards specific types of providers. Participants may have responded differently to this item if it was specific to mental health specialists (e.g., counselors).

Sareen et al. (2007) assessed perceived barriers to mental health treatment using national surveys in the United States (N = 5,384), Netherlands (N = 6,021), and Canada (N = 6,261). In these surveys, participants were asked, “Was there ever a time during the past 12 months when you felt that you might need to see a professional because of problems with your emotions, nerves, or your use of alcohol or drugs but didn’t go?” (Sareen et al., 2007). Neither type of provider nor treatment was specified. Unmet needs with respect to mental health care are difficult to target when items assessing barriers such as “I was not satisfied with available services” do not specify the type of treatment (Sareen et al., 2007). Similarly, Wong et al. (2006) surveyed barriers to mental health care utilization for U.S. Cambodian Refugees, asking participants to indicate whether nine potential barriers would interfere with them “getting Western health care from professionals such as a physician, a psychologist, or a social worker.” Therefore, this study does not allow for the examination of the potential differential influence of these barriers depending on type of treatment or provider.

Another recurring theme and significant limitation in the literature on barriers to treatment revolves around researchers providing limited details on the source of the study items used to evaluate barriers. Goodman (2009) evaluated women’s attitudes, preferences, and perceived barriers to treatment for perinatal depression in a convenience sample of 509 pregnant women. However, throughout the study article, there was no explanation of how items evaluating potential barriers to treatment were chosen. There was no mention of selection of barriers

following a literature review or methods of item development. Similarly, Sareen et al. (2007) discussed the literature on treatment barriers in the introduction of the article, but did not provide any explanation of how they arrived upon the list of perceived barriers respondents had chosen from in their national surveys on perceived barriers. This is problematic given that a crucial component of research studies involves explanation of survey construction and item development. At the very least, investigators should provide an explanation that the list of barriers used in the study was arrived upon after a review of the existing literature.

Other researchers have conducted qualitative studies on treatment barriers and were thorough in their examination of patients' perceptions of barriers. Kravitz et al. (2011) conducted 15 qualitative focus groups of patients with a history of depression to evaluate interpersonal and attitudinal barriers to help-seeking in primary care. An advantage of taking a qualitative approach in researching treatment barriers is that patients are allowed to describe obstacles to treatment in full detail, without the restriction of forced choice responses from a list of potential barriers. This results in rich detail on patients' perceptions of barriers, such as "they're not trained [in psychotherapy] because [primary care doctors] read out of a book. And if the book doesn't say that this is a symptom, they don't have it," (Kravitz et al., 2011). Other researchers have utilized similar qualitative approaches to examine treatment barriers including focus groups that consisted of men with depression (Rochlen et al., 2010) and individual interviews of African American women (Ward, Clark, & Heidrich, 2009) that resulted in rich thematic analyses of barriers and suggestions for future research. However, these researchers, while conducting important investigations of treatment barriers in specific populations, did not create or attempt to create measures that could be more generally used in the assessment of barriers for other populations.

### **Review of Existing Barriers Measures**

While a number of measures have been developed to assess the various barriers to mental health treatment, a majority of these measures either focus arbitrarily on a narrow range of potential barriers without capturing the full breadth of barriers that exist or target only one domain of barriers. For example, several measures are intended to solely assess stigma-related barriers (e.g., Depression Self-Stigma Scale: Kanter et al., 2008) or attitudes towards help-seeking (e.g., Attitudes Towards Seeking Psychological Professional Help, Fischer & Turner, 1970).

Fischer and Turner (1970) created one of the first measures to systematically evaluate attitudes towards seeking mental health services. The “Attitudes Towards Seeking Psychological Help” (ATTPHS) scale consists of 29 items and is used to assess the propensity of individuals to seek psychological services. It consists of four factors: stigma tolerance, interpersonal openness regarding one’s problems, confidence in the mental health professional, and recognition of personal need for professional psychological help. The ATTPHS and a short ten-item version of it (Fischer & Farina, 1995) have been used extensively in past research on attitudes toward seeking psychological help. Price and McNeill (1992) demonstrated that scores on the ATTPHS can discriminate between college students who have or have not engaged in psychological services. However, this measure has several notable shortcomings. Given that it was developed over 25 years ago, many of the terms used in various items are outdated. Furthermore, the scale employed the terms psychiatrist, counselor, and psychologist interchangeably, potentially limiting its internal consistency due to the fact that individuals could have varying attitudes towards these three distinct types of healthcare professionals. Aegisdottir and Gerstein (2009) questioned the construct, content, and factorial validity of both the original and short-form

versions of the ATTPHS. While these are seminal measures in the help-seeking research, they have significant limitations in terms of psychometric properties and only evaluate attitudes towards seeking psychological help. While influential and potentially predictive of eventual treatment seeking, help-seeking attitudes are just one component of the various barriers to psychotherapy that patients encounter.

Only a handful of studies have used empirically developed and psychometrically sound measures for the assessment of barriers (Clement et al., 2012; Endo et al., 2008; Mohr et al., 2010; Pepin et al., 2009). A critical review of these four measures follows and include the Barriers to Psychological Care Questionnaire (Endo et al., 2008), the Barriers to Access to Care Evaluation (Clement et al., 2012), the Barriers to Mental Health Services Scale (Pepin et al., 2009), and the Perceived Barriers to Psychological Treatment (Mohr et al., 2010).

### **Barriers to Psychological Care Questionnaire (BPCQ)**

In order to examine patient-perceived barriers to the psychological care of Japanese patients with lung cancer, Endo et al. (2008) developed a new questionnaire called the Barriers to Psychological Care Questionnaire (BPCQ). Prior to development of this measure, there was no measure that examined the barriers to psychosocial treatment for patients with cancer. After a systematic review of the literature on barriers to psychological care with particular emphasis on studies centered around depression, the researchers developed an initial 25-item questionnaire. They added 11 items to this initial questionnaire after interviewing 10 patients with cancer to ensure the propriety of the measure. The final 36-item self-report measure was administered to 100 patients with lung cancer (>80% were males).

Each item was rated on a 5-point Likert scale [1(do not agree at all) to 5 (agree very much)], with an item score of 3 or greater indicating the presence of a barrier and higher scores

indicating greater patient-perceived barriers. Factor analysis indicated that the questionnaire covered four domains including psychiatric consultation (nine items), psychotropic medication (six items), emotional communication with physicians (eight items), and counseling (five items) (items with a factor loading below .4 were removed from the model). Cronbach Alpha coefficients indicated good reliability for each of the four domains (0.85 for psychiatric consultation, 0.86 for use of psychotropic medicine, 0.77 for emotional communication with physicians, and 0.83 for counseling). To examine the construct validity of the BPCQ, Pearson's correlation coefficients were calculated among the subscales, which resulted in *r*-values of 0.40 or greater.

The strengths of this questionnaire lie in the researchers' efforts to develop an empirical and psychometrically sound scale. However, they did not verify the reproducibility of the questionnaire, indicating that the reliability of the BPCQ may be limited. The majority of the questionnaire focuses on barriers to address emotional concerns with physicians and to psychiatric consultation/treatment. Barriers to counseling are only measured by six items, or approximately 20% of the total items. Furthermore, two of these items are not worded in a way that specifically target barriers to counseling (e.g., "In general, I do not like to speak about my emotions," & "Talking about my emotions to physicians will not alter any radical treatment") (Endo et al., 2008). A major drawback of this questionnaire, particularly if used in native English-speaking populations, is that it was developed in Japanese, and a backward-forward translation was not performed. This results in somewhat awkwardly worded statements such as: "I feel concerned about the side effects of psychotherapy," (Endo et al., 2008). In summary, while it represents a positive step towards construction of an empirically developed measure to

examine barriers to psychological treatment, it failed to survey the breadth and variety of barriers to psychotherapy for patients with depression cited in the literature.

### **Barriers to Access to Care Evaluation (BACE)**

Clement et al. (2012) created a comprehensive assessment of treatment barriers that would assess all types of treatment stigma and could be completed by individuals with any type of mental health problem. A majority of existing measures that assess stigma list stigma as a barrier without considering the various components of stigma (e.g., disclosure concerns, embarrassment/shame, anticipated discrimination, desire to avoid stigma stereotypes). This led to the development of the Barriers to Access to Care Evaluation (BACE) measure. Incorporating barriers items from 23 existing studies, these researchers utilized systematic item reduction, feedback from an expert group, and an iterative process (two iterations and one final version) to create a final measure with 30 items. These items were scored from 0 (not at all) to 3 (a lot) with higher scores indicating greater barriers. They included a 12-item “treatment stigma” subscale to assess all of the component aspects of treatment stigma. Example items include: “thinking I did not have a problem,” and “Concern that I might be seen as weak for having a mental health problem,” (Clement et al., 2012).

The researchers began with a pool of 172 items from 23 studies that examined treatment barriers, reducing these items through deletion and amalgamation for a final 38 items that were sent to an expert panel. Several items were deleted and re-worded following feedback from this panel, resulting in the 36-item BACE (version 2). This version was completed online by 117 individuals ( $M$  age = 36.1,  $SD$  = 11.1, age range = 18 to 70 years, 80% female, 87% “White British”) who had received secondary mental health services in the last year. Thirty-four percent of the participants reported a diagnosis of depression, while 31% reported bipolar disorder.

Forty-six percent of the participants had been hospitalized for a mental health condition. The third and final version of the BACE (30 items) was developed after item analysis and conceptual discussion by the research team.

Fifty-nine participants completed the BACE (version 2) twice to provide data for test-retest reliability. Weighted kappa values ranged from 0.61 to 0.80 for a majority of the items (22 out of 36), indicating acceptable levels of agreement. The remaining 11 items had values between 0.346 and 0.60, indicating lower agreement. The treatment stigma subscale had a Cronbach's alpha of 0.89, indicating good internal consistency.

Content validity was ensured through development of the items from the extant literature, use of an expert panel in an iterative process, and allowing of participants to enter additional barriers through use of free-text responses. Researchers concluded that a majority of these additional barriers (20 out of 30) were already covered by existing items. Convergent validity was evaluated through correlation of the treatment stigma subscale with two other measures: the Internalised Stigma of Mental Illness Scale (ISMI) (Ritsher, Otilingam, & Grajales, 2003) and the Stigma Scale for Receiving Psychological Help (SSRPH) (Komiya et al., 2000). The researchers reported correlations between the BACE treatment stigma subscale and the ISMI ( $r = 0.40$ ), as well as for the SSRPH ( $r = 0.30$ ), indicating weak convergent validity for the treatment stigma subscale.

The main strengths of this study included that it attempted to develop a comprehensive measure of barriers to mental health treatment, the detailed, systematic, and iterative process of measure development, and initial assessment of psychometric properties that indicated generally positive results. Furthermore, the treatment stigma subscale captured a broad array of stigma-related barriers as compared to other assessments that generally assessed fewer stigma

subcomponents. A significant drawback of the BACE is that it does not capture barriers that are specific to particular types of treatment. The measure captures treatment through the phrase “professional care,” preventing the ability to differentiate between barriers specific to psychotherapy, medication, or other treatments. The researchers also did not complete a full psychometric assessment given that they did not conduct a factor analysis or an examination of responsiveness. Furthermore, convergent validity was weak, and test-retest reliability was lower for a portion of the items. Psychometrics of the third and final version of the BACE were not examined at all.

Furthermore, while intended to capture a comprehensive list of barriers, the BACE was initially developed from a review of studies that focused primarily on stigma and help-seeking. The final version of the BACE only contains 18 items that assess non-stigma related barriers. In addition, men and racial and ethnic minority groups were significantly underrepresented in their sample (80% female and 87% “White British”). Overall, the BACE (though intended to be comprehensive in nature) is limited in its ability to assess barriers specific to psychotherapy given that it is not sensitive to the type of treatment being assessed.

### **Barriers to Mental Health Services Scale (BMHSS)**

To investigate intrinsic and extrinsic barriers to psychotherapy, Pepin et al. (2009) developed the 56-item self-report measure called the Barriers to Mental Health Services Scale (BMHSS). These researchers were particularly interested in developing a questionnaire that could (1) be used in the general population, (2) detect any differences in barriers endorsed between younger and older adults, and (3) detect any sex effects on barriers endorsed. Participants rated each item/barrier on a 5-point Likert scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*), with higher scores indicative of more burdensome barriers. The



researchers originally created over 200 items, which were then reviewed by geropsychology experts to refine item content and eliminate redundancy. Sixty-three items were then utilized in data collection, with seven more being removed to improve the internal consistency of the 10 subscales. Subscales were standardized by utilizing sums of component items divided by total number of items in each subscale.

The five intrinsic barrier subscales include stigma, help seeking, belief about inability to find a psychotherapist, knowledge and fear of psychotherapy, and belief that depressive symptoms are normal. The five extrinsic barrier subscales include ageism, transportation concerns, concerns about psychotherapist's qualifications, physician referral, and insurance and payment concerns. The intrinsic subscales are added together for an intrinsic total score and the extrinsic subscales are added together for an extrinsic total score. The internal consistency of the BMHSS ranged from unfavorable to acceptable for the 10 subscales, with the Cronbach alpha ranging from 0.48 to 0.90 (5 of 10 were below 0.70). The alphas for the BHMSS total score (.90), intrinsic total score (0.86), and extrinsic total score (0.80) were all large and acceptable.

Pepin et al. (2009) administered the BMHSS to 76 undergraduate students (M age = 23.0 years, SD = 4.5, age range = 18 to 35 years, 67% female, 78% Caucasian) and 88 community-dwelling elderly adults (M age = 74.8 years, SD = 7.3, age range = 61 to 90 years; 68% female, 100% Caucasian). They found that younger adults perceived insurance concerns, belief about inability to find a psychotherapist, and fears of psychotherapy to be greater barriers than older adults. For both younger and older adults, Pepin et al. (2009) found that stigma was not identified as a primary barrier. Furthermore, overall rankings of barriers in terms of perceived burdensomeness were very similar between younger and older adults. Overall, women relative to men reported greater difficulties finding a psychotherapist as a barrier whereas men relative to

women identified stigma as a greater barrier. These were the only differences in barriers associated with sex.

Notable limitations of this study included participation of overall healthy, highly educated, and active elderly adults, a majority of whom drove themselves to the research site. Furthermore, 100% of these elderly adult participants were Caucasian. Therefore, these results may be non-generalizable to less independent older adults with more physical and cognitive limitations and/or who are from racial and ethnic diverse backgrounds and less educated. Several of the study subscales ('belief that depressive symptoms are normal' and 'physician referral') yielded low coefficient alphas (.48 and .61 respectively), which suggested that results should be interpreted with caution. The researchers did not conduct a factor analysis to determine the unique dimensions underlying the BMHSS nor did they examine the test-retest reliability or convergent validity of the measure. Finally, many of the items were framed in the negative or even double negative, creating potential for misinterpretation when rating an item from "strongly disagree" to "strongly agree" (e.g., "I would not go to psychotherapy because a psychotherapist can't understand the problems of someone my age") (Pepin et al., 2009). A 56-item self-report measure may also have the potential to exhaust participants, particularly given the considerable verbosity of each item.

### **Perceived Barriers to Psychological Treatment (PBPT)**

In 2006, Mohr et al. conducted a study that examined barriers to psychotherapy among primary care patients with and without depression, and tested the hypothesis that barriers would be more common among patients with depression. As described above, existing measures of barriers to treatment did not distinguish psychotherapy and pharmacotherapy, rather they were grouped together in the questionnaires. Further, studies that evaluated barriers specific to

psychotherapy were limited to circumscribed populations such as women with perinatal depression (O'Mahen & Flynn, 2008), distressed women's clinic patients (Alvidrez & Azovar, 1999), or individuals with a prior history of depression who do not currently meet criteria for a depressive disorder (Blumenthal & Endicott, 1996). Therefore, this study was intended to be the first survey of perceived barriers to psychotherapy in a broad sample of primary care patients. Collating items used in previous studies for a total of 8 items, Mohr et al. (2006) constructed a scale referred to as the Perceived Barriers to Psychotherapy (PBP). Questionnaires were sent to primary care patients meeting criteria for depression in the database, and 260 patients completed the survey. Participants were instructed to rank how difficult each barrier made it to attend psychotherapy (from "no problem at all" posed by a barrier to "impossible to attend psychotherapy regularly") (Mohr et al., 2006). Factor analysis resulted in two factors including practical barriers and emotional barriers. This model accounted for 58.2% of the variance with an internal reliability of 0.79 for the total score (sum total of item scores). Depression was indeed associated with higher frequency of perceived barriers. Eleven percent of the sample reported at least one emotional barrier whereas 56.6% of the sample reported one or more practical barriers. Depression was associated with a higher number of perceived emotional barriers. While effective in demonstrating that depression was consistently associated with greater frequency of perceived barriers, this questionnaire was by no means comprehensive at examining the variety of barriers to psychotherapy encountered by patients with depression.

Building on this research, Mohr et al. (2010) developed a measure of perceived barriers to psychotherapy that was comprehensive in nature, as compared to their original 8-item measure. They intended to develop a comprehensive survey of barriers, administer it in a broad sample of primary care patients, evaluate the psychometrics of the measure, investigate the

relationship between perceived barriers and concurrent/future psychotherapy use, and clarify the relationship between perceived barriers and depression. The researchers constructed a new study questionnaire called Perceived Barriers to Psychological Treatment (PBPT), a self-report measure comprised of 27 items that identified potential barriers to attending weekly psychotherapy sessions. They incorporated the 8 study items used by Mohr et al. (2006) with additional items developed from data gathered in that study as well. Participants were instructed to describe in writing any barriers (free text) that were not included in the original survey. Eight healthcare providers (five psychologists, two primary care physicians, one social worker) discussed these responses and condensed them into final study items, adding a few others by professional consensus.

For each barrier, patients were instructed to “rate the degree to which different kinds of problems might get in the way of seeing a counselor or a therapist,” with response choices of: 1 (*not difficult at all*), 2 (*slightly difficult*), 3 (*moderately difficult*), 4 (*extremely difficult*), and 5 (*impossible*) (Mohr et al., 2010). Counseling and psychotherapy were defined as “weekly sessions in a counselor’s or therapist’s office that lasts approximately 50 minutes,” (Mohr et al., 2010). They utilized summed scores (sum total of likert scale ratings for all barriers divided by total number of barriers) and a dichotomous scoring method [items ranked as a 4 (*extremely difficult*) or 5 (*impossible*) coded as posing a barrier, with 3 or lower coded as not posing a barrier]. The intention behind these scoring methods was to incorporate the understanding that any one barrier can be substantial enough to prevent a patient from pursuing treatment. In other words, barriers may impact patients by a threshold, rather than an additive effect.

Mohr et al. (2010) administered the PBPT to 658 primary care patients ( $M$  age = 50.9 years,  $SD$  = 15.42, age range = 18 to 87 years, 70.1% female, 60.1% Caucasian, 28.7% African

American, 5.3% Latino/a, 2.6% Asian American, 2.3% Multiracial, 0.9% Other). Fifty percent of the participants reported previous history of psychotherapy, while 13.8% reported concurrent enrollment in psychotherapy. Fifty-five percent of participants reported at least one perceived barrier that made it extremely difficult or impossible to attend counseling. Among patients with depression (Patient Health Questionnaire-9 (PHQ-9) total score  $\geq 10$ ), 78.4% reported one or more barriers, compared to 49.6% for patients who did not meet criteria for depression. The researchers conducted an exploratory factor analysis on half of the sample, resulting in a total of 8 factors. Confirmatory factor analysis conducted on the other half of the sample supported these results. The 8 factors included stigma (7 items), lack of motivation (2 items), emotional concerns (3 items), negative evaluations of psychotherapy (4 items), misfit of psychotherapy to needs (4 items), time constraints (2 items), participation restrictions (4 items), availability of services (2 items). Three items were excluded from the exploratory factor analysis due to low communalities ( $h^2 < .361$ ), although the cost of psychotherapy was included in the total PBPT score due to its prevalence in the literature as a frequently cited barrier. Of all the solutions, this optimal 8-factor model had acceptable fit (RMSEA = .067, 90% CI = .057-.077).

Overall, the psychometric properties of the PBPT appeared to be quite robust. Internal reliabilities were acceptable for all factors, with Cronbach alpha's ranging from 0.71 to 0.89. In ascending order, Cronbach alpha's for each of the subscales were 0.71 for time constraints, 0.73 for availability of services, 0.77 for misfit of psychotherapy to needs, 0.82 for lack of motivation, 0.83 for emotional concerns, 0.84 for participation restrictions, 0.84 for negative evaluation of psychotherapy, and 0.89 for stigma. Cronbach's alpha for the Total PBPT score was 0.92.

A majority of the subscales displayed at least one indicator of criterion validity. Concurrent enrollment in psychotherapy was evaluated as a criterion validity variable given the

expectation that perceived barriers would be associated with lower rates of psychotherapy utilization. After controlling for demographic variables and depression, participants endorsing fewer barriers in misfit of psychotherapy to needs (Odds ratio [OR] = .88,  $p = .007$ ), time constraints (OR = .83,  $p = .006$ ), cost (OR = .78,  $p = .009$ ), or availability of services (OR = .88,  $p = .04$ ) were more likely to report current enrollment in psychotherapy. To assess predictive validity, patients completing a one-year follow-up survey were asked if they attended psychotherapy in the prior year. After controlling for demographic variables and depression, participants with higher scores on time constraints (OR = .86,  $p = .035$ ), emotional concerns (OR = .86,  $p = .02$ ), stigma (OR = .94,  $p = .026$ ), misfit of psychotherapy to needs (OR = .84,  $p = .001$ ), and total PBPT score (OR = .98,  $p = .039$ ) were less likely to endorse psychotherapy experience in the year following completion of the PBPT.

Participation restriction, lack of motivation, and negative evaluation of therapists did not result in significant associations with concurrent or eventual (at one-year follow-up) enrollment in psychotherapy. This indicated that these factors may not pose significant barriers to treatment. The investigators suggested that the null effect related to lack of motivation may stem from a complex interaction between lack of motivation and other symptoms of depression. Stated another way, lack of motivation may affect other symptoms that increase interest in psychotherapy, while simultaneously creating barriers. In terms of the null effects related to participation restriction, this study was conducted in an urban setting with a plethora of public transportation and paratransit systems [public transportation service using modern, accessible vehicles for individuals with disabilities who cannot use fixed-route bus or rail service due to disability], potentially clouding the potential impact of this barrier on concurrent/future psychotherapy enrollment. Researchers found the absence of an association between negative

evaluation of therapists and concurrent/future enrollment in psychotherapy puzzling, although they suggested that this finding was consistent with reports that negative attitudes towards mental health services are not always indicative of decreased utilization (Mackenzie, Scott, Mather, & Sareen, 2008).

Consistent with findings of their previous study (Mohr et al., 2006), the investigators discovered an association between greater depression severity and increased frequency of perceived barriers on the total PBPT score ( $\beta = 0.34, p < 0.001$ ) and all subscales except for time constraints. In terms of explaining these findings, the researchers suggested that negative cognitions and expectancies related to depression may increase the perceived severity of barriers and reduce motivation and behaviors towards overcoming them (Mohr et al., 2010). A notable limitation of this study included recruitment of participants from a single clinic. Nevertheless, it was the first study in the barriers literature to develop an empirically rooted, psychometrically sound, and comprehensive measure of the perceived barriers to receiving psychotherapy.

### **Use of the PBPT in Research of Treatment Barriers**

As it constitutes the closest approximation to a *gold standard* measure of barriers to psychotherapy for adults with depression, the PBPT has been used by several researchers interested in treatment barriers. Two recent studies utilized an adapted version of the PBPT and tailored their assessment towards more specific populations. One study compared outcomes between internet-based and face-to-face psychotherapy for depression (Casey, Wright, & Clough, 2014) and the other study adapted the PBPT for use in a depression screening program of hemodialysis patients (Farrokhi, Beanlands, Logan, Kurdyak, & Jassal, 2017). Casey et al. (2014) adapted the wording of the PBPT to assess barriers specific to internet-based psychotherapy, finding that although potential consumers associate fewer barriers with internet-

based psychotherapy, they still prefer face-to-face treatment. Farrokhi et al. (2017) adapted the PBPT to determine barriers to a screening program for depression in a hemodialysis program, adding 11 items to the original 27 items in the PBPT (example of added item: “I think better treatment of the kidney problem would improve depression”). In adapting the PBPT for this study, “counseling” was replaced by “screening program for depression” throughout the survey. The screening program for depression (which was merely hypothetical for the purposes of this study) was described as involving routine assessment of depressive symptoms via questionnaires, as well as potential referral and treatment. Although investigation is required to establish the psychometrics of this adapted version of the PBPT, results of the study indicated that the PBPT was appropriate for use outside of a solely primary care population (Farrokhi et al., 2017).

Wilks, Coyle, Krek, Lungu, and Andriani (2018) administered the PBPT in a study that looked at the relationship between suicidal ideation and acceptability toward online-help seeking, and found that higher total scores on the PBPT were associated with stronger preferences for online help-seeking in a population of adults with suicidal ideation. On average, participants with no prior history of psychotherapy endorsed over eight barriers to treatment on the PBPT (Wilks et al., 2018). This study highlights the utility of the PBPT in assessing help-seeking preferences in an underserved, high-risk population. Pfeiffer et al. (2016) administered 14 items of the PBPT to evaluate barriers to psychotherapy for patients following inpatient hospitalization at Veteran Affairs medical centers. The most commonly endorsed barriers included difficulties with transportation, lack of energy or motivation, and concerns about discussing upsetting issues.

Innes, Cough, Day, and Casey (2018) administered the PBPT to assess treatment barriers among individuals with disordered eating behaviors, given that there is a lack of psychometrically sound instruments to assess barriers in this population. These researchers



examined the psychometric properties of the PBPT and confirmed many of the original findings of Mohr et al. (2010) on the excellent internal reliability and construct validity of the PBPT. However, this study found a clear seven-factor solution as compared to Mohr et al. (2010) who retained an eight-factor solution. Furthermore, study results confirmed the association between depressive symptoms and PBPT scores reported by Mohr et al. (2010). In summary, the PBPT has been utilized in various studies, displayed excellent psychometric properties, and demonstrated high utility as a measure of barriers to treatment.

### **Conclusion**

Table 1 presents an overview of barriers to psychotherapy reviewed throughout this chapter. The barriers to initiating psychotherapy and the process by which adults with depression navigate such barriers remain poorly understood. There have been several attempts to capture the variety and breadth of existing barriers, with the PBPT being the closest approximation of a *gold standard* measure in this regard. However, no studies to date have evaluated the various solutions by which adults with depression overcome barriers to psychotherapy. As such, there are no existing measures that evaluate perceived solutions to barriers to psychotherapy from the perspective of adults with depression, which is a significant gap in the field. It is important to understand how patients navigate intrinsic and extrinsic barriers to psychotherapy. By understanding the internal and external factors and influences that enable adults with depression to overcome barriers to psychotherapy, clinicians, researchers, and mental health organizations can target barriers more effectively and ultimately increase access to psychotherapy, a treatment option that is effective, presents unique benefits, and is often preferred by patients.

This study utilized a sample of adults with depression in a variety of settings (including college counseling centers, private practice and outpatient psychotherapy clinics, and an

outpatient psychiatry clinic) to investigate the barriers and various solutions adults with depression utilize to overcome barriers to psychotherapy. Through development and implementation of a new study questionnaire, this study examined which solutions adults with depression perceived as helpful in overcoming particular barriers to psychotherapy.

Just as an individual may endorse both extrinsic and intrinsic barriers to psychotherapy, solutions that enable one to overcome these barriers may be both intrinsically and extrinsically influenced. Some solutions involve processes operating within the individual, such as perceived need for treatment outweighing difficulties posed by a particular barrier. Other solutions are primarily influenced by extrinsic factors, such as an individual overcoming a barrier by receiving a referral from a physician. In many cases, barriers are resolved through an interaction between processes centered both within and outside the individual. For example, an individual facing the barrier of time constraints may perceive a need for psychotherapy (intrinsic) and ask a family member to assist with their daily responsibilities (extrinsic) to overcome this barrier. In this way, intrinsic and extrinsic factors may interact to produce a solution to any particular barrier.

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Insert Table 1 here

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## **CHAPTER 3**

### **Rationale, Aims, and Hypotheses**

#### **RATIONALE**

The lack of research regarding the intrinsic and extrinsic barriers to psychotherapy for adults with depression, and how they navigate such barriers raises many unanswered questions. Although not exhaustive, some research has attempted to capture the breadth and variety of barriers that exist (Clement et al., 2012; Endo et al., 2008; Mohr et al., 2010; Pepin et al., 2009). Unfortunately, research to date has provided limited information regarding how individuals initiate psychotherapy after first encountering barriers. In order to maximize the accessibility of psychotherapy as an antidepressant treatment option, there is a need to answer the questions of what are the barriers and what are solutions that would allow adults with depression to overcome such barriers to psychotherapeutic treatment. By understanding the intrinsic and extrinsic solutions that enable adults with depression to overcome barriers to psychotherapy, clinicians, scientists, and mental health organizations can target barriers more effectively and ultimately increase access to psychotherapy, a treatment option that is safe and efficacious. Such understanding will help to systematically reduce the discrepancy between high stated interest in psychotherapy as a treatment option and low rates of initiation after referral.

The present study endeavored to assess barriers to psychotherapy endorsed by adults with depression and to design and implement a new questionnaire (*Overcoming Barriers to Psychotherapy*) that examined what solutions adults with depression perceived as helpful in overcoming barriers to psychotherapy. This addressed a significant gap in the literature, namely the lack of a specific measure of the factors that would allow individuals to overcome intrinsic

and extrinsic barriers to the initiation of psychotherapy. Creation and implementation of a new questionnaire that examined such solutions represents a critical step towards reducing barriers to psychotherapy that result in low initiation rates, and importantly prolongs untreated depression. By investigating the types of solutions that help individuals with depression overcome barriers to psychotherapy, this study aimed to produce new knowledge that would help target and reduce the burden of these barriers for adults with depression who have not initiated psychotherapy.

### **AIMS AND HYPOTHESES**

**Aim 1:** To characterize the endorsement of intrinsic and extrinsic barriers and solutions among a group of outpatients with depression currently receiving psychotherapy.

**Aim 1 Rationale:** To our knowledge, this study represents the first attempt to characterize the solutions endorsed by outpatients with depression receiving psychotherapy as an antidepressant treatment. Several demographic variables have been linked with higher endorsement of certain barriers to psychotherapy (e.g., income, race, and ethnicity). These variables may also influence the endorsement of certain solutions.

**Aim 1.1:** To compute the total number of barriers (intrinsic and extrinsic) as rated on the Perceived Barriers to Psychological Treatment (PBPT) and percentages of each solution type endorsed on the Overcoming Barriers to Psychotherapy (OBP).

**Aim 1.2:** To explore associations between demographic variables (including gender identity, age, education level, income, race, and ethnicity) and solutions endorsed on the OBP.

**Aim 2:** To determine the impact of demographic variables (income, race, and ethnicity) on barriers as rated on the PBPT.

**Hypothesis 1:** Participants of an African American or Hispanic background relative to non-Hispanic Caucasian participants will endorse higher extrinsic barrier total scores as rated on the PBPT.

**Hypothesis 2:** Participants of a lower income level relative to those with a higher income level will endorse higher extrinsic barrier total scores as rated on the PBPT.

**Aim 3:** To determine what types of solutions are most frequently endorsed to overcome barriers to psychotherapy in adults with depression currently engaged in psychotherapy.

**Hypothesis 3:** A higher percentage of intrinsic solutions relative to extrinsic solutions will be endorsed for intrinsic barriers.

**Hypothesis 4:** A higher percentage of extrinsic solutions relative to intrinsic solutions will be endorsed for extrinsic barriers.

**Hypothesis 5:** A higher percentage of Intrinsic-General solutions as compared to the other three solution types will be endorsed for intrinsic barriers.

**Hypothesis 6:** A higher percentage of Extrinsic-Specific solutions as compared to the other three solution types will be endorsed for extrinsic barriers.

**Aim 4:** To examine the relationship between depression symptom severity and barriers (intrinsic and extrinsic) to initiating psychotherapy.

**Hypothesis 7:** Depression symptom severity as rated on the PHQ-9 will be positively associated with the intrinsic barrier total score as rated on the PBPT.

**Hypothesis 8:** Depression symptom severity as rated on the PHQ-9 will be positively associated with the extrinsic barrier total score as rated on the PBPT.

**Aim 5:** To determine the impact of psychosocial functioning on barriers (intrinsic and extrinsic) to initiating psychotherapy.

**Hypothesis 9:** Severity of psychosocial impairment as rated on the WSAS will be positively associated with the intrinsic barrier total score as rated on the PBPT.

**Hypothesis 10:** Severity of psychosocial impairment as rated on the WSAS will be positively associated with the extrinsic barrier total score as rated on the PBPT.

## CHAPTER 4

### METHOD

#### *Study Design Overview*

This was a prospective study with a cross-sectional design. Data were collected through an online survey completed independently by study participants off-site.

#### **Participants**

The study was exempted by the Institutional Review Board at the University of Texas Southwestern Medical Center (IRB# STU-2019-0745). A variety of recruitment strategies were used with the intention of recruiting participants who would endorse a variety of barriers to psychotherapy and associated solutions. Study flyers were distributed to a variety of community/outpatient settings across the Dallas-Fort Worth metroplex (e.g., UT Southwestern Psychotherapy and Psychiatric Clinics, University of Texas at Arlington Counseling and Psychological Services, private practice psychotherapy offices). Furthermore, community/outpatient staff, UTSW faculty and staff, and professional colleagues of the dissertation author used email to distribute the flyer to interested patients (see Appendix B for full-length flyer). Finally, Center for Depression Research and Clinical Care social media posts (Facebook, twitter, and Instagram pages) were used for distribution. The following eligibility criteria were utilized:

#### Inclusion Criteria:

- 1) Age of 18+ years
- 2) Stated history of past or current depressive illness
- 3) Current enrollment in individual psychotherapy

- 4) Access to internet (via PC, Mac, laptop, tablet, smartphone, etc.)

Exclusion criteria:

- 1) Unable to read/write in English

### **Procedures**

As part of their recruitment, participants were provided an online link to an electronic REDCap survey containing all of the study measures. Study data were collected and managed using REDCap electronic data capture tools hosted at University of Texas Southwestern Medical Center (CTSA NIH Grant UL1-RR024982; Harris et al., 2009a; Harris et al., 2009b). REDCap (Research Electronic Data Capture) is a secure, web-based application designed to support data capture for research studies, providing 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources. The first page of the REDCap survey informed participants of the purpose of the study, participation requirements of the study (completion of 15-30 minute online survey), eligibility criteria, and that participation was confidential, de-identified, and anonymous. This page was presented to participants to obtain willingness to participate. Individuals who indicated willingness to participate answered questions related to eligibility (i.e., to confirm their age, stated history of depression, current enrollment in individual psychotherapy, and ability to read/write in English). For individuals who were ineligible or declined to participate, a screen appeared thanking them for their time.

For eligible individuals who indicated willingness to participate, the following series of measures was presented: demographic data, Patient Health Questionnaire-9 (PHQ-9), Work and Social Adjustment Scale (WSAS), Perceived Barriers to Psychological Treatment (PBPT), and



Overcoming Barriers to Psychotherapy (OBP). Participants were instructed to complete the study questionnaires in one sitting, taking approximately 15-30 minutes. All participants completed the survey independently, using their own time and independent means of obtaining internet access (electronic devices were not supplied by any settings in which they were recruited). The REDCap survey was tested by study personnel and confirmed to be compatible with any computer, laptop, tablet, or smartphone, as well as any of the following internet browsers: Firefox, Internet Explorer, Chrome, and Safari. In the event that study participant endorsed suicidality/self-harm on the PHQ-9, they were automatically provided a series of safety recommendations within the online survey form (See Appendix A). Additionally, the same safety recommendations were provided to all participants at the end of the survey. Participants were encouraged to complete all items of the questionnaires but were not required to do so.

### **Measures**

Copies of all measures utilized in this research study can be found in Appendix A.

#### *Demographics*

Basic demographic data including age, gender identity, level of education, relationship status, race, ethnicity, employment status, and level of income, were collected. Information was also collected regarding the participants' psychotherapy experience (e.g., duration of psychotherapy, number of sessions), medical and psychiatric comorbidities, and medication history.

#### *Depressive Symptoms*

Depressive symptoms were assessed using the Patient Health Questionnaire-9 (PHQ-9), a widely used instrument for screening, monitoring, and measuring depression symptom severity. The PHQ-9 incorporates the DSM-IV Major Depressive Disorder diagnostic criteria into a brief

self-report questionnaire, consisting of nine items that are each rated on a scale of “0” (not at all) to “3” (nearly every day) (Kroenke, Spitzer, & Williams, 2001). The diagnostic validity of the PHQ-9 was initially established in two studies that involved 3,000 patients in 7 obstetrics-gynecology clinics and 3,000 patients in 8 primary care clinics (Spitzer, Kroenke, Williams, & Patient Health Questionnaire Primary Care Study Group, 1999; Spitzer et al., 2000). Kroenke et al. (2001) conducted a study that established the validity of the PHQ-9. Construct validity was evaluated by use of the 20-item Short-Form General Health Survey, symptom-related difficulty, and self-reported sick days and clinic visits. Construct validity was adequate as the continuous PHQ-9 scores displayed a correlation of 0.55 with symptom-related difficulty, 0.39 with disability days, and 0.24 with physician visits. As severity of symptoms increased as measured by the PHQ-9, there was a considerable decrease in functional status on each of the six subscales of the 20-item Short-Form General Health Survey. Criterion validity was evaluated against an independent structured mental health professional (MHP) interview. The results indicated that a PHQ-9 total score  $\geq 10$  had a sensitivity of 88% and a specificity of 88% for major depressive disorder. The PHQ-9 total scores range from 0 to 27, and the PHQ-9 cutoff total scores of 5, 10, 15, and 20 represent mild, moderate, moderately severe, and severe depression, respectively (Kroenke et al., 2001). In addition to its ability to assess severity of depressive symptoms, this measure was chosen for its brevity, ease of use, and strong construct and criterion validity.

### *Psychosocial Functioning*

Psychosocial functioning of participants was measured with the Work and Social Adjustment Scale (WSAS). The WSAS is a self-report scale of functional impairment attributable to an identified problem. It is a short (comprised of 5 items) and comprehensive measure of work and social adjustment that permits comparisons of functional impairment across

studies and a variety of psychiatric disorders (e.g., anxiety, depressive disorders) (Mundt, Marks, Shear, & Greist, 2002). Further, it captures the experiential impact of a disorder from the patient's point of view in terms of the manner in which the disorder (in this case, depression) impacts one's ability to function day to day. The WSAS is a reliable and valid measure of psychosocial functioning. Utilizing data from a sample of 377 adults with depression and 199 patients with Obsessive Compulsive Disorder, Mundt et al. (2002) reported adequate internal consistency with Cronbach's  $\alpha$  ranging from 0.70 to 0.94. The test-retest correlation coefficient was 0.73, and the correlation of the WSAS with the 17-item Hamilton Depression Rating Scale total score was 0.76. Several other studies, including a sample of 1,371 Norwegian outpatients and 205 phobic patients found the WSAS to be a reliable, valid, and sensitive to change measure of work, social, and other adjustment (Mataix-Cols et al., 2005; Pedersen, Kvarstein, & Wilberg, 2017). The WSAS total scores range from a minimum of 0 to a maximum of 40. Scores below 10 are associated with subclinical populations (individuals suffering from psychiatric symptoms yet not meeting threshold of symptoms necessary for diagnosis), while scores between 10 and 20 are associated with significant psychosocial impairment, but less severe clinical pathology. Scores higher than 20 are indicative of moderately severe to severe psychosocial impairment and moderately severe to severe psychopathology (Mundt et al., 2002).

### *Barriers to Psychotherapy*

Existing barriers to the initiation of psychotherapy were assessed using the Perceived Barriers to Psychological Treatment (PBPT). The PBPT consists of 27-items that identify potential barriers to attending weekly psychological or behavioral treatment. Items were derived from a previous survey in which 260 primary care patients were asked to rate eight barriers that were identified from a literature review (Mohr et al., 2006). Eight clinicians (five psychologists,

two primary care physicians, and one social worker) reviewed these barriers and then through consensus condensed them into specific items.

Each item asks patients to “rate the degree to which different kinds of problems might get in the way of seeing a counselor or a therapist,” (Mohr et al., 2010). 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. The original wording of the PBPT defines counseling and psychotherapy as weekly sessions in a counselor’s or therapist’s office that last approximately 50-minutes. Given that the present study intended to recruit participants regardless of whether they endorsed weekly psychotherapy visits, a brief preface was added to the PBPT. This preface encourages participants to complete the measure even if their counseling sessions are less frequent than weekly and if their sessions last less than 50 minutes (see Appendix A).

Given that this study exclusively recruited participants currently enrolled in psychotherapy and intended to evaluate barriers already encountered in the past, the original wording of the PBPT was slightly revised, such that instead of prompting participants to rate the degree to which various barriers “would make it difficult” to attend counseling, the revised wording prompted them to rate the degree to which barriers “made it” difficult to attend counseling. The change in verb tense from “would make it” to “made it” was the only revision made to the PBPT with the intention of reducing any confusion for participants evaluating barriers already encountered in the past.

Items are worded so that the participant can rate how difficult each potential barrier made it for him or her to attend appointments. Response choices are rated on a scale of 1 to 5 and include the following ratings: 1 (*not difficult at all*), 2 (*slightly difficult*), 3 (*moderately difficult*), 4 (*extremely difficult*), or 5 (*impossible*).

The PBPT displayed excellent psychometric properties in various populations and settings (Casey et al., 2014; Farrokhi et al., 2017; Innes et al., 2018; Mohr et al., 2010; Pfeiffer et al., 2016; Wilks et al., 2018). Concurrent enrollment in psychotherapy was evaluated as a criterion validity variable given the expectation that perceived barriers would be associated with lower rates of psychotherapy utilization. After controlling for demographic variables and depression, participants endorsing fewer barriers in misfit of psychotherapy to needs (Odds ratio [OR] = .88,  $p = .007$ ), time constraints (OR = .83,  $p = .006$ ), cost (OR = .78,  $p = .009$ ), or availability of services (OR = .88,  $p = .04$ ) were more likely to report current enrollment in psychotherapy. To assess predictive validity, patients completing a one-year follow-up survey were asked if they attended psychotherapy in the prior year. After controlling for demographic variables and depression, participants with higher scores on time constraints (OR = .86,  $p = .035$ ), emotional concerns (OR = .86,  $p = .02$ ), stigma (OR = .94,  $p = .026$ ), misfit of psychotherapy to needs (OR = .84,  $p = .001$ ), and total PBPT score (OR = .98,  $p = .039$ ) were less likely to endorse psychotherapy experience in the year following completion of the PBPT (Mohr et al., 2010). An extensive review of the psychometric properties can be found in the literature review above.

### *Scoring*

Mohr et al. (2010) used a dichotomous and summed scoring method to score the PBPT. For the dichotomous scoring method, barriers rated by participants as a 4 (extremely difficult) or 5 (impossible) were coded as barriers, while scores of 3 or below were not coded as barriers. Dichotomized scores were used by Mohr et al. (2010) for analyses surrounding PBPT subscales, which were not used in the present study for various reasons. First of all, Mohr et al. (2010) did not provide any rationale in their study as to why barriers rated at a 4 or 5 would be considered

barriers, while barriers rated at a 2 (slightly difficult) or 3 (moderately difficult) would not constitute barriers. Barriers rated at a 2 or 3 might act as barriers to the initiation of psychotherapy, and therefore excluding these barriers from analyses could result in underrepresentation of the impact of the relative difficulty posed by those particular barriers. Furthermore, current study hypotheses were not framed around the eight PBPT subscales out of a desire to maintain a succinct set of hypotheses. Finally, a great majority of the analyses conducted by Mohr et al. (2010), including all of the analyses used for their study hypotheses, utilized the total PBPT score. Using a summed scoring method, the total PBPT score is calculated by adding the Likert Scale Scores for all the barriers and dividing by the total number of barriers. As a mean rating of all barriers, the total PBPT score ranges from a minimum of 1 (all barriers rated as “not difficult at all”) to a maximum of 5 (all barriers rated as “impossible”).

Each of the PBPT barriers was coded as intrinsic or extrinsic (see Appendix A) for the purpose of analyzing study hypotheses. While Mohr et al. (2010) did not distinguish between intrinsic and extrinsic barrier types in their study, Pepin et al. (2009) categorized barriers as intrinsic or extrinsic and utilized intrinsic barrier total scores and extrinsic barrier total scores, establishing precedent for the current study to use these types of categories and scores. For each participant, the intrinsic barrier total score was calculated by adding the Likert Scale ratings for each of the barriers coded as intrinsic divided by the total number of intrinsic barriers endorsed (19 of the 27 barriers on the PBPT were coded as intrinsic). As a mean rating of intrinsic barriers, intrinsic barrier total score ranges from a minimum of 1 (no intrinsic barriers endorsed) to a maximum of 5 (all intrinsic barriers rated as making it “impossible” to attend counseling). The extrinsic barrier total score was calculated by adding the Likert Scale ratings for each of the barriers coded as extrinsic divided by the total number of extrinsic barriers endorsed (8 of the 27

barriers were coded as extrinsic). As a mean rating of extrinsic barriers, extrinsic barrier total score ranges from a minimum of 1 (no extrinsic barriers endorsed) to a maximum of 5 (all extrinsic barriers rated as making it “impossible” to attend counseling).

### *Solutions to Barriers to Psychotherapy*

The present study implemented a new questionnaire developed by the dissertation author in consultation with 8 experts from a variety of disciplines including clinical psychologists, social workers, and master’s level mental health clinicians, the *Overcoming Barriers to Psychotherapy (OBP)* [see Appendix A]. The OBP evaluates which solutions adults with depression perceive as helpful in overcoming barriers to psychotherapy. At the beginning of the questionnaire, participants are prompted to reflect on the time prior to initiating psychotherapy and select the solution that they perceive as most helpful in overcoming each particular barrier (see Appendix A). Designed as a companion questionnaire to the PBPT, the OBP presents each barrier in the PBPT along with four proposed solutions to overcoming that barrier. Participants are prompted to select which of the four solutions they perceive as most helpful in overcoming each barrier. The solutions fall into four categories: 1) Intrinsic-Specific, 2) Intrinsic-General, 3) Extrinsic-Specific, and 4) Extrinsic-General. Each barrier was paired with one of each of these four solution types. Intrinsic solutions are those that operate within an individual and enable them to overcome a perceived barrier, whether intrinsic or extrinsic. Such solutions may involve decision-making, attitudinal shifts, or prioritization of agendas that primarily occur within the individual. Extrinsic solutions are those that primarily operate outside an individual. While external factors (e.g., new information, cost) may result in an individual overcoming barriers, they still act on the individual and may lead to internal changes. Evidently, these categories are not mutually exclusive. For the purpose of the distinction between intrinsic and extrinsic,

solutions may pull somewhat from both categories, but the initial impetus for the solution either derives from within the individual (intrinsic) or outside the individual (extrinsic). General solutions are those that could lead to resolution of any barrier and are not framed with a particular barrier in mind. These solutions include perceived benefit of psychotherapy that exceeds the burden of the barrier, perceived worsening or seriousness of symptoms, perceived need of treatment, motivation to seek treatment, or recommendations or encouragement from others to seek psychotherapy. Specific solutions are those that target a particular barrier and are constructed in a way to lead to resolution of the core difficulty posed by a barrier.

For each barrier rated as a 1 (“not at all”) by participants on the PBPT, the corresponding barrier and solution set was omitted from the OBP. The intention behind this was to omit any barriers from the OBP that participants did not endorse any difficulty with, such that the solutions endorsed on the OBP applied only to barriers previously encountered by participants. Participants evaluated each barrier and solution set on the OBP for all barriers rated a 2 (“slightly difficult”) or higher on the PBPT. Therefore, analyses conducted in this study included scores of 2 or higher as indicative of a perceived barrier.

Participants were instructed to select the solution that they perceived as most helpful in overcoming each particular barrier to psychotherapy and therefore may or may not have utilized and/or benefitted from the solutions they endorsed. To mimic the structure of the PBPT and to compensate for the use of forced choice of solutions on the OBP, a free-text response was available for participants to list alternative solutions that they utilized to overcome barriers to psychotherapy (not listed on the OBP).

### *Scoring*



Depending on the hypothesis being tested, each solution was coded as either a “match” or a “mismatch,” according to different criteria. To test Hypothesis 3, intrinsic solutions were coded as matches for intrinsic barriers, while extrinsic solutions were coded as mismatches for intrinsic barriers. The sum total of matches were divided by the total number of intrinsic barriers endorsed, resulting in a match percent for each participant. For Hypothesis 4, extrinsic solutions were coded as matches for extrinsic barriers, while intrinsic solutions were coded as mismatches for extrinsic barriers. The sum total of matches were divided by the total number of extrinsic barriers endorsed, resulting in a match percent for each participant. For Hypothesis 5, Intrinsic-General solutions were coded as matches for intrinsic barriers, while the other three solution types (Intrinsic-Specific, Extrinsic-Specific, and Extrinsic-General) were coded as mismatches for intrinsic barriers. The sum total of matches were divided by the total number of intrinsic barriers endorsed, resulting in a match percent for each participant. For Hypothesis 6, Extrinsic-Specific solutions were coded as matches for extrinsic barriers endorsed, while the other three solution types (Extrinsic-General, Intrinsic-Specific, and Intrinsic-General) were coded as mismatches for extrinsic barriers. The sum total of matches were divided by the total number of extrinsic barriers endorsed, resulting in a match percent for each participant.

### *Measure Construction*

The OBP was constructed by the dissertation author through an iterative process and consultation with 8 experts from a variety of disciplines including clinical psychologists, social workers, and master’s level mental health clinicians. Having conducted an extensive review of the literature on barriers to psychotherapy for adults with depression, the items contained in this survey represent solutions that may enable adults with depression to overcome barriers. Given the lack of previous research on solutions or any pre-existing solution measures (to our

knowledge), these items were carefully designed in light of research on barriers to psychotherapy such that they were aimed to be representative of potential and likely solutions that patients with depression would utilize to overcome barriers. In order to evaluate the initial coding of solutions by the dissertation author, 10 blinded raters (including clinical psychologists, social workers, master's level mental health clinicians, and clinical psychology doctoral students) were provided a version of the measure without solution types provided and asked to code each of the solutions along the 4 solution types (Intrinsic-Specific, Intrinsic-General, Extrinsic-Specific, and Extrinsic-General). The ratings of the blinded raters were cross-referenced with initial coding of solutions to determine levels of agreement. An agreement level of 80% was set as the cutoff for an acceptable level of inter-rater agreement, given that definite conclusions can be made for values above 80% (Hallgren, 2012). Of the total 108 solutions on the OBP, 98 solutions (90.7%) displayed an agreement level with initial coding equal to or greater than 80% (i.e., at least 8 of the 10 blinded raters coded the solutions under the same solution type as the dissertation author). Ten of the 108 solutions (9.3%) displayed an agreement level with initial coding below 80%, ranging from 60-70% agreement. These ten items were re-worded to align more closely with definitions specified for each solution type, ultimately resulting in consensus between the dissertation author and mentor on the final iteration of revised items. Furthermore, these raters were asked to evaluate the content of the measure by providing specific feedback on item wording, general feedback on the measure, and suggestions of alternative solutions for each barrier, which were incorporated in the final iteration of the OBP.

### **Alternative Models Considered**

Initially, the OBP was constructed to include five solutions for each barrier, with no attempt to capture each of these four solution types. In this initial model, the intention was to

evaluate what solution was most frequently endorsed for each particular barrier. Given that this model would require analyses for each of the 27 barriers, it was decided that solution types would be utilized rather than examining solutions endorsed at the individual barrier level.

The second model incorporated use of two solutions types including specific solutions and general solutions. Each barrier presented three specific solutions and three general solutions, for a total of six items per barrier. While inclusion of six items allowed for a breadth and variety of solutions, this model would have only lent itself to producing claims regarding whether general or specific solutions were more frequently endorsed as resolving barriers, with no consideration of whether the solutions were intrinsic or extrinsic. This resulted in construction of the current four solution model.

Consideration was also given to administering separate questionnaires that would look at the motivation for treatment, as well as perceived benefit and need of treatment, rather than capturing these constructs within the OBP. However, consultation with the dissertation committee resulted in the decision to rule out use of these questionnaires due to the complications posed by participants retrospectively assessing their motivation, perceived benefit, and need after having initiated psychotherapy.

## **CHAPTER 5**

### **RESULTS**

#### **Overview of Data Collection and Statistical Analyses**

All data were collected using REDCap electronic data capture tools hosted at the University of Texas Southwestern Medical Center (CTSA NIH Grant UL1-RR024982; Harris et al., 2009a; Harris et al., 2009b). Data were exported from REDCap and subsequently managed with SPSS® version 25.0 (SPSS, Inc., Chicago, Illinois). Statistical assumptions were examined prior to planned analyses and data were checked for normality. Power analyses were conducted using G\*Power software version 3.1. For the one-sample Wilcoxon signed-rank tests, power was estimated to be .80 based on a sample size of 107 and effect size of .28. Initially, an effect size of .2 was targeted for these analyses, which would have required a sample size of 208. However, in consultation with dissertation committee, a sample size of 107 was considered sufficient for these analyses, and the achieved effect size of .28 (between a small and medium effect size of .2 and .5, respectively, as defined by Cohen, 1988) was determined to be adequate for interpretation of results.

#### **Descriptive Statistics**

Figure 1 displays the number of participants who completed each portion of the survey. A total of 212 participants opened the survey. Thirty-six participants who opened the survey entered no inclusion criteria and therefore were excluded due to missing data. Of the remaining 176 participants, 44 failed to meet inclusion criteria due to not reporting current enrollment in individual psychotherapy. Additionally, 7 of these 44 participants also had no stated history of past or current depressive illness. A sample size of 132 participants satisfied all four inclusion

criteria and proceeded to the rest of the survey. Demographic information for the total sample of 132 participants is provided in Table 2. Sample size varied for individual analyses depending on availability of particular data points required for specific analyses. A sample size of 107 completed the OBP and therefore comprised the analyzable sample for related analyses. In order to determine whether there were differences between the descriptive characteristics of the overall sample of 132 and the analyzable sample of 107, chi-square tests were conducted. No significant differences in descriptive characteristics were observed except as noted below.

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Insert Figure 1 here

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Insert Table 2 here

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The overall sample had a mean age of 36.9 (SD = 14.4) and was primarily comprised of women (% female = 69.5). Chi-square results indicated a higher proportion of men in those who completed the OBP compared to those who did not complete the OBP ( $\chi^2 (2) = 7.59, p = .022$ ). Eighty-two percent of the sample was Caucasian, 3.8% African American, and 14.4% other (i.e., Asian, more than one race). Eight percent of the sample was Hispanic, and 92% of the sample was Non-Hispanic. The mean years of education was 16.1 (SD = 2.5) and the majority of the sample (53.0%) was employed full-time. Twenty-one percent of the sample were university undergraduate or graduate students. Forty-eight percent of the sample reporting an annual household income less than \$50,000, and 52.3% of the sample reporting an annual household income greater than \$50,000.

Psychotherapy experience for the total sample is provided in Table 3. The majority of participants (64.3%) reported that their current psychotherapy experience was not their first psychotherapy experience. Chi-square results indicated a higher proportion of participants who reported no previous psychotherapy experience in those who completed the OBP compared to those who did not complete the OBP ( $\chi^2 (1) = 4.40, p = .036$ ). Ninety-six percent of the sample reportedly found psychotherapy to be helpful. Nearly half the sample (45.7%) endorsed once weekly psychotherapy visits, while approximately a third of the sample (31.3%) reported bimonthly (every other week) psychotherapy visits. Fifty-eight percent of the sample reported their current psychotherapy experience as less than a year in duration, while 41.9% endorsed one or more years of psychotherapy. Fifty percent of the sample reportedly attended between 1 and 20 sessions during their current psychotherapy experience, while 49.6% of the sample attended 20 or more sessions. A majority of the sample (54.3%) reportedly worked with multiple psychotherapists in the past (for 3 or more sessions).

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Insert Table 3 here

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Medication history, current use of nutritional supplements (for antidepressant effect), medical comorbidity, psychiatric comorbidity, and diagnostic information are presented in Table 4. Forty-nine percent of the sample ( $n=63$ ) reported current use of antidepressant medication(s). Twenty-four percent of the sample reported use of Bupropion, 22.2% Sertraline, 20.6% Escitalopram, and 30.2% reported use of “Other” antidepressant. Nineteen percent of the sample indicated concurrent use of multiple antidepressants. A large majority of participants using antidepressant medications (90.8%) indicated that the medications were helpful in relieving their

depressive symptoms. Fifty-four percent of the sample reported prior use of antidepressant medication. Nineteen percent of the sample reported current use of nutritional supplements for antidepressant effect, and 70.8% of these participants reported that the nutritional supplement was helpful in alleviating depressive symptoms.

Clinical information for the overall study sample is also provided in Table 4. A majority of the sample (61.3%) reported at least one comorbid neuropsychiatric condition, with the most frequently endorsed conditions being Anxiety Disorder (55.8%), Post-Traumatic Stress Disorder (10.9%), and Attention-Deficit/Hyperactivity Disorder (8.5%). Twenty-six percent of the sample reported multiple neuropsychiatric conditions. Thirty-six percent of the sample reported a comorbid medical condition, with 16.3% endorsing hypertension and 24.0% indicating “Other” Medical Condition. Sixty-nine percent of the sample indicated that they had previously received a formal diagnosis of major depressive disorder.

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Insert Table 4 here

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Overall depression severity and psychosocial functioning for the sample are provided in Table 5. PHQ-9 cutoff total scores of 5, 10, 15, and 20 were used to represent minimal or none, mild, moderate, moderately severe, and severe depression, respectively (Kroenke et al., 2001). Overall depression severity was mild with a mean PHQ-9 total score of 9.6 (SD = 5.6). Forty-four percent of participants reported moderate to severe depressive symptoms. WSAS cutoff total scores of 10 and 20 were used to represent significant psychosocial impairment and moderately severe to severe psychosocial impairment, respectively (Mundt et al., 2002). Overall level of psychosocial functioning indicated significant impairment with a mean WSAS score of

13.4 (SD = 9.0). Forty-three percent of the sample (n = 50) reported minimal or no impairment. Thirty-nine percent of participants (n = 45) indicated clinically significant psychosocial impairment, while 18.1% endorsed moderately severe to severe psychosocial impairment.

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Insert Table 5 here

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### **Aim One**

Aim 1 intended to characterize the endorsement of intrinsic and extrinsic barriers and solutions among a group of outpatients with depression currently receiving psychotherapy. The mean values of total number of barriers endorsed (barriers rated between 2 and 5), number of intrinsic barriers endorsed, number of extrinsic barriers endorsed, total PBPT score (sum total of likert scale ratings for all barriers divided by total number of barriers endorsed), intrinsic barrier total score (sum total of likert scale ratings for all intrinsic barriers divided by total number of intrinsic barriers endorsed), extrinsic barrier total score (sum total of likert scale ratings for all extrinsic barriers divided by total number of extrinsic barriers endorsed), and percentage of each of four solution types endorsed were calculated.

Endorsement of barriers and solutions for the total sample is presented in Table 6. Overall endorsement of barriers was relatively low, with a mean total PBPT score of 1.72 (SD = 0.51). Participants tended to rate extrinsic (mean total score 1.89 (SD = 0.55)) relative to intrinsic mean total score 1.66 (SD = 0.56)) barriers as more burdensome. The intrinsic barrier total score and extrinsic barrier total score variables were checked for normality by visual inspection of the shape of the distributions with histograms and examination of the distance between the means and medians, which revealed right-skewed distributions. Because of this, all subsequent analyses



utilizing those variables were non-parametric. A Wilcoxon signed-rank test was conducted to confirm that the mean extrinsic barrier total score was higher than the mean intrinsic barrier total score ( $Z = -4.8, p < 0.001$ ). Ninety-five percent of the sample endorsed at least one intrinsic barrier, while 98.2% of the sample endorsed at least one extrinsic barrier. Only 3.4% of the sample ( $n = 4$ ) endorsed zero barriers on the PBPT. In the overall sample, 30.2% of the solutions endorsed were Intrinsic-General, 35.8% were Intrinsic-Specific, 15.6% were Extrinsic-General, and 18.3% were Extrinsic-Specific.

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Insert Table 6 here

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The total PBPT score, intrinsic barrier total score, extrinsic barrier total score, and percentage of each of four solution types endorsed were calculated for groupings of participants based on severity of depressive symptoms using the PHQ-9 cutoff total scores of 5, 10, 15, and 20 to represent mild, moderate, moderately severe, and severe depression, respectively (Kroenke et al., 2001). Also, such scores were calculated for separate groupings based on psychosocial impairment with the WSAS cutoff total scores of 10 and 20 to represent significant functional impairment and moderately severe to severe functional impairment, respectively (Mundt et al., 2002). Barriers endorsed by depression severity and level of psychosocial functioning are presented in Table 7. Solutions endorsed by depression severity and level of psychosocial functioning are presented in Table 8.

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Insert Table 7 here

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Insert Table 8 here

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Total PBPT score, intrinsic barrier total score, and extrinsic barrier total score were calculated across demographic variables (age, race, ethnicity, level of education, income level, gender identity [participants were asked their gender identity, not sex, in order to be inclusive as possible and not create a dysphoric experience by asking both their gender identity and sex], age). These values are presented in Table 9.

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Insert Table 9 here

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### Aim 1.2

Aim 1.2 explored associations between demographic variables (including gender identity, age, education level, income, race, and ethnicity) and each of the four solutions endorsed on the OBP. These percentages are presented in Table 10. To satisfy this aim, a series of Kruskal-Wallis H tests were computed in order to examine whether there were significant differences in percentages of solution types endorsed within these demographic subgroupings. Two tests were used to examine the association between level of education and the mean percentage of Extrinsic-Specific solutions endorsed. Using the Bonferonni correction, the threshold for significance was .05 divided by 2 (0.025). Participants with 11-12 years of education endorsed a significantly greater mean percentage of Extrinsic-Specific solutions ( $M = 30.0$ ,  $SD = 12.8$ ) than participants with 12-16 years of education ( $M = 17.9$ ,  $SD = 20.0$ ) ( $H(1)=6.2$ ,  $p = 0.01$ ).

Furthermore, participants with 11-12 years of education endorsed a significantly greater mean percentage of Extrinsic-Specific solutions ( $M = 30.0$ ,  $SD = 12.8$ ) than participants with 17 or more years of education ( $M = 15.9$ ,  $SD = 17.6$ ) ( $H(1)=6.2$ ,  $p = 0.01$ ). Other demographic variables of interest were unassociated with percentages of endorsed solution types.

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Insert Table 10 here

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### **Hypothesis 1**

Hypothesis 1 stated that participants of an African American or Hispanic background relative to non-Hispanic Caucasian participants would endorse higher extrinsic barrier total scores as rated on the PBPT. Given the underrepresentation of participants of African American ( $n=5$ ) or Hispanic ( $n=11$ ) background in the sample, this study was unable to test this hypothesis with adequate power. However, a follow-up Kruskal-Wallis H test indicated that there was no difference in extrinsic barrier total scores between Hispanic and non-Hispanic participants ( $H(1)=1.7$ ,  $p = 0.188$ ).

### **Hypothesis 2**

Hypothesis 2 stated that participants of a lower income level relative to those with a higher income level would endorse higher extrinsic barrier total scores as rated on the PBPT. A Kruskal-Wallis H test was used to account for the non-normality of data distribution (i.e., extrinsic barrier total score) that violated the assumptions of linear regression (right-skewed). The results of this analysis were non-significant ( $H(5)= 3.6$ ,  $p = 0.603$ ), and indicated that income was unassociated with extrinsic barrier total score.

### **Hypothesis 3**

Hypothesis 3 stated that a higher percentage of intrinsic solutions relative to extrinsic solutions would be endorsed for intrinsic barriers. For each intrinsic barrier, the choice of an intrinsic solution was coded as a match, while an extrinsic solution was coded as a mismatch, which resulted in a match percent for each participant (number of matches divided by total number of intrinsic barriers endorsed). The median match rate of 0.46 was compared to 0.5 using a one-sample Wilcoxon signed-rank test. The finding was significant ( $W = 1,498.500$ ,  $p = 0.027$ ), but in the unexpected direction. In fact, a higher percentage of extrinsic solutions relative to intrinsic solutions were endorsed for intrinsic barriers. As each participant could endorse a different number of intrinsic barriers, a weighted T-test was subsequently conducted in order to weight cases by the number of intrinsic barriers endorsed by each participant. The weighted mean proportion ( $M = 0.46$ ,  $SD = 0.02$ ) was significantly lower than 0.50 ( $t = -2.61$ ,  $p = 0.01$ ). This reinforced the earlier finding that a lower percentage of intrinsic solutions relative to extrinsic solutions were endorsed for intrinsic barriers. The results do not suggest that a higher percentage of intrinsic solutions relative to extrinsic solutions were endorsed for intrinsic barriers.

#### **Hypothesis 4**

Hypothesis 4 stated that a higher percentage of extrinsic solutions relative to intrinsic solutions would be endorsed for extrinsic barriers. For each extrinsic barrier, the choice of an extrinsic solution was coded as a match, while an intrinsic solution was coded as a mismatch, which resulted in a match percent for each participant (number of matches divided by total number of extrinsic barriers endorsed). The median match rate of 0.40 was compared to 0.5 using a one-sample Wilcoxon signed-rank test. The finding was significant ( $W = 1,099.000$ ,  $p = 0.001$ ), but in the unexpected direction. A lower percentage of extrinsic solutions relative to

intrinsic solutions were endorsed for extrinsic barriers. Given that each participant could endorse a different number of extrinsic barriers, a weighted T-test was conducted as a follow-up analysis in order to weight cases by the number of extrinsic barriers endorsed by each participant. The weighted mean proportion ( $M = 0.44$ ,  $SD = 0.02$ ) was significantly lower than 0.50 ( $t = -2.55$ ,  $p = 0.01$ ). This reinforced the finding that a lower percentage of extrinsic solutions relative to intrinsic solutions were endorsed for extrinsic barriers. These findings do not indicate that a higher percentage of extrinsic solutions relative to intrinsic solutions were endorsed for extrinsic barriers.

### **Hypothesis 5**

Hypothesis 5 stated that a higher percentage of Intrinsic-General solutions as compared to the other three solution types would be endorsed for intrinsic barriers. For each intrinsic barrier, the choice of an Intrinsic-General solution was coded as a match, while the other three solutions were coded as a mismatch, which resulted in a match percent for each participant (number of matches divided by total number of intrinsic barriers endorsed). The median match rate of 0.20 was compared to 0.25 using a one-sample Wilcoxon signed-rank test. The finding was insignificant ( $W = 1,932.000$ ,  $p = 0.06$ ), which indicated that the null hypothesis (median match rate = 0.25) was retained. However, the lack of a statistically significant finding in the expected direction (the median match rate  $> .25$ ) indicated that Intrinsic-General solutions were not endorsed more frequently for intrinsic barriers as compared to the other three solution types (and not chosen at a rate higher than would be expected by chance). Given that each participant could endorse a different number of intrinsic barriers, a weighted T-test was subsequently conducted in order to weight cases by the number of intrinsic barriers endorsed by each participant. The weighted mean proportion ( $M = 0.23$ ,  $SD = 0.02$ ) did not differ significantly from 0.25 ( $t = -1.15$ ,

$p = 0.25$ ). This reinforced the lack of a significant finding of the Wilcoxon signed-rank test, and indicated that Intrinsic-General solutions were not endorsed more frequently for intrinsic barriers than the other three solution types. This hypothesis was unsupported.

### **Hypothesis 6**

Hypothesis 6 stated that a higher percentage of Extrinsic-Specific solutions as compared to the other three solution types would be endorsed for extrinsic barriers. For each extrinsic barrier, the choice of an Extrinsic-Specific solution was coded as a match, while the other three solutions were coded as a mismatch, which resulted in a match percent for each participant (number of matches divided by total number of extrinsic barriers endorsed). The median match rate of 0.20 was compared to 0.25 using a one-sample Wilcoxon signed-rank test. The finding was significant ( $W = 1,881.000$ ,  $p = 0.05$ ), but in the unexpected direction. This indicated that Extrinsic-Specific solutions were endorsed less frequently for extrinsic barriers as compared to the other three solution types. In fact, Extrinsic-Specific solutions were endorsed less frequently for extrinsic barriers than would be expected by chance. Given that each participant could endorse a different number of extrinsic barriers, a weighted T-test was subsequently conducted in order to weight cases by the number of extrinsic barriers endorsed by each participant. The weighted mean proportion ( $M = 0.22$ ,  $SD = 0.02$ ) did not significantly differ from 0.25 ( $t = -1.25$ ,  $p = 0.21$ ). The results of this analysis differ from that of the Wilcoxon signed-rank test and indicated that Extrinsic-Specific solutions are not endorsed more or less frequently than a rate of 0.25. However, given that the Wilcoxon signed-rank test relies on less statistical assumptions than the T-test, coupled with the fact that the distribution of percentages of Extrinsic-Specific solutions endorsed was non-normal, the Wilcoxon signed-rank test is a more appropriate analysis to test this hypothesis. Regardless, this hypothesis was unsupported.

### **Hypothesis 7**

Hypothesis 7 stated that depression symptom severity as rated on the PHQ-9 would be positively associated with the intrinsic barrier total score as rated on the PBPT. Given the lack of normality in the distribution of intrinsic barrier total scores, a Spearman's rank correlation coefficient was calculated to examine the association between the PHQ-9 total score and intrinsic barrier total score. A statistically significant correlation ( $r_s = .383$ , 95% CI [0.21, 0.53],  $p < 0.001$ ) was found between the PHQ-9 total score and intrinsic barrier total score, and indicated that this hypothesis was supported (see Figure 2 for a scatterplot of this relationship). The Spearman's rank correlation coefficients and corresponding p-values for Hypotheses 7-10 are presented in Table 11. As a post-hoc evaluation after excluding participants with previous psychotherapy experience, the correlation between the PHQ-9 and intrinsic barrier total scores was greater ( $r_s = .511$ ,  $p < 0.001$ ), which indicated that previous psychotherapy experience did not reduce the strength of this relationship.

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Insert Table 11 here

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### **Hypothesis 8**

Hypothesis 8 stated that depression symptom severity as rated on the PHQ-9 would be positively associated with the extrinsic barrier total score as rated on the PBPT. A Spearman's rank correlation coefficient was calculated to examine the association between the PHQ-9 total score and extrinsic barrier total score. A statistically significant correlation ( $r_s = .204$ , 95% CI [0.02, 0.37],  $p = .03$ ) was found between the PHQ-9 total score and extrinsic barrier total score (see Figure 3 for a scatterplot of this relationship). This finding suggested that the hypothesis was

supported. As a post-hoc evaluation after excluding participants with previous psychotherapy experience (i.e., those who were not currently reporting their first psychotherapy experience), the correlation between the PHQ-9 and extrinsic barrier total scores was larger ( $r_s = .35$ ,  $p = 0.02$ ). However, there was no significant association between psychotherapy experience and extrinsic barrier total score ( $r_s = -0.09$ ,  $p = 0.32$ ).

### **Hypothesis 9**

Hypothesis 9 stated that severity of psychosocial impairment as rated on the WSAS would be positively associated with the intrinsic barrier total score as rated on the PBPT. A Spearman's rank correlation coefficient was calculated to examine the association between the WSAS total score and the intrinsic barrier total score. A statistically significant correlation ( $r_s = .466$ , 95% CI [0.30, 0.60],  $p < 0.001$ ) was found between the WSAS total score and intrinsic barrier total score (see Figure 4 for a scatterplot of this relationship). Therefore, this hypothesis was supported.

### **Hypothesis 10**

Hypothesis 10 stated that severity of psychosocial impairment as rated on the WSAS would be positively associated with the extrinsic barrier total score as rated on the PBPT. A Spearman's rank correlation coefficient was calculated to examine the association between the WSAS total score and the extrinsic barrier total score. A statistically significant correlation ( $r_s = .301$ , 95% CI [0.12, 0.46],  $p = 0.001$ ) was found between the WSAS total score and extrinsic barrier total score (see Figure 5 for a scatterplot of this relationship). This hypothesis was supported.

### **Endorsement of Alternative Barriers**



At the end of the PBPT, there was a free-text response available for participants to list any alternative barriers to psychotherapy that they encountered (not listed on the PBPT). The full list of free-text responses on the PBPT is presented in Appendix C. Several alternative barriers were cited by multiple participants, including social stigma, lack of perceived need for treatment, and not knowing where to start in psychotherapy.

#### Endorsement of Alternative Solutions

To mimic the structure of the PBPT and to compensate for the use of forced choice of solutions on the OBP, a free-text response was available for participants to list alternative solutions that they utilized to overcome barriers to psychotherapy (not listed on the OBP). The full list of free-text responses on the OBP is presented in Appendix D. An alternative solution cited by several participants involved psychotherapists offering evening hours, which enabled participants to attend psychotherapy despite encountering the barrier of scheduling and/or work conflicts. No other solution was reported by multiple participants.

#### Summary of Results

In summary, the study results indicated that a lower percentage of intrinsic solutions relative to extrinsic solutions were endorsed for intrinsic barriers. Furthermore, a lower percentage of extrinsic solutions relative to intrinsic solutions were endorsed for extrinsic barriers. Extrinsic-Specific solutions were endorsed less frequently for extrinsic barriers as compared to the other three solution types. Statistically significant correlations were found between the PHQ-9 total score and both intrinsic and extrinsic barrier total scores, as well as between the WSAS total score and both intrinsic and intrinsic and extrinsic barrier total scores.

## CHAPTER 6

### DISCUSSION

The primary goals of the current study were to assess barriers to psychotherapy endorsed by adults with depression currently receiving psychotherapy, and to design and implement a new questionnaire (*Overcoming Barriers to Psychotherapy*) in order to examine what solutions adults with depression perceive as helpful in overcoming barriers to initiating psychotherapy. Five primary aims were established to achieve these goals. The five aims were to (a) characterize the endorsement of intrinsic and extrinsic barriers and solutions, (b) determine the impact of demographic variables on barriers endorsed, (c) determine what types of solutions are most frequently endorsed to overcome barriers, (d) examine the impact of depression symptom severity on barriers to initiating psychotherapy, and (e) determine the impact of psychosocial functioning on barriers to initiating psychotherapy.

#### **Endorsement of Barriers and Solutions**

Overall, endorsement of barriers in the study sample was relatively low, considering that the mean total PBPT score of the sample was 1.72 (SD=0.51) and a score of 2 indicates that a barrier made it “slightly difficult” to attend weekly psychotherapy. However, this value was comparable to the mean total PBPT score reported in the Mohr et al. (2010) study (M=1.62, SD=0.58) (Mohr et al., 2010). Their study, unlike the present one, recruited some participants with no history of depression, which may have contributed to the low score in their sample. The low score in the present study sample may have been influenced by the considerable amount of psychotherapy experience in the sample (64.3% endorsed previous psychotherapy experience). Participants who endorsed previous psychotherapy experience may have learned how to resolve

or manage intrinsic and extrinsic barriers, which ultimately could have resulted in a low mean total PBPT score.

A Wilcoxon signed-rank test revealed that participants rated extrinsic barriers as more burdensome than intrinsic barriers. This finding is consistent with several studies that have indicated that adults with depression more frequently endorse extrinsic relative to intrinsic barriers and perceive them as more burdensome (Alvidrez & Azovar, 1999; Mohr et al., 2006; Mohr et al., 2010; Pepin et al., 2009; Simon et al., 2004). Individuals may have rated extrinsic barriers rather than intrinsic barriers as more burdensome given that the study survey required participants to retrospectively evaluate previously encountered or utilized barriers and solutions. The process of attending psychotherapy may address some of the intrinsic barriers patients endorse (e.g., improve motivation), as participants may reflect on the intrinsic barriers they encountered in the past with a current level of emotional resistance (difficulty posed by intrinsic barriers) that has lessened with exposure to treatment. While the same case could be made for extrinsic barriers, patients' reporting of extrinsic barriers may be less influenced by this process given that reflecting on the barriers of cost or transportation may tap into more tangible memories than memories that involve concerns about being judged by a psychotherapist. This type of influence may be due to consistency bias, which is the tendency for individuals to overemphasize consistency in memories of close relationships (e.g., between client and psychotherapist) (Karney & Coombs, 2000). Furthermore, considering that a majority of the sample (53.0%) were employed full-time and 21.2% of the sample were university undergraduate or graduate students, it follows that many participants would report difficulty with extrinsic barriers that included daily responsibilities (e.g., working around school responsibilities) and difficulties getting time off work.

In the overall sample, 30.2% of the solutions endorsed were Intrinsic-General, 35.8% were Intrinsic-Specific, 15.6% were Extrinsic-General, and 18.3% were Extrinsic-Specific. To our knowledge, this represents the first attempt to characterize the types of solutions used by adults with depression currently receiving psychotherapy to overcome barriers to initiating psychotherapy. This information is critical towards improving the classification of solutions as well as providing insight into how best address and resolve these burdensome barriers. Intrinsic solutions were selected for 65.8% of the barriers endorsed over the total sample, roughly twice as often as the selection of extrinsic solutions (33.9%). More specifically, Intrinsic-Specific solutions were the most frequently endorsed and were selected over twice as often as Extrinsic-General solutions, which were the least frequently endorsed solution type.

There are a number of potential explanations for this pattern of endorsed solution types. As previously mentioned, solutions that enable individuals to overcome barriers may be influenced by both internal and external factors. In a sense, the distinction between intrinsic and extrinsic solution types is somewhat arbitrary given that an extrinsic solution (e.g., referral from a physician) may lead to an internal change to attend psychotherapy. As another example, an individual perceiving a need for psychotherapy (intrinsic solution) may ask a family member to assist with daily responsibilities (extrinsic solution) to overcome this barrier. Therefore, internal and external factors may interact to produce a solution to any particular barrier. When considering the barriers that they have previously encountered, participants in this study sample may have been focused on their intrinsic sense of agency to overcome barriers and initiate psychotherapy, rather than reflecting on the extrinsic factors that influenced them along the way. Such focus could have resulted in the frequent selection of intrinsic solutions. Psychotherapy provides a variety of benefits as a treatment for depression including improved psychosocial

functioning, increased positive representations of interpersonal relationships (e.g., decrease in negative expectations in relationships), and development of new problem-solving strategies (Scott et al., 2000; Høglend et al., 2000; Zilcha-Mano et al., 2016). Notably, a key aim of most evidence-based psychotherapeutic interventions is to increase a client's sense of agency (Williams & Levitt, 2007). When reflecting on the barriers encountered and overcome, participants—who had potentially experienced a subjective increase in sense of agency throughout the course of psychotherapy—may have reflected that while external factors (e.g., friends, family) pushed them towards psychotherapy, it was their intrinsic motivation and desire for symptomatic relief that were most influential in helping them to overcome barriers.

Another explanation for this endorsement pattern of solutions types relates to key findings in the literature on barriers to psychotherapy. Two of the most frequently endorsed and burdensome barriers are lack of perceived need for antidepressant treatment and low perceived seriousness of depressive symptoms (Blumenthal & Endicott, 1996; Mojtabai et al., 2011). Intrinsic-General solutions were worded with these two barriers in mind and incorporated the understanding that two of the most critical solutions to these barriers might constitute an internal shift towards individuals beginning to perceive a need for antidepressant treatment or taking depressive symptoms more seriously (e.g., Intrinsic-General solution from the OBP s: “My depression was getting worse, so I felt motivated to attend counseling anyway”). Additionally, in consultation with professional colleagues (i.e., clinical psychologists, social workers, master's level mental health clinicians), it was reflected that psychotherapy clients often do not resolve the core difficulty posed by the particular barrier itself (e.g., cost), but rather prioritize treatment and allocate their internal/external resources in such a way that they are able to overcome the barrier. In a similar vein, several of the Intrinsic-Specific solutions were phrased such that the

solution consisted of the individual prioritizing treatment or finding a way to cope with the barrier rather than directly resolving it by practical means (e.g., Intrinsic-Specific solution from the OBP : “I realized that [psychotherapy] was worth the cost because my depression was impacting my ability to work and provide for myself or my family member”).

Finally, the phrasing of the individual solutions and the conceptual grouping of the solutions into four subtypes could have influenced the endorsement of solutions. While input from professional colleagues was integrated into the wording and development of the exact solutions, no patient focus groups were not utilized to develop the questionnaire (*Overcoming Barriers to Psychotherapy*), which could have limited the wording and phraseology. From a measure construction standpoint, it would have been useful to obtain input and perspectives of patients, as such direct patient information could have enriched the understanding of what solutions are most frequently utilized by adults with depression.

The intent of aim 1.2 was to explore associations between demographic variables (including gender identity [participants were asked their gender identity, not sex, in order to be inclusive as possible and not create a dysphoric experience by asking both their gender identity and sex], age, education level, income, race, and ethnicity) and solutions endorsed on the OBP. The study results indicated that education level was the only statistically significant demographic variable that was significantly associated with the percentages of solution types. Participants with 11-12 relative to 12-16 years of education endorsed a significantly greater mean percentage of Extrinsic-Specific solutions. Furthermore, participants with 11-12 relative to 17 years or more of education endorsed a significantly greater mean percentage of Extrinsic-Specific solutions. This suggested that participants with lower relative to higher education levels may be more likely to resolve barriers through practical means (e.g., Extrinsic-Specific solution from the OBP: “I

asked for time off work and/or told my boss/supervisor that I needed to attend counseling”) or conversations with others about specific difficulties posed by intrinsic barriers (e.g., Extrinsic-Specific solution from the OBP: “I spoke with someone who had a positive counseling experience, and it opened my mind to counseling being helpful”). Given that only 11 participants were in the 11-12 years of education group, these significant findings may not be representative of the solutions most frequently endorsed by individuals in this education group and should be interpreted with caution. Also, this significant finding could be due to a statistical type 1 error related to a high number of statistical analyses that were conducted to address this aim. Therefore, these significant findings should be interpreted with caution.

Overall, it appears that demographic variables (except for education level) were insignificantly associated with solution types endorsed on the OBP. While this may indicate that the same trends of solution types were endorsed by adults with depression regardless of their demographic characteristics, this pattern may or may not hold true for a sample greater diversity and a wider range of educational achievement, including a larger portion of participants with lower levels of education achievement.

### **Impact of Demographic Variables on Barriers Endorsed**

Aim 2 endeavored to determine the impact of demographic variables (income, race, and ethnicity) on barriers as rated on the PBPT. Hypothesis 1, which stated that participants of an African American or Hispanic background relative to non-Hispanic Caucasian participants would endorse higher extrinsic barrier total scores as rated on the PBPT, was untestable due to inadequate power given the considerable lack of racial (African American=3.8% (N=5), Caucasian=81.8% (N=108)) and ethnic diversity (Hispanic=8.3% (N=11), Non-Hispanic=91.7% (N=121)) in the study sample. Previous research indicated that African American and Latino/a

relative to non-Hispanic Caucasian individuals reported that practical barriers to psychotherapy were more burdensome, particularly with respect to difficulty with finding counselors and transportation (Mohr et al., 2006; Mohr et al., 2010). Future studies that include greater racially and ethnically diverse samples are needed to inform the impact of race and ethnicity on extrinsic barriers endorsed on the PBPT.

Hypothesis 2, which stated that participants with a lower income level relative to those with a higher income level would endorse higher extrinsic barrier total scores as rated on the PBPT, was unsupported. Adults with depression and low-income frequently report extrinsic barriers including financial constraints, transportation issues, difficulties obtaining child care, scheduling conflicts with work, limited clinic hours, and inconvenient clinic locations (Krupnick & Melnikoff, 2012). While low-income has previously been linked with greater endorsement of extrinsic barriers, it remained unclear whether this would hold true for endorsement of barriers on the PBPT in particular since the study by Mohr et al. (2010) included no measure of income. A negative finding suggested that there was no association between level of income and endorsement of extrinsic barriers in this study sample. There may in fact be no true relationship between income and endorsement of extrinsic barriers. While individuals in low-income groups tend to report greater financial constraints and transportation barriers relative to those of higher income groups (Mohr et al., 2006; Krupnick & Melnikoff, 2012), this finding indicated that individuals of higher income groups reported a similar level of difficulty with extrinsic barriers overall. Individuals of higher income groups may have significant time constraints or conflicting responsibilities due to demanding employment duties or raising families that contribute to the endorsement of extrinsic barriers. To our knowledge, this represented the first finding in the literature on barriers to psychotherapy that indicated similar levels of difficulty with extrinsic



barriers among individuals of higher and lower income groups. However, the particular types of extrinsic barriers endorsed as most burdensome may differ between the two income level groups. Further research is warranted to investigate the impact of level of income on endorsement of extrinsic barriers.

The lack of a significant finding with income level not generalize to all samples with lower socioeconomic status due to other demographic factors. For instance, the high level of education of the sample may have mitigated the impact of income on extrinsic barrier total score. The overall level of education of this sample was high ( $M=16.1$  years,  $SD=2.5$  years), and even the lowest income group (Less than \$20,000) had a high level of education ( $M=14.9$  years,  $SD=1.9$  years). The level of education has often been cited as a strong predictor of mental health utilization, including initiation of psychotherapy (Donisi et al., 2013; Bijl & Ravelli, 2000; Parslow & Jorm, 2000). Pepin et al. (2009) found that higher education levels were associated with fewer perceived barriers to psychotherapy, although the effect sizes were small. Education might therefore be considered a protective factor against barriers to psychotherapy given that higher education is associated with increased access to psychiatric treatment (Steele et al., 2007) and better practical problem-solving skills (Haught, Hill, Nardi, & Wallis, 2000).

Intersecting sociodemographic factors (e.g., race, ethnicity, income, education) impact perceived barriers to psychotherapy and how adults with depression navigate these barriers (Alang, 2015), and as mentioned previously, racial and ethnic diversity was low in this study. Considering that education predicts access to psychotherapy and has been associated with fewer perceived barriers to psychotherapy, the findings in the present study may not generalize to a sample with an overall lower level of education. To properly evaluate the impact of income on extrinsic barrier total score, it would be important to investigate a sample with a wider range of

education levels as well as greater diversity of other relevant demographic factors. While the finding was insignificant, it is worth noting that the mean extrinsic barrier total score ( $M=2.06$ ,  $SD=0.64$ ) was highest for the lowest income group (less than \$20,000). Overall, further research is needed to elucidate the relationship between income level and endorsement of extrinsic barriers.

### **Relationship between Endorsed Barrier and Solution Type**

To date, the relationship between barriers to the initiation of psychotherapy and solutions to these barriers has received limited attention. There is a critical need to examine what types of solutions are most frequently endorsed by adults with depression as resolving barriers to initiating psychotherapy. As such, Aim 3 endeavored to determine what types of solutions are most frequently reported by adults with depression as helpful in overcoming barriers to psychotherapy. The new study questionnaire—*Overcoming Barriers to Psychotherapy*—was designed by the dissertation author in consultation with 8 professional colleagues (e.g., clinical psychologists, social workers, and master's level mental health clinicians) as a companion measure to the PBPT with the goal of directly examining the solutions that adults with depression endorse as helpful in overcoming barriers to psychotherapy.

Hypothesis 3, which stated that a higher percentage of intrinsic solutions relative to extrinsic solutions would be endorsed for intrinsic barriers, was unsupported by the findings. While the finding was significant, it was in the unexpected direction. In fact, a higher percentage of extrinsic relative to intrinsic solutions were endorsed for intrinsic barriers. This represents a critical first step towards the understanding of how adults with depression overcome intrinsic barriers to psychotherapy.

At first glance, this result might seem somewhat counterintuitive given that, as we hypothesized, one might expect intrinsic solutions to be endorsed more frequently than extrinsic solutions for intrinsic barriers. One possible explanation for this result is that the resolution of barriers to psychotherapy relies on specific strategies that enables one to address the core difficulty posed by that barrier type (whether intrinsic or extrinsic), and thus may require the individual to utilize solutions of the opposing type (extrinsic) as compared to that of the barrier encountered (intrinsic). In other words, individuals who encounter difficulty with intrinsic barriers may need to rely on extrinsic solutions given that the difficulty is intrinsic in nature. In this way, individuals utilize extrinsic solutions that allow them to bypass the difficulty they are encountering intrinsically. For example, individuals endorsing difficulty with the barrier of lack of motivation (intrinsic) may be less likely to utilize an intrinsic solution that would require them to encourage themselves to act on a perceived need for treatment or reprioritize psychotherapy in order to overcome this barrier. However, they may respond better to an extrinsic solution, such as encouragement from a friend or family member, enabling them to bypass a lack of internal motivation and rely on an extrinsic factor to overcome the barrier. This finding suggested that adults with depression currently receiving psychotherapy endorse extrinsic solutions more often than intrinsic solutions in order to resolve intrinsic barriers to the initiation of psychotherapy.

Hypothesis 4, which stated that a higher percentage of extrinsic solutions relative to intrinsic solutions would be endorsed for extrinsic barriers, was unsupported by the findings. While the finding was statistically significant, it was in the unexpected direction. A higher percentage of intrinsic relative to extrinsic solutions were endorsed for extrinsic barriers. Similar to the findings above, this result may indicate that barriers are more frequently resolved by solutions of different types (i.e., extrinsic barriers resolved by intrinsic solutions). This finding

lends further credence to the explanation of the results for Hypothesis 3. In this case, individuals encountering difficulty with extrinsic barriers may need to rely on intrinsic solutions given that the difficulty is extrinsic in nature, thereby utilizing intrinsic solutions that allow them to bypass the difficulty they are encountering extrinsically. For example, individuals endorsing difficulty with the barrier of getting time off from work (extrinsic) may be less likely to utilize an extrinsic solution that would require them to directly address the conflict by asking a boss/supervisor for time off. However, they may benefit from an intrinsic solution, such as realizing that their depression was impacting their ability to work and provide for themselves or family members, enabling them to reprioritize psychotherapy and rely on an intrinsic factor to overcome the barrier. This finding suggested that adults with depression currently receiving psychotherapy endorse intrinsic solutions more often than extrinsic solutions in order to resolve extrinsic barriers to the initiation of psychotherapy. In terms of clinical considerations, this knowledge might be utilized to inform clinicians in guiding their patients towards resolution of endorsed barriers (after initiation of psychotherapy). This might result in increased attendance and engagement in psychotherapy, which are linked to improved antidepressant treatment outcomes (Holdsworth, Bowen, Brown, & Howat, 2014).

Hypothesis 5, which stated that a higher percentage of Intrinsic-General solutions as compared to the other three solution types would be endorsed for intrinsic barriers, was unsupported by the findings. The finding was insignificant and therefore the null hypothesis was retained. In other words, Intrinsic-General solutions were endorsed at a rate that would be expected by chance. The lack of a statistically significant finding in the expected direction indicated that Intrinsic-General solutions were unendorsed more frequently than the other three solution types for intrinsic barriers. Initially, this hypothesis was framed with the understanding

that the lack of perceived need for antidepressant treatment and low perceived seriousness of depressive symptoms are two of the most frequently endorsed barriers to psychotherapy (Blumenthal & Endicott, 1996; Mojtabai et al., 2011). Therefore, it was hypothesized that Intrinsic-General solutions, which consisted of solutions such as perceived need for treatment and worsening of symptoms, would be endorsed more frequently for intrinsic barriers than the other three solution types. As noted above in the discussion of Hypothesis 3, it appeared that extrinsic solutions were endorsed more frequently than intrinsic solutions for intrinsic barriers. A positive finding for Hypothesis 5 would have indicated that Intrinsic-General solutions (i.e., perceived worsening of symptoms, perceived need for treatment, motivation for treatment) resolve intrinsic barriers more frequently than other solution types. Regardless, it is noteworthy that in the overall sample, Intrinsic-General solutions were selected for 30.2% of all endorsed barriers. Therefore, these solutions may play a critical role in reducing barriers to psychotherapy for adults with depression.

Hypothesis 6, which stated that a higher percentage of Extrinsic-Specific solutions as compared to the other three solution types will be endorsed for extrinsic barriers, was unsupported by the findings. While the finding was statistically significant, it was in the unexpected direction. This finding indicated that Extrinsic-Specific solutions were less frequently endorsed for extrinsic barriers as compared to the other three solution types. In fact, Extrinsic-Specific solutions were endorsed significantly less frequently for extrinsic barriers than would be expected by chance. Initially, this hypothesis was framed with the expectation that Extrinsic-Specific solutions, which consisted of practical solutions aimed towards targeted resolution of specific difficulties posed by extrinsic barriers, would be more frequently endorsed than the other three solution types for extrinsic barriers. For example, the barrier of difficulties

with transportation was paired with the following Extrinsic-Specific solution from the OBP: “I used public transportation, paratransit, a cab, or other means of transportation (other than driving self) to attend counseling.” One possible explanation of this result is that the resolution of extrinsic barriers requires solutions that bypass the practical difficulty of the particular barrier, as explained in the previous discussion of Hypothesis 4. Alternatively, Extrinsic-Specific solutions may have been worded throughout the OBP such that they were unrepresentative of the practical solutions adults with depression would frequently utilize to overcome particular extrinsic barriers. In the overall sample, Extrinsic-Specific solutions were selected at the second lowest rate of the four solutions types for a total of 18.3% of all barriers (both intrinsic and extrinsic) endorsed. As previously noted, intrinsic solutions were endorsed more frequently than extrinsic solutions for extrinsic barriers. Again, this may indicate that practical barriers are often resolved through individuals reprioritizing psychotherapy or reframing their motivation for treatment given a sense of need or urgency.

### **Impact of Depression Symptom Severity on Endorsed Barriers**

Aim 4 endeavored to examine the relationship between depression symptom severity and barriers (intrinsic and extrinsic) to initiating psychotherapy. Hypothesis 7, which stated that depression symptom severity as rated on the PHQ-9 would be positively associated with the intrinsic barrier total score as rated on the PBPT, was supported by the findings.

To assist with clarification of clinical interpretation of the following correlations, the strength of the significant correlation coefficients was designated as small ( $<.29$ ), medium ( $.30-.49$ ), and large ( $>.50$ ) (Hemphill, 2003). A significant correlation of medium strength was found between the PHQ-9 and intrinsic barrier total scores. This is consistent with previous findings that depression symptom severity (as measured by the PHQ-9 total score) is associated with

increased endorsement of emotional (intrinsic) barriers (Mohr et al., 2006). Furthermore, Mohr et al. (2010) reported that after controlling for demographic variables, the PHQ-9 total score predicted the total PBPT score. With respect to intrinsic barriers in particular, Mohr et al. (2010) did not distinguish between intrinsic and extrinsic barriers (and therefore did not use intrinsic and extrinsic barrier total scores), but that study reported that the PHQ-9 total score predicted barriers related to negative evaluation of therapy, lack of motivation, emotional concerns, and negative stigma (Mohr et al., 2010). The finding of a significant correlation between the PHQ-9 and intrinsic barrier total scores further confirmed the association between depression severity and endorsement of intrinsic barriers, as well as affirmed the decision to use a summary score for intrinsic barriers on the PBPT. This association may be fueled by frequently occurring clinical features of depression including avoidance, social withdrawal, and amotivation.

Negative expectations about the future (e.g., pessimistic thoughts, hopelessness) that are common in depression may contribute to several intrinsic barriers on the PBPT including concerns about being judged by a counselor, not thinking a counselor would care, and not expecting counseling to be helpful. Also, decreased energy, a core depressive symptom in the DSM-5, is directly or indirectly captured by several of the intrinsic barriers listed on the PBPT. This finding may generalize to populations of outpatients with MDD currently receiving psychotherapy. Previous findings concerning the relationship between depression symptom severity and endorsement of intrinsic barriers were limited to populations of primary care patients with and without depression (Mohr et al., 2006; Mohr et al., 2010). Therefore, this result substantiated previous findings and suggested that depression is linked to greater endorsement of intrinsic barriers in a population of outpatients with depression.

The considerable amount of psychotherapy experience in the sample (64.3% endorsed previous psychotherapy experience) had little to no influence on the endorsement of intrinsic solutions. It might be expected that individuals who have encountered intrinsic barriers to psychotherapy in the past would report less difficulty with intrinsic barriers (relative to those with no previous psychotherapy experience) given exposure to psychotherapy or development of strategies to resolve or mitigate the impact of intrinsic barriers. However, individuals appear to experience a similar degree of difficulty with intrinsic barriers regardless of psychotherapy experience. As a post-hoc evaluation after excluding participants with no previous psychotherapy experience, the correlation between the PHQ-9 and intrinsic barrier total scores was greater, which indicated that previous psychotherapy experience did not reduce the strength of this relationship.

Hypothesis 8, which stated that depression symptom severity as rated on the PHQ-9 would be positively associated with the extrinsic barrier total score as rated on the PBPT, was narrowly supported by the findings. While a statistically significant correlation was found between the PHQ-9 and extrinsic barrier total scores, it was small and therefore may be clinically unmeaningful. Depression symptom severity has been found to predict greater endorsement of several extrinsic barriers including financial cost and transportation difficulties (Mohr et al., 2006). Additionally, depression has been cited as a predictor of extrinsic barriers including financial cost, lack of available services, and participation restriction on the PBPT, after controlling for demographic variables (Mohr et al., 2010). The finding of this study substantiated previous findings and suggested that depression is linked to greater endorsement of extrinsic barriers (although possibly a subtle increase), and potentially strengthens the case for using extrinsic barrier total score as a summary score on the PBPT. A majority of the study sample



(64.3%) endorsed previous psychotherapy experience (i.e., indicated that their current psychotherapy experience was not their first one). The small association between PHQ-9 and extrinsic barrier total scores may be due to the relative dearth of prior psychotherapy experience reported by the sample (41.9% endorsed one or more years of psychotherapy). In other words, individuals with greater psychotherapy experience may become increasingly familiar with the time, resources, and practical considerations necessary to deal with extrinsic barriers.

As a post-hoc evaluation after excluding participants with previous psychotherapy experience (i.e., those who were not currently reporting their first psychotherapy experience), the correlation between the PHQ-9 and extrinsic barrier total scores was indeed larger ( $r_s = .35$ ,  $p = 0.02$ ). However, there was no significant association between psychotherapy experience and extrinsic barrier total score ( $r_s = -0.09$ ,  $p = 0.32$ ). It is possible that a stronger association between depression symptom severity and the extrinsic barrier total score would be observed in a more ethnically, racially, and socioeconomically diverse sample, particularly given that such individuals tend to report greater difficulty with extrinsic barriers (Alegría et al., 2008; Mohr et al., 2006; Mohr et al., 2010; Motjtabai, 2005).

### **Impact of Psychosocial Functioning on Endorsed Barriers**

Aim 5 endeavored to determine the impact of psychosocial functioning on barriers (intrinsic and extrinsic) to initiating psychotherapy. To our knowledge, this represented the first attempt to investigate the relationship between psychosocial functioning and endorsement of barriers to psychotherapy. Psychosocial functioning was targeted as an outcome variable for a number of reasons. As mentioned previously, psychosocial impairments are prevalent in patients with current and remitted depression, pose a significant burden, and may be effectively targeted and resolved in the context of psychotherapy (Lam et al., 2014; Scott et al., 2000). Hypothesis 9,

which stated that severity of psychosocial impairment as rated on the WSAS would be positively associated with the intrinsic barrier total score as rated on the PBPT, was supported by the findings. A significant correlation of medium strength was observed between the WSAS and intrinsic barrier total scores, which was the largest association of the study analyses. This finding might indicate that adults with depression tend to report greater difficulty with intrinsic barriers to psychotherapy with increased severity of psychosocial impairment. One of the items on the WSAS evaluates the degree of impairment in an individual's ability to form and maintain close relationships with others. Individuals who reported difficulty in this area may have rated intrinsic barriers as more burdensome due to either negative expectations about the helpfulness of psychotherapy or about their personal ability to connect with a psychotherapist. An individual experiencing difficulties in forming close relationships may not expect psychotherapy to be a helpful form of treatment, given general negative expectations about their own interpersonal capacities, or more specifically questioning their ability to form a meaningful connection with a psychotherapist. It is widely considered that a positive therapeutic working alliance is critical to the success of psychotherapy (Horvath, Del Re, Flückiger, & Symonds, 2011; Lambert & Barley, 2001). Individuals with significant psychosocial impairment may struggle to form a positive working alliance, have a negative or unhelpful psychotherapy experience, and therefore expect psychotherapy to be less helpful in the future.

Other areas of psychosocial functioning assessed by the WSAS include work impairment, home management, social leisure, and private leisure. Individuals reporting difficulties in these areas may perceive intrinsic barriers as more burdensome due to the influence of impairments in various areas of life. That is, individuals struggling in multiple domains of psychosocial functioning may tend to perceive intrinsic barriers as more burdensome and over estimate that

these barriers require more time, energy, or resources to overcome than they have available to invest.

Causality of this relationship was unable to be established given that the study utilized a cross-sectional design. The presence of several intrinsic barriers to psychotherapy (e.g., lack of motivation, difficulties with physical symptoms) could directly or indirectly contribute to a variety of psychosocial impairments. Regardless, this finding represents a critical step towards understanding the relationship between psychosocial functioning and endorsement of intrinsic barriers.

Hypothesis 10, which stated that severity of psychosocial impairment as rated on the WSAS would be positively associated with the extrinsic barrier total score as rated on the PBPT, was supported by the study findings. A significant medium strength correlation was found between the WSAS and extrinsic barrier total scores. This finding could indicate that adults with depression tend to report greater difficulty with extrinsic barriers to psychotherapy as severity of psychosocial impairment increases, although causality was not established. The presence of extrinsic barriers to psychotherapy (e.g., lack of transportation, financial constraints, time constraints) could directly or indirectly contribute to difficulties in various areas of psychosocial functioning. For example, problems with transportation could contribute to difficulties in social leisure activities.

Various forms of psychosocial impairment could contribute to increased difficulty with extrinsic barriers. For example, impairment in work functioning could result in the financial cost of psychotherapy being a greater barrier, especially if the impaired functioning at work resulted in lower funds available for psychotherapy. Additionally, psychosocial impairment in various areas of life could directly or indirectly interfere with an individual's ability to successfully

navigate extrinsic barriers. If an individual experienced impairment in home management, for example, he/she might not consider psychotherapy a priority and therefore not invest in overcoming an extrinsic barrier. Alternatively, an individual struggling to take care of his/her children might be interested in psychotherapy but not have the energy to invest in finding a good psychotherapist. The association between psychosocial functioning and endorsement of extrinsic barriers was smaller than the association between psychosocial functioning and endorsement of intrinsic barriers. This could potentially indicate that psychosocial impairment impacts an individual's endorsement of intrinsic barriers to a greater degree than with extrinsic barriers. Several areas of psychosocial functioning are reflective of an individual's ability to relate with others and exercise proper self-care. In a sense, the difficulty an individual encounters before initiating psychotherapy may mirror their difficulties in interpersonal functioning and self-care.

Based on these findings, future research may provide additional information concerning the relationship between the specific barrier and solution type. To develop a thorough understanding of what solutions are most effective in resolving barriers to psychotherapy, focus groups could be utilized in order to assess the breadth and variety of solutions that adults with depression utilize to overcome barriers. Focus groups that involve group interviews could encourage communication among research participants to gather data, which would provide an effective means to obtain rich qualitative data and encourage participants to comprehensively explore and express their views (Boateng, 2012; Zorn, Roper, Broadfoot, & Kay, 2006). Future research may want to include options for participants to endorse whether or not they utilized a particular solution rather than using a forced choice answer format. This information could have helped determine what solutions are effective rather than solutions that are merely perceived as helpful.

Also, future studies may want to include patients with varying levels of psychotherapy experience, including those who have never attended psychotherapy. This would allow for a broader understanding of the solutions utilized by individuals encountering difficulties with initiating psychotherapy. By definition, one might consider the overall endorsement of barriers to be lower in a group of adults who have overcome barriers relative to a group of adults who have encountered barriers and yet to initiate psychotherapy. Utilizing a sample of individuals with varying levels of psychotherapy experience might serve to illuminate the varying stages of overcoming barriers, including the initial encounter of intrinsic and/or extrinsic barriers, problem-solving, and utilization of solutions. Additionally, future research may want to recruit participants who live in both urban and rural settings in order to determine whether there are any differences in barriers and solutions endorsed between these two groups. Individuals living in rural settings were more likely to report availability and accessibility barriers to receiving mental health services (Steele et al., 2007). Given that telephone-administered psychotherapy has been cited as an effective antidepressant treatment option for individuals in rural settings, it may constitute an effective solution for availability and accessibility barriers (Crowther et al., 2010; Mohr et al., 2006).

### **Study Limitations**

This study had several limitations including (a) lack of established psychometrics for the new study measure *Overcoming Barriers to Psychotherapy (OBP)* and the fact that it was designed as a companion measure to the PBPT, (b) the conceptual groupings of solution types, (c) use of forced choice answer format for solutions endorsed on the OBP, (d) limited diversity of study participants, and (e) retrospective evaluation of previously encountered or used barriers and solutions.

Psychometrics of the OBP were not examined due to the intended scope of the current study. The intention of this study was to take a crucial first step towards developing a preliminary understanding of how adults with depression navigate barriers to psychotherapy. Therefore, the study results that pertained to Hypotheses 3-6 (Aim 3) should be interpreted with caution. Future research is needed to examine the psychometrics of the OBP, including internal consistency, construct validity, and test-retest reliability, and external validity. It would have been ideal to utilize focus groups in order to ask participants what barriers to psychotherapy they had encountered, gain an in-depth understanding of how they navigated each particular barrier, and develop a preliminary understanding of what solutions or solution types were most frequently endorsed, subsequently incorporating these findings into the first iteration of the OBP. Next, it would have been helpful to have administered the OBP to a pilot group of participants, discuss their perspectives of the measure, determine whether any items were confusing, and accordingly revise the item content.

While there were attempts to establish the face validity of items on the OBP and to validate the coding of the solution types, the lack of established psychometrics should be heeded when interpreting study results pertaining to the OBP (i.e., Aim 3). Face validity of the OBP items was established via development of solutions and revision of item wording through consultation with 8 professional colleagues of the dissertation author (e.g., clinical psychologists, social workers, and master's level mental health clinicians). Additionally, 10 blinded raters (including clinical psychologists, social workers, master's level mental health clinicians, and clinical psychology doctoral students) provided a version of the measure without solution types provided and were asked to code each of the solutions along the 4 solution types, resulting in an agreement level with initial coding of 90.7% (See *Measure Construction* section above for full

explanation of this process). The remaining items were re-worded to align more closely with definitions specified for each solution type. The final iteration of the OBP also incorporated feedback from these raters on item wording, general input, and suggestions of alternative solutions for each barrier. Finally, the OBP was developed for use as a companion measure to the PBPT and therefore cannot operate as a stand-alone measure. Future research may want to develop a measure examining solutions to barriers to psychotherapy that can be used independently of the PBPT.

The second limitation of this study concerns the potential shortcomings related to conceptual groupings of the solution types. Initially, the OBP was constructed to include five solutions for each barrier, with no classification of solution types used. The original goal was to develop an understanding of what particular solutions were most frequently endorsed for each barrier. However, solution types were designed in order to make hypotheses and analyses more succinct, rather than interpreting results at the individual barrier level. As a result, solutions were grouped into the four different types (Intrinsic-General, Intrinsic-Specific, Extrinsic-General, and Extrinsic-Specific). Pepin et al. (2009) categorized barriers as intrinsic and extrinsic and established a basis for the current study to use these categories for solutions. The distinction between general and specific solutions was designated by the dissertation author, with the idea that general solutions could lead to resolution of any barrier and not be framed with a particular barrier in mind and that specific solutions could target and resolve the core difficulty posed by a barrier. While coding of these solution types by blinded raters resulted in an agreement level of 90.7%, these solution types were not established with focus groups or direct precedence in the literature (largely due to the lack of previous research on solutions to barriers to psychotherapy).

As a result, the study results for Hypotheses 3-6 directly depended on the construct of the four solution types and should be interpreted with caution.

The third study limitation included the use of a forced choice format for solutions endorsed on the OBP, which required the participants to select one of four solutions that they found most helpful to overcome a particular barrier. The issue with this forced choice format is that participants may have not actually utilized the solution they selected on the OBP to overcome a barrier to psychotherapy, yet merely selected the solution that they perceived as most helpful from the available choices. Therefore, study results indicated what solutions adults with depression reported as most helpful from the available options rather than solutions they utilized or were effective for them. In an attempt to compensate for this limitation, a free text response was provided for participants at the end of the OBP to enter any solution they may have used that was not listed throughout the measure (see Appendix D for a complete list of free-text responses provided by the study participants on the OBP). For example, an alternative solution cited by several participants involved psychotherapists offering evening hours, which enabled participants to attend psychotherapy despite encountering the barrier of scheduling and/or work conflicts. Free text response fields were not provided for each individual barrier-solution set on the OBP due to the potential burden this could place on participants. In summary, study results should be interpreted with the understanding that participants may have not utilized or benefitted from the solutions they endorsed on the OBP.

The fourth limitation of this study concerned the lack of diversity of the study sample. The majority (81.8%) of participants in this study were Caucasian. Also, the majority (91.7%) of participants were non-Hispanic. This considerable lack of racial and ethnic diversity prevented analysis of Hypothesis 1 due to inadequate power. Furthermore, the lack of racial and ethnic



diversity in the sample resulted in uncertainty whether the observed patterns of solutions endorsed would hold true for a more diverse sample. This could potentially decrease the external validity of this study's findings to individuals of various racial and ethnic backgrounds. Therefore, the findings of this study may only apply to adults with depression who are from Caucasian and non-Hispanic backgrounds.

Finally, study participants retrospectively evaluated barriers and solutions that they faced and utilized in the past. Therefore, study results may have been influenced by memory biases. Further, study measures did not distinguish whether participants were endorsing barriers and solutions for their prior or current psychotherapy experiences. It was unclear whether participants were reflecting on barriers encountered in the recent or distant past.

Future research should conduct focus groups to examine other solutions that adults with depression utilize to overcome barriers to psychotherapy, with subsequent examination of the psychometrics of the OBP. Furthermore, future research should emphasize recruitment of participants of diverse ethnic and racial backgrounds and participants with varying levels of psychotherapy experience to examine patterns in endorsement of solutions. Finally, it may be beneficial to examine specific solutions rather than solution types and incorporate an option that allows participants to indicate whether they utilized a particular solution and how effective that solution was for them.

### **Study Strengths**

While this investigation had several notable limitations, it also had considerable strengths. First and foremost, to our knowledge, this study represented the first attempt to examine what solutions adults with depression perceive as helpful in overcoming barriers to initiating psychotherapy. Additionally, the OBP represents the first measure specifically

developed to assess solutions to intrinsic and extrinsic barriers to psychotherapy. This is the first study to examine the associations between psychosocial functioning and endorsements of intrinsic and extrinsic barriers. This study provides vital information regarding the solutions that adults with depression utilize to overcome barriers to initiating psychotherapy.

Furthermore, participants were recruited from multiple psychotherapy and psychiatry clinics across the Dallas-Fort Worth metroplex, with the intention of recruiting a sample that endorsed a broad variety of barriers to psychotherapy, as well as solutions. As such, the sample was fairly balanced in terms of distributions of income, amount of previous psychotherapy experience, depression symptom severity, and level of psychosocial impairment.

Despite some of the measure design limitations noted above, the *Overcoming Barriers to Psychotherapy* measure was developed through an iterative process and in consultation with professional colleagues. The final iteration of the OBP was developed after consideration of three different models.

## **Conclusions**

The principle goal of this study was to assess and characterize the relationship between barriers to psychotherapy and solutions utilized by adults with depression to overcome intrinsic and extrinsic barriers. The results of the current investigation indicate that Intrinsic-Specific solutions are endorsed most frequently by adults with depression, followed by Intrinsic-General, Extrinsic-General, and Extrinsic-Specific solutions, respectively. Extrinsic solutions were endorsed more frequently than intrinsic solutions for intrinsic barriers, and intrinsic solutions were endorsed more frequently than extrinsic solutions for extrinsic barriers. Therefore, it appears that barrier and solution types are more likely to mismatch rather than match.

The resolution of barriers to psychotherapy may require individuals to utilize solutions of different types as compared to the type of the barrier encountered. Individuals encountering difficulty with intrinsic barriers may need to rely on extrinsic solutions given that their difficulty is intrinsic in nature, thereby utilizing extrinsic solutions that resolve intrinsic barriers. Conversely, individuals encountering difficulty with extrinsic barriers may need to rely on intrinsic solutions given that their difficulty is extrinsic in nature, thereby utilizing intrinsic solutions that resolve extrinsic barriers.

These results support previous findings as evidence of significant associations between depression symptom severity and overall ratings of both intrinsic and extrinsic barriers, respectively (Mohr et al., 2006; Mohr et al., 2010). Previous research has not examined the relationship between psychosocial functioning and barriers to psychotherapy. The results further the literature by providing evidence of significant associations between psychosocial functioning and overall ratings of both intrinsic and extrinsic barriers, respectively. Future research is warranted to better understand the nature of the relationship between psychosocial impairment and barriers to psychotherapy.

The results further the literature as they provided a preliminary understanding of how adults with depression navigate burdensome intrinsic and extrinsic barriers to psychotherapy and ultimately enter treatment. Understanding that adults with depression may benefit from solutions of different types than the barriers encountered may help researchers, public health programs, and clinicians to strategically target these barriers to minimize and/or resolve barriers and maximize access to care. Essentially, assisting individuals in compensating for the difficulty encountered intrinsically or extrinsically by offering a contrasting solution may enable them to ultimately overcome that barrier and receive critical help with their depression. This represents a

critical step towards developing an understanding of how adults with depression navigate and overcome barriers, presenting clinicians and mental health organizations with the foundational knowledge for creation of new interventions that effectively reduce barriers to treatment.

Additionally, clinicians may utilize this knowledge to guide their patients towards solutions specifically targeted to resolve barriers that patients continue to struggle with after initiation of psychotherapy. Future research is warranted to examine whether participants with varying levels of psychotherapy experience utilize the same solution types. Future research is warranted to evaluate the psychometric properties of the *Overcoming Barriers to Psychotherapy* measure, as well as to administer the measure in a more diverse population to examine the relationships between race, ethnicity, barriers to psychotherapy, and solutions endorsed. Furthermore, future research may want to examine other solutions not captured by this measure. The results of the current study, coupled with the development of a new questionnaire to examine solutions to barriers, provides a model for future researchers to expand knowledge of how adults with depression overcome barriers to psychotherapy.

## CHAPTER 7

### TABLES

Table 1 – Overview of Barriers to Initiating Psychotherapy

<b>Intrinsic Barriers (those that operate within the individual)</b>	<b>Sociodemographic Factors Influencing Barriers</b>	<b>Examples</b>
Beliefs and attitudes about depression, psychotherapy, and evaluative barriers	Age, Gender, Income, Education, Race/Ethnicity,	Cultural beliefs about depression and its treatment, belief that depressive symptoms are normal, perceived ineffectiveness of treatment, low perceived seriousness of symptoms, preference to handle depression alone
Knowledge of depression and psychotherapy, Insight into symptoms	Age	Lack of knowledge about depressive symptoms or available services, low insight into symptoms, slow problem recognition
Fears of psychotherapy, denial, misattribution of symptoms	Age, Income, Education, Race/Ethnicity	Fears of upsetting emotions in psychotherapy, discussing personal issues, or that psychotherapy is overly intrusive. Denial of being depressed. Misattributing symptoms to general medical conditions
Psychological Distress	N/A	High levels of distress may interfere with treatment seeking process
Illness-related barriers	Gender (high prevalence of depression in females)	Severe depression linked with greater number barriers, low motivation,
Stigma	Age, Gender, Income, Race/Ethnicity	Depression self-stigma, anticipated discrimination, stigmatizing beliefs: “If I go to [psycho]therapy it means I am crazy”
<b>Extrinsic Barriers (those that operate outside the individual)</b>		<b>Examples</b>
Financial concerns	Income, Race/Ethnicity	Cost of psychotherapy, concerns about insurance

Availability and accessibility of services	Income, Race/Ethnicity	Lack of available counseling in area, accessibility of services (e.g., location, long wait lists, etc.)
Participation restrictions	Income, Race/ethnicity	Problems with transportation (no car, parking problems, poor public transportation), mobility issues
Time Constraints	Income, Race/Ethnicity	Difficulty getting time off work, interference from daily responsibilities

Table 2. *Demographic Characteristics*

Characteristic		
Age (years)		
Mean ( <i>SD</i> )		36.9 (14.4)
Range		18-72
Gender Identity, % (N)		
Male		28.2 (37)
Female		69.5 (91)
Other Gender		2.3 (3)
Race, % (N)		
African American		3.8 (5)
Caucasian		81.8 (108)
Other		14.4 (19)
Ethnicity, % (N)		
Hispanic		8.3 (11)
Non-Hispanic		91.7 (121)
Education (years)		
Mean ( <i>SD</i> )		16.1 (2.5)
Range		11-26
Income, % (N)		
Less than \$20,000		20.8 (27)
\$20,000 to \$34,999		13.1 (17)
\$35,000 to \$49,999		13.8 (18)
\$50,000 to \$74,999		20.0 (26)
\$75,000 to \$99,999		7.7 (10)
Over \$100,000		24.6 (32)
Employment Status, % (N)		
Full time		53.0 (70)
Part Time		18.9 (25)
Unemployed		11.4 (15)
On active military duty		0.0 (0)
Retired		4.5 (6)
Student		21.2 (28)
Other		3.8 (5)
Marital Status, % (N)		
Single, never married		49.2 (64)
Cohabiting, but not married		4.6 (6)
Married, living together		30.8 (40)
Married, not living together		2.3 (3)
Separated		0.8 (1)
Divorced		10.8 (14)
Widowed		1.5 (2)
Living situation, % (N)		
Alone		31.8 (42)
Roommates		18.2 (24)
Partner/spouse		22.7 (30)

Partner/spouse and children	17.4 (23)
Extended family	9.8 (13)
Native English Speaker, % (N)	
Native	98.5 (130)
Non-native	1.5 (2)

---



Table 3. *Psychotherapy Experience*

Psychotherapy Characteristic	
First Psychotherapy Experience, % (N)	
Yes	35.7 (46)
No	64.3 (83)
Found Psychotherapy Helpful, % (N)	
Yes	96.1 (124)
No	3.9 (5)
Frequency of Psychotherapy Attendance	
Once weekly	45.7 (59)
Twice weekly	0.8 (1)
Every other week (twice per month)	31.0 (40)
Once per month	16.3 (21)
Less than once per month	6.2 (8)
Duration of Current Psychotherapy	
<1 month	6.2 (8)
1-2 months	11.6 (15)
3-4 months	17.1 (22)
5-6 months	7.8 (10)
6-12 months	15.5 (20)
1-2 years	18.6 (24)
2-3 years	7.8 (10)
3-4 years	7.8 (10)
4-5 years	2.3 (3)
5+ years	5.4 (7)
Number of Psychotherapy Sessions Attended	
1-2	7.8 (10)
3-4	8.5 (11)
5-9	17.8 (23)
10-20	16.3 (21)
20-30	13.2 (17)
30-40	12.4 (16)
40-50	3.1 (4)
50+	20.9 (27)
Number of Psychotherapists Seen in Past ( $\geq 3$ + sessions)	
0	24.8 (32)
1	20.9 (27)
2	18.6 (24)
3	17.1 (22)
4	7.0 (9)
5+	11.6 (15)

Table 4. *Medication and Supplement History, Comorbidity, and Diagnostic Information*

Characteristic	
Current Antidepressant Medication Use, % (N)	
Yes	49.2 (63)
No	50.8 (65)
Antidepressant Taken, % (N)*	
Bupropion	11.7 (15)
Citalopram	3.1 (4)
Desvenlafaxine	1.6 (2)
Duloxetine	2.3 (3)
Escitalopram	10.2 (13)
Fluoxetine	6.3 (8)
Paroxetine	0.8 (1)
Sertraline	10.9 (14)
Other	14.8 (19)
Multiple Antidepressants	9.4 (12)
Found Antidepressant Helpful, % (N)	
Yes	90.8 (59)
No	9.2 (6)
Prior Antidepressant Medication Use, % (N)	
Yes	54.3 (70)
No	45.7 (59)
Number of Times Antidepressant Medications Taken in Past, % (N)	
0	45.7 (59)
1	18.6 (24)
2	8.5 (11)
3	5.4 (7)
4	2.3 (3)
5+	19.4 (25)
Nutritional Supplement Use to Treat Depression, % (N)	
Yes	18.6 (24)
No	81.4 (105)
Found Nutritional Supplement Helpful, % (N)	
Yes	70.8 (17)
No	29.2 (7)
Comorbid Neuropsychiatric Condition, % (N)**	
Anxiety Disorder	55.8 (72)
Attention-Deficit/Hyperactivity Disorder (ADHD)	8.5 (11)
Bipolar Disorder	7.8 (10)
Post-Traumatic Stress Disorder (PTSD)	10.9 (14)
Problems with Substance Abuse	7.8 (10)
Schizophrenia	0.8 (1)
Other Neuropsychiatric Condition	17.1 (22)
Multiple Neuropsychiatric Conditions	25.6 (33)
None Reported	27.9 (36)
Comorbid Medical Condition, % (N)	

Diabetes	3.9 (5)
Cardiac Disease	0.8 (1)
Hypertension	16.3 (21)
Other Medical Condition	24.0 (31)
Multiple Medical Conditions	8.5 (11)
None Reported	63.6 (82)
History of Depression Diagnosis (per-report), % (N)	
Yes	69.0 (89)
No	31.0 (40)

---

\*No participants reported taking the antidepressant medication Venlafaxine.

\*\* No participants endorsed Alzheimer's Disease as a comorbid neuropsychiatric condition.

Table 5. *Depression Severity and Level of Psychosocial Functioning in Overall Sample*

Clinical Characteristic		
PHQ-9 Score		
Mean ( <i>SD</i> )		9.6 (5.6)
Range		0-27
Depressive Severity (PHQ-9), % (N)		
Minimal or None		17.5 (22)
Mild		38.9 (49)
Moderate		25.4 (32)
Moderately Severe		10.3 (13)
Severe		7.9 (10)
WSAS Score		
Mean ( <i>SD</i> )		13.4 (9.0)
Range		0-37
Psychosocial Functioning (WSAS), % (N)		
Minimal or No Impairment		43.1 (50)
Significant Impairment		38.8 (45)
Moderately Severe Impairment		18.1 (21)

PHQ-9 = Patient Health Questionnaire-9

WSAS = Work and Social Adjustment Scale

PHQ-9 ranges: 0-4 = Minimal or None, 5-9 = Mild, 10-14 = Moderate, 15-19 = Moderately Severe, 20-27 = Severe

WSAS ranges: 0-10 = Minimal or No Impairment, 10-20 = Significant Impairment, 20-30 = Moderately Severe Impairment

Table 6. *Barriers and Solutions Endorsed in Overall Sample*

Clinical Characteristic	
# Barriers Endorsed, M $\pm$ SD	11.0 $\pm$ 5.7
# Intrinsic Barriers, M $\pm$ SD	7.4 $\pm$ 4.6
# Extrinsic Barriers, M $\pm$ SD	3.7 $\pm$ 1.7
Total PBPT Score, M $\pm$ SD	1.72 $\pm$ 0.51
Intrinsic Barrier Total Score, M $\pm$ SD	1.66 $\pm$ 0.56
Extrinsic Barrier Total Score, M $\pm$ SD	1.89 $\pm$ 0.55
% Intrinsic-General Solutions, M $\pm$ SD	30.2 $\pm$ 21.4
% Intrinsic-Specific Solutions, M $\pm$ SD	35.8 $\pm$ 19.9
% Extrinsic-General Solutions, M $\pm$ SD	15.6 $\pm$ 22.0
% Extrinsic-Specific Solutions, M $\pm$ SD	18.3 $\pm$ 18.9

PBPT = Perceived Barriers to Psychological Treatment

\*Total PBPT Score, Intrinsic Barrier Total Score, and Extrinsic Barrier Total Score Range from 1-5

Table 7. *Barriers Endorsed by Depression Severity and Psychosocial Functioning*

Clinical Characteristic				
	(n)	PBPT Total Score (M $\pm$ SD)	Intrinsic Barrier Total Score (M $\pm$ SD)	Extrinsic Barrier Total Score (M $\pm$ SD)
Depression Severity				
Minimal or None	22	1.40 $\pm$ 0.30	1.31 $\pm$ 0.31	1.61 $\pm$ 0.37
Mild	45	1.71 $\pm$ 0.47	1.61 $\pm$ 0.50	1.93 $\pm$ 0.52
Moderate	30	1.83 $\pm$ 0.48	1.78 $\pm$ 0.54	1.97 $\pm$ 0.55
Moderately Severe	11	1.83 $\pm$ 0.70	1.89 $\pm$ 0.76	1.69 $\pm$ 0.68
Severe	10	2.04 $\pm$ 0.65	1.96 $\pm$ 0.72	2.23 $\pm$ 0.62
Psychosocial Impairment				
Minimal or None	49	1.51 $\pm$ 0.35	1.42 $\pm$ 0.39	1.72 $\pm$ 0.43
Significant	41	1.83 $\pm$ 0.50	1.76 $\pm$ 0.53	1.98 $\pm$ 0.59
Moderately Severe	19	2.03 $\pm$ 0.60	2.01 $\pm$ 0.70	2.08 $\pm$ 0.56

PBPT = Perceived Barriers to Psychological Treatment

Table 8. *Solutions Endorsed by Depression Severity and Psychosocial Functioning*

Clinical Characteristic					
	(n)	%Intrinsic- General (M $\pm$ SD)	%Intrinsic- Specific (M $\pm$ SD)	%Extrinsic- General (M $\pm$ SD)	%Extrinsic- Specific (M $\pm$ SD)
Depression Severity					
Minimal or None	22	27.0 $\pm$ 22.7	33.2 $\pm$ 19.3	19.6 $\pm$ 27.6	20.3 $\pm$ 24.7
Mild	45	27.2 $\pm$ 19.8	41.4 $\pm$ 19.2	13.6 $\pm$ 18.5	17.8 $\pm$ 18.9
Moderate	30	34.3 $\pm$ 22.0	29.5 $\pm$ 19.2	16.7 $\pm$ 23.9	19.6 $\pm$ 16.7
Moderately Severe	11	31.2 $\pm$ 23.9	43.9 $\pm$ 22.8	12.9 $\pm$ 21.2	12.0 $\pm$ 14.0
Severe	10	28.9 $\pm$ 23.0	27.3 $\pm$ 17.0	14.8 $\pm$ 21.5	19.0 $\pm$ 16.3
Psychosocial Impairment					
Minimal or None	49	26.5 $\pm$ 23.5	34.2 $\pm$ 21.8	19.1 $\pm$ 25.8	20.1 $\pm$ 23.6
Significant	41	30.7 $\pm$ 18.9	36.8 $\pm$ 17.0	14.0 $\pm$ 20.4	18.4 $\pm$ 14.2
Moderately Severe	19	40.1 $\pm$ 21.6	38.0 $\pm$ 21.1	7.2 $\pm$ 10.9	14.8 $\pm$ 14.8

Table 9. *Barriers Endorsed by Demographic Group*

Clinical Characteristic				
	(n)	PBPT Total Score (M $\pm$ SD)	Intrinsic Barrier Total Score (M $\pm$ SD)	Extrinsic Barrier Total Score (M $\pm$ SD)
Race				
African American	4	1.70 $\pm$ 0.42	1.64 $\pm$ 0.46	1.84 $\pm$ 0.48
Caucasian	96	1.79 $\pm$ 0.50	1.63 $\pm$ 0.54	1.89 $\pm$ 0.55
Other	18	1.83 $\pm$ 0.60	1.80 $\pm$ 0.65	1.90 $\pm$ 0.55
Ethnicity				
Hispanic	11	2.03 $\pm$ 0.75	2.00 $\pm$ 0.85	2.10 $\pm$ 0.56
Non-Hispanic	107	1.69 $\pm$ 0.47	1.62 $\pm$ 0.51	1.86 $\pm$ 0.54
Education				
11-12 years	11	2.27 $\pm$ 0.61	2.30 $\pm$ 0.68	2.20 $\pm$ 0.64
12-16 years	72	1.70 $\pm$ 0.50	1.63 $\pm$ 0.53	1.85 $\pm$ 0.56
>16 years	35	1.61 $\pm$ 0.39	1.50 $\pm$ 0.43	1.86 $\pm$ 0.47
Income				
Less than \$20,000	25	2.00 $\pm$ 0.62	1.97 $\pm$ 0.68	2.06 $\pm$ 0.64
\$20,000 to \$34,999	16	1.67 $\pm$ 0.44	1.59 $\pm$ 0.52	1.87 $\pm$ 0.57
\$35,000 to \$49,999	14	1.64 $\pm$ 0.60	1.53 $\pm$ 0.70	1.88 $\pm$ 0.47
\$50,000 to \$74,999	24	1.61 $\pm$ 0.37	1.54 $\pm$ 0.34	1.78 $\pm$ 0.54
\$75,000 to \$99,999	10	1.71 $\pm$ 0.52	1.67 $\pm$ 0.55	1.81 $\pm$ 0.53
Over \$100,000	27	1.63 $\pm$ 0.44	1.54 $\pm$ 0.45	1.85 $\pm$ 0.52
Gender Identity				
Male	35	1.65 $\pm$ 0.47	1.58 $\pm$ 0.49	1.80 $\pm$ 0.54
Female	91	1.75 $\pm$ 0.50	1.67 $\pm$ 0.55	1.93 $\pm$ 0.54
Other	2	2.22 $\pm$ 1.73	2.34 $\pm$ 1.90	1.94 $\pm$ 1.33
Age				
18-40	83	1.74 $\pm$ 0.55	1.67 $\pm$ 0.60	1.90 $\pm$ 0.55
40-65	45	1.71 $\pm$ 0.47	1.63 $\pm$ 0.50	1.91 $\pm$ 0.55
65+	4	1.66 $\pm$ 19.8	1.72 $\pm$ 0.24	1.52 $\pm$ 0.37



Table 10. *Solutions Endorsed by Demographic Group*

Clinical Characteristic					
	(n)	%Intrinsic- General (M $\pm$ SD)	%Intrinsic- Specific (M $\pm$ SD)	%Extrinsic- General (M $\pm$ SD)	%Extrinsic- Specific (M $\pm$ SD)
Race					
African American	4	25.1 $\pm$ 19.2	17.0 $\pm$ 17.3	38.9 $\pm$ 42.8	19.0 $\pm$ 15.6
Caucasian	96	32.7 $\pm$ 21.9	37.4 $\pm$ 19.1	14.1 $\pm$ 19.1	15.9 $\pm$ 16.0
Other	18	17.8 $\pm$ 15.4	21.2 $\pm$ 23.1	18.2 $\pm$ 31.9	31.9 $\pm$ 28.1
Ethnicity					
Hispanic	11	27.1 $\pm$ 18.5	46.0 $\pm$ 22.5	2.2 $\pm$ 49.2	24.7 $\pm$ 30.1
Non-Hispanic	107	30.5 $\pm$ 21.8	34.9 $\pm$ 19.5	16.8 $\pm$ 22.6	17.8 $\pm$ 17.7
<b>Education**</b>					
<b>11-12 years</b>	11	25.1 $\pm$ 17.4	25.2 $\pm$ 17.2	19.7 $\pm$ 18.1	<b>30.0<math>\pm</math>12.8**</b>
<b>12-16 years</b>	72	30.3 $\pm$ 21.9	37.8 $\pm$ 20.3	14.0 $\pm$ 22.8	<b>17.9<math>\pm</math>20.0**</b>
<b>&gt;16 years</b>	35	31.5 $\pm$ 22.1	34.8 $\pm$ 19.1	17.8 $\pm$ 21.7	<b>15.9<math>\pm</math>17.6**</b>
Income					
Less than \$20,000	25	26.5 $\pm$ 23.5	34.2 $\pm$ 21.8	19.1 $\pm$ 25.8	20.1 $\pm$ 23.6
\$20,000 to \$34,999	16	30.7 $\pm$ 18.9	36.8 $\pm$ 17.0	14.0 $\pm$ 20.4	18.4 $\pm$ 14.2
\$35,000 to \$49,999	14	40.1 $\pm$ 21.6	38.0 $\pm$ 21.1	7.2 $\pm$ 10.9	14.8 $\pm$ 14.8
\$50,000 to \$74,999	24	26.5 $\pm$ 23.5	34.2 $\pm$ 21.8	19.1 $\pm$ 25.8	20.1 $\pm$ 23.6
\$75,000 to \$99,999	10	30.7 $\pm$ 18.9	36.8 $\pm$ 17.0	14.0 $\pm$ 20.4	18.4 $\pm$ 14.2
Over \$100,000	27	40.1 $\pm$ 21.6	38.0 $\pm$ 21.1	7.2 $\pm$ 10.9	14.8 $\pm$ 14.8
Gender Identity					
Male	35	31.5 $\pm$ 22.1	34.8 $\pm$ 19.1	17.8 $\pm$ 21.7	15.9 $\pm$ 17.6
Female	91	29.7 $\pm$ 22.2	37.4 $\pm$ 18.6	14.0 $\pm$ 20.2	18.9 $\pm$ 19.1
Other	2	30.8 $\pm$ 0.0	42.3 $\pm$ 0.0	0.0 $\pm$ 0.0	26.9 $\pm$ 0.0
Age					
18-40	83	29.7 $\pm$ 22.0	37.1 $\pm$ 20.0	15.4 $\pm$ 20.1	17.8 $\pm$ 17.1
40-65	45	29.7 $\pm$ 20.7	33.2 $\pm$ 20.7	17.0 $\pm$ 25.7	20.1 $\pm$ 22.7
65+	4	43.9 $\pm$ 20.0	37.0 $\pm$ 12.1	6.25 $\pm$ 12.5	12.9 $\pm$ 14.3

\*\*Kruskal Wallis H Tests were conducted, indicating significant between group differences between participants with 11-12 years of education and both those with 12-16 ( $p = .01$ ), as well as >16 years of education on mean percentages of Extrinsic-Specific Solutions ( $p = .01$ )

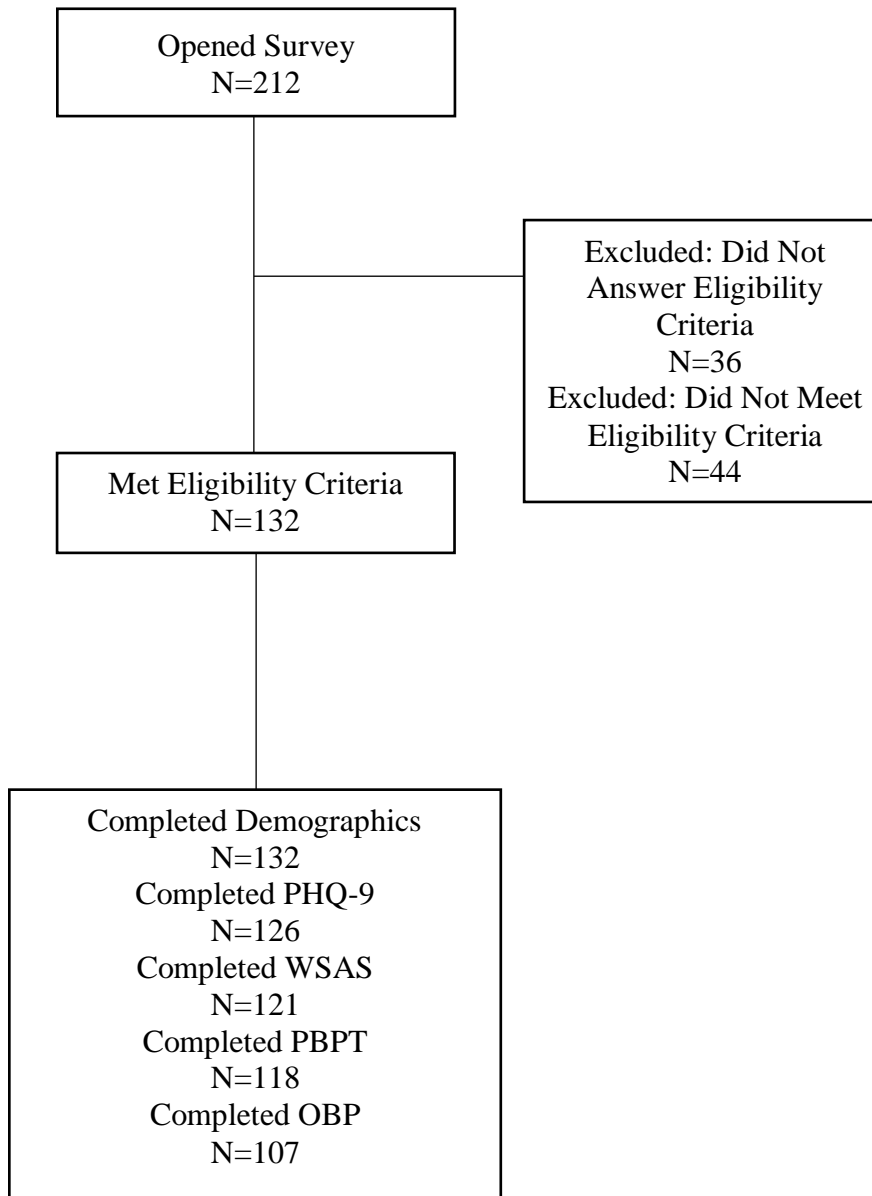
Table 11. *Relationships between Depression Severity, Psychosocial Functioning, and Ratings of Intrinsic and Extrinsic Barriers*

Clinical Characteristic	PHQ-9	WSAS
Intrinsic Barrier Total Score		
$r_s$	.383	.466
p	<.001	<.001
Extrinsic Barrier total score		
$r_s$	.204	.301
p	.027	.001

## CHAPTER 8

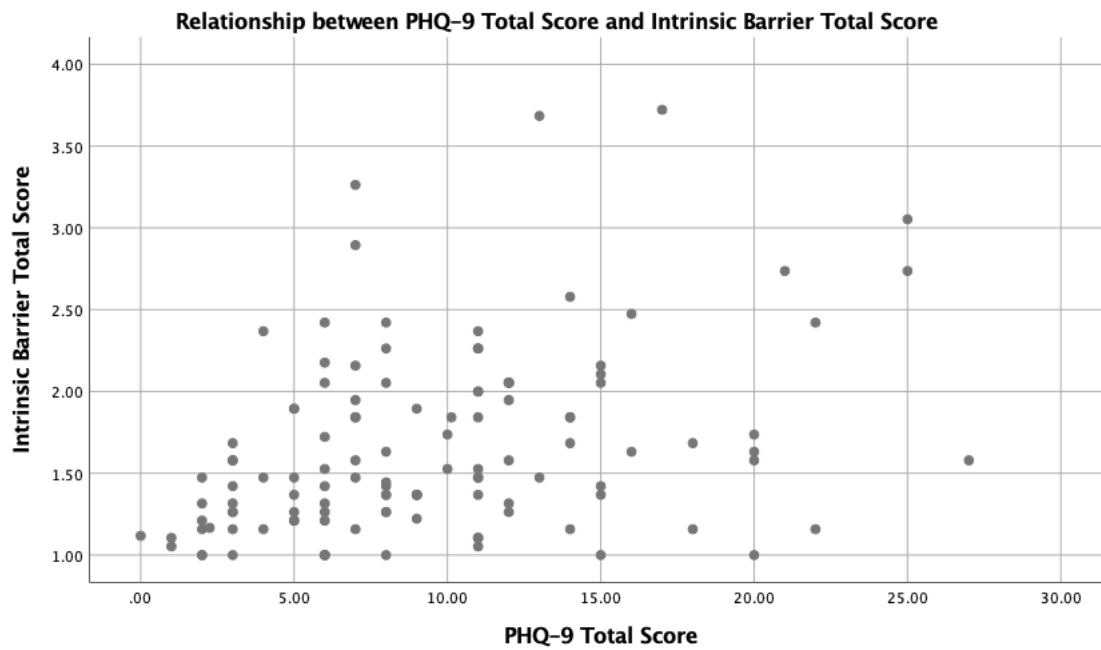
### FIGURES

Figure 1 – Schematic of Data



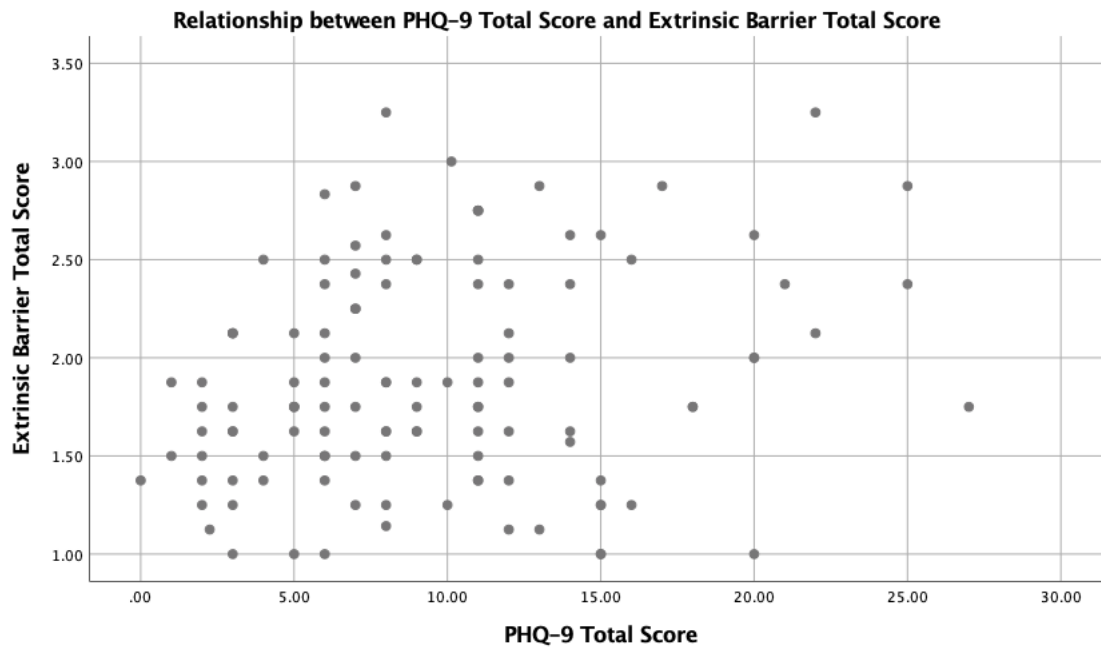
OBP = Overcoming Barriers to Psychotherapy  
PBPT = Perceived Barriers to Psychological Treatment  
PHQ-9 = Patient Health Questionnaire-9  
WSAS = Work and Social Adjustment Scale

Figure 2 – Relationship between the PHQ-9 Total Score and Intrinsic Barrier Total Score



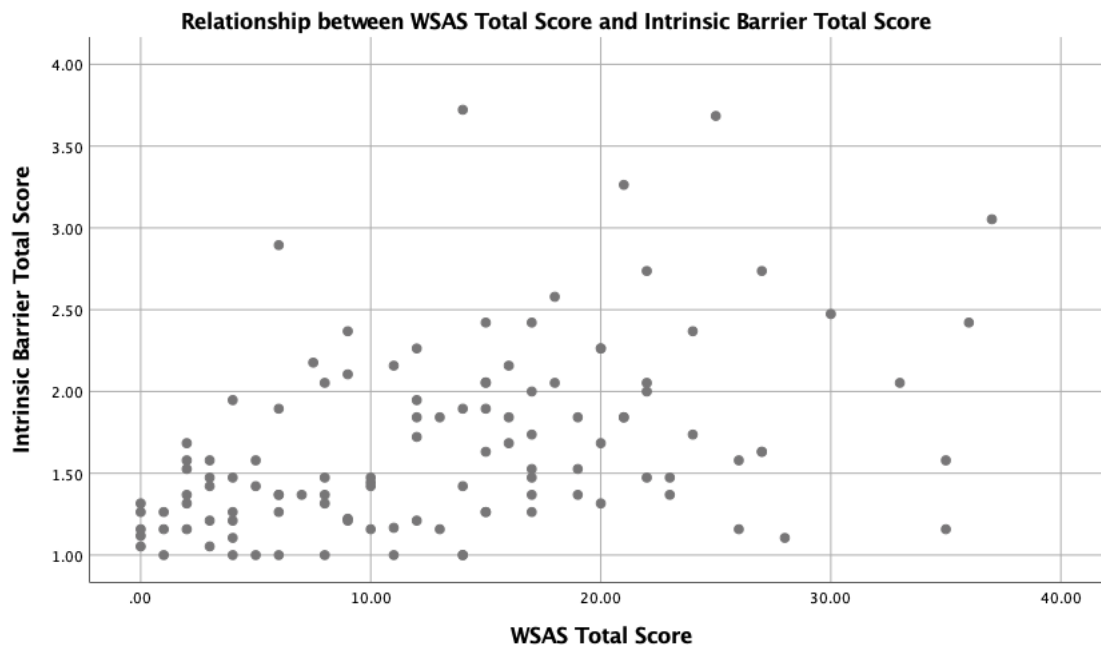
\*A line of best fit was not used since the analysis used was a Spearman's rank correlation coefficient rather than a linear regression (due to violation of normality)

Figure 3 – Relationship between the PHQ-9 Total Score and Extrinsic Barrier Total Score



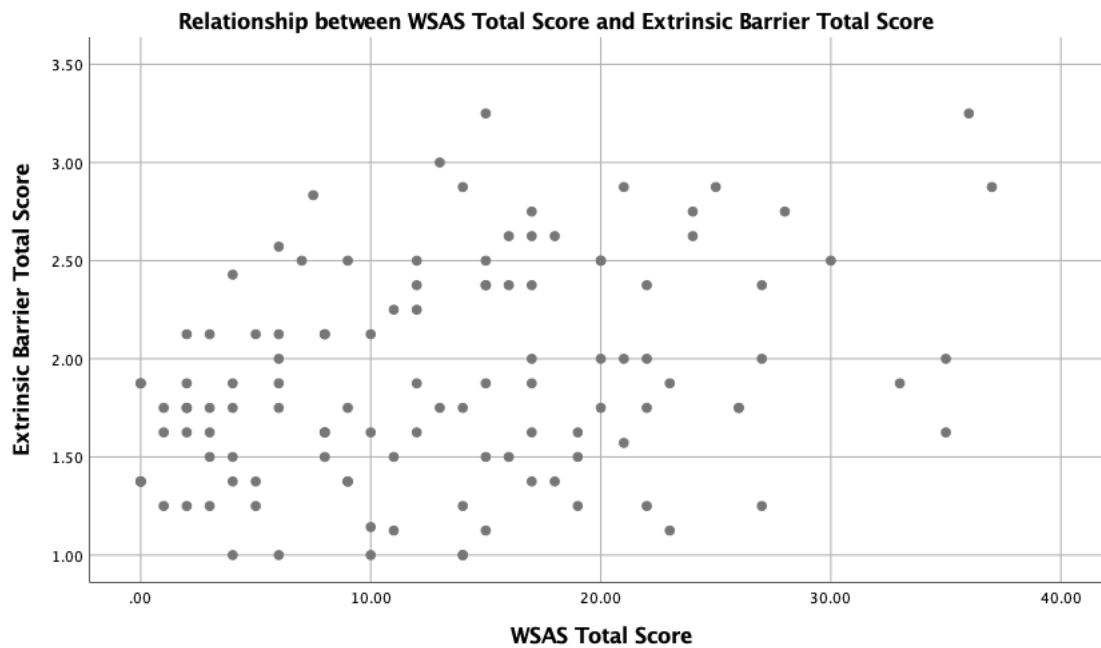
\*A line of best fit was not used since the analysis used was a Spearman's rank correlation coefficient rather than a linear regression (due to violation of normality)

Figure 4 – Relationship between the WSAS Total Score and Intrinsic Barrier Total Score



\*A line of best fit was not used since the analysis used was a Spearman's rank correlation coefficient rather than a linear regression (due to violation of normality)

Figure 5 – Relationship between the WSAS Total Score and Extrinsic Barrier Total Score



\*A line of best fit was not used since the analysis used was a Spearman's rank correlation coefficient rather than a linear regression (due to violation of normality)

## CHAPTER 9

### APPENDICES

#### APPENDIX A

##### Study Survey

Explanation of Study and Indication of Willingness to Participate (First page of REDCap Survey:

You are being invited to participate in a research study being conducted at the **University of Texas Southwestern Medical Center**. The title of this study is: ‘Identifying Barriers and Solutions to Psychotherapy in Adults with Depression’ conducted by Dr. Tracy Greer and her study team at the Center for Depression Research and Clinical Care at UT Southwestern Medical Center, Dallas. The goal of the study is to learn about the barriers to individual counseling encountered by adults with depression and the solutions that they use to overcome these barriers and ultimately begin individual counseling. We are interested in learning how you overcame any barriers to individual counseling you may have faced in the past. We believe that this information is crucial in increasing access to counseling for adults with depression so that they can receive treatment and ultimately recover to lead fulfilling and successful lives. Participation involves filling out this survey, which collects demographic information and asks questions about depressive symptoms, barriers to counseling, and solutions to these barriers. You are eligible to participate in the study if you are at least 18 years of age, are currently depressed or have been depressed in the past, are currently attending individual counseling, and can read/write in English.

We estimate that it will take 15-30 minutes to complete the survey. Some of the questions in the survey may make you feel uncomfortable. You may refuse to answer any of the questions, take a break or stop your participation in this study at any time. Participation in the study is *optional*, and you may withdraw from participating in the study at any time.

Your responses are confidential and anonymous. This survey is being administered via REDCap’s Public Survey Link, which does not automatically collect any identifying information and is **not** linked to your email address. The research team will not attempt to determine the identity of those who have participated in the study, and the data collected in this study will be examined in aggregate. The study has been reviewed and approved by the University of Texas Southwestern Medical Center Institutional Review Board.

The University of Texas Southwestern Medical Center Human Research Protection Program (HRPP) oversees research on human subjects. HRPP and Institutional Review Board (IRB) representatives will answer any questions about your rights as a research subject, and take any concerns, comments or complaints you may wish to offer. You can contact the HRPP by calling the office at 214-648-3060.



Before you agree to participate, make sure you have read the information provided above, and you have freely decided to participate in this research.

Clicking on the “**Submit**” button below indicates your willingness to participate in this study. Thank you for participating in this study!

---

### **Demographics**

\*\*\*Eligibility criteria determined by questions 1-4: (eligible if: Yes, Yes, Yes, Yes). If participant is ineligible (answers No to any one of questions 1-4), the following text pops up: “Based on your answer, you do not meet the requirements for completion of the survey. Thank you for your participation.”\*\*\*

1. Are you at least 18 years of age?  
Yes  
No
2. Are you currently in individual counseling? (e.g., meeting with a therapist on a regular basis to talk about difficulties and/or try to learn new coping strategies)  
Yes  
No
3. Are you currently depressed or have you ever been depressed in the past?  
Yes  
No
4. Are you able to read and write in English?  
Yes  
No
5. What is your age in years? (enter using numerical digits only)  
[Free text continuous response]
6. How do you describe yourself?  
Male  
Female  
Agender (without gender)  
Androgynous  
Transgender  
Gender fluid  
Gender queer  
Spectrum  
Do not identify as male or female  
Not sure  
Decline to state
7. How many years of education have you completed?  
(For your reference: Less Than High school <12 years, High school graduate or GED =12 years, Junior college degree or technical school diploma =14 years, Freshman in College =12, Sophomore in College =13, Junior in College =14, Senior in College =15,

Bachelor's Degree =16 years, Master's Degree =18 years, Doctoral Degree = ~20 years, Professional degree [J.D., M.D., D.O., etc.] = ~20+) (Enter years using numerical digits only)

[Free text: Continuous numerical response]

8. Please select your primary race
  - American Indian or Alaska Native
  - Black or African American
  - Asian
  - Native Hawaiian or Other Pacific Islander
  - White
  - More than one race
  - Other
  - Choose not to answer
  - Unknown
9. If Other, please specify: [Free text response]
10. Are you Hispanic?
  - Yes
  - No
11. What is your marital status?
  - Single, never married
  - Cohabiting but not married
  - Married, living together
  - Married, not living together
  - Separated
  - Divorced
  - Widowed
12. With whom do you live?
  - I live alone
  - I live with roommates
  - I live with my partner/spouse
  - I live with my partner/spouse and children
  - I live with extended family
13. Is English your native language?
  - Yes
  - No
14. What is your current employment status? Select all that apply.
  - Full time
  - Not Employed
  - On active military duty
  - Part Time
  - Retired
  - Student
  - Other
15. What is your household income?
  - Less than \$20,000
  - \$20,000 to \$34,999

\$35,000 to \$49,999

\$50,000 to \$74,999

\$75,000 to \$99,999

Over \$100,000

16. Is your current individual counseling experience your first individual counseling experience?

Yes

No

17. How often do you attend individual counseling?

Once weekly

Twice weekly

Every other week (twice per month)

Once per month

Less than once per month

18. How long has it been since you started seeing your current counselor?

Less than one month

1-2 months

3-4 months

5-6 months

6-12 months

1-2 years

2-3 years

3-4 years

4-5 years

5+ years

19. Approximately how many individual counseling sessions have you attended with your current counselor?

1-2 Sessions

3-4 Sessions

5-9 Sessions

10-20 Sessions

20-30 Sessions

30-40 Sessions

40-50 Sessions

50+ Sessions

20. Do you find individual counseling to be helpful?

Yes

No

21. How many counselors have you seen in the past for individual counseling (for at least 3+ sessions)?

0

1

2

3

4

5+

22. Are you currently taking medication(s) for depression as prescribed by a physician?  
 Yes  
 No

\*\*\*If a participant answered No to question 22, they were not prompted to answer questions 23-24, which were intended as follow-up questions\*\*\*

23. Please select any medication you are taking to treat your depression from the following list:

Celexa (Citalopram)  
 Cymbalta (Duloxetine)  
 Effexor (Venlafaxine)  
 Lexapro (Escitalopram)  
 Paxil (Paroxetine)  
 Pristiq (Desvenlafaxine)  
 Prozac (Fluoxetine)  
 Wellbutrin (Bupropion)  
 Zoloft (Sertraline)  
 Other

24. Do you find your current medication(s) to be helpful in treating your depression?  
 Yes  
 No
25. Have you taken any medication(s) for depression as prescribed by a physician in the past?  
 Yes  
 No

\*\*\*If a participant answered No to question 25, they were not prompted to answer question 26, which was intended as a follow-up question\*\*\*

26. About how many times in the past have you taken antidepressant medication(s)?

1  
 2  
 3  
 4  
 5+

27. Are you currently taking any nutritional supplements (e.g. Fish Oils, St. John's Wort, herbs, etc.) to treat your depression?  
 Yes  
 No

\*\*\*If a participant answered No to question 27, they were not prompted to answer question 28, which was intended as a follow-up question\*\*\*

28. Do you find the nutritional supplement(s) to be helpful in treating your depression?  
 Yes  
 No

29. Please select all of the following psychiatric conditions that apply to you:
- Alzheimer's Disease
  - Anxiety Disorder
  - Attention-Deficit/Hyperactivity Disorder (ADHD)
  - Bipolar Disorder
  - Post-Traumatic Stress Disorder
  - Problems with Substance Abuse
  - Schizophrenia
  - Other Psychiatric Condition
30. Please select all of the following medical conditions that apply to you:
- Diabetes
  - Heart Disease
  - Hypertension
  - Other Medical Condition
31. To your knowledge, have you ever received a diagnosis of depression (e.g. Major Depressive Disorder, Persistent Depressive Disorder (Dysthymia), Unspecified Depressive Disorder) in the past or do you currently have one?
- Yes
  - No

### **PHQ-9**

- Over the last 2 weeks, how often have you been bothered by any of the following problems?
1. Little interest or pleasure in doing things
    - Not at all
    - Several days
    - More than half the days
    - Nearly every day
  2. Feeling down, depressed, or hopeless
    - Not at all
    - Several days
    - More than half the days
    - Nearly every day
  3. Trouble falling or staying asleep, or sleeping too much
    - Not at all
    - Several days
    - More than half the days
    - Nearly every day
  4. Feeling tired or having little energy
    - Not at all
    - Several days
    - More than half the days
    - Nearly every day
  5. Poor appetite or overeating
    - Not at all
    - Several days

- More than half the days  
Nearly every day
6. Feeling bad about yourself or that you are a failure or have let yourself or your family down  
Not at all  
Several days  
More than half the days  
Nearly every day
7. Trouble concentrating on things, such as reading the newspaper or watching television  
Not at all  
Several days  
More than half the days  
Nearly every day
8. Moving or speaking so slowly that other people could have noticed. Or the opposite being so fidgety or restless that you have been moving around a lot more than usual  
Not at all  
Several days  
More than half the days  
Nearly every day
9. Thoughts that you would be better off dead, or of hurting yourself  
Not at all  
Several days  
More than half the days  
Nearly every day

[\*\*\*If a study participant endorses suicidality/self-harm (any answer other than “Not at all”), the following safety recommendations will be automatically provided within the online survey:

For concerns related to suicidality or self-harm, individuals need to contact or meet with a qualified healthcare professional. If you are in crisis and need immediate assistance:

- 1) Go to the nearest emergency room
- 2) Call 911 and seek immediate assistance from a professional
- 3) Contact the National Suicide Prevention Lifeline (1-800-273-8255)\*\*\*]

### **WSAS (Work and Social Adjustment Scale)**

People's depression sometimes affects their ability to do certain day-to-day tasks in their lives. To rate your depression, look at each section and determine on the scale provided how much your depression impairs your ability to carry out the activity. This assessment is not intended to be a diagnosis. If you are concerned about your results in any way, please speak with a qualified health professional.

If you're retired or choose not to have a job for reasons unrelated to your problem, tick here

1. Because of my depression my ability to work is impaired. '0' means 'not at all impaired' and '8' means very severely impaired to the point I can't work.

Not at all  
Slightly  
Definitely  
Markedly  
Very severely

2. Because of my depression my home management (cleaning, tidying, shopping, cooking, looking after home or children, paying bills) is impaired.

Not at all  
Slightly  
Definitely  
Markedly  
Very severely

3. Because of my depression my social leisure activities (with other people e.g. parties, bars, clubs, outings, visits, dating, home entertaining) are impaired.

Not at all  
Slightly  
Definitely  
Markedly  
Very severely

4. Because of my depression, my private leisure activities (done alone, such as reading, gardening, collecting, sewing, walking alone) are impaired.

Not at all  
Slightly  
Definitely  
Markedly  
Very severely

5. Because of my depression, my ability to form and maintain close relationships with others, including those I live with, is impaired.

Not at all  
Slightly  
Definitely  
Markedly  
Very severely

### **Perceived Barriers to Psychological Treatment (PBPT)**

\*\*\*This section asks about how different problems might get in the way of seeing a counselor or therapist. When completing this section, think about the problems that got in the way of you seeing a counselor **BEFORE** you started counseling. We want to know about what barriers to counseling you faced in the **past**. This section also asks about weekly counseling sessions that last approximately 50 minutes. Please complete this section even if your counseling sessions are less frequent than every week and if your sessions last less than 50 minutes.\*\*\*

We are interested in understanding what kinds of things make it hard for people to obtain counseling for stress related problems (nervousness, anxiety, depression, etc.) or health problems (weight, diet, exercise, smoking). We would like you to rate the degree to which different kinds of problems (transportation difficulties, health problems like fatigue, etc.) got in the way of seeing a counselor or therapist. If a particular problem does not apply to you mark the "Not Difficult at All" column.

For the purpose of this questionnaire, assume that counseling would involve weekly sessions in the counselor's or therapist's office lasting approximately 50 Minutes.

	Not Difficult at All (1)	Slightly Difficult (2)	Moderately Difficult (3)	Extremely Difficult (4)	Impossible (5)
1. Problems with transportation (no car, parking problems, poor public transportation, etc.) made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The responsibility of caring for loved ones (children, someone with an illness, etc.) made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The cost of counseling made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. My daily responsibilities and activities made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. The lack of available counseling services in my area made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Not knowing how to find a good counselor made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Getting time off from work to go to counseling made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Physical problems, such as difficulties walking or getting around, made it _____ for me to attend weekly counseling.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



- |   |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 9. Physical symptoms (fatigue, pain, breathing difficulties, etc.) made it _____ for me to attend weekly counseling.                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. A serious Illness which requires me to stay close to home made it _____ for me to attend weekly counseling.                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Having heard about or having had a bad or unsatisfactory experience with counseling made it _____ for me to attend weekly counseling. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Distrust of counselors made it _____ for me to attend weekly counseling.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. I wouldn't expect counseling to be helpful and this made it _____ for me to attend weekly counseling.                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Attending counseling is too self-indulgent and that made it _____ for me to attend weekly counseling.                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Anxiety about going far from my home made it _____ for me to attend weekly counseling.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Concerns about having upsetting feelings in counseling made it _____ for me to attend weekly counseling.                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. I feel that talking about upsetting issues makes them worse and that made it _____ for me to attend weekly counseling.                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Lack of energy or motivation to make an appointment and then go made it _____ for me to attend weekly counseling.                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Difficulty motivating myself to do anything at all made it _____ for me to attend weekly counseling.                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. Discomfort with having someone see me while I am  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

emotional made it \_\_\_\_\_ for me to attend weekly counseling.

- |  |                          |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 21. My problems are not severe enough for counseling and therefore it was _____ for me to attend weekly counseling.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. Having family and/or friends know I was going to counseling made it _____ for me to attend weekly counseling.        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. Having to talk to someone I do not know about personal issues made it _____ for me to attend weekly counseling.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. My concern about being judged by the counselor made it _____ for me to attend weekly counseling.                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. I just do not think a counselor would truly care about me and that made it _____ for me to attend weekly counseling. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Attending counseling means I cannot solve my own problems and that made it _____ for me to attend weekly counseling. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. Having a medical or insurance record of my counseling sessions made it _____ for me to attend weekly counseling.     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please feel free to provide other reasons that get in the way of you seeing a therapist or counselor: (Free response) (Please avoid using any names or identifiers here that would identify you as this is an anonymous survey)

\*\*\*The following scale, Overcoming Barriers to Psychotherapy (OBP), is designed as a companion measure to the Perceived Barriers to Psychological Treatment (PBPT) scale. Participants who rate barriers at a “2” indicating “Slightly Difficult” or higher on the Perceived Barriers to Psychological Treatment (PBPT) scale will endorse solutions for the corresponding barrier-solution set on Overcoming Barriers to Psychotherapy (OBP) scale. Participants who rate barriers at a “1” indicating “Not at all Difficult” on the Perceived Barriers to Psychological Treatment (PBPT) scale will not endorse solutions for the corresponding barrier-solution set on Overcoming Barriers to Psychotherapy (OBP) scale. In the event that a majority of participants are rating a large number of barriers at a “1” indicating “Not at all Difficult,” on the PBPT, we

may revise the rating system, such that all participants will endorse solutions for all barrier-solution sets on the OBP regardless of their ratings of barriers on the PBPT.\*\*\*

### **Overcoming Barriers to Psychotherapy (OBP)**

\*\*\*The following section asks about weekly counseling sessions that last approximately 50 minutes. Please complete this section even if your counseling sessions are less frequent than every week and if your sessions last less than 50 minutes.\*\*\*

The following section is intended to gather information on your beliefs regarding counseling. Overall this study aims to gain a better understanding of what factors make it easier for individuals to begin counseling. By sharing your honest perspective on the topic, the hope is that the results of this study can improve the treatment of depression for others.

- Think back to the days/weeks/months leading up to your eventual decision to start counseling. To the best of your ability, try to bring to mind any factors or beliefs that may have caused you to hesitate about or postpone your decision to begin counseling. Do your best to put yourself in the mentality you had at that time.
- For the next section, please select the solution that was most helpful in allowing you to overcome the barrier that made it difficult for you to attend weekly counseling. It may not fit perfectly, but try to select the answer that helped you most in overcoming this barrier and beginning counseling.

### **Study Items**

Of the following solutions, which was most helpful in getting past this difficulty in attending counseling?

**Problems with transportation (no car, parking problems, poor public transportation, etc.) made it difficult for me to attend weekly counseling. [Extrinsic]**

- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I used public transportation, paratransit, a cab, or other means of transportation (other than driving self) to attend counseling. **[Extrinsic-Specific]**
- I decided it was worth dealing with my transportation problems because I needed treatment for my depression. **[Intrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**

**The responsibility of caring for loved ones (children, someone with an illness, etc.) made it difficult for me to attend weekly counseling. [Extrinsic]**

- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**

- I realized that I could not care for others unless I got help for my depression. **[Intrinsic-Specific]**
- I asked for time off work or changed my schedule to fulfill my responsibilities and also attend counseling. **[Extrinsic-Specific]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**

**The cost of counseling made it difficult for me to attend weekly counseling. [Extrinsic]**

- I found lower cost or sliding scale services or was able to have my insurance cover the cost. **[Extrinsic-Specific]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- I realized that it was worth the cost because my depression was impacting my ability to work and provide for myself or my family member. **[Intrinsic-Specific]**

**My daily responsibilities and activities made it difficult for me to attend weekly counseling. [Extrinsic]**

- I needed help with my depression, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- I asked for help from friends, family, or loved ones to assist with my responsibilities so I could attend counseling. **[Extrinsic-Specific]**
- I realized that my depression was impacting my ability to complete these responsibilities and activities. **[Intrinsic-Specific]**

**The lack of available counseling services in my area made it difficult for me to attend weekly counseling. [Extrinsic]**

- I did a more thorough search and found a counselor closer to me. **[Extrinsic-Specific]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I decided to deal with the inconvenience of a long commute to attend counseling. **[Intrinsic-Specific]**
- I was referred to a counselor by a friend, family member, or loved one, or physician/PCP. **[Extrinsic-General]**

**Not knowing how to find a good counselor made it difficult for me to attend weekly counseling. [Extrinsic]**

- After discussing my difficulty finding a good counselor, my physician/PCP gave me a referral to a counselor they trusted. **[Extrinsic-Specific]**
- I pushed myself to make the extra effort to find a good counselor. **[Intrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**

**Getting time off from work to go to counseling made it difficult for me to attend weekly counseling. [Extrinsic]**

- I asked for time off work and/or told my boss/supervisor that I needed to attend counseling. **[Extrinsic-Specific]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I realized that my depression was impacting my ability to work and/or provide for myself or my family member. **[Intrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**

**Physical problems, such as difficulties walking or getting around, made it difficult for me to attend weekly counseling. [Intrinsic]**

- I was referred to a counselor by a friend, family member, or loved one, or physician/PCP. **[Extrinsic-General]**
- I believed that the energy I put into navigating my physical problems and/or limitations would be rewarded by the benefits of counseling. **[Intrinsic-Specific]**
- My depression seemed worse than my physical problems. **[Intrinsic-General]**
- I found counseling services that were more physically accessible. **[Extrinsic-Specific]**

**Physical symptoms (fatigue, pain, breathing difficulties, etc.) made it difficult for me to attend weekly counseling. [Intrinsic]**

- My depression seemed worse than my physical symptoms. **[Intrinsic-General]**
- I received help from a friend, family member, or loved one with my physical symptoms to attend counseling. **[Extrinsic-Specific]**
- I believed that my physical symptoms would be easier to manage if I got help with my depression. **[Intrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**

**A serious illness which requires me to stay close to home made it difficult for me to attend weekly counseling. [Intrinsic]**

- A friend, family member, or loved one helped me attend counseling. **[Extrinsic-General]**

- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I found a counselor closer to me. **[Extrinsic-Specific]**
- I believed that my illness would be easier to manage if I got help with my depression. **[Intrinsic-Specific]**

**Having heard about or having had a bad or unsatisfactory experience with counseling made it difficult for me to attend weekly counseling. [Intrinsic]**

- I received a referral from a trusted friend, family member, or loved one who had a positive experience with a counselor. **[Extrinsic-Specific]**
- I believed that seeing a different counselor would be helpful. **[Intrinsic-Specific]**
- I was referred to a counselor by a friend, family member, or loved one, or physician/PCP. **[Extrinsic-General]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**

**Distrust of counselors made it difficult for me to attend weekly counseling. [Intrinsic]**

- After discussing my distrust of counselors, someone close to me recommended a counselor they trusted, which eased my concern. **[Extrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- Despite my distrust of counselors, I still preferred counseling over medication and felt that I needed treatment. **[Intrinsic-Specific]**

**I wouldn't expect counseling to be helpful and this made it difficult for me to attend weekly counseling. [Intrinsic]**

- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I received a referral from a trusted friend, family member, or loved one. **[Extrinsic-General]**
- I spoke with someone who found counseling helpful, which encouraged me to attend counseling. **[Extrinsic-Specific]**
- I realized that my depression was making counseling seem like a less helpful option. **[Intrinsic-Specific]**

**Attending counseling is too self-indulgent and that made it difficult for me to attend weekly counseling. [Intrinsic]**

- I heard about a positive counseling experience and the benefits of counseling, which eased my concerns about it being too self-indulgent. **[Extrinsic-Specific]**

- Despite counseling feeling self-indulgent, I believed that it would be a worthwhile investment for my mental health. **[Intrinsic-Specific]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- I felt motivated to attend counseling because I needed help with my depression. **[Intrinsic-General]**

**Anxiety about going far from my home made it difficult for me to attend weekly counseling. [Intrinsic]**

- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- I realized that my anxiety about going far from my home was getting in the way of treatment that I needed. **[Intrinsic-Specific]**
- I found a counselor closer to me. **[Extrinsic-Specific]**

**Concerns about having upsetting feelings in counseling made it difficult for me to attend weekly counseling. [Intrinsic]**

- I trusted that my counselor would have the expertise to help me deal with upsetting feelings. **[Intrinsic-Specific]**
- I spoke with someone who had a positive counseling experience, and he/she encouraged me to confront my upsetting feelings in counseling. **[Extrinsic-Specific]**
- I was referred to a counselor by a friend, family member, or loved one, or physician/PCP. **[Extrinsic-General]**
- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**

**I feel that talking about upsetting issues makes them worse and that made it difficult for me to attend weekly counseling. [Intrinsic]**

- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- I spoke with someone who had a positive counseling experience, and it opened my mind to counseling being helpful. **[Extrinsic-Specific]**
- I accepted the need to confront upsetting issues in counseling to overcome my depression. **[Intrinsic-Specific]**

**Lack of energy or motivation to make an appointment and then go made it difficult for me to attend weekly counseling. [Intrinsic]**

- A friend, family member, or loved one encouraged me to attend counseling. [**Extrinsic-General**]
- I believed that counseling would help improve my energy and motivation. [**Intrinsic-Specific**]
- I needed help for my depression, so I made counseling a bigger priority. [**Intrinsic-General**]
- I received a referral for counseling from my physician after discussing my lack of energy or motivation. [**Extrinsic-Specific**]

**Difficulty motivating myself to do anything at all made it difficult for me to attend weekly counseling. [**Intrinsic**]**

- I needed help for my depression, so I made counseling a bigger priority. [**Intrinsic-General**]
- I pushed myself to attend counseling because I was fearful that my motivation and depression would get worse. [**Intrinsic-Specific**]
- I read or heard about how counseling could help improve motivation. [**Extrinsic-Specific**]
- A friend, family member, or loved one encouraged me to attend counseling. [**Extrinsic-General**]

**Discomfort with having someone see me while I am emotional made it difficult for me to attend weekly counseling. [**Intrinsic**]**

- I spoke with someone who had a positive counseling experience, and they encouraged me to attend counseling despite this concern. [**Extrinsic-Specific**]
- A friend, family member, or loved one encouraged me to attend counseling. [**Extrinsic-General**]
- I decided to start counseling and try to overcome this discomfort. [**Intrinsic-Specific**]
- My depression was getting worse, so I felt motivated to attend counseling anyway. [**Intrinsic-General**]

**My problems are not severe enough for counseling and therefore it was difficult for me to attend weekly counseling. [**Intrinsic**]**

- I needed help for my depression, so I made counseling a bigger priority. [**Intrinsic-General**]
- I spoke with a friend, family member, loved one, physician or other provider and learned that my problems were appropriate for counseling. [**Extrinsic-Specific**]
- I realized that I was downplaying my problems and started taking my depression more seriously. [**Intrinsic-Specific**]
- A friend, family member, or loved one encouraged me to attend counseling. [**Extrinsic-General**]



**Having family and/or friends know I was going to counseling made it difficult for me to attend weekly counseling. [Intrinsic]**

- I was referred to a counselor by my physician, PCP, or other provider. [Extrinsic-General]
- I decided to keep counseling a secret from others. [Intrinsic-Specific]
- My depression was getting worse, so I felt motivated to attend counseling anyway. [Intrinsic-General]
- I had a discussion with this individual (or individuals) and explained my reasons for attending counseling. [Extrinsic-Specific]

**Having to talk to someone I do not know about personal issues made it difficult for me to attend weekly counseling. [Intrinsic]**

- I decided to push myself to talk to a counselor about personal issues, so that I could deal with my depression. [Intrinsic-Specific]
- I needed help for my depression, so I made counseling a bigger priority. [Intrinsic-General]
- I spoke with someone who had a positive counseling experience, which eased my concerns about talking to someone I did not know about personal issues. [Extrinsic-Specific]
- I received a referral from a friend, family member, loved one, or physician/PCP. [Extrinsic-General]

**My concern about being judged by the counselor made it difficult for me to attend weekly counseling. [Intrinsic]**

- I spoke with someone who had a positive experience with a counselor, which eased my concern about being judged. [Extrinsic-Specific]
- A friend, family member, or loved one encouraged me to attend counseling. [Extrinsic-General]
- I decided to confront my issues in counseling rather than worry about what a counselor might think about me. [Intrinsic-Specific]
- I needed help for my depression, so I made counseling a bigger priority. [Intrinsic-General]

**I just do not think a counselor would truly care about me and that made it difficult for me to attend weekly counseling. [Intrinsic]**

- A friend, family member, or loved one encouraged me to attend counseling. [Extrinsic-General]
- My depression was starting to affect more areas of my life (e.g. work, relationships), so I felt motivated to attend counseling anyway. [Intrinsic-General]
- I decided to try therapy and see if I could find a counselor who made me feel cared for. [Intrinsic-Specific]

- I spoke with someone who had a positive experience with a counselor, which opened my mind to the possibility of a counselor caring about me. **[Extrinsic-Specific]**

**Attending counseling means I cannot solve my own problems and that made it difficult for me to attend weekly counseling. [Intrinsic]**

- I spoke with someone who had a positive counseling experience, and they helped me to think of counseling as a way of solving my own problems. **[Extrinsic-Specific]**
- I needed help for my depression, so I made counseling a bigger priority. **[Intrinsic-General]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- I realized that doing nothing was worse than asking for help from a counselor. . **[Intrinsic-Specific]**

**Having a medical or insurance record of my counseling sessions made it difficult for me to attend weekly counseling. [Extrinsic]**

- My depression was getting worse, so I felt motivated to attend counseling anyway. **[Intrinsic-General]**
- A friend, family member, or loved one encouraged me to attend counseling. **[Extrinsic-General]**
- Speaking with a friend, family member, loved one, physician, or other provider eased my concerns about having a medical or insurance record of my counseling sessions. **[Extrinsic-Specific]**
- I trusted that the information I shared in counseling would be kept private and would not affect me negatively. **[Intrinsic-Specific]**

Please feel free to provide other solutions that allowed you to overcome barriers and begin counseling: (Free response) (Please avoid using any names or identifiers here that would identify you as this is an anonymous survey)

Thank you for your participation! We hope that the answers you provided will help us to reduce barriers to counseling for adults with depression.

For concerns related to suicidality or self-harm, individuals need to contact or meet with a qualified healthcare professional. If you are in crisis and need immediate assistance:

- 1) Go to the nearest emergency room
- 2) Call 911 and seek immediate assistance from a professional
- 3) Contact the National Suicide Prevention Lifeline (1-800-273-8255)

**APPENDIX B - Study Recruitment Flyer**

**Do you suffer from depression?  
Or have you in the past?  
Did you have trouble starting counseling?**

We invite you to participate in a research study conducted by UT Southwestern investigators. Participants are needed to complete a survey on barriers to starting individual counseling in adults with depression.

You are eligible to participate if you:

- ✓ Are at least 18 years old
- ✓ Have current or past depression
- ✓ Are currently in individual counseling
- ✓ Can read and write in English
- ✓ Have access to internet (via PC, Mac, laptop, tablet, smartphone, etc.)

There are many barriers people encounter when considering counseling as a treatment option. We are interested in learning how adults with depression overcome barriers to counseling and begin treatment. Your participation will help us to reduce these barriers so we can help others with untreated depression to enter treatment.

Participation involves an online survey that should take ~15-30 minutes

If you would like to participate, simply go to this web address on your phone, tablet, laptop, or computer on any browser:

<http://is.gd/overcomingbarriers>

If you have a device that has an app capable of reading QR codes, you may scan the QR code below, which should take you directly to the survey in a web browser.



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## APPENDIX C

### Alternative Barriers Reported on PBPT (Free-Text Responses)

I felt crazy getting counseling.
When a Psychologist told me I didn't look like I had any mental condition and demanded we talk about what he wanted, which was in regards to my weight. I was scared to go find a new Psychologist in fear that would happen again.
I wouldn't know where to start or what to talk about made it moderately difficult for me to attend counseling
I always feel like I need to put on a smile for the therapist to keep them from knowing that I'm not getting better.
I didn't know I had a problem until my parents suggested I get help after 5-6 months of sadness and crying. I knew I was sad but I had no idea I had bipolar depression. I didn't think I needed a therapist.
My depression/anxiety comes in waves. So we going through a bad period of depression, I would consider making an apt. But a few days later, everything would be fine again and I would lose the motivation to go talk to someone.
I had been to so many "talk" therapists I was tired of talking. Over years, didn't seem to help. Finally doing CBT training weekly. First time in years I am getting what I need.
The types of jobs that makes it difficult to take off or those working a second employment with limited free time, maybe.
I thought that things would get better with time.
Social stigma
Trying other counselors and having bad experiences
High co-pays even with insurance
Because of anxiety and some paranoia in my past, I never felt I could trust that a counselor was looking out for my best interest. I also never knew how I could find a good counselor who fits with my needs and who is highly qualified and practiced. Also, I had a false belief that counselors and psychologists were for only for "crazy people". Part of me also thought psychotherapy treatment took too long (not each session, but the period of months or years that it takes to be effective). I never knew how to recognize my emotions or feelings, so I felt that counseling was pointless for me. I didn't think I was "treatable" with via counseling.
Most mental health professionals seem to think One Size Fits All regarding treatment
Having the guilt of spending time and money on a problem that is "all in my head" and not a physical ailment got in the way of seeing therapist. Feelings of my depression not being severe enough also got in the way.
Lack of counselors availability (open appointments) made it difficult for me to schedule my first session.

A sense of being overwhelmed, so much to work on that I didn't know where to start....so I didn't do anything at all.
Did not want family and friends to worry about me
When I was in high school, I had no idea I was depressed. The lack of insight and vocabulary made it hard to go to therapy because I couldn't self-identify that I had a problem. Additionally, I tried to hide what was bothering me from those around me making it difficult for others to identify whether or not I was having issues.
Started when I was 16. 40+ years with little success with 6 counselors made seeking counseling again very difficult.
Finding a counselor who can really diagnose and help is a big challenge. Many do not accept insurance. What a sad state of affairs.
Finding out what counselors my insurance will pay for made it difficult, and limited my choices.
My employer initially offered free counseling, but the office was disorganized, so it took a long time to get an appointment. When I finally started, on my second appointment, they informed me that their schedules were too full to do regular counseling. The whole process made it difficult to start counseling in earnest because they wasted nearly two months in this process.
Many years ago I called a depression phone line to get information and it was never sent. A counselor fell asleep [during a couple's counseling session with me and my husband]. We didn't go back. One psychiatrist I made an appointment with never saw me. He had his young assistant interview me. 20 years ago I was seeing a psychiatrist and on an antidepressant for 5-6 years. During the last 3 years my arms and legs broke out in open sores that would not heal. I told the doctor that I was just on that one medicine and could I get off the drug. He did not recommend it. I got off the drug and I healed. I stopped going. I had tried 3 other meds earlier with side effects.
Counselors who accepted my insurance tended to be less helpful than those who were private pay only. Filing super bills for reimbursement was a tedious and confusing task, especially when I was younger and very depressed. Partial reimbursement was necessary though in order for me to be able to afford counseling, so ultimately I stopped going. At one time myself and my roommate were seeing the same counselor individually. That counselor broke confidentiality which caused a serious trust issue for me with my counselor and conflict between myself and my roommate. The same counselor did the same thing with my husband at the time, telling him something I'd said in therapy during a one-time joint session (my husband came for one of my individual sessions-we were not in couples counseling). The same counselor later referred me to a psychiatrist who I later learned wrote prescriptions for people who were "prescription shopping." He gave me Xanax without ever assessing me. After all of that I left therapy and didn't return for 5 years.
Lack of knowledge about counseling services available to students

## APPENDIX D

### Alternative Solutions Reported on OBP (Free-Text Responses)

I was at my lowest but didn't want to give up.
I can't take time off but the therapist has evening hours which makes it possible to attend my sessions.
Someone would drive me to my appointments if I was too anxious to drive myself the distance.
Seeking referrals from others, including my physician made it easier to see a therapist.
Therapist had evening availability
I spoke with a trusted family member who had also been on anxiolytics and antidepressants. They gave me the advice that if I was on medicine, then I would also be going to a counselor. They recommended not just using medicine to try and treat my anxiety and depression. They had gone through some horrendous life experiences and had opened up about being on medicine and going to counseling, which allowed me to believe the efficacy of counseling.
Still looking for a therapist who thinks outside the box
I felt that my depression and thoughts of self-harm were too severe to not get help with, and also that I felt that I didn't want to tell loved ones the details of my depression in the thought that they would be pressured to help me.
Finding the confidence to attend the meeting. Glad I found mine
I decided to try counseling for a short while, knowing that I always had the option to quit.
My chronic illness was able to be better controlled with medication. Then, I was diagnosed with breast cancer. Finally, my developmentally disabled son had a mental health break and was suicidal and needed even more support and counseling than he had been receiving.
I have been dealing with depression since a child. I know some things that help like going outside(sunshine), going to events even if I don't feel like it, making plans ahead of time. I have never given up on myself or my worth. I'm just sad that depression has robbed me of a lot of my quality of life. I am 71.
I trusted that having a record of being compliant and consistent with treatment would be in my favor, but I was denied long term care and accidental death insurance for something in my psychiatric records even though I've never once had a suicide attempt and have consistently managed my depression.

## CHAPTER 10

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