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Refinement and Pilot Testing of a Culturally Enhanced Treatment for Depressed African-Americans

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REFINEMENT AND PILOT TESTING OF A CULTURALLY ENHANCED TREATMENT FOR DEPRESSED AFRICAN-AMERICANS

by

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ABSTRACT
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A multitude of evidence suggests that while African Americans are adversely impacted by depression, they still experience significant health disparities in the receipt and acceptability of treatments for the disorder. This study, conducted in two phases, was an initial attempt to address some of these disparities. Phase 1 explored the acceptability and feasibility of implementing a group behavioral activation psychotherapy that incorporated culturally adapted components to address specific risk and protective factors for depression experienced by African Americans. Overall, adequate levels of feasibility were obtained for the organic recruitment of participants from community nursing centers in Milwaukee and the administration of therapy groups at these sites. Participants also reported adequate levels of acceptability for treatment components. Modifications were made to the initial treatment manual from participant feedback and analysis of feasibility data, and this manual was tested in a small, waitlist randomized controlled trial at one of the nursing centers. It was hypothesized that those receiving treatment would experience

significant reductions in depression across the trial relative to waitlist controls, and that active group members would experience significantly greater change in variables targeted by the culturally adapted components. High levels of attrition from both groups, however, ruled out meaningful comparisons of groups. Uncontrolled post-hoc analyses of changes in Phase 1 depression groups, however, showed reductions in depression symptoms for both groups. Only one of the groups, however, experienced significant reductions in depression across time. Implications and future directions are discussed.

This thesis is dedicated to my two wonderful children Teeko and Bramsey. Persistence in this project would not have been possible without their continued support in the form of an unending supply of snaggles, stinky kisses, and early morning rises. I would like to thank Kristin, the love of my life, for her unending support in all of my personal and academic endeavors. Many thanks also go out my loving mother, father, brother, step brother and grandmother for all their love and support from 1000 miles away. Moreover, completion of this project would not have been possible without the passion, support, and dedication of my "Beat Back the Blues" study team. I would especially like to thank Ms. Donetta Walker, who wore many hats as part of the team, for being my rock throughout this process.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Introduction

Despite the availability of empirically supported treatments for depression such as behavioral activation (BA; Martell, Addis, & Jacobson, 2001) and cognitive therapy (Beck, Rush, Shaw, & Emory, 1979), data is significantly more sparse regarding the efficacy of these approaches for African Americans. As described in more detail below, major disparities in mental health service utilization and lower satisfaction with services amongst AA suggest the potential utility of developing culturally sensitive treatments in order to enhance treatment engagement and mitigate treatment attrition within this group.

The following analysis and synthesis of the research literature advances the argument for developing a culturally adapted form of psychotherapy for African American depression, using a behavioral activation approach. Specifically, the theoretical and empirical rationales for incorporating various culturally adapted components into a behavioral activation framework are reviewed in the context of the ability of such adaptations to address unique risk factors of African Americans for the onset and maintenance of depression in a culturally sensitive manner that is also consistent with the group's values and mental health treatment preferences. These components, which were incorporated into an initial draft of a treatment manual, are described. Prior to addressing these topics, a brief review of depression phenomenology, rates of the disorder, and contemporary treatment approaches will be reviewed for the population at large, and for African Americans more specifically.

Symptoms of Major Depressive Disorder

Major Depressive Disorder is diagnosed when criteria are met for a past or current major depressive episode (MDE; APA, 2000a), the criteria of which are enumerated in

the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; APA, 2000a). Whereas the constellation of symptoms reflecting a MDE may vary markedly across individuals, all diagnosed episodes must share at least one of two cardinal symptoms. The first is depressed mood, which individuals may verbally describe as feeling sad, down, or depressed, while anhedonia, the second cardinal symptom, refers to reports of markedly lower interest or pleasure in activities, hobbies, or tasks previously enjoyed. In order to be diagnosed with a MDE, one must endorse at least five symptoms, of which at least one is a cardinal symptom being present for most of the day nearly everyday during a 2-week period. The additional seven symptoms of an episode described in the DSM-IV (APA, 2000a) include symptoms related to (1) body weight, (2) sleep, (3) motor changes, (4) lower energy, (5) feelings of guilt and worthlessness, (6) cognitive difficulties, (7) and suicidal ideation or preoccupation with thoughts of death. In general, these symptoms must be significantly present during the same 2 week period, along with the cardinal symptoms described above.

Additional criteria must also be satisfied prior to receipt of diagnosis. Once the aforementioned criteria are met, a diagnosis is assigned if there is no evident history of Mixed Episodes, the symptoms do not directly follow from physiological changes associated with substance use or medical condition, and the symptoms result in clinically significant impairment in at least one life area of functioning. Finally, in cases of bereavement, a diagnosis is not given unless clinically significant symptoms remain for a period greater than the two months following the loss.

The heterogeneity of depression is underscored not just by the variability in the number of potential symptoms that may constitute a diagnosis, but also in the variation

within specific symptom types. For instance, symptoms related to weight may refer to either weight loss or gain, while sleeping difficulties may similarly relate to either too much or too little sleep. In addition, motor changes may reflect either underlying agitation that manifests as behaviors such as pacing, handwringing, and rubbing, or instead, may include psychomotor retardation of behavioral responses such as reduced, or slower, speech and body movements (APA, 2000a).

The literature evaluating potential pathognomic and prognostic biological markers of depression further supports the characterization of the disorder as more of a loose constellation of symptoms. Multiple structural areas of the brain may be implicated in depression in one way or another, including the anterior cingulate cortex, hippocampal area, amygdale and anterior cingulate cortex (Davidson, Pizzagalli, Nitschke, & Putnam, 2002). Despite having isolated these areas of interest, however, great variability exists in terms of abnormalities associated with depression across studies and across patients within studies (Davidson et al., 2002).

Just as symptom profiles of depression are expected to exhibit some degree of variability, it is also possible that certain cultural groups may vary in the extent to which they experience specific symptom clusters of the disorders. Baker (2001), for instance, has suggested three alternative presentations of symptoms that may be common for African Americans. According to Baker, the "stoic believer" is unlikely to report symptoms associated with depressive affect such as sadness and may be more likely to endorse anhedonic symptoms. A second presentation, referred to as the "angry, evil" is defined by changes in personality reflecting greater anger and irritability. The generality

of these findings is very questionable, however, as delineation of subtypes is based on interpretation of a very limited number of taped client sessions.

Others have suggested that African Americans may be more likely to report somatic complaints associated with depression relative to Caucasians (Baker & Bell, 1999; Adebimpe, 1982 and that African Americans are more likely to seek treatment for somatic as opposed to cognitive symptoms such as demoralization (Snowden, 1999a). The generality of results of Snowden and colleagues to African American depression is questionable, however, given that participants were not diagnosed with standardized depression instruments and that many of the assessed symptoms appear related more to anxiety.

Racial differences in symptom presentation have also been explored in other studies using standardized depression measures. Findings have shown that elderly African American participants endorse significantly more somatic symptoms of depression relative to Caucasians (Blazer, Landerman, Hays, Simonstick, & Saunders, 1998) when administered the Center for Epidemiological Studies Depression Scale (CESD; Radloff, 1977), although this difference did not remain statistically significant when income and education were used as covariates in the regression model. A major limitation of this study, however, relates to the absence of standardized diagnoses of depression as an inclusion criterion, which precludes any firm conclusions regarding applicability of results to depression per se.

Another study (Wohl, Lesser, & Smith, 1997) improved upon these shortcomings by using a structured interview to diagnose depression and rule out other disorders such as psychosis, bipolar disorder and substance disorder when selecting participants.

Analyses of racial differences in the endorsement of symptoms assessed via the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967) for age matched participants did not find evidence of greater reports of physical complaints for African Americans, but did show that African Americans were more likely than Caucasians to report their symptoms as being worse in the morning, and were less likely to endorse mood and anxiety symptoms. According to the authors, the greater number of somatic complaints found in other studies may be confounded with significant age differences between groups evaluated.

An additional means of evaluating variation in symptom typology across racial groups involves testing different models using factor analytic techniques to explore differences in factor structures of measures across groups. In an analysis of data from a large epidemiological study of Caucasian and African American elderly participants from a community sample (Blazer et al., 1998), confirmatory factor analyses of the Center for Epidemiological Studies Depression Scale run separately for each ethnic group supported a four factor solution of depressed affect, positive affect, somatic complaints, and interpersonal problems for both groups. Another study (Nguyen, KitnerTriolo, Evans, & Zonderman, 2004) using a similar methodology corroborated these findings of invariance of the CESD factor structure across race and replicated findings across varying levels of socioeconomic status for African Americans and Caucasians. Nguyen et al. also tested a 3 factor model that collapsed somatic and depressive affect symptoms onto one factor in order to determine whether such a model provided significantly better fit for African Americans relative to the significant four factor model. Results indicated poorer fit for the three factor model.

A final study examined the factor structure of the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), an instrument used to assess depression severity, in a sample low income sample of African Americans receiving outpatient medical care (Grothe et al., 2005). Confirmatory factor analyses yielded two first order factors of cognitive and somatic symptoms that, in turn, significantly loaded onto a second order factor of depression. Although the results from these factor analytic studies are tempered by some of the same limitations already discussed such as the absence of a Major Depressive Disorder diagnosis as an inclusion criterion, they nonetheless lend initial support to the suggestion that the symptom clusters commonly observed for depression are generally relevant to African Americans.

Overall then, the studies reviewed support the notion that African Americans experience symptoms qualitatively similar to those experienced by Caucasians. At the same time, however, findings also suggest that African Americans may be less likely to report mood symptoms relative to Caucasians, and that depression severity may vary across racial groups as a function of the time of day.

Risk Factors and Rates of Depression for African Americans

Despite the above similarities in symptom presentations, African Americans on average experience a significantly greater number of risk factors for depression. As a group, they are estimated to be up to 10 times more likely to live in poverty than Caucasians (Belle, 1990), with poverty in turn being one of the most robust predictors of depression (Belle & Doucet, 2003; Belle, 1990). Data from the United States Census Bureau indicates that African Americans constituted almost 25% of those living below the poverty line in the United States in 2001, and that the rate of unemployment for

African American males was double the rate for Caucasians in 2002 (US Census Bureau, 2002) .

Longitudinal analyses have suggested that low income is associated with increased risk of depression over a nine year period (Kaplan, Roberts, Camaeho, & Coyne, 1987), and that African American women with fewer economic assets such as lack of homeownership experienced greater than twice the level of depressive symptomatology relative to those with more substantive economic assets (de Groot, Auslander, Williams, Sherraden, & Haire-Joshu, 2003). A number of cross sectional analyses have also shown a significant positive relation between financial strain and depressive symptomatology among African Americans. Structural equation modeling of a large pool of data from the National Commorbidity Study (Kessler, et al., 1996) indicated that financial strain negatively influenced depression severity among an African American community sample directly and indirectly through the availability of social support (Lincoln, Chatters, & Taylor, 2005). Another large study sampling African American women from an urban area using SEM also demonstrated this poverty depression link, even after taking into account the influence of other stressors likely to be experienced by women of lower SES such as physical safety and discrimination (Schluz et al., 2006).

Cross sectional regression analyses have corroborated the relationship between depression and poverty with African Americans. Analyses of a sample of middle aged African Americans found that those with low income were more than 1.6 times likely to be depressed, with perceptions of lacking financial support to support oneself and family associated with the likelihood being more than twice as likely to be depressed (Miller et

al., 2004). These odds ratios appear especially robust given the number of covariates and explanatory variables were included in the models such as demographics, housing quality, health insurance coverage, physical limitations, medical utilization, and social support. Odom and Vernon-Feagans (2010) extended these findings to rural African Americans in a study that included a baseline measure of depression as a covariate in a cross sectional analysis undertaken at a later time point. Although the inclusion of baseline depression does not eliminate the methodological issues of cross- sectional designs, it does partially rule out the alternative explanation of depression severity being constant across time, and leading to poverty as opposed to the converse possibility.

Discrimination is another risk factor for depression that is uniquely experienced by African Americans relative to Caucasians (Sanders-Thompson, 2002; Belle & Doucet, 2003; Clark, Anderson, Clark, & Williams, 1999). Despite the paucity of longitudinal designs evaluating this relationship, a number of cross-sectional analyses have highlighted this relationship (Schulz et al.., 2006; Odom & Vernon-Feagans, 2010; Siefert, Finlayson, Williams, Delva, & Ismail, 2007). One study of low income African American mothers that included a number of risk factors and protective factors as explanatory variables in the model found that a one unit increase in perceived discrimination was associated with increasing the likelihood of depression by a factor of 2.7 (Siefert et al., 2007).

Additional risk factors more likely to be experienced by African Americans are the greater likelihood of having experienced a traumatic event (U.S. Department of Health and Human Services, 2001; Green, Grace, Lindy, & Leonard, 1990; Breslau, Davis, & Andreski, 1995; Belle & Doucet, 2003), and disparities in physical health

(Centers for Disease Control, 2005; U.S. Department of Health and Human Services, 2000; National Institutes of Health, 2000). In a study previously described (Lincoln et al., 2005) using SEM, traumatic events were shown to have a direct, positive relationship with depression symptom severity. A significant amount of data, reviewed in a later section, indicates that African Americans experience significantly more physical health problems such as cardiovascular disease and diabetes (AHA, 2009b; 2010; 2011; ADA, 2011; Lloyd-Jones et al., 2009; NIH, 2011), and that depression may be both a risk factor and an outcome for such conditions (e.g. Katon et al., 2010; Mausbach, Patterson, Rabinowitz, Grant, & Schulz, 2007).

As a result of the disproportionately greater number of risk factors for depression experienced by African Americans relative to Caucasians, a reasonable corollary might posit that African Americans evidence significantly greater rates of depression as compared with the majority group. The DSM-IV (APA, 2000a) cites estimates of lifetime prevalence rates ranging from 10 to 25% for women and from 5 to 12% for men, and point prevalence rates estimated to range from 5 - 9% and 2 - 3% for women and men respectively. Interestingly, the manual suggests that these rates are unlikely to differ across ethnicities.

The data concerning prevalence rates for African Americans is in fact mixed, with some studies showing greater or equal rates, and others showing lower rates as compared with Caucasians. Results from one study examining depression in a community sample of middle aged African Americans found point prevalence rates of 21% for major depressive disorder (Miller et al., 2004) which appears significantly greater than rates published in the DSM-IV. Another study, examining prevalence of depression in African

American young adults, found lifetime prevalence of 9.4% (Ialongo et al., 2004), a rate more consistent with DSM statistics. Caution should be used in interpreting the results of Miller et al., however, as this study used a short form of the CESD, which may have resulted in inflated rates of depression relative to the structured interview used by Ialongo and colleagues.

Other studies have directly compared rates of depression between African Americans and Caucasians. Data from the large NIMH Collaborative Psychiatric Epidemiology Survey (n = 14710), in which structured interviews were used to assess lifetime and 12 month rates of depression, indicated that African Americans and Caucasians do not significantly differ in rates of depression on either measure (Gonzalez, Tarraf, Whitfield, & Vega, 2010). Another large study, in contrast, found that African Americans had significantly lower lifetime prevalence for Major Depressive Disorder, but did not differ from Caucasians when 12 month rates were examined (Williams et al., 2007).

Contrary to the above findings demonstrating at least equal rates of depression for African Americans, other studies suggest lower lifetime prevalence rates of MDD for African Americans relative to Caucasians (Zhang & Snowden, 1999; Riolo, Nguyen, Greden, & King, 2005). These results, however, should be qualified by taking note of the methodology employed in regression analyses, which controlled for factors associated with SES such as poverty and income levels. Given that African Americans are significantly more likely to be of lower SES (Belle, 1990), a possibility remains that partialing out the effect of a variable differentially affecting African Americans may lead some consumers of statistics to underestimate the impact of African American

depression. Whereas the results suggest, unsurprisingly, that race itself does not result in depression, a potentially relevant argument is that the statistics may be more meaningful if SES in these kinds of analyses is allowed freedom to vary. An additional artifact that may have deflated observed rates is the fact that community sampling generally did not include individuals in the prison system, which are likely to have greater psychopathology, including depression, as compared with community samples (Jordan, Schlenger, Fairbank, & Caddell, 1996; Rowell, Draine, & Wu, 2011). This omission is especially relevant, given that African American exhibit a disproportionate rate of incarceration relative to Caucasians (Harrison & Beck, 2006; Mauer & King, 2007).

Beyond providing information on the rates of depression across ethnicities, some of the previous studies yield additional information regarding the impairment associated with the disorder. Evidence suggests that even if African Americans are assumed to have comparable rates of depression, the impairment associated with the condition is more severe for them relative to Whites. For instance, African American depression was shown to have a more chronic course (Williams et al., 2007), with greater than 68% of African Americans having recurrent mood problems as opposed to a single depressive episode (Ialongo et al., 2004). In fact, those identifying as African American have been shown to be 1.6 times more likely to have recurrent episodes relative to Caucasians (Gonzalez et al., 2010). A final example of this disparity is found in reports suggesting that depressed African Americans report significantly more functional impairment associated with work and tasks of daily living (Gonzalez et al., 2010; Williams et al., 2007).

Costs Associated with Depression

In light of the high prevalence rates of depression described above, it is not surprising that the disorder poses a major health concern in this country. Depression is in fact one of the most commonly diagnosed psychiatric disorders (Dwight-Johnson, Sherbourne, Liao & Wells, 2000) and has been recognized as one of the most debilitating diseases worldwide, affecting approximately more than 20 million middle-aged individuals in the United States alone each year (Murray & Lopez, 1996). In addition to the personal costs of depression reflected in lower quality of life, familial stress, and even divorce (Booth et al., 1997; Shelton, 1985; Liem & Raymen, 1982), the disorder presents a huge economic burden. Depression has been associated with increased odds of obtaining disability payments, a significantly greater number of physical health problems, increased health care utilization, and higher health care premiums (Rytsala et al., 2007; Lerner et al., 2004; Baune, Adrian & Jacobi, 2007; Donohue & Pincus, 2007; Steffick, Fortney, Smith & Pyne, 2006). When the effects of absenteeism from work and reduced productivity on the job (Adler et al., 2006; Kessler & Frank, 1997; Lerner et al., 2004; Stewart, Ricci, Chee, Hahn & Morganstein, 2003) are also considered, the annual financial burden of depression in the United States has been estimated between 44 billion (Antonouccio, Thomas, & Danton, 1997) and 83 billion dollars (Greenberg et al., 2003).

Empirically Supported Cognitive Behavioral Treatments for Depression

In light of the huge economic and personal burden of depression, fortunately there are a number of empirically supported treatments for the disorder. In the sections that follow, a brief review of two cognitive behavioral therapies, Cognitive Therapy and

Behavioral Activation, will be reviewed. A brief review of the theoretical rationale, basic components of treatments, and efficacy of treatments is provided.

Cognitive Therapy

Cognitive therapy (Beck, Rush, & Shaw, & Emery, 1979) was initially developed based on observations of thought anomalies associated with depressed psychiatric clients (Beck, 1963). These clients were prone to committing a number of illogical thinking areas, which Beck organized into various categories of dysfunctional thoughts. Some examples of these errors of thinking include selective abstraction, overgeneralization, minimization and maximization. Selective abstraction refers to reasoning based on a restricted focus on certain contextual details of a situation despite the presence of other important features of the situation that might provide contradictory information. Overgeneralization is said to occur when a patient generalizes one occurrence of failure as representing a complete lack of ability within that domain, while magnification and minimization are processes by which one either magnifies the relevance of negative events, outcome, or characteristics, or minimizes the relevance of positive events. According to Beck, these thoughts were generally negative, or pessimistic, and had the tendency to occur automatically and frequently with his depressed patients.

This topography of depression was elaborated on with Beck's emphasis on cognitive schemas (Beck, 1964). According to Beck, cognitive schemas are durable cognitive components representing one's interpretations and beliefs about the environment and one's self, with the role of providing a conceptual means of deconstructing and interpreting new stimuli that are encountered in one's life. Generally, new information is assumed to be processed and understood in terms of similarity to

existing schemas. With depressed individuals, the assumption is that idiosyncratic negative schemas become overactive, and displace more appropriate schemas. These negative schemas reflect negative underlying beliefs about the self, the world, and the future (Beck, 1964; Beck et al., 1979). Thus, when a negative schema such as " I am worthless" is activated, an individual's memories and opinions are made to fit with this cognitive representation, despite their being more objectively congruent with alternate, appropriate schemas. It is further postulated that activated schemas result in the depressed affective response, and also influence behavior (Clark, Beck, & Alford, 1999; Beck, 1964; Beck et al., 1979).

Based on this theoretical rationale, symptom improvement in depression is predicated on the modification of schemas into more adaptive and realistic cognitive components (Beck et al., 1979). At the beginning of therapy, clients are instructed to increase levels of activity by engaging in self care and other behaviors evidencing reduced frequency as a result of being depressed. The major components of therapy, however, deal with targeting the client's maladaptive thoughts and beliefs. Therapy explicitly targets having clients learn to recognize automatic negative thoughts, while monitoring how these thoughts affect mood and behaviors. Next, clients are taught to challenge negative thoughts, either through logical refutation, or by seeking evidence contrary to the content of thoughts. As therapy progresses, specific negative schemas precipitating the negative thoughts are identified, and these beliefs are then challenged in the same manner as automatic thoughts. The process of modifying thoughts and beliefs is known as cognitive restructuring.

A thorough description of the efficacy of Cognitive therapy is beyond the scope of this review. Briefly, CT has been shown to be as efficacious as tricyclic antidepressants (Murphy, Simmons, Wetzel, & Lustman, 1984) and selective serotonin reuptake inhibitors (Hollon et al., 1992) in randomized controlled trials with depressed psychiatric outpatients with Major Depression. Although these trials did not use a placebo or no treatment control condition to rule out effects attributable to the passage of time or common factors, other studies containing a placebo group have demonstrated the superiority of cognitive therapy to placebo (Jarrett et al., 1999; DeRubeis et al., 2005).

Meta-analyses aggregating the results of multiple efficacy trials for psychotherapy treatments of depression have shown consistently that CT is in fact more efficacious than both no treatment and placebo conditions (Dobson, 1989; Gloaguen et al., 1998), with one of these indicating that CT may be more efficacious than *other* therapies not classified specifically as behavioral therapies (Gloaguen, Cottraux, Cucherat, & Blackburn, 1998). A reexamination of the data (Wampold, Minami, Baskin, & Tierney, 2002), however, suggested that Gloaguen and colleagues had erroneously included quite disparate therapeutic approaches under the common umbrella, "other treatments". When this category was further subdivided into treatments intended and not intended to be efficacious in treating depression, the results suggested instead that CT was only superior to the inert treatments not meant to have an effect.

Behavioral Therapies

Purely behavioral approaches to treating depression have a long history over the past forty years. The behavioral analytic conceptualization of depression is rooted in the writing of Lewinsohn (1974) and Ferster (1973). According to Lewinsohn (1974),

depressive symptoms (sadness, hopelessness, etc.) are naturally elicited by reductions in, losses of, or low availability of response contingent positive reinforcement (RCPR). In other words, certain losses or negative life events (e.g. death of a loved one) result in a decreased number of available stimuli previously reinforcing various behaviors, with the upshot being the decreased activity commonly observed with the other mood and cognitive symptoms common with depressed individuals. Lewinsohn (1974) also assumed that reductions in response contingent positive reinforcement could also be a function of deficits in an individual's behavioral repertoire, thereby hindering the receipt of reinforcement. Using this functional description of depression, Lewinsohn developed a treatment focusing on the scheduling of pleasant events to increase the likelihood of contact with stable sources of RCPR in one's environment, with the assumption that depressed mood and other symptoms will improve as the individual becomes more active. The approach also sought to teach individuals social skills in an attempt to target deficits in behavioral repertoires of individuals that might also interfere with obtaining RCPR.

Although Ferster never actually developed a treatment protocol for depression, his discussion of the role of avoidance in the maintenance of symptomatology was a crucial addition to the current behavioral analytic conceptualization of the disorder. According to Ferster (1973), a depressed individual's behavioral repertoire becomes dominated by schedules of negative reinforcement, whereby the individual either avoids, or escapes from, private and public events experienced as aversive. A concrete example of this phenomenon would be the depressed CEO who calls in sick for a board meeting as a

result of stress, anxiety, or other aversive responses that might result from his thinking about, traveling to, or attending the meeting.

Whereas the short term adaptive value of these responses is evident, as a means of temporarily reducing the distress, the long term consequences escape and avoidance will likely be deleterious to the individual's mental health. As one's behavioral repertoire becomes dominated by this form of aversive control, the individual is less likely to encounter new sources of response contingent positive reinforcement and become engaged with the world, thus perpetuating the cycle of depression.

Behavioral Activation (Martell et al., 2001) is a contemporary behavioral approach to treating depression based on an integration of Ferster and Lewinsohn's ideas, with an emphasis placed on targeting avoidance as the primary maintaining factor of the disorder. An integral part of treatment therefore involves teaching clients to recognize avoidance patterns, and choose activity over avoidance and inactivity. As clients break avoidance cycles and activate, the contingencies of the natural environment are expected to gain control of the behavioral repertoire through increased levels of RCPR, leading to an increase of behavior on a global scale in varied life domains.

During the assessment phase of BA, clients complete daily activity monitoring in order to provide the client and therapist with information pertaining current levels of inactivity, and the relationship between mood and activity levels. Continued monitoring over the course of treatment also provides clients with a means of tracking progress over time, and can be used to guide activation assignments, the hallmark of BA treatment. BA takes a graded approach to activating clients by having clients schedule activation tasks for homework that are likely to be difficult, but manageable, in order to increase chances

of success. As therapy proceeds, clients are encouraged to engage in a larger number of activities, including those rated as likely being more difficult. Although BA does not explicitly challenge the form of negative thinking or underlying beliefs as in cognitive therapy (Beck, Rush, Shaw, & Emery, 1979), thoughts in BA are considered important insofar as they function as avoidance (i.e. rumination), or as establishing operations that decrease the saliency of potential positive reinforcers.

Developed at around the same time, Behavioral Activation Treatment for Depression (BATD; Lejuez, Hopko, & Hopko, 2001) is another contemporary behavioral therapy approach theoretically grounded in matching law (Hernstein, 1970; McDowell, 1982). Whereas BATD also assumes that depression results from reductions in RCPR, it differs from BA, however, in its more explicit assumption that depression is in large part maintained by social environments that positively reinforce depressed behavior (e.g. staying in bed all day) at greater rate than non-depressed behavior (e.g. getting up and making breakfast). The treatment protocol consists of a formal values assessment leading to value-linked behavioral goals and activities that are then incorporated into an activity assignment hierarchy that grades tasks according their difficulty. Behavioral contracting is also used as a means of ensuring that individuals from the client's environment do not unintentionally punish attempts at activation or reinforce depressed behavior.

BA (Martell et al., 2001) has received empirical support in a large randomized controlled trial (RCT) comparing BA, CT, Paroxetine, and pill-placebo (Dimidjian et al., 2006). For clients classified as having low symptom severity, the three active treatments exhibited similar efficacy, with all three approaches outperforming placebo. Results for patients classified as higher depression severity, however, suggested equivalent

improvement rates for BA and Paroxetine groups, which in turn showed significantly greater rates of improvement relative to the CT group. These similarities in treatment response for more severe clients are important, in that they call into question conventional wisdom generally recommending ADM for more severe cases of depression (American Psychiatric Association, 2000b).

Post hoc analyses of the data set explored the possibility that the differential response for severe clients may have resulted from more difficult clients being allocated to the CT group, or from lower treatment fidelity within this condition (Coffman, Martell, Dimidjian, Gallop, & Hollon, 2007). No differences were found in patient allocation to treatment arms, and fidelity was deemed acceptable for both groups, reinforcing the implications that BA may indeed work better than CT for extreme non-responder to treatment (Coffman et al., 2007).

Although less support is available for the efficacy of BATD, a number of smaller trials have pointed to its effectiveness. In a small RCT of hospital inpatients, BATD significantly reduced symptoms relative to a supportive therapy condition (Hopko, Lejuez, LePage, Hopko, & McNeil, 2003). Additional support stems from case studies using BATD with depressed cancer patients (Hopko, Bell, Armento, Hunt, & Lejuez, 2005; patients in a community mental health environment (Lejuez, Hopko, LePage, Hopko, & McNeil, 2001) and a patient with depression and Borderline Personality Disorder (Hopko, Sanchez, Hopko, Dvir, & Lejuez, 2003).

Treatment Outcome Literature for African Americans

In contrast to the above findings highlighting the efficacies of psychotherapies for depression, there is a striking paucity of research examining the efficacies of treatments

for African Americans. Of the studies that have been conducted in this area, most have a number of methodological limitations that preclude any firm conclusions regarding the effectiveness of extant psychotherapies for this group.

One RCT of low income minority clients examined the relative efficacies of the SSRI paroxetine, manualized group cognitive behavioral therapy, and referral to community mental health services (Miranda, Chung, et al., 2003). Despite author claims of CBT outperforming community referral in intent to treat analyses, a closer inspection of the data reveals that significant group differences actually did not emerge until four months post-treatment. Results are even less impressive when viewed in light of the fact that less than 10% of those referred to community services attended at least one appointment and that no significant differences were observed for instrumental role functioning between groups at any time point. Moreover, CBT resulted in significantly better social functioning only at six months post-treatment.

Another RCT of low income, minority primary care patients comparing a CBT group format with an enhanced CBT group containing case management with a social worker also provided disappointing results (Miranda, Azocar, Organista, Dwyer, & Areane, 2003). Although the authors surprisingly did not report inferential statistics on symptom amelioration, neither of the groups exhibited reductions in depression scores beyond a standard deviation of baseline scores. In addition to low levels of symptom movement, acceptability was inferred to be low as attrition from therapy was markedly high, with 44% and 28% dropping out of CBT and enhanced CBT respectively.

Slightly better results were obtained in a study that retrospectively examined medical charts at a clinic serving primarily low income patients, of which 65% were

minorities (Organista, Munoz, & Gonzalez, 1994). Results showed that those completing at least 12 sessions of a behavioral treatment focusing on scheduling pleasant events and social skills training achieved a 35% reduction in symptoms relative to 24% for treatment non-completers. At the same time, acceptability of treatments remains questionable given the observed attrition rate of 58%, and the significantly greater likelihood of minorities to terminate before the optimal number of sessions. In any event, firm conclusions are difficult because of the study's limitations including the retrospective report methodology, lack of a control group, and no ADM discontinuation prior to treatment.

A final RCT comparing Interpersonal Therapy and the ADM nortriptyline did not find any significant differences in treatment response between African Americans and Caucasians, and showed both groups improving significantly from baseline to post-treatment (Brown, Schulberg, Sacco, Perel, & Houck, 1999). Despite these promising results, interpretation is complicated by the lack of a group controlling for time and also through the failure to assess current ADM usage at baseline. And whereas African Americans did not differ significantly in depression symptom improvement according to the Hamilton Rating Scale, they on average still exhibited significantly greater functional impairment relative to Caucasians.

Notwithstanding the many methodological flaws reviewed in the above studies, the results still provide some information suggesting that the current arsenal of empirically supported treatments may not generalize as well to African Americans. Collectively, these studies indicate the likelihood of low treatment acceptability as evidenced by significant rates of attrition, and fail in most respects to highlight significant

pre-post reductions in depressive symptomatology. Furthermore, the greater residual levels of functional impairment for African Americans suggest that the treatment approaches used may be less suitable for improving quality of life in these individuals.

Existing mental health treatment disparities for African Americans provide additional evidence suggesting that currently available modes of treatment may have low acceptability among African Americans. Despite comparable rates of depression amongst African-Americans and Caucasians, important disparities exist regarding the provision and utilization of mental health services across these groups. African-Americans are significantly less likely to use professional help in treating general psychiatric problems (Alvidrez, 1999; Cooper-Patrick et al., 1999; Thompson, Bazile & Akbar, 2004) and depression (Harman, Edlund, & Fortney, 2004; Iangalo et al., 2004; Miller et al., 2004; Williams et al., 2007), and are likely to rely on informal sources of support such as a pastor or family when dealing with emotional problems or grief (Mathews & Hughes, 2001; Neighbors & Jackson, 1984; Neighbors, 1988). One study showed that less than 10% of African Americans diagnosed with depression in the previous year had sought any form of treatment (Ialongo et al., 2004), while another indicated that African Americans were 40% less likely than Caucasians to receive mental health services for emotional disorders (Cooper-Patrick et al., 1999). This discrepancy in treatment seeking remains even when the effect of socioeconomic status is statistically controlled (Padgett, Patrick, Burns & Schlesinger, 1994; Cooper Patrick, Crum, & Ford, 1994; Sue, Zane & Young, 1994), with lower rates of treatment seeking for emotional problems evident even when mental health services are free and readily available (Boscarino et al., 2004).

When African-Americans do seek professional help for mental health concerns in general, they are more likely to be seen by primary care physicians or in emergency rooms (Scheffler & Miller, 1989; Hu, Snowden, Jerrell & Nguyen, 1991; Sussman, Robins & Earls, 1987; Gallo, Marino & Ford, 1995; Snowden & Pingatore, 2002; Snowden, 1999b). This pattern has also been shown to hold for depression even when race and SES are statistically controlled (Cooper-Patrick et al., 1994).

Given this reliance on medical professionals, it is unsurprising that African Americans are more likely to be prescribed medication, despite voicing a preference for therapy over medication (Sussman et al., 1987; Cooper-Patrick et al., 1997; Dwight-Johnson et al., 2000; Arean & Miranda, 1996; Brody, Khaliq & Thompson, 1997). This pattern of treatment seeking and receipt is problematic given that depressed African-Americans show less short-term treatment compliance with antidepressants than Caucasians (Brown et al., 1999), are generally more averse to longer term treatment with medication (Cooper, Brown, Vu, Ford, & Powe, 2001.), and may have greater likelihood of adverse reactions to certain classes of ADM (Das, Olfson, McCurtis, & Weissman, 2006).

Even when African Americans seek therapy for mental health concerns, they have been shown to attend significantly fewer sessions than Caucasians (Hu et al., 1991; Padgett et al., 1994; Kearney, Draper & Barón,, 2005; Thompson et al., 2004). The quality of these services are also generally considered poor (Cooper-Patrick et al., 1999; Diala et al., 2001; Katon, Von Korff, Lin, Bush & Ormel, 1992), with African Americans being significantly less likely to receive guideline concordant care relative to other groups (Gonzalez et al., 2010).

The Argument for Culturally Adapted Treatments

The source of these treatment disparities is likely multifaceted. A lack of adequate health insurance (Mathews et al., 2001; Neighbors, 1988; Das et al., 2006) and lower availability sufficient mental health resources in close proximity to African American neighborhoods (Mathews et al., 2001; Neighbors, 1988), for instance, are commonly cited reasons for observed differences. Nevertheless, the above findings on disparities and treatment outcome studies for African Americans suggest that acceptability of available treatments may also contribute to the problem. This fact is lent support through findings illustrating that African Americans are still less likely to seek specialty care for mental health issues even when the effects of variables such as education, insurance, income, and employment status are partialed out (Cooper-Patrick et al., 1994; Cooper-Patrick et al., 1999; Snowden, 1999b).

In line with this view, the U.S. Surgeon General has described these mental health disparities as a national health concern, insisting that elimination of racial differences in service utilization is a national health priority (U.S. Department of Health and Human Services, 2001). Whereas the report highlights the need for inclusion of more African-Americans in well controlled clinical research to determine whether available empirically supported treatments are relevant for this group, it nonetheless describes cultural adaptations as likely being necessary to enhance treatment retention. The limited evidence regarding poor treatment outcomes and high levels of attrition previously reviewed lends support to these claims. Similar concerns about limitations of ESTs for minority groups have been echoed in the literature by many scholars who have argued for cultural adaptations that better address specific African American needs and preferences

for therapy (Baker & Bell, 1999; Waite & Killian, 2009; Atkinson, Morten, & Sue, 1998; Austin, Carter, & Vaux, 1990; Chiang, Hunter, Yeh, 2004),

Recent guidelines, in fact, have been established enumerating the conditions justifying culturally adaptive treatments (Lau, 2006; Borrelli, 2010). According to Lau, culturally adaptations of empirically supported treatments may be necessary when evidence suggests significant variability between groups in vulnerabilities and, or, protective factors for specific psychological problems, and that adaptations consequently should be formulated in ways that target risk factors while capitalizing on existing protective factors to enhance treatment outcomes. Borrelli expands the number of factors to consider when deciding appropriateness of adaptation to include variability between groups in rates or problematic behaviors, burden of disorders, treatment engagement in the community, treatment response to available approaches, and the perceived social validity of interventions.

The social validity of current empirically supported treatments is also addressed by Lau (2006), who contends that new components may be needed in current empirically supported treatments neglecting specific cultural values and goals, as their exclusion may lead to lower acceptability or engagement in treatments that would otherwise be valid, and possibly efficacious, with an adequate dose of therapy. Lau also suggests that modifications along these lines may be applicable and necessary to address low acceptability even before a series of costly randomized controlled trials are conducted with the original evidence based treatment administered to the minority group, as long as modifications do not diminish purported active mechanisms of treatment.

Cultural adaptation of psychotherapy for African Americans depression is consistent with these suggestions in light of the literature previously reviewed on African Americans highlighting treatment disparities, high attrition in outcome studies and a disproportionate number of risk factors such as physical health problems and discrimination, and unemployment.

Behavioral activation provides a sound foundation from which culturally adapted components providing strategies for targeting the risk factors and protective factors relevant to this group can be integrated, while still remaining consistent with BA's purported mechanism of change emphasizing increased levels of activation (Lewinsohn, 1974; Martell et al., 2001).

The subsequent sections describe a culturally enhanced behavioral activation (CEBA) manual that was developed to target both risk and protective factors associated with depression. Specifically, adapted components address risk factors such as physical health problems, anger, discrimination, stress, and unemployment, while also targeting protective factors such as social support and spirituality. The empirical and theoretical rationales for including these components are further expounded upon in the following sections, along with a brief description of specific elements that have been incorporated into the treatment. In short, the culturally enhanced components contain didactic materials, resources, and teach specific skills related to the aforementioned areas, while using a BA framework to assign homework related to components when personally relevant to clients.

The culturally sensitivity of this approach is also apparent in its targeting of the general barrier related to perceptions of some African-Americans that psychological

services are generally unrelated to their specific needs (Waite & Killian, 2008; 2007; Thompson et al., 2004). Specifically, African-Americans have reported that spirituality and religion, anger, and stress reduction are all issues that should be incorporated into treatments for depression. The modifications included in CEBA move beyond earlier attempts at treatment cultural adaptations, which have primarily relied on basic adaptations such as translation of manuals into Spanish for Latinos (Organista et al., 1994;) and the use of ethnically appropriate names for African-Americans in treatment materials (Kohn, Oden, Munoz, Robinson & Leavitt, 2002).

BA is likely a good fit for a depressed African-American sample given that they are more likely to view depression as resulting from negative life events (Kendrick, Anderson & Moore, 2007; Waite & Killian, 2008; Primm, Cabot, Pettis, & Cooper, 2002) and prefer a treatment using a problem solving approach (Waite & Killian, 2007; Waite & Killian, 2009; Sweeney, Robins, Ruberu, & Jones, 2005) focusing on confronting versus avoiding problems (Browman, 1997; Kendrick et al., 2007), views and preferences that map on neatly to the theoretical rationale and practical application of BA.

The behavioral foundation of CEBA is based on a third version of behavioral activation (Kanter, Bowe, Baruch, & Busch, 2011) that integrates the two approaches previously described (Martell et al., 2001; Lejuez et al., 2001). As with BA (Martell et al., 2001), the approach chosen for CEBA uses activity monitoring as an assessment tool at the beginning of treatment. The protocol also uses a formalized values and goals assessment as in Lejuez et al., from which meaningful, and personally relevant concrete goals are formulated and subsequently incorporated into an activity hierarchy similar to

that employed in BATD. The focus of therapy retains a focus on homework review and scheduling activation assignments, consistent with the two other approaches.

Use of this approach also delineates a functional assessment (FA) to determine specific problems that may arise with homework completion, and prescribes specific BA interventions linked to these obstacles (Kanter Busch, & Rusch, 2009; Kanter et al., 2011). The FA assumes that difficulties with homework compliance are likely related to four specific areas based on the three term contingency of operant learning consisting of the antecedent, operant, and reinforcer. Stimulus control deficits assume difficulties with stimuli effectively setting the occasion for behaviors, and use interventions such as personal reminders to make homework completion more likely. Social and non-social skills training interventions are used for deficits pertaining to clients not having skills within their behavioral repertoire to complete specific tasks. The final two functional classes assess obstacles related to the reinforcer piece of the three term contingency. In line with Lejuez et al. (2001), behavioral contracting is linked to difficulties with public consequences reinforcing depressive behavior, while mindful, valued activation techniques target the kinds of avoidance considered as the principal barrier in Martell et al. BA (2001).

The addition of an FA and FA-linked interventions may prove a particularly helpful addition to a behavioral activation approach, given that homework non-compliance is a significant predictor of poorer depression outcome (Burns & Spangler, 2000; Bryant, Simons, & Thase, 1999). Preliminary evidence suggests the validity of functional categories and framework for conducting the assessment (Baruch, Kanter, Bowe, & Phennig, 2011).

The next section describes the theoretical and empirical rationales for including culturally enhanced components of CEBA by reviewing the relationship between depression and the culturally adapted targets, and how these relationships are consistent with a behavioral framework. In addition, a brief description of how these components have been integrated into CEBA, along with a description of empirical support for these components is provided.

Theoretical and Empirical Rationales for CEBA Components

Psychoeducation

Psychoeducation is a common component of many empirically supported therapies (e.g. Woods et al., 2008; Woods & Twohig, 2008). Whereas BA (Martell et al., 2001) and BATD (Lejuez et al., 2001) do not provide an in depth discussion of depression outside of how the disorder is conceptualized in terms of the theoretical underpinnings of the therapy, there are important reasons for providing greater education on the symptoms, phenomenology and treatments available for the disorder when treating African Americans.

Qualitative data, for instance, has demonstrated that African Americans have limited knowledge about mental illness in general (Thompson et al., 2004), and that both depressed (Waite & Killian, 2007; 2008) and non-depressed (Thompson et al., 2004) members of this group report a strong desire for more education on mental illness and depression in particular. A second reason for incorporating psychoeducation relates to findings suggesting the provision of psychoeducation may lead to better treatment retention. Of African Americans randomized to either pyshoeducation or no psychoeducation, those who subsequently initiated treatment received a significantly

greater dose if previously in the psychoeducation group of the study (Alvidrez, Arean, & Stewart, 2005). Other evidence has suggested that the receipt of psychoeducation results in increased odds of African Americans initiating treatment (Dwight-Johnson, Unutzer, Sherbourne, Tang, & Wells, 2001).

The CEBA manual includes educational information on the symptoms and treatments available for depression, including antidepressant medication. In addition, the theoretical conceptualizations and efficacies of cognitive and behavioral treatment approaches are briefly reviewed, with the behavioral activation description further elaborated on in order to provide a rationale for the treatment approach.

Stress and Relaxation Strategies

As described earlier, African Americans experience a disproportionately larger number of stressors such as lower incomes, racism, discrimination, and a greater tendency to experience violence. Exposure to stress may result in physiological responding such as increased arousal of the sympathetic nervous system and the hypothalamic-pituitary-adrenal (HPA) axis, resulting in increased levels of circulating cortisol and adrenaline, increased heart rate, and higher blood pressure (Rozanksi & Kubzansky, 2005; Taylor & Stanton, 2007). Not surprisingly, arousal of this nature has also linked to race related stressors (Harrel, 2000), with some evidence suggesting that African Americans may have significantly greater cardiovascular responses to stress, potentially placing them at greater risk for developing permanently higher blood pressure, or hypertension (Hamer & Malan, 2010). Other negative health effects associated with chronic stress include poor health outcomes such as obesity, diabetes, cardiovascular

disease, depression, and hypertension (Rozanski & Kubzansky, 2005; Taylor & Stanton, 2007).

These health problems, as described more in the section detailing the physical health components of CEBA, may in turn serve as risk factors for developing depression, or the worsening of current depressive symptomatology, which makes sense from a behavioral view of depression. Incipient health problems can be construed as negative life events eliciting depressive symptoms and greater inactivity. These symptoms may interfere with more active coping in dealing with additional life stressors, with additional negative life events resulting in ever more depression symptoms and a spiral of depression as previously described. These relationships suggest the relevance of incorporating stress reduction strategies into the CEBA approach.

Another reason for including stress management activities relates to findings that stress may interfere directly with task performance independent of the aforementioned health effects. Results indicate more errors on cognitive tasks such as attention (Petrac, Bedwell, Renk, Orem, & Sims, 2009; Olsson, Roth, & Melin, 2010), working memory (Klein & Boals, 2001), even when state anxiety is statistically controlled (Petrac et al., 2009). This relationship has also been demonstrated with real world tasks. One study, for instance, showed that high levels of employment related stressors were associated with greater levels of depression symptoms, which were, in turn, longitudinally related to decrements in job performance (Lerner et al., 2010). Another demonstrated that higher levels of perceived threat resulted in impairments in negotiating skills (O'Connor, Arnold, & Maurizio, 2010).

Although these kinds of tasks will likely differ in some ways from the kinds of homework assignments clients will generally attempt during treatment, it remains likely from a behavioral standpoint that the high level of arousal likely experienced by African American clients in relation to chronic levels of stress may nonetheless interfere with completion of personally relevant activities. For instance, skills deficits, or avoidance, reflecting inadequate coping repertoires will likely interfere with clients obtaining new sources of RCPR as the individual becomes less active, thereby maintaining or potentially worsening depression symptoms. Although one of the goals of BA (Martell et al., 2001) is getting clients to overcome avoidance by having them activate in the presence of aversive internal events such as thoughts, feelings and emotions, a possibility remains that greater arousal from everyday stressors may render even tasks graded at lower difficulties harder to complete.

A culturally adapted treatment may therefore benefit from including relaxation strategies to reduce the arousal associated with stress, thereby increasing the likelihood of success with homework compliance. This approach is similar to the distress tolerance skills taught in DBT for Borderline Personality Disorder (Linehan, 1993a; Linehan, 1993b), whereby different skills are used to reduce high levels of emotional arousal so that clients can subsequently activate and be effective in reaching their goals. In fact, relaxation strategies such as deep muscle relaxation have long been incorporated into behavioral treatment approaches of Lewinsohn and colleagues (Lewinsohn, Munoz, Youngren, & Zeiss, 1978; Lewinsohn, Biglan, & Zeiss, 1976).

Progressive muscle relaxation has been shown to be effective at reducing physiological arousal associated with stress in a number of studies. RCTs have shown

that PMR is effective at reducing physiological symptoms of stress relative to no-treatment controls for variables such as cortisol levels in participants with insomnia (Pawlow, O'neil, & Malcom, 2003), as well as blood pressure and pulse rate (Lyles, Burish, Krozely, & Oldham, 1982) for patients following receipt of chemotherapy treatment, with differences in the latter study maintained treatment at follow-up. These studies, in addition, showed reductions in self reports of depression and anxiety symptoms. Evidence from RCTs has also highlighted how PMR results in significantly quicker recovery of anxiety in response to viewing traumatic slides (Rausch, Gramling, & Auerbach, 2006), as well as lower systolic blood pressure and more adaptive heart rate variability relative to control groups (Nickel et al., 2005). A final line of supporting evidence for the use of PMR comes from evidence that this strategy may lead to less absenteeism from work due to employment related stress, although caution is warranted given the lack of randomization (Murphy & Sorenson, 1988).

Paced diaphragmatic breathing is another relaxation strategy that has been used in various treatment approaches (e.g. Woods et al., 2008; Hazlett-Stevens & Craske, 2009), with evidence suggesting that paced breathing too directly influences the physiology of the stress response. Results of an RCT demonstrated that participants randomized to using paced breathing prior to being told they would receive a shock experienced significantly smaller sympathetic nervous changes as measured by heart rate variability relative to those using a faster breathing approach (Sakakibara & Hayano, 1996). These effects on HRV have also been replicated in a study of college students completing stressful math tasks (Ring et al., 1999). In addition to influencing physiology, paced breathing has also been shown to affect psychological variables, decreasing both pain

perceptions and negative affect in response to thermal pain tests (Zautra, Fasman, Davis, & Craig, 2010)

In CEBA, clients are taught progressive muscle relaxation and paced breathing, and are encouraged to practice these techniques outside of session both at scheduled times, and on an as needed basis when stress arises during the day. For some individuals, practice may be further encouraged when managing stress more effectively is consistent with other relevant, valued life domains of the client, in which he or she wished to become more active. Based on meta-analytic results suggesting larger effect sizes for PMR studies including audiotapes to facilitate practice at home (Carlson & Hoyle, 1993), CEBA also includes tape recorded versions of the exercises for clients.

Cardiovascular Disease and Diabetes

African Americans are significantly more affected by physical illnesses such as cardiovascular disease and diabetes. Studies have indicated that up to 45% of African American males, and 47% of African American females, over the age 20 years have some form of CVD, with CVD being the number one cause of death for this group (Lloyd-Jones et al., 2009; AHA, 2009b; 2010; 2011). Likewise, African Americans representing this demographic are significantly more likely to have a diagnosis of diabetes as compared with Caucasians (AHA, 2011; 2009b; Lloyd-Jones et al., 2009; NIH, 2011). This section describes the relationship between depression and these two health conditions, and how these make sense in a behavioral framework. A brief description is provided of how CEBA targets these risk factors.

Whereas the majority of studies examining the relationship between CVD and depression have focused on depression as a risk factor for CVD, a few studies have

examined the converse relationship. A large longitudinal study with a sample comprised of 20% ethnic minorities showed that individuals having a heart procedure during the duration of the study were significantly more likely to have a diagnosis of Major Depressive Disorder at five year follow-up when controlling for baseline depression and diabetes status (Katon et al., 2009). Previous heart failure was also associated with significantly greater symptoms of depression in another study, although causality can not be inferred from its cross sectional design (Klein & Turvey, 2007). A final source of data suggesting CVD is an antecedent comes from a longitudinal study with a small number of African Americans, showing that changes in cardiac symptoms across the study were positively associated with depression symptoms (Bennett & Elliott, 2005), although these results are qualified by ambiguity concerning the temporal relation of variables.

Additional studies have examined depression as a risk factor for CVD. A cross-sectional study with a large number of African American participants found that depression was significantly associated with increased resting heart rate, and heart rate variability reflecting increased sympathetic activation (Ohira, et al., 2008). These results remained significant even after a number of risk factors for CVD were controlled. Another study of African Americans with type 2 diabetes did not find depression significantly related to a composite risk index of the likelihood to develop future CVD (Collins-McNeil, 2006), although the limited variance reflected in high levels of depression may have made detecting an effect more difficult. Further analyses of the data did, however, determine that specific depression symptoms such as anhedonia and irritability were significantly associated with risk profiles (Collins-McNeil et al., 2007).

A number of longitudinal studies have also highlighted depression as a CVD risk factor. In a study of dementia patient caregivers that included a large number of African Americans (Mausbach et al., 2007), a diagnosis of depression using a very conservative cutoff score significantly predicted the development of CVD at the 18 month follow-up, even after various risk factors for CVD and stressfulness of the caregiving jobs were statistically controlled. Another study employing a longer follow-up period of at least 10 years found that African Americans with severe depression were more than 2.5 times more likely than African Americans with lower levels to have suffered a stroke during the follow-up period (Jonas & Mussolino, 2000) even after partialing out the effects of a number of demographic and risk factor variables. Moreover, the odds ratio for Caucasians of high depression severity using the same analysis reached a maximum of only 1.68, suggesting that AA with depression may be at even greater risk for CVD onset. These results were replicated using an even longer follow-up period of 20 years, with depressed African American having a significantly greater chance of developing CVD relative to Caucasions (Joynt, Whellan, & O'Connor, 2003). A final source supporting the link between depression and CVD comes from a meta-analysis of high quality studies, using a diagnosis of Major Depression disorder as inclusion criteria for one set of analyses. Results indicated an aggregate odds ratio of 2.5, suggesting that depression more than doubles one's chances of developing CVD (Van der Kooy et al., 2007).

The same relationships also hold for diabetes, with the disease being both a risk factor for, and a consequence of depression. A longitudinal study with a large number of African Americans indicated that individuals with treated type 2 diabetes at baseline were more than 1.5 times more likely to develop significant depression symptoms over the

duration of the study as compared with those who were diabetes free (Golden et al., 2008). Results from another cross sectional study of African Americans did not support this relationship, but indicated that a combination of diabetes and significant depression symptoms resulted in more functional impairment (Husaini et al., 2004).

Analyses of predominately Caucasian respondents have yielded similar results. For instance, diabetes symptoms at baseline have been shown to increase the odds of a Major Depressive Disorder diagnosis at 5 year follow-up when baseline diabetes and depression symptoms are controlled (Katon et al., 2009). Other findings using more conservative analyses have shown an increased odds of having depression associated with diabetes symptoms, after accounting for the effects of alcohol use, obesity, smoking and age (Knol et al., 2007).

Longitudinal studies oversampling African Americans have also shown that depression is a risk factor for the development of type 2 diabetes, albeit with some qualifications. Results of Golden et al. (2008) showed the risk of diabetes increasing by a factor of 1.1 for each 5 point increase in CESD scores when adjusting for SES and glucose metabolism. The relationship lost significance, however, when lifestyle factors were incorporated into the regression model. Another longitudinal design using SEM showed that depression was positively associated with HBA1c counts, with 13% of the variance in this relationship explained by various health behaviors (Chiu, Wray, Beverly, & Dominic, 2010). Other longitudinal studies using participants of Caucasian European descent have also provided evidence for a robust relationship, with significant levels of depression resulting in significant odds ratios ranging from 1.65 to 2.29 in terms of

increased risk of developing diabetes over a 5 (Campayo et al., 2010) and 10 (Atlantis, Browning, Sims, & Kendig, 2010) year period respectively.

Although the pathways fostering these relationships between depression and physical health are likely complex, a behavioral conceptualization of depression affords some explanatory power. Diagnoses of physical conditions such as CVD and diabetes may serve as negative life events, resulting in either the incipient symptoms of depression, or increased symptoms for those already with a depression diagnosis. Whereas simply being given the diagnosis of depression is likely a negative life event in and of itself, the resulting decrement in physical functioning that may accompany physical illness may also likely interfere with one's ability of obtaining previous or new sources of RCPR. The concomitant, lower levels of activity associated with depression may in part reflect poor self care behaviors that may then lead to even worse physical functioning, which in turn may serve as an additional negative life event, more depressive symptoms, and lower levels of activity. Such a cycle of reciprocal influence has been described in the literature (Bowser, Utz, Glick, & Harmon, 2010). It is also possible that behaviors associated with depression, even in the absence of an actual diagnosis, may serve as risk factors for development of these physical ailments in the first place, which then perpetuates the cycle of depression in the aforementioned manner.

Data have accrued implicating a large number of behavioral risk factors for CVD. For instance, depressed individuals are more likely to be non-compliant with medication regimens for CVD, are less likely to follow cardiac rehabilitation programs following myocardial infarction, and are more likely to engage in risk factors for CVD such as smoking and unhealthy eating (Joynt et al., 2003; McConnell, Jacka, Williams, Dodd, &

Berk, 2005). Evidence also suggests that depression is associated with a significantly reduced likelihood of engaging adequate exercise, an additional risk factor for the development of CVD, following a significant cardiac event (McConnell et al., 2005; Taylor, 2010). In fact, those with depression are more than 1.7 times more likely to be physically inactive, even after controlling for a number of covariates (Koopmans et al., 2009).

Similar associations have been found between depression, self-care behaviors and diabetes. Evidence suggests that even at lower symptom levels, depression is associated with a significantly lower number of self-care behaviors known to be risk factors for diabetes such as using medication, maintaining a healthy diet, exercising, keeping multiple medical appointments, and monitoring blood sugar (Bowser et al., 2010), a relationship that may be partially related to a lack of energy needed to complete these required behaviors (Bowser et al., 2010). Studies reviewed earlier further support the effect of depression on diabetes being partially mediated by health behaviors. The results of Chiu et al. (2010), for instance, suggest that as much as 13% of the variance in the relationship may be accounted for by self-care behaviors. Longitudinal analyses have further demonstrated that both chronic and worsening depression are associated with significantly fewer days of eating healthy foods such as fruits and vegetable, and a significantly greater number of days eating high fat foods (Katon et al., 2010). Those with persistent depression, on average, recorded only one healthy day of eating per week. Additional evidence supporting the depression-behavior link were found in a study examining diabetes self care behaviors for an African American sample with high levels of clinically relevant depression. Only 29% of participants reported compliance with

dietary regimen, while only 49% and 40% reported compliance with blood glucose monitoring and adherence to an exercise regimen respectively (Collins-McNeil et al., 2007).

Poor self care behaviors such as poor diet, lack of exercise, and drinking alcohol may be negatively reinforced with depressed clients through the process or escape or avoidance as described in BA (Martell et al., 2001). As an example, consider a depressed individual with the intention of going grocery shopping to purchase and later prepare a healthy dinner. The mere thought of starting these tasks may overwhelm the client, who may instead opt to order a less nutritious pizza from delivery. The point is that the unhealthy behavior is likely reinforced by enabling the individual to avoid, or escape from the aversive experience associated with thinking about, or starting to engage in the desired tasks. Cross-sectional (Kim, Knight, & Longmire, 2007; Samuel-Hodge, Watkins, Rowell, & Hooten, 2008) and longitudinal (Goode, Haley, Roth, & Ford, 1998) analyses of African Americans have indeed found that avoidant coping styles are predictive of significantly poorer physical symptoms and depression, while a meta-analysis examining the effects of coping style and depression for those with diabetes found that avoidance was associated with more depression, while active coping was conversely associated with significantly better diabetic functioning (Duangdao & Roesch, 2008).

Avoidance may not be the only process maintaining these kinds of behaviors. One possibility is that individuals may lack the necessary awareness, or skills required to engage in healthy living, which increases the probability of additional negative life events through the experience of worse physical functioning, thereby maintaining the familiar

cycle of depression. One's environment may also play a role, as attempts at healthy behaviors are punished, or depressed and unhealthy behaviors are reinforced by family members and friends. These possibilities are all relevant in the behavioral activation framework employed in CEBA (Kanter et al., 2011).

Educating African Americans about the risk factors and consequences of CVD and diabetes is likely to be an important aspect of this treatment approach, given that African Americans may often not be aware of the deleterious consequences of unhealthy behaviors that serve as risk factors, such as lack of adherence to eating regimens (Gazmariarian, Ziemer, & Barnes, 2009). But whereas education is likely to be important, it may not necessarily translate into adoption of healthier behaviors (Bowser et al., 2010). Supporting this idea is a pilot study with older African Americans that provided education and tips on adopting healthier lifestyle choices to prevent CVD (Resnick et al., 2009). The intervention had high levels of acceptability, but did not result in significant pre to post changes in behaviors related to diet and medication, or exercise, whereas a protocol providing diabetes education and problem solving consultations to African Americans with type 2 diabetes resulted in significantly greater medication adherence for the active relative to a treatment as usual group (Bogner & de Vries, 2010).

The CEBA manual provides clients with education on modifiable risk factors for CVD and diabetes, and encourages developing goals in the valued life domain of healthy living when relevant to clients. Specifically, clients are encouraged to formulate healthy lifestyle goals related, but not limited, to nutrition, exercise, and medical recommendations as described in guidelines from the American Heart Association (AHA,

2001; 2009a; 2011) and American Diabetes Association (ADA, 2011a; 2011b; CDC, 2011). The consequences of these conditions are also be explored in a didactic format, in order to motivate the desire for change by having clients think about how development, or worsening, of these conditions may adversely influence goals in other valued life domains. The provision of community resource packets for free and low fee medical services medical services in the community are also provided in an attempt to mitigate the barrier of disparities in health care resulting from barriers such as lower financial resources, lack of insurance and impaired access to available treatments (USDHSS, 2000; 2001; AHA, 2010).

The structured approach of activity scheduling in a graded fashion provides a seamless integration with educational components, providing clients with a means of working towards health goals without getting overwhelmed. Activity scheduling and monitoring are likely to be helpful in allowing clients to keep up with, or initiate, medical routines that are in the service of their valued life directions. A final benefit of the CEBA approach relates to strategies targeting avoidance, skills deficits, and public reinforcement of depressed behavior, which as described above, may serve as a barrier to activating healthy behaviors.

Such an approach is consistent with the BA model previously described (Lewinsohn, 1974, Ferster, 1973; Kanter et al., 2011). On the one hand, the proposed intervention is posited to reduce depression by getting the client to become more active and increase the likelihood of contact with additional sources of RCPR. Maintenance of healthy behaviors, meanwhile, will likely lessen the chances of additional negative life events such as development, or worsening of disease conditions, that may lead to

increased depressive symptomatology. According to the BA model, this approach is therefore relevant for those with and without current CVD or diabetes, and likely has the potential to influence not only current depression, but also relapse through mitigating the odds of new negative life events. Empirical support for targeting chronic health problems in depression treatments is also based on findings that those with CVD, or with chronic medical conditions achieve significantly less symptom remission over a 2 year period (Sherbourne, Hays, & Wells, 1995).

Chronic Pain

Chronic pain is another set of conditions (e.g. arthritis, back pain, migraines) that may differentially affect African Americans relative to Caucasians through variables such as significantly greater perceptions of disability and pain severity relative to Caucasians (Green, Baker, Sato, Washington, & Smith, 2003; Green, Ndao-Brumblay, Nagrant, Baker, & Rothman, 2004). Whereas some studies have failed to detect racial differences in pain severity, the effect of greater pain related disability has remained more consistent (Ndao-Brumblay & Green, 2005). The remainder of this section will discuss the relationship between depression and chronic pain, and provide theoretical and empirical rationales for the inclusion of a component targeting related conditions in the CEBA manual. A brief description is provided of how CEBA targets chronic pain.

Longitudinal analyses have shown that chronic pain is both an antecedent (Currie & Wang, 2005; Rudich, Lerman, Gurevich, & Shahar, 2010) and consequence (Currie & Wang, 2005) of depression. Depression has been implicated as a consequence of chronic pain across a wide range of pain intensity, with the risk of developing a diagnosis of Major Depressive Disorder over a 2 year period increasing significantly for those with

severe cases of chronic pain relative to those with mild pain at baseline after controlling for other health comorbidities, type and duration of pain (Currie & Wang, 2005). Examination of depression as an antecedent has also shown that reductions in depression severity across time are linked with decreases in both pain severity and reported disability (Glombiewski, Hartwich-Tersek, & Rief, 2010), although the temporal relationship is unclear. Further evidence for a depression-chronic pain relationship come from cross sectional analyses demonstrating consistent positive relationships between depression symptoms, pain intensity and pain disability in samples including significant numbers of African Americans (Ndao-Brumblay & Green, 2005; Corbiere, Sullivan, Stanish, & Adams, 2007).

The bidirectional and possibly reciprocal relationship between chronic pain and depression makes sense in light of the behavioral conceptualization already reviewed in relation to CVD and diabetes. In short, the development of chronic pain may likely serve as a negative life event, triggering an increase in depressive symptoms. The presence of pain itself may lead to reinforcement of depressed behavior by one's social environment when others take over responsibilities as a result of the person's disability, or may result in avoidance of specific activities through negative reinforcement, with both processes resulting in additional decreases in RCPR and even greater symptoms of depression. Evidence suggests that avoidant coping used by individuals with chronic pain across time is in fact associated with greater pain severity, even when baseline depression and pain severity are controlled (Rusu & Hasenbring, 2008). Pain related avoidance, however, may also be a function of inaccurate perceptions of the likely pain expected to be experienced from engaging in certain activities, given that fear related to pain has been

shown to predict lower activity levels significantly better than actual reports of pain itself (Waddell, Newton, Henderson, Somerville, 1993; Geisser, Haig, & Theisen, 2000).

Recent conceptualizations of the relation between pain and avoidance have examined the role of mindfulness, which has been described as attention to the current moment, in a non-attached, non-judgmental way (Linehan, 1993a; Linehan, 1993b; Kabat-Zinn, 2003). In a study exploring the fear avoidance model of pain, a measure of trait mindfulness accounted for a significant portion of the variance in pain related catastrophising, with higher levels of mindfulness associated with less catastrophising (Schutze, Rees, Preece, & Schutze, 2010). Moderator analyses of the data suggested that mindfulness moderates the relationship between pain intensity and pain related catastrophising, with low levels of mindfulness associated with significantly greater catastrophising at higher levels of pain (Schutze et al., 2010). An intervention targeting inaccurate pain catastrophising may thus be useful in helping clients overcome pain related fear avoidance, and come into contact with additional sources of RCPR.

Studies have examined the effects of mindfulness training for chronic pain (Morone, Greco, & Weiner, 2008; Morone, Rollman, Moore, Uin, & Weiner, 2009). In an RCT of older adults with chronic pain and no previous training in mindfulness, those receiving practice in mindfulness of the body demonstrated significantly higher levels of pain acceptance, engaged in a significantly more activities, and reported significantly lower levels of disability related to back pain relative to a waitlist control (Morone et al., 2008). A second study comparing the same treatment format with an educational program for chronic pain showed significant pre to post reductions in the same outcome variables, but with no significant differences between groups (Morone et al., 2009). One

possibility for equivalence of results, however, may be due to clients activating on their own and exploring options discussed for reducing pain.

Other approaches to treating pain with evidence of efficacy involve progressive muscle relaxation, a procedure already described and included in the CEBA manual. An RCT of clients with tension headaches showed significant decreases in pain symptoms from baseline to post-treatment for those randomized to PMR, but not waitlist or placebo medication (Blanchard et al., 1990). A review of uncontrolled studies, in turn, found average decreases in pain symptomatology of up to 50% three months post-treatment (Morone & Greco, 2007), while meta-analytic estimates of effect size have ranged from .91 to 1.31 for the treatment.

Collectively, these findings suggest that relaxation and mindfulness interventions may be an effective means of targeting pain related avoidance associated with lower activity levels, which will in turn increase the chances of clients activating and coming into contact with sources of RCPR, with concomitant effect on depression symptomatology. Although BA (Maretell et al., 2001; Kanter et al., 2011) does deal specifically with avoidance when relevant, it is possible that additional strategies such as mindfulness and relaxation may be helpful for dealing with co-morbid depression and pain, given that the combination has been shown to result in significantly lower functioning than pain or depression alone (Mossey & Gallagher, 2004; Corbiere et al., 2007).

The CEBA manual teaches clients how to practice mindfulness of external, as well as internal events such as thoughts, emotions, body sensations before moving on to mindfulness of painful sensations themselves. The presentation of mindfulness skills is

based on the mindfulness module in the skills training manual of DBT (Linehan, 1993b). Briefly, these skills involve observing and describing internal and external events in a non-attached and non-judgmental way, by describing only the facts of the observed situation. After clients have had an initial opportunity to practice skills, they are led in a meditation directing them to focus on areas of their bodies in which they experience tension or pain. Clients are encouraged to schedule practicing this mediation at specified times, along with any unscheduled times when pain may be interfering with activating in other life domains. The relationship of managing one's pain in relation to other valued life domains and goals is also explored as a means of motivating individuals to use the skills, and activate even in the presence of discomfort, a precept consistent with BA approaches (e.g. Martell et al., 2001; Kanter et al., 2011).

Anger

Racism and discrimination are additional risk factors for depression with African Americans. This group is significantly more likely than Caucasians to report discrimination (Sanders-Thompson et al., 2002), while also being more likely to experience greater racism relative to other minority groups such as Latinos and Asians, with these perceptions then associated with lower quality of life (Utsey, Chae, Brown, & Kelly, 2002). Although racism may often be overt, it also manifests itself in subtler, but frequent, forms such as being stared at, or provided with poor service (Swim, Hyers, Cohen, Fitzgerald, & Bylsma, 2003).

Not surprisingly, experiences of racism and discrimination have been associated with depression in African Americans in a number of cross-sectional studies. Findings have suggested a strong relationship between these variables, even when the effects of

income (Schulz et al., 2006), age, gender, mental health treatment, and number of recent stressors (Banks, Kohn-Wood, & Spencer, 2006) are taken into account. In fact, discrimination remained the most powerful predictor of depression in structural models containing a number of risk and protective factors associated with the disorder, with discrimination increasing the risk of clinically significant depression by slightly less than a factor of 3 (Siefert et al., 2007).

A common response to perceived racism and discrimination among African Americans is anger (Belle & Doucet, 2003; Bullock & Houston, 1987; Gee, Ryan, & Laflamme, 2006; Swim et al., 2003). Despite being a valid emotional response in these instances, there are a number of negative consequences that may be associated with experience of anger that in turn affect depression.

One potential negative consequence of the anger experience is its relation to poor health outcomes. Frequently occurring anger has been described as an event that can wear down the body through increased cortisol secretion through hyperactivation of the HPA axis and prolonged stimulation of the sympathetic nervous system (Hamer & Malan, 2010; Thomas & Gonzalez-Prendes, 2009). Experience of frequent anger has also been cited as being related to unhealthy behaviors such as substance use and overeating, which along with heightened arousal may put individuals at further risk for high blood pressure and other forms of CVD (Thomas & Gonzalez-Prendes, 2009).

Some evidence suggests that African Americans may be more predisposed to these kinds of consequences. One study examining differential physiological response in relation to an anger provoking task showed that African Americans endorsing significant levels of recent discrimination had significantly greater increases in blood pressure and

heart rate during an anger recall task, with blood pressure also taking longer to return to baseline for this group (Richman, Bennett, Pek, Siegler, & Williams, 2007). Such elevated cardiovascular responses with African Americans have been demonstrated even when anger provoking situations were meant to be neutral, or provide very subtle racism cues (Merritt, Bennett, Williams, Edwards, & Sollers, 2006).

Attempts have been made at determining whether variable manifestations of anger expression differentially affect health. In a study comparing physiological response of African Americans and Caucasians, Gentry and colleagues (1982) evaluated physiological correlates of participants categorized as being high on either anger-in or anger-out. Those high on anger-in were defined as having a tendency to internalize, or suppress outward, behavioral manifestations of anger, while the other group, as implied by the name, were likely to endorse a tendency of outward anger expression. In response to an anger provoking scenario, participants high on anger in had significantly higher systolic blood pressure than those of the anger-out group.

Even if the outward expression of anger is associated with lower CVD risk factors, outward expression of anger may result in a number of untoward effects as well. Possible consequences include harm to others and oneself, legal problems, interpersonal difficulties, and employment problems (Deffenbacher, 2011; Gardner & Moore, 2008). Relative to those low on trait anger, high scorers are significantly more likely to report significant negative long term consequences of anger and aggression (Tafrate, Kassinove, & Dundin, 2002).

Collectively, these findings demonstrate how anger may map onto a behavioral conceptualization of depression. The negative consequences discussed above such as

health, interpersonal problems, and anger elicited from racism, can all be conceptualized as negative life events and reductions in RCPR, that in turn result in increased levels of depression symptoms. Avoidance is also a likely, operative factor, relevant when individuals become too tired, or overwhelmed, following anger provoking situations to engage with other value linked goals. As described earlier, common avoidance responses to anger may also include unhealthy behaviors such as overeating or substance use (Thomas & Gonzalez-Prendes, 2009). Other possibilities that may help to maintain depression and anger responses relate to maladaptive, habitual ways of dealing with anger being reinforced by one's social environment, or skills deficits militating against the using more adaptive strategies in response to anger related distress.

Unfortunately, any treatment targeting depression will be incapable of eliminating racism, which is lamentably well ingrained in society, sometimes at very subtle levels. CEBA therefore focuses on targeting the anger experience associated with discrimination, with the aim of reducing avoidance and fostering adaptive coping, thereby preventing the accrual of additional negative life events that may maintain or worsen depression. Anger as a target is consistent with the literature, in which some scholars have concluded that anger may be the most important issue to explore in therapy with African Americans (Belle & Doucet, 2003; Harrel, 2000).

Many cognitive-behavioral approaches to anger treatment include some form of cognitive challenging or restructuring, and various behavioral components such as monitoring antecedents, behaviors and consequences, and implementing alternative thoughts and behaviors in place of anger related ones (Day, Howells, Mohr, Schall, & Gerace, 2008; Siddle, Jones, & Awenat, 2003). A qualitative review of the literature has

also shown that relaxation is effective in targeting the physicological accompaniments of the experience (Deffenbacher et al., 2011). Overall, such CBT informed anger interventions appear effective, with one meta-analysis providing an estimated effect size of .70 (Beck & Fernandez, 1998).

Besides the fact that most of these efficacy studies included very few African Americans and may exhibit low generalizability as a result of narrow sampling (e.g. disruptive children, prisoners), there is an even more important reason for assuming that contemporary approaches to dealing with anger may not be inappropriate for African Americans. Because anger is oftentimes a valid response in relation to racism or discrimination, the use of cognitive restructuring, is therefore likely to be experienced as very invalidating for clients. Harrel (2000), for instance, has suggested that validation of racism is a very important treatment consideration. Despite its validity, however, anger still results in a number of negative outcomes associated with depression, and therefore remains an important aspect of treatment. CEBA targets this dialectic by adapting some of skills used in DBT for intense and problematic emotions (Linehan, 1993a; Linehan, 1993b).

DBT is used to treat borderline personality disorder, a mental illness characterized by emotion dysregulation (APA, 2000a; Linehan, 1993a). It teaches validation of emotions by providing clients with education regarding the cognitive, emotional, physiological, biological and behavioral components of emotions, even ones proving to be ineffective for clients. At the same time, DBT also encourages clients to use skills such as mindfulness to observe and describe action urges non-judgmentally for emotions that will not be effective, and to factually observe the emotional experience in terms of

body sensations, judgments that occur, and any other internal or external stimuli. In addition, clients are encouraged to think about the factual consequences of responding in effective versus ineffective ways.

These basic mindfulness skills in DBT likely serve a number of functions such as reducing emotional intensity, or preventing emotional intensity from escalating, as a result of decreasing the chances that clients will engage in activities that may further fuel the emotion such as rumination and being judgmental of the situation (Linehan, 1993a; Linehan, 1993b). Evidence suggests, in fact, that a low degree of mindfulness is associated with increased rumination, which in turn significantly predicts anger and hostility (Borders, Earleywine, & Jajodia, 2010). The corollary is that rumination may not only increase anger intensity, but make negative consequences of acting on action urges more likely. Judgments, in addition, have also been described as increasing the likelihood of a greater anger response (Deffenbacher, 2011), which suggests the potential utility of targeting these along with rumination.

Wright, Day, and Howells (2009) have in fact argued that mindfulness approaches to treating anger may also be more effective than other CBT approaches in training awareness of early sequelae of the anger response such as body sensations, thereby making it easier for clients to then use other skills to prevent the escalation of the anger response. Their review also highlights how non-judgmental stance will likely be helpful enhancing client tolerance of action urges, without having to act on them. A final benefit reviewed is that the process of observing different elements of the anger response in a non-judgmental, and non-attached way, may interfere with the effects of rumination as described above (Wright et al., 2009).

In a single-subjects design, mindfulness training resulted in lower levels of aggression for three aggressive males with severe personality disorders, with good maintenance of results (Singh et al., 2007). Another quasi-experimental design showed that men with severe anger problems learning an adapted form of DBT skills in an inpatient setting showed significant declines in severity of aggressive behaviors relative to a group that received treatment as usual (Evershed, et al., 2003). Other studies have shown that DBT skills training groups reduce anger relative to standard group therapy for women with Borderline Personality Disorder (Soler et al., 2009).

The relevance of these studies to the applicability of using mindfulness techniques in the CEBA manual is certainly qualified by methodological limitations such as small narrowly defined samples (Singh et al., 2007), lack of randomization (Evershed et al., 2003), and efficacy for clients with Borderline Personality Disorder (Soler et al., 2009). Moreover, DBT provides a huge arsenal of treatment strategies targeting emotion dysregulation, making a determination of construct validity for individual components difficult. Nevertheless, mindfulness skills are incorporated into all of the different treatment modules and are taught and practiced with twice the frequency of the other three units (Linehan, 1993b). As a result, they are likely an important aspect of emotion regulation in general, and there are no reasons suggesting they are contraindicated in addressing anger with African American clients, given the earlier review of the likely effects of rumination and judgments on the anger cycle.

CEBA specifically addresses racism and anger by affording clients the opportunity to discuss their experiences with racism, and having therapists validate anger in response to racism. Clients are given education on the multiple components of the

anger response, including physiology, cognitions, body sensations, action urges, behaviors (Day et al., 2008), and in addition are asked to think about antecedents and consequences of anger personally relevant to them. Mindfulness, having already been covered in the unit on physical pain, is discussed in the context of thinking factually about the consequences of acting on anger and focusing on body sensations of anger in a non-judgmental way as a means of regulating. In order to facilitate practice in and out of session, clients are asked to imagine a recent anger provoking situation, and practice the mindfulness skills.

Other strategies teach clients to recognize extremely high levels of anger intensity and use previously learned relaxation and distress tolerance techniques to bring down emotional arousal to a more manageable level. Once at these lower levels, clients are encouraged to use this energy to productive ends in the service of valued domains. Ultimately, the provision of anger management skills is intended to provide clients with a means of regulating the emotion, so as not to obstruct contact with new sources of RCPR and living in line with one's values, as well as preventing the accumulation of additional negative life events. Values assessment is also reviewed to motivate and encourage practice of these skills on an as needed basis, as well as at times specifically scheduled during the week while skills are being learned.

Employment

As reviewed earlier, African Americans are significantly more likely to be unemployed and live in poverty relative to Caucasians. This section presents an elaboration of the relationship between employment and depression, along with a

description of how CEBA attempts to target the risk factors of poverty and unemployment within its behavioral activation framework.

Obvious costs of unemployment relate to reduced earnings and the resulting threat posed to one's overall quality of life (Herr, 1989; Liem and Rayman, 1982). Specific threats include depression, increased stress within the family unit, divorce, and increased risks of health problems, incarceration, and suicide (Shelton, 1985; Liem and Raymen, 1982). Shelton (1985) suggests that many of these problems may directly interfere with the ability of the individual to reenter the workforce.

There is also evidence that longer spells of unemployment are associated with higher levels of depression (Moorehouse & Caltabiano, 2007). Although causality can not be inferred from these findings, the data suggest the possibility of a vicious cycle whereby longer durations unemployment and depression interact in a feedback loop that may prolong unemployment and increase the societal costs described above.

A behavioral account can describe how depression may serve as a significant obstacle to reemployment. For instance, the loss of a job can be construed as a negative life event, resulting in losses of RCPR and naturally elicited symptoms of depression. An individual would then be likely to exhibit decreased activity levels related to job search activities, with his behavior repertoire potentially becoming dominated by aversive control as previously described. Recent findings, for instance, have implicated avoidance as one of the key problems endorsed by clients receiving career counseling regarding follow-through (Baruch, Kanter, Bowe, & Pfennig, 2011).

Other factors such as skills deficits and reinforcement of depressed behaviors in social milieu may also contribute to the cycle of depression. Some clients, for instance,

may lack the skills needed to write a resume, or be successful in a job interview. One's family may also reinforce depressed behavior such as staying in bed, versus getting up and looking for work. Resulting inactivity from these processes, once again will likely lead to future negative life events and depression, as bills and other financial stressors, for instance, continue to grow.

A nascent research literature has started to describe some of the unique effects of depression on employment seeking in unemployed populations. The paucity of data in this realm is surprising, given the numerous accounts suggesting a strong relationship between job loss and mental health problems, including depression (Guindon & Smith, 2002; Barling, 1990; Feather, 1990; Warr, Jackson, & Banks, 1988). In fact, unemployed populations appear to be affected more greatly by depression, with unemployed samples showing twice the 12-month prevalence rate as employed comparison samples (Marcotte, Wilcox-Gok, & Redmon, 1999).

Despite the rational appeal of the behavioral model's argument that depression may be detrimental to reemployment, existing empirical evidence in this area is mixed. Survival analyses and growth curve modeling used in a longitudinal design (Ginexi, Howe, & Caplan, 2000) found that initial levels of depressive symptomatology did not significantly predict time elapsed in finding new employment amongst recently unemployed individuals. Although these null findings appear strong due to the exclusion in analyses of potential demographic and human capital covariates, whose inclusion would likely rendered even more conservative findings, it should also be noted that the chosen sample of individuals in long term relationships may have been too narrowly defined to be broadly generalizable. Given the inclusion criteria of currently being in a

long term relationship, it is plausible that the relationship served as a protective factor eliminating variance that might exist in the population at large.

Two additional studies did control for demographic and human capital variables, and also failed to show a significant link between depressive symptoms and attainment of employment. One (Coiro, 2001) is limited in terms of generalizability, however, because its sample consisted exclusively of poor, single mothers. And although the other study also found null results (Zabkiewicz & Schmidt, 2007), it may have yielded different results with a more sensitive dependent measure (e.g. a continuous measure of time to get off welfare), in contrast to the dichotomous measure of departure from welfare at any time within a two year window.

Contrary to the evidence cited above, a number of longitudinal studies have elucidated significant relations between baseline depression levels and one's ability to obtain employment. Although limited by small sample size and a high attrition rate, one study demonstrated that baseline depression symptoms significantly predicted reemployment for low income African American women at 10 weeks from baseline (Mascaro, Arnette, Santana, & Kaslow, 2007), albeit with the limitation not controlling for variables likely to covary with depression. In a study controlling for basic demographics, however, Prause and Dooley (2001) did find a significant positive association between depression severity and the odds of obtaining employment 2 years from baseline using a large data set representative of the general population from the National Longitudinal Survey of Youth. A third study using Structural Equation Modeling (Vinokur & Schul, 2002) demonstrated a significant negative association

between initial depressive symptoms and the quality and quantity of work experienced by recently laid off individuals at 6 and 12 months following baseline.

Cross-sectional evidence for the detrimental effects of current depression levels and history of depression on reemployment has also started to accrue. Two studies have shown that higher current levels of depressive symptoms are significantly related to increased odds of being unemployed (Lewis, Lee, & Altenbernd, 2006; Kalil, Schweingruber, & Seefeldt, 2001). Using data from the National Comorbidity Survey, Marcotte and colleagues (1999) also found that individuals with a history of depression were 4% less likely to be employed. Moreover, their results indicated that those who were neither in the labor force, nor actively searching for work, had significantly higher levels of depression prior to being interviewed. These results suggest, albeit in a provisional way, that higher levels of depression may contribute in part to dropping out of the labor force. Whereas the cumulative literature appears mixed regarding the relationship between depression and unemployment, the stronger methodologies of studies showing significant relationships lends some support to the idea that depression is not only a natural consequence of becoming unemployed, but may likely be a unique factor in the maintenance of unemployment.

Additional lines of evidence supporting this possibility come from studies indicating that certain treatments for depression are associated with a greater likelihood of finding work. In an RCT that randomized unemployed participants to either general self-efficacy enhancement or no treatment, individuals in the active treatment showed significant increases in self-efficacy, job search activity, and chances of being employed 18 weeks post-treatment (Eden & Aviram, 1993). In another RCT, durability of such

gains up to 2 years post-treatment were demonstrated with a form of therapy designed to increase mastery, motivation, and inoculate one against setbacks related to employment(Vinokur, Schul, Vuori, & Price, 2000). Despite the limited sampling of studies, initial results are positive in suggesting that both short and longer term gains in employment are possible when using psychotherapy to treat depression.

CEBA targets employment by providing clients with local community resource packets that include information on free job search services in the city of Milwaukee. The resources also provide information on other economic assistance (e.g. heating) and sources of logistical support (e.g. free babysitting), in order to lower additional financial and logistical barriers that may interfere with employment seeking behaviors. As with all of the other units discussed, obtaining employment is discussed in terms of values and goals, and clients are encouraged to utilize the resource packets via scheduling specific assignments each week that work towards achieving employment related goals.

Support

The CEBA components described up to this point have emphasized targeting specific risk factors of African Americans for depression. This last section changes the focus to the protective factors social support and spiritual support, examines how they may be applicable in the context of treating African American depression, and illustrates how they are incorporated into the CEBA framework.

The potential role of social support as a protective factor for depression has been described in a number of cross sectional designs with African Americans. Low levels of social support have been shown to partially mediate the effects of discrimination related stress on depression symptoms with African American college students (Prelow, Mosher,

& Bowman, 2006). Other studies have found that a majority of African Americans are likely to use family support as a means of dealing with racism related stress (Swim et al., 2003), with some evidence suggesting that family support may account for up to 22% of the variance in depression (Kimbrough, Molock, & Walton, 1998). In fact, structural equation modeling found social support to be the most robust predictor of depression amongst a number of explanatory variables (Abu-bader & Crewe, 2006).

Longitudinal studies have corroborated these relationships. Using a sample with a large proportion of African Americans, Goode et al., (1998) demonstrated that baseline social support moderated the relationship between stress and symptoms related to physical health and depression over the course of a year, with high levels of social support evidencing a protective effect. Longitudinal data covering a 5-year period (Clay, Roth, Wadley, & Haley, 2008) have also suggested that social support may act as a mediator, partially mediating the relationship between ethnicity and depression with baseline differences on a number of covariates controlled. Findings suggested that African Americans in some instances may be more likely to access social support as a coping strategy for dealing with stressors, which are consistent with claims in the literature that family support is important to African Americans, and should be considered when implementing psychological interventions (Priest, 1991).

Despite its potential benefits as a treatment target, the construct of social support used in many of the studies is generally comprised of multiple facets such as emotion, financial, and logistical support, which hinders a clear determination of what aspects are most strongly associated with depression. Nevertheless, from a behavioral perspective all

of these components are likely to be relevant in certain instances, with certain clients, based on idiographic differences clients bring to treatment.

For instance, losses of social support serving as negative life events and concomitant reductions in RCPR may be the death of one's parent, or the lack of financial support provided an old boyfriend. Whereas these losses are certainly topographically different, they are functionally the same in reflecting reductions in RCPR likely to elicit depressive symptoms. In both cases, the behavioral model would suggest activating individuals to find new sources of social support, as one means of having individuals contact new sources of RCPR.

Loss of different modes of social support may also make avoidance behaviors more likely. For instance, social support has been shown to be associated with a greater likelihood of taking medications and adhering to medical regimens, while low social support exhibited the converse relationship (Gerber, Cho, Arozullah, & Lee, 2010). An explanation of these findings may in part relate to the role of resources assuaging the stress related to remaining active in busy and complicated lives. When the buffering effects of support are eroded, or never there in the first place, individuals may become more easily overwhelmed with a multitude of responsibilities, with the upshot that negative reinforcement gains control of behavior amongcompeting contingencies. Evidence from longitudinal models have supported this possibility, with the relationship between initial levels of social support and lower levels of depression mediated via approach, versus avoidant, coping with stressors (Holahan & Moos, 1991; Holahan, Moos, Holahan, & Brennan, 1997).

CEBA encourages clients to seek out personally relevant sources of social support. For some clients, this goal may map onto specific valued-linked goals, while in other instances, it may be a means of increasing the chances of the client being able to successfully activate in other valued life areas.

But just as social support may likely be helpful in facilitating the kinds of active coping that BA attempts to facilitate, the availability of these resources may also be detrimental to improvement when support members are reinforcing depressed behaviors, or taking over responsibilities associated with a client's values and longer term goals (Lejuez et al., 2001; Kanter et al., 2011). Therefore, the difference between support that reinforces depressed versus non-depressed behavior is clarified during this module of treatment.

Spirituality is another component proposed as having likely utility when targeted as a protective factor in psychotherapy for African Americans (Hunn & Craig, 2009; Norman, 2008; Priest et al., 1991). These suggestions are not surprising given the presumed importance of prayer to African Americans, who have been shown to use religion as a form of coping and emotional support significantly more than other ethnic groups (Priest, 1991). Qualitative analyses of African American women with significant depression symptoms, for instance, have found that a majority of women viewed faith as the bedrock of symptom improvement for mental illness (Wittink, Joo, Lewis, & Barg, 2009). Fortunately, such views do not appear to be mutually exclusive with psychotherapy, as qualitative studies have illustrated perceptions of African American women that God provides doctors with the ability to facilitate healing (Wittink et al., 2009).

The relationship between spirituality and depression is consistent with the previous discussion of social support, although there is a notable dearth of longitudinal studies in this domain. Cross sectional studies, however, have suggested that African Americans scoring higher on measures of spirituality or religiosity are more likely to have lower depression and anxiety (Jang & Johnson, 2004; Watlington & Murphy, 2006), with greater church attendance associated with significantly better psychological well being (Samuel Hodge et al., 2008). Spirituality may also be associated with better physical health through its effect on variables such systolic blood pressure (Steffen, Hinderliter, Blumenthal, & Sherwood, 2001), while social support from church may buffer the effects on racism on depression (Odom et al., 2010). Preliminary evidence suggests, in fact, that the protective effects of spirituality may actually be mediated by social support (Jang & Johnson, 2004).

Spirituality, when conceptualized as social support, may therefore be related to depression in ways similar to those described above for more general social support. It is likely, however, that spirituality through other outlets such a prayer and meditation may serve as a more general form of support, potentially giving individuals strength, and a feeling of connectedness with the world during difficult times. As such, outlets such as prayer and meditation may allow individuals motivation to engage in various life goals in difficult situations, or may even allow them to relax in situations for which aversive control of behavior might be more likely. DBT (Linehan, 1993b), for instance encourages clients to use prayer as a distress tolerance skill by feeling connected with something, or someone, outside of the self in order to bring down intense emotions in order to facilitate later, active problem solving.

The calls for incorporation of spirituality and religiosity into treatments for African Americans have been more consistent than precepts guiding the implementation of such components in extant treatments. Due to the likely variability of clients in terms of religious views, the CEBA manual in no way focuses on any one religion or form of spirituality. The purpose of the component is instead to have clients share how religion or spirituality has been helpful in the past, or how it might be helpful in the future. Scheduling of religion-specific activities is of course limited to those for whom religion is a personally relevant valued life area, but all clients are encouraged to schedule activities in these domains if personally relevant. CEBA also takes a non-denominational approach with its didactic portion, teaching clients a meditation that they can practice in order to harness inner support during difficult times.

Summary

The preceding review has provided the theoretical and empirical justifications behind the development of a culturally enhanced depression treatment for African Americans using a BA framework, along with a brief description of specific elements targeted by the adapted components in the extant CEBA manual. The current study was conducted in order to revise the existing manual and to provide an initial test of its efficacy in the African American community.

Study Hypotheses

This study was conducted in two distinct phases. The purpose of Phase 1 was to administer the existing Culturally Enhanced Behavioral Activation manual (CEBA; Bowe, 2011) to two groups of African American clients at two neighborhood community health centers on the West Side of Milwaukee, and to incorporate feedback from clients

and therapists regarding the acceptability and feasibility of treatment into a revised manual that was tested in a Phase 2 randomized-controlled trial (RCT). Another goal of this initial phase was to provide comparative information regarding ease of recruitment and implementation of study protocols at the two sites in order to guide the selection of a single site to be used in the Phase 2 RCT.

There were no specific a priori hypotheses for Phase 1, given its primary aim of improving the extant manual and determining feasibility of potential study sites. Primary and secondary hypotheses for Phase 2 are described below.

Primary Hypotheses

It was hypothesized that those receiving CEBA would experience significant reductions in depression symptoms relative to a waitlist control group at post-treatment, with a moderate effect size predicted for treatment. It was also predicted that CEBA would result in adequate retention levels, with attrition rates significantly lower than those reported in other trials examining CBT treatment of depression with African Americans. A final primary hypothesis was that CEBA would result in acceptable levels of global satisfaction with the receipt of therapy.

Secondary Hypotheses

Additional hypotheses tested for movement of variables specifically associated with culturally adapted components shown to be related to depression either as risk or protective factors in the maintenance of symptoms. It was hypothesized that the therapy group would show significant reductions in physical health complaints, physical health functioning, the internal experience of trait anger, the external experience of trait anger, and anger expression. It was further predicted that those administered CEBA would

show significant increases in global activity levels, satisfaction with and availability of social support, and quality of life.

Methods

The methods used differed according to the stage of the study. Methods are presented according to the stages in which they were employed.

Phase 1 Methods

Participants

Bread of healing group.

Recruitment based on the procedures described below resulted in 11 prospective African American participants expressing interest to participate in the study. Of these, three individuals did not meet inclusion criteria for the study, which resulted in a total of eight participants qualifying and consenting to participate. Those not qualifying for the study did not significantly differ in age from qualifiers, t (9) = .790, p = .450. One qualified participant did not attend the first group session, and subsequently was not reachable by phone. A second participant withdrew his participation after attending the first group session as a result of the group time conflicting with his school schedule, which left six participants who started and completed the study. The mean age of participants who initiated treatment was 55.83 (SD = 4.22) years. Five of the seven participants (71.34%) were female, all participants reported having at least a high school education, and three (42.86%) of the participants noted having received tertiary education ranging from "some college" to a Master's degree. Three of the participants (42.86%) were currently married, two (28.57%) reported that they were single, and one participant (14.29%) was a widower. One (14.29%) of the participant's marital status was unclear.

The mean number of Axis I psychiatric diagnoses for the group was 2.14 (*SD* = .90), with the number of Axis I diagnoses per participant ranging from 1 to 3. All participants (100%) met current diagnostic criteria for current Major Depressive Disorder. Four participants (57.14%) met criteria for Panic Disorder, and four participants (57.14%) met criteria for Posttraumatic Stress Disorder. Additionally, one participant (14.29%) met criteria for current alcohol abuse, and two participants (28.57%) met criteria for Antisocial Personality Disorder (ASPD). Of the two participants meeting criteria for ASPD, one of these was the participant who withdrew from the study following the first session.

Silver spring community nursing center group.

All seven prospective participants assessed for participation in the Silver Spring Community Nursing Center Group qualified for the study. Two prospective participants declined to participate, and a third individual did not attend the first session and was subsequently unreachable by phone, leaving four participants who completed the group. Three of the participants (75%) were female, and the mean age of those who participated in the study was 51.50 years (*SD* = 4.93). Three of the participants (75%) were not married, and the fourth participant did not provide information regarding her marital status. Two of the participants (50%) were high school graduates, one (25%) reported having some college, and a fourth (25%) did not provide information regarding education level. The mean number of Axis I psychiatric diagnoses was 3.00 (*SD* = 1.15) for those who participated in the study. All four participants had a diagnosis of current Major Depressive Disorder. Two participants (50%) met criteria for PTSD, one (25%) met criteria for Panic Disorder, and one (25%) met criteria for Agorophobia. In addition, one

participant (25%) met criteria of Obsessive Compulsive Disorder, one (25%) met criteria for Generalized Anxiety Disorder, and another individual (25%) was diagnosed with Alcohol Dependence.

Materials

Mini international neuropsychiatric interview. The Mini International Neuropsychiatric Interview (MINI; Lecrubier et al., 1997; Sheehan et al., 1998) is a brief, structured diagnostic interview used to assess for the presence of 16 Axis I and disorders and Antisocial Personality Disorder according to the Diagnostic and Statistical Manual of Mental Disorders (DSM) criteria of the American Psychiatric Association (APA, 2000a; APA, 1994; APA, 1987). The interview is designed to take approximately 15-20 minutes to administer in person or over the telephone (Lecrubier et al., 1997), and has demonstrated concurrent validity with good to excellent concordance rates using the Structured Clinical Interview for the DSM (SCID-I; Spitzer, Wiliams, Gibbon, & First, 1990) and the Composite International Diagnostic Interview (CIDI; World Health Organization, 1990) as benchmarks (Sheehan et al., 1997; Lecrubier et al., 1997; Sheehan et al., 1998). For depression, specifically, the MINI has shown high sensitivity and moderate specificity for depression diagnosis using the SCID and CIDI as the gold standards (Lecrubier et al., 1997; Sheehan et al., 1997). Interestingly, initial validation studies of the MINI did not include information regarding the ethnic composition of the samples. Although we are not aware of specific studies addressing issues of validity and reliability with African American populations, the measure has nonetheless been used with predominately African American samples (e.g.; Pinninti, Madison, Muser & Rissmiller, 2003; Bogner & De vries, 2008; Alvidrez et al., 2005)

Beck depression inventory II. The Beck Depression Inventory II (BDI-II; Appendix A) is a 21 item self-report instrument used to measure depression severity (Beck, Steer, & Brown, 1996; Beck et al., 1961). The scale used for each of the items ranges from 0 to 3, resulting in a possible range of scores from 0 to 63, with higher scores indicative of greater depression severity. Scores ranging from 0 to 13 represent minimum severity, while scores from 14 to 19, 20 to 28, and 29 to 63 are representative of mild, moderate and severe depression respectively.

The BDI-II is a well validated instrument commonly used to track clinical change in depression symptoms. The measure has demonstrated good internal consistency (α's = .87 to .92), concurrent validity (Segal, Coolidge, Cahill, & O'Riley, 2008; Titov, Dear, McMillan, Anderson, Zou, & Sunderland, 2011) with commonly used depression measures such as the Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke, & Williams, 1999) and Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), and convergent validity (Segal et al., 2008) with the Short Psychological Wellbeing Scale (Ryff, 1989). Factor analytic studies have also lent support to the item's construct validity by consistently yielding a 2-factor solution of cognitive and somatic symptoms, loading onto a second order factor of depression for both Caucasians and African Americans, as well as young and old individuals (Titov et al., 2011; Groethe et al., 2005; Segal et al., 2008). Additionally, the measure adequately reflects clinical change across treatment (Lambert, Shapiro, & Bergin, 1986; Edwards et al., 1984).

Weekly acceptability measures. Weekly self-report acceptability measures (Appendix C) were created for this study in order to evaluate areas such as the clarity, relevance, helpfulness, and sufficiency of time for BA and culturally adapted components

of treatment. Some of the questions utilize quantitative rating scales, whereas other questions are presented in an open ended response format.

Procedure

A brief description of the research literature guiding the procedural approach of the study is first presented. A detailed discussion of procedures followed for the two phases of the study then follows.

Procedural background. There is currently an absence of any generally accepted, standard approach to the development of psychotherapy treatment manuals. Nevertheless, a small literature is starting to accrue that provides guidelines for developing manuals in order to increase the likelihood of their subsequent adoption in the clinical world outside the confines of university laboratories in which much psychotherapy treatment research is conducted. Despite some variability in the delineation of recommended steps, there is a great degree of overlap in these contemporary suggestions.

Multiple approaches, for instance, suggest that initial manual development be guided by the extant research literature and data obtained in day-to-day clinical practice with regards to developing new, or improving current, treatment components grounded in both theoretical and practical considerations (Onken, Blaine, & Battjes, 1997; Weisz, 2004; Rounsaville, Carroll, & Onken, 2001; Carroll & Nuro, 2002). Recommendations posit that this rudimentary version of the manual should specify basic components, including durations of sessions, intensity of treatment, treatment targets, and hypothesized mechanisms of change (Carroll & Nuro, 2002; Rounsaville et al., 2001). For the purposes of this study, a provisional CEBA manual was created through a

synthesis of the research literature on risk and protective factors implicated in the maintenance of African American depression with an empirically supported psychotherapy treatment approach to depression, behavioral activation (Kanter et al., 2011). Development of the manual, in addition, took into account issues learned from the experiences of clinicians treating African Americans in the UWM psychology clinic, as well as a small, nascent research literature underscoring African American treatment preferences and values (Bowe, 2013).

As described in more detail below, the process of continued manual development used in this study was consistent with guidelines of revising provisional manuals through the incorporation of feedback from clinicians and patients on the acceptability and feasibility of treatment components and subsequent pilot testing of the revised manual in a small RCT to obtain estimates of effect sizes for powering future larger studies (Onken et al., 1997; Rounsaville et al., 2001; Carroll & Nuro, 2002; Weisz, 2004). The approach utilized was also consistent with recommendations that treatment developers should attempt to address potential real world and external validity concerns related to the manual earlier in the treatment development timeline (Chorpita, 2002; Westen, 2002; Baum, 1995), as underscored by proposed study procedures such as direct consultation with community members for whom the manual is designed throughout the development process, the development and testing of the manual in the community context in which treatment will eventually take place, and the use of a practicing clinician from the African American community as one of the study therapists.

Phase 1 (months 1-8) procedure: revision of ceba manual. The aim of Phase 1 was to improve the current version of the CEBA manual by incorporating feedback on its

acceptability and feasiblity from two groups administred treatment in the community into a revised manual for later use in Phase 2. Phase 1 therapy group sessions took place at two community health centers in Milwaukee, Wisconsin. The Silver Spring Community Nursing Center (SSCNC) is an academic nursing facility affilliated with UWM that is committed to providing free and low cost medical services to residents of a neighborhood on the West Side of the city composed predominately of African Americans. A second group was run at the the Bread of Healing Clinic (BOH), located in the Cross Lutheran Church on Milwaukee's West Side. The clinic, associated with Aurora Sinai Medical Center and the University of Wisconsin Medical School, provides free medical services and education to the local community residents. Approximately 80% of the population served at the clinic is of African American ethnicity. Both sites provided ample, private spaces to accommodate weekly therapy sessions during the study. The ease of recruitment and feasibility of administering treatment at the two sites was assessed to determine which site would be used for the Phase 2 RCT.

The goal of Phase 1 was to recruit 8 - 10 participants meeting criteria for Major Depressive Disorder to enroll at each of the sites, for a total of 16 - 20 participants. Consistent with future research aims of disseminating CEBA to nurse practitioners and other medical/mental health professionals working in neighborhood health clinics, recruitment procedures attempted to enroll those living in the immediate community into the study by using the two community health centers as the principal vehicle of advertising. Physicians, nurses and mental health professionals at SSCNC and BOH directly targeted patients for whom they felt depression was a likely problem by providing interested, prospective participants with a study flyer giving a brief description

of the study and directions for contacting the University of Wisconsin-Milwaukee (UWM) research staff regarding questions and/or eligibility determination. Flyers were also posted in general locations throughout the health centers, and office staff were given extra copies with which to provide patients.

When interested individuals contacted the research laboratory, they listened to a brief recruitment script delineating all facets of the study (Appendix B), and provided verbal assent for continuing with the screening protocol when interested in determining eligibility. All screens for study inclusion were completed over the phone with the study assessor, and prospective participant received $10 for completion of these. The MINI, the structured diagnostic interview used during the screen, has been administered in numerous trials using a telephone interview format (e.g.; Cohen, Ofek-Shlomai, Vardy, Weiner, & Shvartzman, 2006; Duburcq et al., 1999; Patten, Adair, & Williams, 2006).

In order to qualify for Phase 1, participants had to meet the inclusion criteria of being African-American males or females between the ages of 18 and 65 inclusive. They also had to possess at least a fifth grade education level, the ability to read and write in English, and be assigned a diagnosis of Major Depressive Disorder during the screen according to the Mini International Neuropsychiatric Interview (MINI; Lecrubier et al., 1997). Participants were excluded when they evidenced current suicidal ideation, or meet criteria for Bipolar Disorder, Schizophrenia, or alcohol or substance dependence according to the MINI during the screen.

A member of the research team mailed qualifying participants who agreed to participate in the study an informed consent document reviewing study information discussed at the time of their screen and subsequently contacted participants within a

week after the document was mailed. At this point, a member of the research team read through all of the sections with the participants, answered any questions the participant had, and asked the participant to sign and return the document via pre-paid postage to the UWM research laboratory.

Three prospective participants recruited at the BOH did not meet inclusion criteria for the study. One of these would have experienced a conflict with the group meeting time as a result of having to attend chemotherapy appointments. Another individual was currently taking antipsychotic medication and met criteria for Schizophrenia, while a third individual was barred from receiving services at the BOH following a physical altercation with another recipient of services. At the SSCNC, no participants were excluded based on inclusion/exclusion criteria.

Following recruitment, Co-PIs Drs. Kanter and Lee co-administered the CEBA protocol to one Group at the BOH in weekly, 2 hour sessions lasting for 12 weeks. Dr. Kanter has considerable background experience administering BA, training diverse audiences in BA and implementing manual-guided BA for research trials, including his current R34 of BA for depressed Latinos. Dr. Lee has specialized in providing preventive mental health services for African American individuals and families on numerous grants, and has several years of experience as a mental health clinician in the African American community.

The SSCNC group sessions started approximately one and a half months following the start of the BOH group. When initial recruitment throughput was slower at the SSCNC relative to the BOH, the study team decided that staggering the start dates of the groups would better facilitate the iterative process of making improvements to the

manual and implementing these in order to obtain additional acceptability and feasibility data prior to initiating Phase 2. The study assessor and a research assistant were chosen as co-therapists to run the group at SSCNC. This decision was based on feedback from consultation with a community advisory board of leaders from the African American community in Milwaukee, who expressed concerns about possible limitations of the generalizability of stable services to the community as a result of the expertise of study therapists in treating depression. Given the interest of the study team in future research examining the disseminability of treatment using nurse practitioners inexperienced with administering behavioral treatments for depression, the decision to use less experienced therapists was viewed as means to obtain initial qualitative data on the feasibility of training less experienced mental health professionals. The project coordinator, who authored the CEBA manual, also attended all groups at the SSCNC to assist therapists with any unforeseen problems that might arise during sessions.

Seven prospective participants were screened for inclusion in the SSCNC group, and all qualified for participation. Of these, five participants provided informed consent to start the group, and three declined participation. Another participant never showed up for the first group, and was never reachable by phone subsequently. Therefore, four participants initiated treatment at the SSCNC.

A treatment development team, consisting of the project coordinator, therapists, study assessor, and research assistants met weekly to discuss issues related to the feasibility of implementing treatment components. The team specifically discussed logistical concerns related to time constraints, appropriate pacing of material, potentially beneficial changes to sequences of components, alterations of content and administrative

issues such as participant payments and scheduling of groups during holidays over the course of the phase. The team also reviewed the acceptability of manual content regarding the clarity and relevance of topics and strategies to both clients and therapists, with the aim of improving overall accessibility of treatment to clients.

Client acceptability of CEBA was obtained weekly throughout treatment using quantitative scales and qualitative open-ended questions assessing areas such as the clarity, relevance, utility and appropriate use of time for the various therapy components (Appendix C). As remuneration for providing their feedback, clients received $10 per week in gift cards for answering the acceptability measures. Following the last session, they attended a focus group discussion with the project coordinator, or PI, to provide additional feedback on treatment acceptability. The focus group formats utilized information obtained from weekly acceptability measures to develop more specific open ended questions designed to facilitate a discussion allowing clients to clarify and expand upon feedback provided on earlier acceptability. Although the generation of specific focus group questions occurred as Phase 1 progressed, the general a priori format for questions followed is provided in Appendix D. The approach used of having both quantitative and qualitative data inform manual development is consistent with recommendations from the literature regarding the benefits of utilizing a dual methodological approach to intervention development (Two Feathers et al., 2005; Baum, 1995). Participants received $20 for their participation in the focus groups.

All feedback from clients, therapist and the treatment development team was incorporated into a refined CEBA manual at the end of Phase 1. The aim of Phase II was to test the initial efficacy of the revised treatment.

Retention procedures. The project coordinator and research assistants provided group members with weekly phone reminders regarding session attendance, arrival at appropriate times for completing assessment measures, and attendance at focus groups. As described above, clients were given bus passes to facilitate attendance in instances when transportation served as a barrier.

Training of study personnel. Drs. Kanter and Lee read the initial version of the CEBA manual prior to the start of Phase 1. They then met weekly with the project coordinator, who authored the manual, and the rest of the study team in order to review and practice treatment components before and during the start of treatment. As discussed in the Results section, some of the components were also modified prior to the start of the first group based on feedback from the initial reading of the manual by the study team. The project coordinator also reviewed implementation of therapy throughout Phase 1 by watching therapy sessions live. This process allowed the project coordinator to provide feedback to therapists directly following sessions.

The two inexperienced therapists attended all study meeting and thus underwent the same training as described above for Drs. Kanter and Lee. In addition to this time, the project coordinator met with therapists for 45 minutes each week prior to SSCNC sessions to review and practice session content. The project coordinator was present during all therapy sessions at this site, and also provided feedback and supervision to therapists directly following each group session.

The assessor hired for the study was an African American female who possessed a Master's degree in Community Counseling. The project coordinator, who was trained in administration of the MINI by one of the measure's developers, trained the assessor in

the use of this instrument. Initially, the assessor was asked to review DSM-IV-TR diagnostic criteria and differential diagnosis of disorders covered by the MINI by reading relevant sections of the DSM-IV-TR. Next, the project coordinator extensively reviewed the algorithms used for various diagnoses, and how to record information obtained during the interview. Finally, the assessor participated in a series of 3 mock psychiatric interviews, during which members from the treatment team posed as psychiatric patients. These were videotaped, and the study coordinator scored diagnoses in order to provide a measure of reliability. The inter-rater reliability of assessments was calculated using Kappa, and was acceptable, $K = .69$, $p < .001$. The project coordinator also provided the assessor with feedback pertaining to all of the mock assessments.

Although the Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967) was not used until Phase 2, the assessor was also trained in the administration of this semi-structured interview by the project coordinator at the same time she received training in the MINI. The assessor read and reviewed the training manual with the project coordinator, and performed 6 mock interviews with volunteers and members of the study team as part of her training. Inter-rater reliability was acceptable using the Intraclass Correlation Coefficient, $ICC = .81$, $p < .001$.

Clinical deterioration and suicide protocol. The study used a clinical deterioration and suicide protocol for the possible event of significant clinical deterioration during the course of the study. No clients exhibited significant clinical deterioration or expressed suicidality during the course of the study either at initial assessment, during weekly meetings, or on the weekly BDI-II forms completed. As a result this protocol was not employed. The Suicide Protocol developed for this study is

included as Appendix E. All members of the study team who directly encountered participants were trained in the protocol.

Phase 1 Results

Phase 1 BOH group

Manual changes. The manual underwent a number of changes both prior to the start of, and while, the BOH group received therapy. Modifications were made to the elements employed at the beginning of each session, the underlying BA structure of the manual and culturally adapted components. The presentation of changes that follows below is organized according to these three areas, and the reasoning underlying all changes is provided.

Icebreaker activities. The idea of using an icebreaker activity at the start of the first session to facilitate initial interactions between clients and therapists was extended to include a brief amount of time at the beginning of each session to participate in a group activity. The original activity of having patients walk around the room, learn information about other participants, and then share this information learned with the group was not used. Instead, African Djembe hand drums were purchased, and participants participated in drumming icebreaker activities at the beginning of every session.

This modification was developed by the study team as a means of using a culturally relevant icebreaker activity that could be used as a means of promoting group cohesion (Longhofer & Floersch, 1993; Gold, Solli, Kruger, & Lie, 2009) throughout therapy at the start of each session. In line with the aim of promoting this cohesion, the name of the therapy group was changed to the "Beat Back the Blues Group", and advertised as such. Drumming activities were also construed as a way in which

participants could receive initial and ongoing practice in the skills of mindfulness, a skill more formally taught later in the sequence of sessions. The choice of drumming was also guided by data indicating that this activity alone may be a therapeutic process, with ameliorative effects on psychiatric symptoms such as mood and anxiety shown for music therapy as an ancillary to standard psychotherapy treatment (Gold et al., 2009; Silverman & Marcionetti, 2004).

Group members participated in a number of drumming activities throughout treatment. These ranged from activities in which individuals drummed their names, emotions, and changes in moods, to group drumming sessions during which each member started with, and kept, a specific beat as other members participated. Other group drumming sessions were more open ended, during which each member added, and varied, their own unique drum beats throughout the drumming session.

BA components. The treatment team changed the sample activity monitoring sheet (Appendix F) to include new examples of behaviors that might be relevant to participants. The purpose of changes was to present examples of behaviors that would be more culturally relevant to the lives of African Americans of lower socioeconomic status, whom we expected to be our primary recruitment source. Some examples of changes made included "went to the laundromat", instead of listing "did laundry". The latter, it was assumed by the study team, might wrongfully assume that our clients would dependably have washers and dryers readily available in their homes. As another example, we included the situation of "kid's father stopped by and we had a fight", based on low rates of parental cohabitation in African American families (Annie E. Casey

Foundation, 2013) and the concomitant stress resulting from single parenthood (Keating-Lefler, Hudson, Campbell-Grossman, Fleck, & Westfall, 2004).

The presentation of values and goals clarification was also modified during the course of group. Around the midpoint of treatment, after the initial values and goals clarification had been conducted earlier, study therapists noted that group members had been pursuing a more narrow range of values-linked goals than would be expected at that point in therapy. In addition, the initial decrease in participant depression scores had plateaued midway through treatment, and the treatment team hypothesized that further reductions might not be realized in the absence of participant activation in greater variety of values linked domains.

In order to stimulate further values clarification, therapists used an experiential exercise with participants through which they asked participants to think about their idealized goals in important domains, and to share these with the group. Once these idealized goals were established, therapists and other group members helped participants to clarify what more attainable goals might look like, while encouraging them to keep ideal goals as more long term goals that might be attained in the future. For instance, one of the participants reported that she would like to travel to California for vacation as a goal subsumed under her value of "leisure and recreational activities". Once this goal was established, the participant then worked through setting more reasonable goals of taking "mini-vacations" to areas closer to Milwaukee that were more within her budget. Additionally, the group spent some time helping the individual problem solve ways in which she could realize this goal by seeking out low cost transportation and free activities to pursue.

At the time values and goals clarification was re-explored, therapists realized that some of the participants were experiencing difficulties with understanding the relationships between activity monitoring, the values and goals assessment, the activity hierarchy, and activity scheduling completed at the end of each session. In order to address this confusion, the team developed a worksheet highlighting the relationship between these components that demonstrated how information from monitoring and the values and goals assessment sheet yielded activities that could be included on the activity hierarchy, which was then meant to be used a compass each session for scheduling specific activities to be pursued by participants each week for homework. The sheet used to explain the relationships is included in Appendix G.

Changes to culturally adapted components. A number of changes were made to various culturally adapted components in the initial manual. Specific changes for relevant modules are discussed below.

Psychoeducation. Prior to the first treatment session, the treatment team decided that the current psychoedcation handout was too long, and that its length might interfere with having time to adequately address the BA model of depression during the first session. In addition, some members of the team felt that participants might feel potentially overloaded with information, given expectations of high levels of depression and that some of the participants would likely present with an education level lower than a high school diploma. Whereas some members of the treatment team wished to forgo didactic information about depression outside of the BA conceptualization of depression, other members expressed a desire to retain at least some components, given the literature

suggesting that psyhoeducation might enhance treatment engagement and retention (Alvidrez et al., 2005; Dwight-Johnson et al., 2001).

A compromise was reached through which the amount of information contained on the current psychoeducation sheet was significantly reduced through a process that eliminated information related to diagnostic criteria for dysthymia, information related to the purported mechanisms of change for antidepressant medications, and most of the information related to the effect of psychotherapy on brain changes. Moreover, the paragraph on efficacies of other depression treatments and the section discussing African American depression were significantly shortened. A brief paragraph at the beginning of the sheet was added to communicate that there are many different theoretical explanations for causes and maintenance of depression, and that the approach used during this study would emphasize depression as resulting from changes in participants' environments.

The majority of time for psychoeducation was intended to be spent having participants personalize their experience of depression by looking at the normative influences of chronic stress and negative life events on symptoms of depression. Although the initial manual utilized a 2-circle diagram of negative life events constituting one circle, with the other comprised of cognitive, emotional , and behavioral (e.g. avoidance) symptoms, the treatment team decided to replace this approach with a three circles diagram in which behavioral symptoms of depression related to reduced behaviors, avoidance and escape were recorded in a third circle. During the discussion of symptoms, these behavioral responses were normalized as valid short term responses in the context of present emotional and cognitive symptoms experienced in the second

circle. Whereas Martel and colleagues (2001) have conceptualized this third circle as representing various avoidance and escape behaviors posited as maintaining depression, for the purposes of clarity with this group, the therapists presented this circle also as encompassing behaviors that could be maintained by factors such as forgetting or reinforcement of depressed behaviors from individuals in one's environment. Overall, therapists discussed this circle as "reduced behavior" and "shutting down". The team decided that this conceptualization of depression would also facilitate the use of the three circles diagram in other modules such as stress, cardiovascular disease, physical pain, and anger to demonstrate the relationship between depression and these components.

The revised psychoeducation sheet is provided in appendix H. Therapists also gave the original, longer version to participants to read, if interested. They were asked bring in any questions about topics the following week.

Strategies for managing stress. The My Experiences of Stress sheet was superceded by the three circles diagram, described earlier. Otherwise, presentation of material was consistent with the intent of original manual to illustrate the relationship between negative life events, stressors, symptom of stress, and shutting down behaviors.

Cardiovascular disease and diabetes. The only changes made to this module were the provision of a cookbook to participants and the use of the three circles diagram to describe the relationship between physical health symptoms and depression. The study team purchased a cookbook for each group member from a local community organization that had published the books by compiling numerous, mostly healthy recipes from individuals living the Milwaukee African American community. Therapists used the three circles diagram to describe physical health conditions as both consequences and

antecedents of depression and depression behaviors, in order to show the maintenance of both depression and physical health symptoms.

Chronic physical pain. As with education about stress and physical illness, one change to this module was that therapists used the three circles diagram to describe the relationship between chronic physical pain, depression, and avoidance behaviors. In addition, to the mindfulness exercises described in the initial manual, therapists also led participants through a new experiential exercise illustrating the positive correlation between judgments and subjective experience of pain. During this exercise, participants stretched out both of their arms parallel with the ground, and held them in this position for approximately five minutes, when it was assumed that most participants would have started to experience at least some discomfort. At this point, one of the therapists started alternated talking aloud to each of the arms. The therapist modeled, non-judgmental acceptance language and tone (e.g. "Hello tightness, how are you doing today") when speaking with one of the arms, while modeling the use of judgmental language and tone when speaking to the other arm (e.g. "I hate you. I just want you to go away"). Participants were asked to internally repeat the same, or similar, dialogue while participating in the exercise. During the exercise, the arms associated with judgments noticeably dropped relative to the other arm, and participants generally reported a higher subjective reporting of pain for this arm as well.

During this session, multiple participants inquired about what skills they could use to manage difficult emotional pain that, in their opinions, interfered with their ability to activate. Therapists responded by discussing with patients how mindfulness strategies for chronic pain were functionally the same, and could be used, for difficult emotions as

well. Therapists used the metaphor of participants being able to observe and describe both physical and emotional pain symptoms, and choosing to carry these symptoms along as they pursed values linked goals.

Anger. The study team changed the name of the sheet "Tips for Managing Anger" from the initial manual to "Transforming Ineffective Anger into Effective Action". This change was motivated by feedback from the team that the original sheet might be perceived as invalidating of justified anger arising from issues such as racism and discrimination. The new sheet is included in Appendix I.

Employment seeking and resources. Very few modifications were made to this component. The only change was the inclusion of an additional resource packet for participants called "Free and Low-Cost Health Care Guide: A Guide for Underinsured and uninsured of Southeastern Wisconsin". These materials were obtained and used with permission of the 9 to 5 National Association of Working Women located in Milwaukee.

Social Support and Spirituality. Therapists followed the initial manual when providing information on the relationship between social support and depression, and when they asked participants to formulate additional behavioral goals in this domain.

Group members were asked to discuss during the next session what the relationship between spirituality and depression meant to them, and whether there were any specific aspects of spirituality that participants found helpful with managing depression symptoms. Participants noted that going to church and reading the bible were helpful sources of "strength" for them during difficult times, but that spirituality was more of a connection with "something" that did not need to be associated with formal religion. Some participants described meditations as being helpful, and one participant

brought in a meditation, similar to the one developed by the author of this manual, which discussed how pain can generate strength, and how many types of pain are short-lived and eventually pass. Other participants indicated that they use mantras, or positive notes, on their mirrors when they get up in the morning. An example of one of the mantras used was "Now begins another beautiful day". These suggestions of using mantras and creating meditations were incorporated into the Spirituality component for the second group at SSCNC.

Procedural changes made to group. One aim of Phase 1 was to examine and problem solve feasibility related to logistical barriers that interfered with adequate implementation of treatment. At the beginning of therapy, therapists struggled significantly with managing time to allow adequate review of treatment components. One constraint resulted from most participants showing up for the group sessions up to 30 minutes after the official start time. This problem was exacerbated by existing services at the center through which many of the participants had to wait in line to receive free foodstuffs directly prior to the start of the group. Even once participants arrived to session, five to ten minutes were often spent getting snacks, talking, and filling out the BDI-II prior to the session starting.

In order to address these concerns, therapists spoke with participants about trying to get to the food lines earlier. In addition, participants were assigned different roles to help with organizing the start of sessions, such as preparing the snacks, pouring drinks, passing out and collecting weekly BDI-II measures, and passing out the drums. Although the food lines continued to interfere with the session start time, the amount of time lost once participants arrived was significantly mitigated.

Another significant constraint on time, especially during the early sessions, was the common occurrence of participants talking at length about their problems more generally during homework review, a tendency which greatly reduced the time available for reviewing activation assignments, scheduling new assignments, and teaching skills and psychoeducation. Especially during the first few sessions while therapeutic relationships were still being established, therapists were concerned about cutting off participants too early and redirecting them, as this might be construed as invalidating by participants who did not have a history of attending cognitive behavioral therapy sessions. As a result, the team decided to reframe the purpose of group as a "skills training group", during which a very important aspect would be to ensure adequate time to help participants work towards their goals identified during therapy. At the same time, therapists validated the idea that the group was a place for participants to receive support from others about problems currently experienced, but that this function needed to be balanced by ample time for homework review, activity scheduling, psychoeducation and skills training. After broaching this dialogue, therapists also became more mindful of trying to limit the amount of time available to each participant during homework review, and shaping participants to be mindful of effectively utilizing the time allocated to each of them. These behaviors were shaped very quickly once therapists addressed the issue.

Difficulties with managing time also interfered with the aim of the original manual to complete the values and goals assessment over the first couple of sessions. The study team decided, however, that getting completely through this assessment, even without the aforementioned time constraints, would likely be difficult. Consequently,

the team decided to not introduce the values assessment until the second or third session during future groups.

Acceptability questions. Results for weekly acceptability measures completed by participants are provided in Tables 1-6. Appendix J provides the specific questions used to assess components included in tables.

The means and standard deviations are reported in Tables 1 and 2 for questions assessing the clarity, relevance, and sufficiency of time spent on the BA culturally adapted components. Questions used a scale of 1 to 5. Questions assessing clarity and relevance used three anchor points ("1 = Not at all clear, 3 = Clear, 5 = Extremely clear" and "1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant"). Sufficiency of time devoted to topics also used three anchor points ("1= Way too little time, 3 = Just enough time, 5 = Way too much time).

Questions assessing the domains of Activity monitoring, activity scheduling, creation of the activity hierarchy, and the values and goals assessment were administered on multiple occasions, given that these areas were reviewed more than once. Rather than including a single mean in the table, as for Psychoeducation and the Values Experiential Exercise, the range of these means and their respective standard deviations are reported in Table 1. As shown in the table, mean participant ratings were greater than 3 across all BA components for both clarity and relevance, which suggests that material was overall presented in a clear manner and that the individual BA components were relevant to the lives and goals of participants. The table shows that participants provided mean ratings of greater than 3 for the Activity Hierarchy, Values and Goals Assessment, Values Experiential Exercise, and Homework Review for the amount of time devoted to these

topics, suggesting that participants believed too much time may have been devoted to these topics. Participants gave average ratings of less than 3 for the amount of time spent on psychoeducation and activity monitoring, which suggests participants believed that too little time was spent covering these topics.

Means and standard deviations for questions assessing the clarity, relevance, and sufficiency of time devoted to the elements constituting the culturally adapted components are provided in Table 2. Education on Stress was spread over two sessions, so the range of means and their respective standard deviations are presented in the table. As shown in the table, participants provided mean ratings of greater than or equal to 4 for the clarity and relevance of all elements measured from the chronic pain, anger, unemployment and social support/spirituality components. All mean ratings for clarity and relevance were greater than or equal to 3.50 for elements measured constituting the Stress, Cardiovascular Disease/Diabetes, and Chronic Pain components. Results suggest that culturally adapted components were on average clear and relevant to the lives and goals of participants. All ratings for the amount of time spent on elements of culturally adapted components were greater than or equal to 3.17, which suggests participants believed too much time was devoted to these elements.

Acceptability measures also assessed participant perceptions of the probability that they would engage in using specific skills learned that session over the next week. Questions assessing the likelihood of using skills and resources obtained from group used a five point scale with three anchor points (1 = Extremely unlikely, 3 = Likely, 5 = Extremely likely). As shown in Table 3, participants provided ratings greater than or equal to 3.50 for questions assessing how likely it was that they would use tips for

healthy living, use mindfulness of pain skills, use skills for managing anger, use the resource packet, initiate steps for seeking employment, and initiate steps for seeking social support and increased spirituality. On average, then, participants reported that it was at least likely that they would use skills and resources over the next week.

Along with the probability of use, participants rated how helpful various skills and resources were over the past week throughout the course of therapy after skills were initially learned. The anchors for questions measuring the helpfulness of components were: "1 = Not helpful at all, 3 = Helpful, 5 = Extremely helpful". In addition, helpfulness was also assessed in some instances with questions that generally asked participants "how much success" they had experienced using specific skills. The anchors for these questions were: "1 = No success at all, 3 = Success, 5 = A lot of Success". As a result of an error with the creation of the forms, these two question types were not used in a consistent pattern to assess components. In some instances, both sets of questions were used to assess the same components, while in other instances, only one of them was used. For purposes of data presentation, these two question types were considered as measuring the same construct. In order to provide a more conservative measure of acceptability, the question type with the lower acceptability rating was reported in the results when both questions were used to assess a particular component during a specific session. Results are provided in Table 4, which illustrates that participants rated all elements greater than or equal to 3 across time, suggesting that participants continued to use these elements, and that they remained useful across the duration of therapy.

Table 5 provides results from questions assessing how much participants felt they learned about psychoeducation, skills, and culturally adapted components during the

respective sessions in which these topics were reviewed. Questions used a 5 point scale with three anchor points (1 = Nothing, 3 = Some, 5 = A lot). The table shows that participants provided mean ratings greater than or equal to 3.67 for all aspects measured except for strategies for seeking employment, for which they provided an average rating of 3.00. Table 6 includes ratings of the overall relevance of all material presented in a given session. The same question, "Based on what you've learned today about what you will be doing during this group, how relevant do you think the group is to dealing with your specific problems?", was used at the end of each session. The question used a five point scale with three anchor points (1 = Not at all relevant, 3 = Relevant, 5 = Extremely Relevant). Average participant ratings for all sessions were greater than or equal to 3.25, suggesting that sessions were generally viewed as relevant to addressing their specific problems.

Participants were also asked to complete a series of open ended questions each week asking them to describe any aspects of sessions that remained unclear, and to note any additional topics that were not covered, but which participants believed were relevant to their depression. Additionally, participants were asked to describe any aspects of the session material that were not relevant, and why these were not relevant. Finally, participants were asked to provide other positive and negative feedback regarding sessions, along with ways in which the material could be improved.

Some participants reported during the early sessions that too little time was spent on values and goals assessment, creation of the activity hierarchy, and activity scheduling. As described earlier, therapists consequently devoted additional time to these topics by reviewing the values and goals assessment and hierarchy again, and by

providing a new worksheet (Appendix G) that more clearly explicated the logic and links between these elements. Some of the participants also responded that they would have liked to have had more time devoted to managing anger, to managing chronic pain, and to strategies for seeking employment and resources. Some of the participants also expressed that PMR and paced breathing were unclear, and that not enough time was spent learning these.

Some participants also described additional topics that they would like to be covered in future groups. These included "relationships with loved ones and friends", more psychoeducation on medications for depression, and "concentration as a barrier" to activation. Some participants also noted that "more than two hours" was needed per session to address topics.

These responses to open ended questions were explored in more detail during the focus group. In addition, the average ratings of greater than 3 for the sufficiency of time devoted to individual elements were explored more fully at the focus group, given the seeming contradiction between these ratings and the information obtained from open ended questions.

Focus group. All group members attended a focus group that occurred one week after the last session. Participants were asked general questions about what aspects they liked best and least about therapy, what they would like us to do more of, and less of, with treatment, and what improvements they would suggest. Additional questions were based on information obtained from the weekly acceptability measures that participants completed. The information obtained from the focus group is presented according to the

themes length of group, feedback on components included in treatment, and feedback on relevant topics not included with treatment.

Length of group. All participants reported that they thought the group had ended prematurely. One participant, for instance, indicated that she believed the study team was "not trying to see if we can utilize the skills learned" and noted "I am afraid I might slip back into depression". This same participant noted that she believed she would be able to use her skills in the weeks following group, but that she "would feel more comfortable" if the study team was tracking her progress. Another participant commented that "When you get someone to open up they want to continue to share so that they can reach a point of healing or closure. I would tell you that there are still some issues lacking closure". As described more below, some participants also stated that they could have used more time to learn the various treatment components. When asked for their input regarding how future groups might be structured to maximize available time, a couple of the participants indicated that the length of each session could be increased. Most participants, however, reported that they would feel more comfortable with adding additional sessions to the current protocol.

Feedback on components included in treatment. Participants broadly agreed that activity scheduling was helpful with providing "needed structure" and a means "to figure out" how to reach treatment goals. One participant noted that having copies of the Activity Practice sheet each week was helpful "with attention problems" that had previously interfered with her attaining goals. Multiple participants stated, however, that the relationships between activity monitoring, values and goals, the activity hierarchy and weekly scheduling were initially difficult "to grasp". Most participants reported that

these relationships became clearer when therapists provided them with the Three Step Activation Process sheet clarifying the relationships between elements. Two participants also critiqued the format of the activity hierarchy as being "bad, too crammed, and confusing". They suggested widening the width of the rows on the form. A final consensus among group members was that they would prefer to have more time devoted to activity scheduling and homework review in order to "have more time to talk about specific situations in our lives and to solve these problems".

Multiple participants reported that they enjoyed the mindfulness exercises and that they used them "frequently in painful situations". Another participant reported that mindfulness skills for managing anger had been very helpful for her, but that the treatment should devote more time to having therapists model skills, and to having participants practice these in session. Multiple group members noted that they believed more mindfulness practice would be useful, and one participant recommended doing "mindfulness at the beginning of session after the drumming exercises".

Some participants expressed concerns that the directions for doing progressive muscle relaxation and paced breathing were "confusing", and one participant who initially found the techniques helpful stated that "for me it wasn't ingrained enough into me. I kept forgetting to use it. When I needed it, I didn't think about it". Many participants agreed that the strategies would be less confusing if more time was devoted to practicing these in session. Additionally, participants thought that too little time was spent reviewing available resources in the packets provided, and that the module addressing employment seeking should be moved earlier in the sequence of culturally adapted components to provide participants with more time over the course of the group

to use resources. There was a broad consensus that it might be helpful for therapists to check in on use of skills learned during previous sessions more regularly in order to remind participants of all the relevant skills they had learned.

Feedback on relevant topics not included in treatment. Participants also suggested some additional topics which they felt were relevant to the maintenance of their depression, yet not included as part of the group. One participant stated that "part of my depression is money matters…black people don't discuss finances". A number of participants indicated that they would like to have learned about "money management skills" during the group.

Participants also indicated that "relationships needed to be explored". Specifically, they noted that they would "like to know how to talk about their depression in personal relationships", and learn skills for communicating effectively in family and intimate relationships. Some participants stated that they have difficulties managing "guilt and shame" in their relationships. For instance, one participant commented that "we talked about anger, what about shame or guilt? I still feel guilty".

Phase 1 SSCNC Group

Manual changes. Manual changes to content and materials implemented as the BOH group progressed were all incorporated into the SSCNC group. For example, changes such as the abbreviated psychoeducation, new mindfulness exercises, new forms and modified sheets were all incorporated into the second group.

The only change implemented for the SSCNC group above and beyond these earlier changes was more time devoted to values and goals clarification and the construction of a robust activity hierarchy earlier in treatment to serve as a compass for

weekly activation assignments. These areas were explored more fully at the beginning of treatment prior to incorporation of most of the culturally adapted education and skills training components. Psychoeducation and strategies for managing stress reactions were included in sessions one and two respectively. Values and goals clarification, along with creation of a hierarchy, started during session two, and continued through sessions three and four. During sessions three and four, no new education or skills modules were presented in order to ensure adequate time for formulation of values linked goals and construction of the activity hierarchy. Starting in session five, remaining culturally adapted components were included in sessions.

Acceptability. Results for weekly acceptability measures completed by participants are provided in Tables 7-12. Appendix J provides referent questions from which data was obtained.

The means and standard deviations are reported in Tables 7 and 8 for questions assessing the clarity, relevance, and sufficiency of time spent on the BA components along with the components constituting each of the culturally adapted education and skills topics. The anchor points and scales used are the same described above for the questions completed by the BOH participants.

Questions assessing the domains of activity scheduling, creation of the activity hierarchy, and the values and goals assessment were administered on multiple occasions, given that these areas were reviewed more than once. Rather than including a single mean in the table, as for Psychoeducation and activity monitoring, the range of these means and their respective standard deviations are reported in Table 7. As shown in the table, mean participant ratings were greater than 4.33 across all BA components for both

clarity and relevance, which suggests that material was presented in a clear manner and that the individual BA components were relevant to the lives and goals of participants. The table shows some variability of mean ratings for the sufficiency of time spent on components. Participants gave average ratings of greater than 3 for the amount of time spent on psychoeducation, activity monitoring, and creation of the activity hierarchy, which suggests participants believed that too little time was spent covering these topics. Average ratings for activity scheduling and homework review ranged from 3.00 to 4.00, suggesting that participant perceptions ranged from thinking "just enough time" to too much time was spent on these components. Ratings suggested that perceptions ranged from too much to too little time spent on discussion and clarifying values and goals over the three sessions assessed.

Means and standard deviations for questions assessing the clarity, relevance, and sufficiency of time devoted to the elements constituting the culturally adapted components are provided in Table 8. As shown in the table, participants provided mean ratings of greater than or equal to 4 for the clarity and relevance of all elements measured from the stress, cardiovascular disease/diabetes, anger, and unemployment modules. All mean ratings for clarity and relevance were greater than or equal to 3.50 for elements measured constituting the chronic pain and social support/spirituality components. Ratings suggested that culturally adapted components were on average clear and relevant to the lives and goals of participants. As displayed in the tables, the majority of ratings for the sufficiency of time spent on the various elements were greater than three, which suggests participants believed too much time was devoted to these topics. Participants provided ratings of three (i.e. "just enough time") for four of the topics and average

ratings of less than three for three of the elements, suggesting that participants on average believed that more time could have been spent on these latter elements.

Acceptability measures also assessed participant perceptions of the probability that they would use some of the specific skills learned that session over the next week. The scales and anchor points used for these questions were the same described above for questions answered by BOH respondents. As shown in Table 9, participants provided ratings greater than or equal to 3.75 for questions assessing how likely it was that they would use tips for healthy living, use mindfulness of pain skills, use skills for managing anger, use the resource packet, initiate steps for seeking employment, and initiate steps for seeking social support and increased spirituality. Ratings suggested that on average, participants thought that they would more than likely use skills and resources over the next week.

Participants also rated how helpful various skills and resources were over the past week throughout the course of therapy after skills were initially learned. The same scales and anchor points used with the BOH group for these questions described above were also used for the SSCNC questions. Results are provided in Table 10, which illustrates significant variability in terms of how helpful participants found various components over time, although no specific patterns over time within components were noted. As noted in the table, the majority of mean ratings was greater than or equal to three across time for the various components. Participants provided average ratings of less than three, however, for half of the weeks during which the utility of mindfulness strategies for pain was assessed. In addition, mean participant ratings were less than three on three of the four occasions when the utility of steps for initiating employment seeking was assessed.

Table 11 provides results from questions assessing how much participants felt they learned about psychoeducation, skills, and culturally adapted components during the respective sessions during which these topics were reviewed. The scale and anchor points used were the same as those employed for these questions used during the BOH group. The table shows that participants provided mean ratings greater than or equal to 4.25 for all aspects measured, which suggests participants on average believed they had learned new information in these areas. Table 12 includes ratings of the overall relevance of all material presented in a given session. The same question, "Based on what you've learned today about what you will be doing during this group, how relevant do you think the group is to dealing with your specific problems?", was used at the end of each session. The question used a five point scale with three anchor points (1 = Not at all relevant, 2 = Relevant, 3 = Extremely Relevant). Average participant ratings for all sessions were greater than or equal to 3.00, suggesting that sessions were generally viewed as relevant to addressing their specific problems.

Participants were also asked to complete a series of open ended questions each week asking them to describe any aspects of sessions that remained unclear and to describe any additional topics that were not covered, but which participants believed were relevant to their depression. Additionally, participants were asked to describe any aspects of the session material that were not relevant, and why these were not relevant. Finally, participants were asked to provide other positive and negative feedback regarding sessions and ways in which the material could be improved.

Overall, participants did not provide a significant amount of feedback on open-ended questions. The feedback provided, however, was overwhelmingly positive.

Activity and scheduling and the use of the hierarchy were described as beneficial. One participant noted "I find the activity planning is very helpful and enjoyable and I feel that using the hierarchy and activity planning is very useful to me. It gives me structure in planning my days in a positive manner". Another participant recorded that "relaxation and breathing helped me with my headaches", while another commented on the sessions devoted to tips for health living by writing "this session was especially helpful because I need to address my health". This same participant reported that "since the sessions began, I feel more hopeful with my goals: personal and job readiness. I use the techniques I have learned and feel better about myself". In response to the question of how she would continue to use the skills following the end of group, on participant noted that "I plan to keep scheduling activities from my hierarchy list and adding more goals. It gives me structure in planning my days in a positive manner". This participant also noted "I appreciate the opportunity I had in participating in the sessions, and I thank you for the great work you are doing helping others".

Focus group. Three of the four original SSCNC group members attended a focus group conducted by Dr. Kanter that occurred one week after the last session. The facilitator generated a discussion with participants about what aspects they liked best and least about therapy, what they would like us to do more of, and less of, with treatment, what aspects may have been confusing, and what improvements they would suggest. Additional questions were based on information obtained from the weekly acceptability measures that participants completed. The information obtained from the focus group is presented according to the themes length of group, feedback on components included in treatment, and feedback on relevant topics not included with treatment.

Length of group. One of the group members indicated that she believed the duration and the length of group were adequate. Another participant noted that it might be beneficial to have sessions occur twice each week, and two of the participants stated that they would have liked to have seen the length of the group extended by a few weeks.

Feedback on components included in treatment. Participants stated that they thought activity monitoring and activity scheduling were beneficial. One participant noted that she liked monitoring because "it helped me realize I was watching a lot of TV and sleeping a lot". Another participant realized that she "did a lot of word finds and puzzles during a time that [she] could be more productive". She reported that she realized she could spend this time on things like "learning to use the computer", which was relevant to her values linked goal of obtaining meaningful employment. Regarding activity scheduling, one participant stated that activity scheduling "motivated me to really put in the work". Participants also indicated that they "liked" and planned to continue using the values and goals clarification sheet. Two of the participants noted that clarifying values and formulating goals were the most important aspects of the group for them.

Participants reported that mindfulness skills were helpful, especially for managing anger. One participant noted, however, that the idea of mindfulness was very confusing to her initially, and that she felt she would have benefited from more practice with mindfulness in general. Another group member reported that the he found the idea of mindfulness skills and stress reduction strategies helpful, but that he often struggled with "understanding the right time to use them". He indicated that he needed "more explanation and directions on how to use these" in his life. Overall, all three participants

reported that they would have liked more time to spend on learning and practicing the mindfulness skills. When asked about feedback from weekly acceptability measures indicating that too much time may have been spent on certain components, participants reported that they generally would have liked more time devoted to all of the components.

Feedback on relevant topics not included in treatment. Participants did not provide any additional feedback on elements that they would like to be included as part of future groups. One participant noted, however, that she was currently taking a free class on "learning to budget" her money and that she believed that learning this skill was helpful for managing her depression.

Trainability of SSCNC therapists.

There were no a priori hypotheses concerning the trainability of inexperienced therapists used as facilitators of the SSCNC group. What follows is a qualitative description of issues that accompanied training and delivery of treatment.

Therapists evidenced understanding of the principles and mechanics of basic BA during training. The one area with which trainees struggled while learning the treatment was mindfulness. Initially, both therapists were able to present the scripts included in the manual, but experienced some difficulties with understanding how to use mindfulness in practice. One therapist, in particular, expressed not understanding the point of mindfulness "if it wasn't going to get rid of physical pain, anger" or other difficult emotions. The other therapist exhibited difficulties with discerning between "thinking" and "noticing her thinking". In order to address these concerns during supervision, the trainer provided didactic instruction on the difference between pain and suffering, and the

use of mindfulness to remove the suffering from pain in the service of activation. Therapist used various metaphors to illustrate examples of "carrying negative private experiences" with oneself while still choosing to simultaneously pursue other goals. To address difficulties with observing and describing thoughts, the trainer practiced numerous mini-mindfulness exercises during the supervision process.

Therapists during the group exhibited fidelity during the group in that they delivered all treatment components in the manual. They did, however, still demonstrate some difficulties with teaching mindfulness initially. During the first session in which mindfulness was introduced, for instance, many of the participants stopped observing the physical object within seconds of picking it up. Rather than providing prompts to stimulate longer periods of observing, such as "what does it smell like, what does it feel like" and "really get to know your Clementine by looking closer at it than you ever have", the therapists stopped the exercise prematurely and did not attempt to elicit more descriptions from participants than the very few provided. Therapists were given feedback from the trainer at the end of this session, and therapists spent additional time covering mindfulness during the next session. Relative to BOH participants, however, a couple of the SSCNC participants appeared to struggle more with using mindfulness outside of session.

Another issue that arose during the first couple of homework reviews was that therapists avoided actively problem solving non-compliance with specific homework assignments using the functional assessment procedure from the manual. This procedure was reviewed during supervision, and therapists employed it more appropriately in subsequent sessions.

Feasibility of Treatment at Two Sites

The Bread of Healing and Silver Spring Community Nursing Centers both generously provided ample meeting space for the groups and a wide variety of available time slots to accommodate potential meeting times. Recruitment occurred at a significantly faster rate at the BOH, with all group participants recruited within four weeks of the start of recruitment. The time to recruit a smaller number of individuals willing to participate at SSCNC took approximately three months. For this reason, the study team decided that BOH would serve as the site of the small randomized controlled trial for Phase 2.

As described earlier, significant time constraints were a problem at the BOH during Phase 1 as a result of participants having to wait in long food lines prior to the start of groups. The study team decided that they would not hold the Phase 2 group at a time directly following services that might interfere with participants being punctual for group.

Manual Changes Based on Phase 1

During Phase 1, the study team addressed the problem encountered during the BOH group of delays with developing a solid activity hierarchy by postponing other education and culturally adapted components following stress reduction strategies during the SSCNC group. As described above, therapists did not introduce other components until after goals were formulated for all of the values domains and a complete hierarchy was constructed. Although this approach brought noticeable improvements in efficiency of activity scheduling and allowed for a broader assortment of activities scheduled over time for the SSCNC relative to BOH group, SSCNC therapists reported that this approach

left less time for learning the culturally adapted components well. As described earlier, participants in this group also believed that they would have benefited from having had more time devoted to culturally adapted components.

To address this tradeoff, the study team decided that they would invite participants for an hour long individual therapy session prior to the start of group during which participants would receive a full rationale for treatment including the links between activity monitoring, values assessment, the activity hierarchy, and activity scheduling. This time would also be reserved to start the process of values and goals clarification. Additionally, patients would learn the basic mechanics of activity scheduling during this time and schedule some initial activities prior to the start of the group.

The study team also incorporated a number of changes into the initial manual based on participant feedback during Phase 1. In response to feedback from both groups requesting more practice with mindfulness, the study team decided to incorporate mindfulness practice into every session. Whenever possible, these mindfulness activities mapped onto the education or skills topic for the particular session. For example, the session on interpersonal effectiveness included a mindfulness practice focused on mindfulness of others, while for the session on chronic pain the mindfulness practice focused on bodily pain. The sequence of culturally adapted components was also varied so that information on seeking resources and employment were incorporated within the first few sessions, in line with participant requests for exposure to this information earlier in treatment.

Another change made to the manual included more explicit teaching of functional assessment components and linked interventions of stimulus control, skills training, contingency management, and mindful-valued activation. Therapists from both Phase 1 groups reported that some of these barriers were relevant for patients throughout treatment, but that these were often not addressed in front of the group during homework review when patients did not share examples of homework non-compliance associated with these specific barriers. The study team reasoned that a more formal approach of teaching of these skills during session might be beneficial in forestalling potential problems that might arise with homework completion.

Based on feedback from Phase 1 participants regarding the potential utility for them of learning skills to use in their interpersonal relationships, the study team reached a decision to include interpersonal effectiveness skills focusing on training them to set and attain interpersonal goals. The study team decided to use some of the interpersonal effectiveness skills from the DBT skills training manual (Linehan, 1993b), including the DEAR MAN, GIVE and FAST skills. In DBT, DEAR MAN skills provide individuals with means to effectively get what they want from another individual, by generally asking for something or refusing unwanted requests. Give and Fast skills, in addition, help an individual to maintain or improve his relationships and self-respect, while still working on having interpersonal objectives met.

Post-hoc Analyses

Uncontrolled repeated measures Analysis of Variance (ANOVA) was used to explore reduction of depression symptoms across time for each of the groups independently. Given the difference in clinical experience between therapists used for

each of the groups, a mixed ANOVA was subsequently used to determine any potential differences in reduction of depression between two groups. The mean depression scores at time points used for analyses of both groups are presented in Table 13.

For the BOH group, the repeated measures ANOVA was performed using BDI-II scores at baseline, post-treatment, one week post-treatment, and 1 month post-treatment as the four time points. In order to estimate the single, missing post-treatment data point of one participant, analyses were performed using both the last observation carried forward (LOCF) and multiple imputation method. With the multiple imputation method, the pooled mean of the data point from 5 imputed data sets was substituted into dataset for purposes of calculation. Data was not available for the one participant who withdrew following the first BOH group, so analyses were run using data from the six study completers. Results of the ANOVAs were significant using both the LOCF, $F(3, 15) = 7.90$, $p < .05$, and multiple imputation, $F(3, 15) = 6.80$, $p < .05$, approaches. Planned comparisons using Scheffe tests for the LOCF analysis indicated that relative to baseline, depression scores were significantly lower at post-treatment, $F(1, 15) = 11.87$, $p < .05$, one week post-treatment, $F(1, 15) = 16.25$, $p < .05$, and one month post-treatment, $F(1, 15) = 18.24$, $p < .05$. Depression scores at post-treatment were not significantly different from scores at one week, $F(1, 15) = .34$, $p > .05$, or one month, $F(1, 15) = .68$, $p < .05$, follow-up points. In addition, depression scores at one week and one month follow-up points were not significantly different, $F(1, 15) = .06$, $p > .05$. Planned comparisons using the multiple imputation approach yielded the same statistical results.

Participants at SSCNC did not provide follow-up data. As a result, repeated measures ANOVAs were used to examine reduction of depression from baseline to post-

treatment according to BDI-II scores. LOCF and multiple imputation methods were used to calculate one post-treatment data point for a participant who dropped out of group after the 10th session due to stage four breast cancer. Repeated measures ANOVAs did not show a significant reduction in depression across time using either the LOCF ($F(1, 3) = 4.65$, $p = .12$) or multiple imputation ($F(1, 3) = .04$, $p < .05$) methods.

Mixed ANOVAs were used to determine whether there was a significant time x group interaction for reductions in depressive symptomatology. There were no significant differences between groups on baseline HRSD scores, $t(8) = .211$, $p > .05$, age, $t(8) = 1.49$, $p > .05$, number of missed sessions, $t(8) = 1.85$, $p > .05$, and total number of Axis I diagnoses, $t(8) = 1.55$, $p > .05$. Using the LOCF method for missing data, there was a main effect for time, $F(1, 8) = 8.56$, $p < .05$. The main effect for group, $F(1, 8) = .58$, $p > .05$, and the time x group interaction, $F(1, 8) = .72$, $p > .05$, were not significant. When multiple imputation was used to determine missing values, the main effects of time, $F(1, 8) = 1.57$, $p > .05$, group, $F(1, 8) = .91$, $p > .05$, and the time x group interaction, $F(1, 8) = .84$, $p > .05$, were all non-significant.

Phase 2 Methods

Participants

A total of 18 prospective African American participants were screened for inclusion in the study in Phase 2. Of these, 15 participants met inclusion and exclusion criteria described below and were randomized to either a waitlist or active therapy group. Of the three participants who did not qualify, two were excluded due to diagnoses of schizophrenia, and one of these individuals also reported currently being treated for "bipolar disorder". The third individual was excluded due to self-reported, current crack

cocaine use. The inclusion and exclusion criteria used are described in more detail under the Procedure section.

Following screening procedures described in more detail below, eight participants were randomized to the waitlist control group, and seven participants were randomized to the active group. The waitlist group had a mean age of 44.71 (*SD* = 9.07). Two of the eight members of the waitlist group were men (25%). The average age of participants in the active treatment condition was 50.86 (*SD* = 6.54). Four of the seven (57.1%) participants assigned to this group were female. The two groups did not significantly differ in age, t (13) = 1.562, p = .142. Other demographic variables are not discussed here given the large amount of missing data for these small sample sizes.

All participants met criteria for a current Major Depressive Episode. Baseline depression scores obtained from the initial screening assessment using the Hamilton Rating Scale for Depression (Hamilton, 1967) for the active and waitlist groups had baseline were 22.29 (*SD* = 5.31) and 23.00 (*SD* = 2.07) respectively. The difference in depression between groups was not statistically significant, t (13) = .352, p = .730. The mean number of Axis I diagnoses, including depression, was 3.00 (*SD* = 1.83) for the active group, and 2.88 (*SD* = 1.25) for waitlist participants. The difference in number of diagnoses was not significant, t (13) = .157, p = .878. Additional diagnoses across groups included Panic Disorder with (n = 2) and without (n = 2) Agorophobia (n = 3), Social Phobia (n = 6), Obsessive-Compulsive Disorder (n = 5), Posttraumatic Stress Disorder (n = 4), Alcohol Dependence in partial remission (n = 2), current Alcohol Abuse (n = 3), and Generalized Anxiety Disorder (n = 2).

Materials

Hamilton Rating Scale for Depression. The Hamilton Rating Scale for Depression (HRSD; Hamilton, 1967; Appendix K) is a 24 item semi-structured instrument used to diagnose depression and measure depression severity by assessing affective, cognitive, and somatic symptoms of depression. Severity of symptoms are rated using a scale of 0 to 2, or 0 to 4, depending on the symptom assessed, resulting in possible scores of 0 to 52 based on the initial 17 items of the scale used to compute depression scores. Scores ranging from 8 to 13, 14 to 18, and 19 to 22 reflect depression in the mild, moderate and severe ranges respectively (Hamilton, 1967). Scores greater than or equal to 23 reflect very severe symptomatology.

The HRSD is the most widely used semi-structured interview measuring depression severity and is considered the gold standard for assessment depression symptoms in psychotherapy and medication trials (Nezu, Ronan, Meadows, & McClure, 2000). It has demonstrated concurrent validity with the Beck Depression Inventory (Beck et al., 1961), and good to excellent inter-rater reliability (*Kappa* >= .6) for the majority of questions (Morris, Leese, Chatwin, & Baldwin, 2008), with evidence showing that minimal training is required to achieve acceptable inter-rater reliability for relative novices of psychiatric assessment training. (Wagner, Helmreich, Lieb, & Tadic, 2011). Evidence comparing Caucasian and African American samples also suggests little difference in symptom profiles between groups (Wohl et al., 1997), suggesting the HRSD is a likely a valid measure for evaluating African American depression.

Mini International Neuropsychiatric Interview. A description of the the Mini International Neuropsychiatric Interview and psychometric properties is provided above under the Materials section for Phase 1.

Beck Depression Inventory II. A description of the Beck Depression Inventory II (BDI-II; Appendix A) is provided above under the Measures section of Phase 1.

Behavioral Activation for Depression Scale Short Form. The Behavioral Activation for Depression Scale - Short Form (BADS-SF; Manos, Kanter, & Luo, 2011; Appendix L) is a 9 item self report measure designed to measure activation (e.g. "I was an active person and accomplished the goals I set out to do") and avoidance (e.g. "I engaged in activities that would distract me from feeling bad") levels of individuals over the past week. Items are rated using a 7 point scale ranging from 0 (not at all) to 6 (completely). The BADS-SF was derived from the original 28 item Behavioral Activation for Depression Scale (BADS; Kanter, Mulick, Busch, Berlin, & Martell, 2007) in order to provide a shorter measure that can be filled out quickly in clinical settings to provide a reliable measure of activation and avoidance levels of depressed clients. A total BADS-SF score is derived by summing the activation subscale and the reverse coded total of the avoidance subscale.

Exploratory and confirmatory factor analyses have supported the 2 factor structure (i.e. activation and avoidance) in community and undergraduate samples showing elevated depression symptoms, with the total score and two subscales also demonstrating adequate internal consistency (α's > .80) (Manos et al., 2011). The total score (r = .451) and activation subscale (r = .608) have exhibited adequate test-retest reliability over a one week period with an undergraduate sample, and the total scale has

provided evidence for construct validity via its positive association with time spent in high-reward, valued activities (Manos et al., 2011). The activation and avoidance subscales of the BADS-SF have also demonstrated a significant negative and positive association with depression severity respectively in a large, predominately African American, sample of jobless individuals seeking employment (Bowe & Kanter, 2013).

Medical outcomes study short form - 36 health survey. The Medical Outcomes Study Short Form-36 (SF-36; Appendix M) is a 36 item generic measure comprised of 8 domains reflecting mental and physical health (Ware & Sherbourne, 1992). The specific domains measure physical functioning, physical role limitations, bodily pain, general health, vitality, social functioning, role limitations due to emotional difficulties and mental health. Criterion validity has been shown in a large community sample, with all dimensions correlating significantly with the single, global measure of reported overall health (Jenkinson, Wright, & Coulter, 1994). Test-retest reliability estimates, in addition, ranged from acceptable to excellent (*r*'s = .72 to .97) with psychiatric patients (Burke, Burke, Baker, & Hillis, 1995), while internal consistencies of scales administered to community samples have ranged from acceptable to very good (α's = .76 to .90; Jenkinson et al., 1994), with comparable results found for African American samples (Johnson, Goldman, Orav, & Garcia, 1995; McHorney, Ware, & Sherbourne, 1994) and differing levels of socioeconomic status (McHorney et al., 1994). Moreover, instrument validity has been demonstrated with African Americans experiencing acute chest pains, with results showing race as a non-significant predictor of any scale scores when functional status and clinical factors were statistically controlled (Johnson et al., 1995).

The measure has also been used in numerous studies evaluating diverse physical conditions such as cardiovascular disease (Focht, Brawley, Rejeski, & Ambrosius, 2004), diabetes (Chittleborough, Baldock, Taylor, & Phillips, 2006), obesity (Corica et al., 2006), and chronic pain (Bronfort & Bouter, 1999; Bergman, Jacobson, Herrstrom, & Petersson, 2004). Poor glycemic control and obesity have been shown to be significantly associated poorer health on 7 and 8 of the SF-36 domains respectively (Chittleborough et al., 2006; Corica et al., 2006). The measure has also been shown to discriminate between patients with and without chronic pain both cross-sectionally and longitudinally using the physical functioning, physical role limitations, bodily pain, and vitality scales (Bergman et al., 2004), and has exhibited concurrent validity with the Cooperative Chart System (Nelson, Landgraf, Hays, & Wasson, 1990) with pain patients (Bronfort & Bouter, 1999).

State-trait anger expression inventory. The State-Trait Anger Expression Inventory (STAXI; Appendix N) is a 44 item self report measure comprised of 5 scales and 2 subscales measuring various domains of anger (Spielberger, 1988), and is considered to be the most commonly used measure of anger in research and clinical contexts (Novaco & Taylor, 2004). The state anger scale measures anger in the present moment, while the trait anger scale relates to one's anger disposition. The anger-in expression and anger-out expression scales reflect the frequencies of suppressing the anger experience and directing anger towards both animate and inanimate objects respectively, while the anger-control scale measures the frequency with which anger is controlled or regulated. Individual items are scored on a scale ranging from 0 ("Almost Never") to 4("Almost Always").

Factor analytic studies have confirmed the existence of these 5 factors with both university students and middle aged community residents, along with 2 additional subscales of Trait-Anger scale, known as Angry-Temperament and Trait-Anger-Angry-Reaction (Forgays, Forgays, & Spielberger, 1997; Forgays, Spielberger, Ottaway, & Forgays, 1998; Fuqua et al., 1991). Estimates (Spielberger, 1988) have suggested excellent internal consistency for the State-Anger scale (α's >= .90) and good internal consistencies for the Trait-Anger scale and Angry-Temperament subscale (α's = .82 to .89). The Angry-Reaction subscale, in turn, has evidenced acceptable internal consistency (α = .70). The author is unaware of any studies validating the use of the STAXI with African Americans.

Quality of life and enjoyment satisfaction questionnaire-short form. The Quality of Life and Enjoyment Satisfaction Questionnaire (QLESQ-SF; Appendix O) is a self report measure comprised of the 14 items constituting Areas of Daily Functioning Scale from the larger 93 item Quality of Life and Enjoyment Satisfaction Questionnaire (Endicott, Nee, Harrison, & Blumenthal, 1993). It measures the degree of enjoyment and satisfaction over the last week in different areas such as mood, education, physical health, relationships, financial status, functional capabilities with work and hobbies. In addition, the short form contains two optional questions assessing satisfaction with medications and a global measure of overall life satisfaction, resulting in a total of 16 items for the measure. Items are scored on a scale ranging from 1 ("Very Poor") to 4 ("Good"), with the Areas of Daily Functioning Scale scored as a proportion of the maximum possible score for the scale.

The scale has demonstrated good internal consistency (α = .90) with depressed psychiatric inpatients (Endicott et al., 1993) and outpatients (α's = .87 to 90; Drymalski & Washburn, 2011), inpatients with severe mental illness (α = .95) and normal controls (α = .89; Ritsner, Kurs, Kostizky, Ponizovsky, & Modai, 2002). The instrument has also demonstrated acceptable test-retest reliability over a 2 week interval (Ritsner et al., 2002) for patients with severe mental illness (r = .64) and over the duration between the first and second sessions (Endicott et al., 1993) of depressed hospital inpatients (r = .74). The QLESQ-SF has also exhibited criterion validity in its ability to differentiate patients with severe mental illness from healthy controls (Ritsner et al., 2002), has shown convergent validity (Endicott et al., 1993; Pearlstein et al., 2000) with the Clinical Global Impressions Scale (r = -.66), HRSD (r = -.64), and Symptom Checklist-90 (Derogatits, 1977; r = -.64), and has also demonstrated the ability to predict time to discharge for inpatients with mood disorders (Hope, Page, & Hooke, 2009). There are no known studies validating the use of this instrument specifically with African American samples.

Social support questionnaire-short form. The Social Support Questionnaire - Short Form (SSQ-SF; Sarason, Sarason, Shearin, & Pierce, 1987; Appendix P) is a 12 item self-report measure based on the longer, validated Social Support Questionnaire (Sarason, Levine, Basham, & Sarason, 1983). Availability of social support is measured with 6 questions by assessing the number of persons available to the individual to provide support in various domains. For each of these questions, one's satisfaction with social support in the area targeted by the item is measured on a scale from 1 ("Very dissatisfied) to 6 ("Very Satisfied"). A total score is derived for both the availability and satisfaction

with social support by dividing sums of support persons and satisfactions by 6, the number of questions.

The SSQ-SF has demonstrated adequate internal consistency (α's = .90 to .93) in multiple samples of university undergraduates, similar to reliability estimates obtained for the larger scale (α's = .96 to .98), as well as satisfactory test-retest reliability and concurrent validity with other validated measures of social support (Sarason et al., 1987) such as the Inventory of Social Supportive Behaviors and Perceived Social Support Scale (Barrera, Sandler, & Ramsey, 1981; Procidano & Heller, 1983). This measure has not been validated specifically for use with African Americans.

Client satisfaction inventory. The Client Satisfaction Inventory (CSI; Appendix Q) is a 25-item self-report instrument that measures client satisfaction with mental health services received. The CSI has demonstrated good to excellent internal consistency as well as evidence for discriminant validity (McMurtry & Hudson, 2000). There are currently no known studies validating the use of the CSI with African American samples.

Procedure

Phase 2 pilot study. The purpose of Phase 2 was to conduct a small randomized trial of 20 - 24 participants comparing the CEBA protocol revised during Phase 1 to a waitlist condition in order to obtain initial effect sizes, overall client acceptability of treatment, feasibility of treatment implementation, and effect of treatment on quality of life, functional outcomes, anger, physical health, availability and amount of social support. Based on feasibility data from Phase 1 discussed earlier, BOH was chosen as the site for the trial.

The recruitment aim of Phase 2 was to recruit 20 depressed African Americans. Procedures used initially mirrored the same ones employed during Phase 1. Recruitment proceeded at a slower than expected pace relative to participant throughput obtained during Phase 1, with the study not enrolling a single participant over the months of June and July. The study team used ancillary recruitment strategies such as posting fliers at churches, other nursing centers and other resource centers in the African American community. In addition, study personnel actively recruited at the BOH one day per week during free meal services by making announcements and talking about the group with individuals receiving food from the food line. Members from the Phase 1 BOH group also volunteered to provide testimonials related to their treatment and to encourage others to complete a study screen. The last participant for the study was recruited in mid October 2012.

In order to qualify for Phase 2, participants had to meet all of the criteria delineated for Phase 1 and, in addition, had to receive a score of 14 or greater on the Hamilton Rating Scale for Depression (Hamilton, 1967) at the time of the screen. The same exclusion criteria from the first phase were employed in Phase 2, with additional criteria stipulating that participants would be excluded if they were currently receiving psychotherapy or medication for depression, or if they had already participated in Phase 1 of the study.

Recruitment, screening, and the process of informed consent occurred between June and October 2012 over the phone in the same manner already described for Phase 1 participants, with the exception that the study assessor administered the HRSD per eligibility requirements described above. The HRSD has been validated for use over the

phone and via videoconferencing (Simon, Revicki, & VonKorff, 1993; Potts, Daniels, Burnam, & Wells, 1990; Kobak, Williams, & Engelhardt, 2008). Clients received $20 for completing the study screen. The recruitment script for Phase 2 is provided in Appendix R.

Qualifying participants who chose to participate were randomized to 12 weeks of group treatment with the revised CEBA protocol, or to a waitlist condition that did not receive any treatment over this 12 week period. The CEBA and waitlist comparison took place between November 2012 and January 2013, with Drs. Kanter and one of the clinicians from the SSCNC group serving as co-therapists. Study personnel asked participants randomized to the CEBA condition to arrive thirty minutes early to the first session in order to compete a pre-treatment assessment packet of self-report measures including the Beck Depression Inventory, the BADS-SF to measure global activation and avoidance levels, the SF-36 to measure functional health outcomes, the QLESQ-SF to measure overall life satisfaction, the SSQ-SF to measure availability and satisfaction of forms of social support, and the STAXI to measure trait anger and anger expression. Although waitlist participants were not receiving treatment at this point, they came to BOH to complete the same baseline measures as the CEBA group during the same week.

All active group participants completed the BDI weekly to assess client depression severity and current activity levels respectively in order to track improvement and deterioration, as well as to inform clinical decision making. Those in the waitlist condition were asked to complete and mail their responses to the research laboratory at three points throughout the study using pre-paid envelopes provided. CEBA participants arrived thirty minutes early at Session 7, and stayed for 30 minutes following the last

session to complete the same self-report measures described above for baseline as part of the mid- and post-treatment assessments respectively. Between Weeks 6 and 7, and in the week following the 12th session, the study assessor also administered the HRSD over the phone as part of these assessments. Those in the waitlist condition completed the same measures in parallel with the active treatment arm by coming to the study sites during those weeks. The only planned difference between groups was the inclusion of the CSI to be completed by CEBA participants as part of the post-treatment packet in order to measure overall acceptability of treatment received. Throughout the trial, the study assessor remained blind to randomization status of clients.

Participants in both conditions received $10 for completing each of the mid- and post-treatment HRSD interviews. In addition, they received $10 for completing each packet of self-report questionnaires at baseline, mid-, and post-treatment. Food and beverages were provided at therapy sessions, and clients received bus passes to facilitate session attendance. As remuneration for having agreed to be in the waitlist condition, participants were given the option of receiving CEBA following completion of the study. None of the waitlist participants decided to enroll in treatment at the end of the study.

Phase 2 Results

Participant Flow and Descriptive Statistics

As shown in Figure 1, a significant number of participants withdrew from the active and waitlist conditions over the course of the study. Six of the 8 waitlist participants withdrew from the study, five of whom withdrew between the baseline depression assessment and the first week of treatment after randomization occurred. Two of these waitlist participants were not reachable by phone. One participant was

unable to participate as a result of being incarcerated, another was unable to participate as a result of having undergone a major surgery, and one reported that she was homeless and no longer had time to participate in the study. A final participant declined to participate further when he was not allowed to switch from the waitlist to the active treatment condition during week 1 of treatment.

Of the seven participants randomized to the active condition, only one participant completed the study. A second participant, who stopped attending group once she found housing and subsequently experienced a significant, self-reported drop in depression symptoms, did complete mid- and post-treatment assessments.

Due to the extremely small sample sizes of study completers, no quantitative analyses were conducted to compare groups on measures of depression and secondary variables such as physical health, anger, and quality of life. Instead, a qualitative description of active group participants, including their presenting problems and progress made during treatment, is provided below. In addition, means and standard deviations of baseline measures incorporated for secondary hypotheses are listed in Table 14. These measures were completed during the first week of treatment, prior to the start of the first session. Because a large number of waitlist participants dropped out between the baseline depression assessment and the first week of treatment, these descriptive statistics disproportionately reflect the active treatment group.

Qualitative Description of Active Group Participants

Descriptions are provided separately for each of the active group participants below. Numbers are used to identify participants in the descriptions below.

Participant 19. Participant 19 was a 63 year old male with type II diabetes. He was homeless and showed up for his first individual session prior to the start of group. At this session he appeared to accept the treatment rationale well and expressed commitment to coming to the group, but he never attended any of the group sessions and was unable to be reached by phone.

Participant 30. Participant 30 was a 46 year old male with type II diabetes and who worked as a property manager. Although he did not meet criteria for substance dependence during the pretreatment diagnostic assessment, it became clear during his individual session that he met diagnostic criteria for oxycodone dependence. Therapists discussed this issue with him and recommended that he receive treatment to taper off the medication. During the group sessions he attended, participant 30 was reportedly "half-asleep" throughout all of the group sessions, which made it very difficult to actively work with him during the sessions. He attended the individual session and the first two group sessions and never returned to group. The therapists subsequently found out that patient had experienced a diabetic medical emergency after the second group session and was hospitalized in critical condition for several weeks.

Participant 22. Participant 22 was a 54 year old female who reportedly had cut her wrists in a suicide attempt during the previous year, and subsequently ended up in a psychiatric inpatient facility for a period of time. She noted that she had become suicidal again a few months prior to the start of the group when she became homeless after getting evicted from her home when her boyfriend reported to the housing authority that she had marijuana in the apartment. During group sessions, she reported a history of poly-substance dependence. At the start of group, she was living with her sister and searching

for housing. This participant attended the individual session and the first five group sessions. A lot of her work during sessions was devoted to obtaining housing. She received housing shortly after the fifth group session, and did not attend any additional groups after reporting a remission of depression symptoms. She did, however, agree to complete the mid- and post-treatment depression evaluations.

Participant 27. Participant 27 was a 53 year old female who reported a history of prostitution and drug dependence. At the individual session, it became apparent that she met criteria for current alcohol dependence, although this diagnosis was not apparent at the time of the baseline assessment. Participant 27 was still grieving the death of her husband in March 2012, and was very emotionally avoidant. Her drinking behavior was discussed at length during all of the sessions she attended. In Week 8, she reported that she had achieved abstinence from alcohol. She had a minor lapse two weeks later, but otherwise reported successfully staying clean during this time. She attributed the success to several factors, including mindfulness/acceptance techniques she had been learning in the group, the general support and encouragement to stay focused on getting clean she received from the group therapists, and meeting a man who was also an ex-alcoholic who also encouraged and supported her sobriety in a variety of ways that were consistent with the efforts of the group therapists. She attended nine of the twelve sessions and completed the group.

Participant 23. Participant 23 was a 50 year old female. Although this was not detected during the pretreatment assessment, this participant evidenced an increasingly clear and significant pattern of paranoid symptoms during the subsequent group meetings she attended. The participant noted during the individual session that her two children

had been removed from her care by the state. She believed that this was part of a conspiracy against her, which included elements of people watching her, listening to her phone, reading her private mail, and plotting against her. Although she met diagnostic criteria for a current Major Depressive Episode, she noted that she did not feel depressed, and was convinced that her distress stemmed from the conspiratorial actions of others. Participant 23 was staying in a shelter when she started the group, from which she was later reportedly kicked out. She attended the individual session and only the first five group sessions, and was no longer reachable by phone after this. Her paranoia symptoms greatly interfered with the ability of therapists to work with her during the groups, and the therapists reported that she created a somewhat toxic sense of distrust in the group which made it difficult for the early group members to cohere.

Participant 25. Participant 25 was a 46 year old female with two children, and she indicated that she was currently working part time at the start of group. She brought her two young children along to the individual session and first group, and never returned after the initial group meeting.

Participant 18. Participant 18 was a 44 year old male who described earlier gang affiliations through which he experienced multiple exposures to death. He met criteria for Posttraumatic Stress Disorder and was prescribed respirdol for the condition by a psychiatrist, but refused to take medication. This participant only attended two group sessions, after which his work schedule changed and he was no longer able to attend the groups. During the first two group sessions, his activation assignments focused to a large degree on asking his employer for more hours of work each week. He did not attend any sessions after the second group session. He reported to one of the group therapists by

phone for several weeks that his reason for absence was that he had been successful at obtaining more work hours, which coincided with group times.

Trajectory of Depression Scores Across Treatment

Table 15 lists the HRSD scores for participants at pre-, mid- and post-treatment assessment points. Table 16 also lists scores for weekly BDI-II scores across treatment. Although the number of completers was very small in each of the groups, those who completed treatment experienced greater reductions in depression on both measures relative to those who completed the trial on the waitlist arm.

Discussion

Overall, results from Phase 1 provided several lines of evidence suggesting acceptability of treatment to participants. Members of both Phase 1 groups rated the behavioral activation elements and the culturally adapted components of treatment as being clear, relevant and helpful. On average, they also consistently rated that they would be more than likely to utilize the skills and resources from the groups, and that they believed they had learned a lot about the different components targeted during treatment.

The only exceptions to adequate levels of acceptability on these measures were lower ratings by the SSCNC group for the helpfulness of mindfulness skills for managing chronic pain and of steps for initiating employment seeking. Regarding mindfulness skills, however, skills were still reported as being at least "helpful" during a majority of weeks assessed. On the other hand, three of the four weeks during which the helpfulness of employment strategies were assessed, participants provided average ratings indicating that these strategies were less than helpful. It is unclear whether these lower ratings reflected dissatisfaction with skills module itself, or if ratings were more reflective of difficulties with obtaining work despite activating in the service of this goal.

The low attrition observed during Phase 1 also highlights the acceptability of treatment received. Only one participant withdrew from the BOH group, after attending only one session. It is plausible that his withdrawal likely did not reflect dissatisfaction with treatment, however, as he noted that he had encountered a scheduling conflict when he received more hours at his job. At SSCNC, only one participant did not finish the group. She missed the last two sessions, but these absences were the result of rapidly

declining health when she discovered the presence of stage 4 lung cancer near the end of group. These attrition rates of 14% and 25% for BOH and SSCNC groups respectively compare favorably with rates of higher attrition described in the literature ranging from 28-58% in some studies (Miranda et al., 2003; Organista et al., 1994).

Focus groups largely corroborated information obtained from weekly acceptability measures. Overall, participants indicated that the culturally adapted components were relevant to them, and generally helpful for managing difficulties in their lives. These findings lend some support to claims from the literature that the inclusion of culturally adaptations targeting the unique life circumstances, values and goals of many African Americans of lower SES may be important additions to enhance treatment retention (Baker & Bell, 1999; Waite & Killian, 2009; Atkinson et al., 1998; Austin et al., 1990; Chiang et al., 2004). Moreover, the approach to treatment development was also consistent with recommendations from the literature suggesting that risk and protective factors be identified not only on the basis of their possible acceptability, but also by a compelling theoretical and empirical justification for their inclusion (Lau, 2006).

Another function of focus groups was to allow a forum through which participants could discuss areas of their depression not addressed during the treatment, but which they felt would be beneficial to include in future iterations of the manual. Additionally, participants were able to provide feedback on changes to the extant components that they believed might have a salutary effect on the overall treatment approach. Based on feedback from participants, for instance, the study team decided to introduce mindfulness practice earlier in treatment in order to facilitate additional practice and skills acquisition.

Also at the behest of participants, additional skills modules were also included that addressed the teaching of interpersonal effectiveness skills, and the management of difficult emotions such as guilt and grief.

Whereas the study team incorporated a number of suggestions from participants, some suggestions were not adapted for the Phase 2 trial. For example, some participants indicated that they would have benefited from having time devoted to topics such making a budget for finances, and balancing checkbooks. Due to time constraints imposed by the large number of modules already included, and the addition of new components based on feedback, the study team decided not to include this topic. Instead, the study team decided to emphasize seeking out free services as a goal for activity scheduling. Participants also expressed interest in extending the duration of treatment. Due to logistical concerns, the study team was not able to extend the number of sessions beyond twelve, but did include an individual therapy session for each participant prior to the start of group.

This issue of time was a larger feasibility issue encountered throughout Phase 1 of the study. During the BOH group, participants took much longer to develop specific values linked goals than was expected. In order to address this concern at BOH, and at the outset of the SSCNC group, therapists elucidated that treatment was meant to be more of a skills training class, and less of a platform from which to vent about difficulties each week. In addition, the presentation of culturally adapted components during the SSCNC group was delayed in order to allow adequate time for sufficient depth of values and goals clarification as early as possible in treatment. Whereas this approach did result in a broader array of activation assignments from SSCNC participants earlier on in treatment

relative to those from BOH, this approach had the untoward effect of not allowing sufficient time to learn and start apply culturally adapted components. The inclusion of an individual session for each participant in Phase 2 was therefore a means of balancing these opposing constraints on time.

Another concern related to these time constraints during Phase 1 was the common occurrence of BOH sessions starting, in many instances, one half hour later than planned. Often, this was a result of meetings and services at the center attended by participants immediately prior to group running over the intended time. For Phase 2, the research team decided to hold the session at a time that would be less likely to result in these kinds of conflicts.

Another aim of evaluating feasibility during Phase 1 was to examine the throughput of recruitment efforts based on an organic approach of recruitment within the existing infrastructure of the nursing centers through fliers and referrals from primary care physicians and nurse practitioners on site. Staff at the BOH facilitated many of the referrals within the relatively short time frame of two months during which recruitment took place. At SSCNC, recruitment proceeded at a much slower pace, and nursing staff at this site remained in contact with the study team much more infrequently than providers at BOH. It remains unclear if this lesser degree of contact resulted from lower levels of assessment of depression symptoms, provider perceptions that many patients were not presenting with depression, or identified prospective participants simply not choosing to pursue the study for varying reasons. Nevertheless, this emphasis on targeting providers to identify depression within a primary care context to promote treatment seeking is consistent with current suggestions in the literature (Lake & Baumer,

2010; Toner, Snape, Acton, & Blenkiron, 2010), and may be especially pertinent given the preference highlighted in the literature for African Americans to seek mental health care through primary care (Scheffler & Miller, 1989; Hu et al., 1991; Snowden & Pingatore, 2002; Snowden, 1999b).

Due to the constraints of attrition on the ability to evaluate treatment efficacy during Phase 2, post-hoc analyses of changes in depression scores from baseline across time were performed for each Phase 1 group independently. Depression scores for the BOH were significantly lower at the last session, one week post-treatment, and one month post-treatment relative to baseline using both LOCF and multiple imputation methods for the missing depression score of one participant at the last session. Although depression scores did not show a significant decrease across time for the SSCNC group, the group still experienced a 25% reduction in depression symptoms using an LOCF analysis to calculate the missing score of one participant at the last session. When multiple imputation was used, however, this reduction was only 5.7%, as the mean score of the five imputed values for this individual ended up being significantly higher than her score at the last session attended.

The two groups did not differ from one another on pretreatment depression scores, age or number of missed sessions. A group x time interaction was not significant for depression, which indicates that the BOH healing group, run by two experienced therapists, did not outperform the SSCNC group, run by inexperienced clinicians, in amelioration of depression symptoms across time. Given the results of the preliminary one-way ANOVAs, however, this lack of an interaction may have been the result of low power to detect an effect given the very small sample sizes involved.

The moderate feasibility of organic recruitment efforts during Phase 1 was not replicated during Phase 2. A period of approximately three months elapsed prior to the recruitment of the first study participant. Moreover, most of those recruited into the study became aware of the study through other channels outside of the community nursing centers at which staff aimed recruitment following low organic recruitment rates.

Although measurement of treatment acceptability was not the principal aim of Phase 2, results suggest the potential low acceptability, or perceived relevance, of treatment to participants given their presenting complaints. Six out of seven (85.7%) active group participants and six out of eight (75%) waitlist participants did not complete the trial. Although the extremely small sample sizes militate against direct comparisons, these attrition rates are more in line with, and higher than, rates observed in the depression treatment outcome literature for African Americans (Miranda et al., 2003; Organista et al., 1994). This significantly high dropout precluded any of the planned analyses for Phase 2 examining the efficacy of treatment in reducing depression and leading to movement on variables targeted as risk and protective factors for African Americans. Nevertheless, the depression scores of those on the waitlist generally remained invariant across the 12 sessions, whereas the score of the single participant in the active group decreased by 91.2% on the BDI-II. Moreover, one of the participants in the active group who dropped out following session five reportedly did so as a result of her depression remitting after she obtained her primary treatment goal of finding housing. Her baseline depression on the BDI-II dropped from a score of 50 at baseline to zero at week five, and remained at zero at the end of treatment.

This study is the first, to our knowledge, that has sought to move beyond cultural adaptations to empirically supported treatments that are commonly limited to areas such using more culturally appropriate names in treatment manuals. This study followed recent guidelines of identifying specific risk and protective factors of psychopathology for groups highlighted in the literature and incorporating these into a framework that retains a theoretically plausible mechanism of change (Lau, 2006). Many of the additional adaptations used were consistent with calls from the literature to make treatment more relevant and face valid to African Americans by including components that specifically address areas consistent with their values and treatment goals (Baker & Bell, 1999; Waite & Killian, 2009; Atkinson et al., 1998; Austin et al., 1990; Chiang et al., 2004). Moreover, the approach of Phase 1 allowed the refinement of treatment to occur through a collaborative process between experimenters and those actually receiving the treatment. This latter approach is consistent with recent guidelines for treatment development that utilizes an iterative approach guided by theory and patient acceptability (Onken et al., 1997; Weisz, 2004; Rounsaville et al., 2001; Carroll & Nuro, 2002).

The present study also was novel in conducting all research activities, from recruitment, through assessment and treatment, in the underserved communities in which participants live. This approach sought to complement extant services by using community nursing centers as a gateway to help identify prospective participants, which results show, in part, may be an effective means to expand identification of symptoms and appropriate referral to services for those suffering from depression.

On the one hand, results from Phase 1 illustrated a high degree of acceptability of treatment, and in the instance of BOH, a significant reduction in depression symptoms

across time that were maintained one month post treatment. At the same time, the high attrition rates from both the waitlist and active conditions during Phase 2 illustrate that these results from Phase 1 may not be generalizable to other samples. Although the reasons underlying the discrepancy across phases are not entirely clear, there are a number of potential causes that can be proposed.

One potential reason may relate to differences across phases in group cohesion, a construct documented as positively predicting treatment outcome across a number of studies (Burlingame, Theobald-McClendon, & Alonso, 2011). For instance, three of the Phase 1 BOH participants were sisters. Moreover, both Phase 1 groups consisted of individuals living in the same neighborhoods of Milwaukee, who were already receiving a multitude of services from the community nursing centers. It is possible that some of these commonalities may have increased group cohesion. Because the low throughput of original recruitment methods led researchers to broaden their recruitment net during Phase 2, the individuals enrolling in this phase were from different neighborhoods. With potentially less in common, it remains possible that group cohesion may have been adversely affected as a result. Although this remains a possible explanation, group cohesion was not objectively measured in the study.

Another possibility for differences in attrition may be that the Phase 2 participants presented with more severe life difficulties, additional principal complaints, and stressors that were outside the remit of treatment, even with the various cultural adaptations in place. For instance, three of the participants presented with symptoms of psychosis or substance dependence that, while not apparent during screening for the study, would have disqualified them from receiving treatment. Although one of these individuals with

alcohol dependence completed treatment and saw some improvement in symptoms, the other two individuals dropped out prematurely. Based on the severity of psychotic and dependence symptoms of some members during group, it is likely that these symptoms may have interfered with their ability to adequately process information presented during group and to use strategies in areas of their lives for which treatment might still be relevant. Unlike participants of Phase 1, whose children were all adults, another participant of Phase 2 experienced difficulties with arranging childcare for her kids, and eventually dropped out of treatment. Although she never formally endorsed this as the reason for dropping out, it is possible that the current treatment did not offer enough in the form of ancillary services (e.g. paid childcare) to facilitate group attendance. This point touches upon a broader concern, that despite the theoretical and empirical justifications for including culturally adapted components, such modifications may simply have not been viewed by individuals as, or may not have actually been, sufficient tools to target their presenting problems.

BA has been described as potentially being a more disseminable means of treating depression than other common empirically supported approaches (Hollon, 2000). Notwithstanding the small sample sizes, some initial support for this hypothesis was obtained from the lack of a group x time interaction for depression when results from inexperienced and experienced therapist led groups were compared. Nevertheless, only the group that was run by experienced therapists experienced significant reductions in depression over time, and one of the inexperienced therapists did experience some difficulties with learning mindfulness procedures initially. It is possible that some

elements of the treatment, such as BA principles and more didactic oriented components, may be easier elements in which to train inexperienced clinicians.

There are a number of limitations of Phase 1. First, the weekly acceptability questions used were not standardized measures, and were created solely for the purposes of this study. Another limitation regarding acceptability of treatment relates to the fact that study personnel did not review specific concerns and feedback with participants directly between sessions, which may have affected the information which participants recalled and broached during the focus groups at the end of treatment. Future studies such as these might benefit from pilot testing acceptability measures prior to their use in the study in order to establish some basic psychometric properties regarding the validity and reliability of measures. Another helpful approach in the future might involve the use of mini-focus groups, in addition to the written feedback, to ensure that important feedback is not missed between the time concepts are presented and the day the focus group is held at the end of treatment. This may not have been an important issue in this study, however, as both focus groups generated significant feedback on all of the culturally adapted and BA components.

There are also significant limitations with the data analytic approach used to assess changes in depression during Phase 1. First, the group design of this study violates assumption of independent variances for participant scores when ANOVA procedures are employed, given that participants were all members of the same group. Despite these obvious limitations, the procedure was nonetheless used to provide some preliminary information on changes in scores across time in the absence of other analytical approaches that could have been used with these samples. Even though

significant reductions in depression were found for the BOH group, the lack of a control condition does not rule out the possibility that time, or regression to the mean, accounted for changes. Aside from these issues of internal validity, the results do not necessarily speak to the efficacy or intended mechanism of treatment, as simply bringing individuals together in a supportive group may have impacted scores.

Another limitation is the exclusion from analyses of scores for the BOH participant who withdrew after the first session, as he did not complete the BDI-II at the first session. It is possible that inclusion of his score may have resulted in non-significant findings. The logic of including his score is dubious however, as his putative reason for not being able to attend group was a change in his work schedule, and not dissatisfaction with the group per se.

The generality of findings may have been affected by the sample sizes of the groups for BOH (n = 6) and SSCNC (n = 4), as such small sample sizes may not accurately reflect the variance of participant characteristics in the population at large. This limitation is further supported by the low variability of participant ages, with the middle age and older demographics disproportionately represented over younger individuals in the present study.

Future studies may overcome some of these methodological concerns by devising recruitment strategies targeting a broader age range of participants. This, coupled with the ability to recruit a significantly larger number of individuals for a larger study, would greatly increase the statistical power, allow for more appropriate statistical tests of group data such as hierarchical linear modeling, and would provide more evidence on the generality of findings relative to the population being researched. Although some

success was experienced using the organic recruitment strategies of Phase 1, this approach only led to eight participants enrolling in the study over a period of approximately two months. New methods designed to recruit more individuals from a larger audience, while maximizing organic strategies used in the current study, may be necessary to increase participant throughput along these lines.

One potential option would be to recruit through channels such as television, radio and print. At the same time, future study teams might benefit from a more formal cultivation of relationships with health service providers at the existing community organizations partnering with the studies. During the present study, healthcare staff were not trained to assess or recognize depression symptoms. As some research has shown that depression is often underdiagnosed or misdiagnosed in health care settings such as primary care (Bailey, Blackmon, & Stevens; Lake & Baumer, 2010; Toner et al., 2010), it may be helpful in the future to provide education to providers about what signs they should be looking for, along with brief, validated screening measures they can have participants to fill out. Although health care providers were given some information regarding the study and the type of treatment offered, it may also be helpful to provide additional training on how to discuss treatment with prospective participants. In order to target patients with misgivings about seeking treatment for depression, it may also be helpful to provide brief training in motivational interviewing. Some research, for instance, has indicated that brief training of physicians in motivational interviewing has been helpful in getting clients to make positive behavioral changes relevant to conditions such as diabetes (Rubak, Sandbaek, Lauritzen, Borch-Johnsen, & Christensen, 2009).

The stigma of mental illness is another potential factor that may serve as a barrier to African Americans seeking psychological services in general, and which may have interfered with recruitment efforts for this study in particular. Stigma has been recognized as a factor that may inhibit treatment seeking across ethnicities (Corrigan, 2005), and as an important determinant of propensity to seek treatment amongst African Americans (Rusch, Kanter, Manos, & Weeks, 2008; Cooper-Patrick et al., 1997). Some studies have shown that the provision of psychoeducation may lead to increased odds of both initiating treatment (Alvidrez et al., 2005) and receiving a greater dose (Dwight-Johnson et al., 2001), although these did not explicitly target stigma. Other evidence suggests that psychoeducation describing depression as a biological illness may actually increase stigma in the short term, while a more behavioral presentation of depression as something that results from environmental changes often outside of one's control has no effect on perceptions of stigma (Rush, Kanter, Brondino, Weeks, & Bowe, 2010).

As this latter study was based only on the presentation of brief video clips, future studies could examine whether longer term campaigns are able to produce a more salutary and durable effect, and whether the inclusion of group discussions alongside the videos may be beneficial to this aim. More generally, future research should explore different approaches to developing anti-stigma campaigns as an initial step in the process of getting individuals to consider receiving psychotherapy. If effective programs are identified, these could be employed at the community health centers targeted in the studies.

Research in this area might also benefit from the exploration of ways in which participation in a waitlist condition can be made more tolerable. Many of the waitlist

participants were simply not reachable by phone after withdrawal, but at least one participant expressed anger that he was not able to start treatment at the same time as those randomized to the active condition. Although the possibility of being assigned to a waitlist condition was explained to participants in detail during the informed consent process, it might be helpful to carefully explore the logic behind a waitlist condition with prospective participants, and how these are necessary to conduct certain types of research. Another option would be to pay participants additional money for being on the waitlist, although this possibility raises some concerns regarding the potential for coercion when working with a group of lower socioeconomic status. Other options that might enhance retention are foregoing a true waitlist condition favor of a supportive listening group, or brief supportive listening phone check-ins. As presumably more inert conditions lacking a purported active mechanism of change, these manipulations would not be expected to produce significant changes in depression, and could also control for human contact as an explanation for any movement in dependent variables.

Two final directions for future research relate to the assessment strategies used to screen participants, and the measures used to assess clinical change. In the present study, a number of participants made it through the screening procedure despite their having proscribed diagnoses such as psychotic and substance dependence disorders. These diagnoses were not detected even with the use of a structured clinical interview that has been empirically validated in a number of studies, the MINI. While it is possible that some participants may not have provided accurate information, another possibility is that the assessor may simply have missed important information, despite hours of training with the measure prior to screening participants. In order to mitigate the inclusion of

inappropriate participants, future studies may wish to conduct urinalyses to obtain a more objective measure of substance use. Positive screens could then be followed up with a more semi-structured interviewing approach that would allow the assessor additional flexibility to explore these domains in more depth, as opposed to reading questions to which participants simply respond yes or no. In the same vein, this semi-structured approach may also be helpful for assessing psychotic symptoms. Using this approach, the brevity of the MINI, which was its main appeal in this study, could be maintained with the inclusion of more time consuming modules only for substance and psychotic disorders when indicated.

Because of the problems with attrition for Phase 2, and lack of focus on efficacy for Phase 1, it is premature to recommend the developed treatment approach for dissemination to the community at this point. Nonetheless, a community board of leaders from the Milwaukee, African American community, with whom researchers met a few times over the course of the study to discuss research aims and progress, suggested the possibility of straight dissemination at the end of the study, rather than additional research. In line with this suggestion, the following are some speculations on how this might be implemented in the community.

Some of these recommendations are redundant with the research future directions described above, such as the need to find ways of increasing enrollment in the groups. As described above for instance, it might be beneficial to maximize the existing infrastructure of nursing centers by providing training to health care professionals in the efficient assessment of depression symptoms. It might also be helpful to provide more in depth education to them about the specific approach of the group, in order to ensure that

they are adequately able to explain to clients what can be expected in a BA group. A final strategy for recruitment might involve providing brief psychoeducation presentations on depression to those receiving services at the nursing centers, either by staff, or members who have successfully completed all the modules of the group. These could be folded into other services at the centers, for example, on days when prospective clients attend the centers for free meals.

An additional set of challenges beyond enrolling prospective clients is likely to be financial, as the community nursing centers staff with which researchers worked described their organizations as operating on shoestring budgets. It may therefore be impractical to expect that current finances will allow for the new hiring of psychologists or other experienced clinicians to run new groups. Whereas the trainability of inexperienced clinicians undoubtedly remains and empirical question worthy of further research, it may still be possible to circumvent budgetary constraints by training nursing center staff.

One suggestion would be for researchers to train nurses or other medical staff currently working at the organizations, in a manner consistent with training afforded inexperienced therapists in the current study. In order to complement this training, it might be helpful for staff to co-lead groups with a more experienced member of the research team for a period of time until both leaders feel comfortable about the ability of the inexperienced clinician to lead a group on his or her own. Even after this transition, it might be possible for members of research team to volunteer monthly supervision time in order to help new clinicians problem solve any difficulties experienced once they are facilitating groups on their own.

This overall approach to training, however, is not without potential limitations. Although training extant staff might obviate the need of hiring additional staff, it is unclear if current staff would be able to incorporate the time needed to run a group into their existing schedules.

Outside of the logistics of choosing therapy providers, another important issue for consideration is whether to alter the structure of the group from how it was run during the study in order to provide flexible access of treatment to individuals with significant life difficulties who may not be able to attend weekly sessions. It may, for instance, be helpful to have open groups, which new individuals would be able to enter at any time. This approach would prevent individuals in need of help from having to wait up to four months until a new group opens. In addition, although most culturally adapted components in this study received adequate levels of acceptability on average, not all components are necessarily going to be relevant to the unique experiences of all individuals. It may therefore be helpful to alter the sequence of components within a typical session such that culturally adapted didactic materials and skills are presented for the first half of a session, while homework review and the other BA components are saved for the latter half. This change would confer clients the advantage of not having to spend their time attending culturally adapted components not relevant to them, while still receiving the benefit of BA components. Over time, with an ongoing group setup, this approach would also allow clients the opportunity to drop in for a refresher course on certain skills learned earlier that they would like to polish.

Despite the numerous limitations described above, this study represents an important advance in efforts to address contemporary health disparities in the treatment

of depression in the African American community. Specifically, the approach of treatment development was guided not only by theory and the empirical literature, but also by the direct input of those targeted by the treatment in order to develop a framework with a theoretical plausible mechanism that is also received as acceptable by clients. Just as importantly, this study sought to implement treatment outside of the research laboratory in existing communities in a way that complements existing services already offered. The limitations and areas for future research discussed should be explored further with the aim of developing a more robust, and generalizable, test of the potential efficacy of culturally adapted behavioral activation.

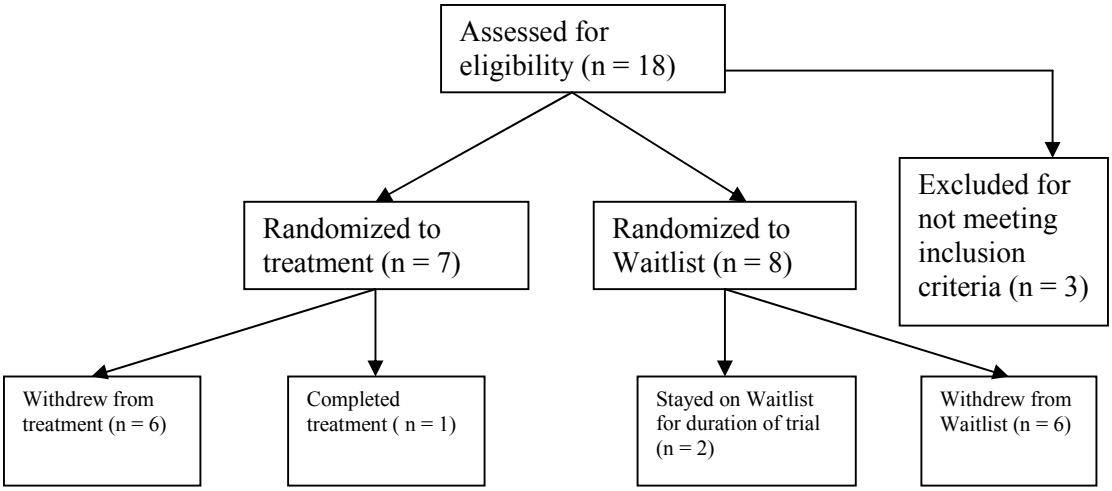

Figure 1. Participant Flow Chart of Phase 2 Randomized Controlled Trial.

Table 1

Phase 1 Bread of Healing Participant Reports of Clarity, Relevance, and Sufficiency of Time for Behavioral Activation (BA) Components

	Clarity		Relevance		Amount of Time	
BA Component	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Psychoeducation	6	3.33 (.52)	6	3.67 (1.03)	6	2.83 (1.17)
Activity Monitoring	6	3.17 (.98) – 3.33 (.82)[a]	5 - 6	3.50 (.84) – 3.80 (1.10)[a]	5	2.80 (.45)
Activity Scheduling	6	3.17 (.75) – 4.17 (.98)[a]	3 -6	3.17 (.75) – 4.33 (.58)[a]	4 - 6	3.00 (1.73) – 3.80 (.45)[a]
Activity Hierarchy	5 - 6	3.83 (.75) – 4.40 (.89)[a]	6	3.50 (1.05) – 3.50 (.84)[a]	6	3.17 (.75) – 3.67 (1.21)[a]
Values and Goals	5 - 6	3.60 (.55) – 3.67 (.52)[a]	5	3.80 (.84) – 4.00 (.71)[a]	6	3.17 (1.17)

Table 1 Continued

BA Component	Clarity		Relevance		Amount of Time	
	n	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Values Experiential Exercise	6	3.83 (.98)	6	3.50 (1.52)	5	3.80 (.84)
Homework Review	N/A[b]	-	N/A[b]	-	5	3.60 (.55) – 4.00 (.71) [a]

Note. Clarity and Relevance questions generally asked "How clear/relevant was the presentation of" the specific component. Questions assessing clarity and relevance used three anchor points ("1 = Not at all clear, 3 = Clear, 5 = Extremely clear" and "1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant"). Questions assessing adequacy of time generally asked "What are your thoughts about the amount of time spent on" the specific component. Questions assessing adequacy of time used three anchor points ("1= Way too little time, 3 = Just enough time, 5 = Way too much time). Actual Questions are provided in Appendix J.
[a]Question was assessed on multiple days. Range of means and respective standard deviations are presented.
[b]N/A denotes that acceptability domain was not assessed for specific component.

Table 2

Phase 1 Bread of Healing Participant Reports of Clarity, Relevance, and Sufficiency of Time for Culturally-Adapted Components

	Clarity		Relevance		Amount of Time	
Cultural Component	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Stress Education						
Stress-Depression Relationship	6	3.50 (.84) – 4.17 (.75) [a]	6	4.00 (.63) – 4.17 (.98) [a]	N/A [b]	-
Progressive Muscle Relaxation	6	4.00 (.89)	6	4.17 (.98)	5	4.00 (1.10)
Paced Breathing	6	3.83 (.98)	6	4.00 (.89)	6	3.17 (1.33)
Diabetes Cardiovascular Disease (DCVD)						
DCVD-Depression Relationship	6	3.92 (.80)	6	3.75 (.88)	6	3.83 (.98)
Healthy Living Tips	6	4.08 (.92)	6	3.92 (.80)	6	3.33 (.82)
Consequences of Healthy Living	6	4.08 (.92)	6	3.92 (1.02)	6	3.67 (.82)
Health Resource Packets	N/A [b]	-	5	4.10 (1.02)	N/A [b]	-

Table 2 Continued

Cultural Component	Clarity		Relevance		Amount of Time	
	n	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Chronic Pain (CP)						
CP-Depression Relationship	6	3.83 (.98)	N/A[b]	-	6	3.67 (1.21)
CP-Mindfulness Relationship	6	3.83 (.98)	N/A[b]	-	N/A[b]	-
Mindfulness Activities	6	4.00 (1.10)	6	3.83 (.75)	5	3.60 (1.14)
Consequences of Pain	6	4.00 (.89)	6	4.33 (.82)	6	3.50 (1.05)
Mindfulness of Pain Exercise	N/A[b]	-	6	4.33 (.82)	N/A[b]	-
Racism/Anger (R/A)						
Racism-Anger Relationship	4	4.25 (.50)	4	4.50 (.58)	4	3.25 (1.50)
Anger-Depression Relationship	4	4.25 (.50)	4	4.25 (.50)	N/A[b]	-
Components of Anger Exercise	4	4.50 (.58)	4	4.25 (.50)	4	3.50 (1.73)

Table 2 Continued

Cultural Component	Clarity		Relevance		Amount of Time	
	n	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Managing Anger Skills	4	4.25 (.50)	4	4.50 (.58)	4	3.50 (1.73)
Unemployment (UE)						
UE-Depression Relationship	5	4.00 (.71)	5	4.20 (.84)	5	3.40 (.89)
Benefits of UE Exercise	5	4.00 (.71)	5	4.00 (.71)	4	3.25 (.96)
Employment – Seeking Exercise	5	4.00 (.71)	5	4.00 (.71)	4	3.25 (.96)
Resource Packet	N/A[b]	-	4	4.00 (.82)	N/A[b]	-
Social Support (SS) & Spirituality (S)						
SS-Depression Relationship	5	4.00 (.00)	5	4.20 (.45)	5	3.60 (.89)
SS Seeking Tips	5	4.20 (.45)	5	4.20 (.45)	5	3.80 (1.10)
S-Depression Relationship	5	4.40 (.55)	5	4.440 (.55)	5	3.60 (.89) – 3.80 (1.10)[a]
S Assessment	5	4.40 (.55)	5	4.00 (.00)	5	3.60 (.89)

Table 2 Continued

	Clarity		Relevance		Amount of Time	
Cultural Component	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
S Meditation	5	4.20 (.45)	5	4.40 (.55)	5	4.00 (.00)

Note. Clarity and Relevance questions generally asked "How clear/relevant was the presentation of" the specific component. Questions assessing clarity and relevance used three anchor points ("1 = Not at all clear, 3 = Clear, 5 = Extremely clear" and "1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant"). Questions assessing adequacy of time generally asked "What are your thoughts about the amount of time spent on" the specific component. Questions assessing adequacy of time used three anchor points ("1= Way too little time, 3 = Just enough time, 5 = Way too much time). Actual Questions are provided in Appendix J.

[a]Question was assessed on multiple days. Range of means and respective standard deviations are presented.

[b]N/A denotes that acceptability domain was not assessed for specific component.

Table 3

Phase 1 Bread of Healing Participant Reports of Likeliness to Engage in Skills

Activity	*n*	*M (SD)*
Healthy Living Tips	6	4.00 (.89)
Mindfulness for Pain	6	3.50 (1.22)
Anger Management Skills	4	4.25 (.50)
Resource Packet	4	4.00 (.82)
Employment Seeking	4	4.00 (1.41)
Social Support Activation	5	3.80 (.45)
Spiritual Activation	5	4.20 (.84)

Note. Questions generally asked “How likely is it that you will start to use” specific component “over the next week”. Questions used the three anchor points (“1 = Extremely unlikely, 3 = Likely, 5 = Extremely likely”. Actual Questions are provided in Appendix J.

Table 4

Phase 1 Bread of Healing Participant Reports of Helpfulness of Skills

Activity	*n*	*M (SD)*
Progressive Muscle Relaxation Previous Week		
Week 6	6	3.17 (1.60)
Week 7	6	3.50 (1.05)
Week 8	5	3.60 (.89)
Week 9	4	3.75 (.50)
Week 10	3	3.67 (.58)
Week 11	5	3.80 (.45)
Paced Breathing Previous Week		3.50 (1.05)
Week 7	6	3.50 (1.05)
Week 8	5	3.80 (.84)
Week 9	4	4.00 (.82)
Week 10	4	3.25 (.96)
Week 11	5	3.80 (.48)
Healthy Living Tips		
Week 8	5	4.40 (.55)

Table 4 Continued

Activity	*n*	*M (SD)*
Week 9	4	4.50 (.58)
Week 10	4	3.75 (.50)
Week 11	5	4.00 (.71)
Mindfulness for Pain		
Week 9	4	3.75 (.50)
Week 10	4	3.00 (.82)
Week 11	5	3.40 (.89)
Anger Management Skills		
Week 10	4	3.50 (1.00)
Week 11	5	4.00 (.71)
Resource Packet		
Week 11	5	4.40 (.55)

Note. Helpfulness questions generally asked "How helpful was" specific component "over the past week" or "How much success did you have using" specific component "over the past week". Questions assessing helpfulness used the three anchor points ("1 = Not helpful at all, 3 = Helpful, 5 = Extremely helpful" or "1 = No success at all, 3 = Success, 5 = A lot of success"). Actual Questions are provided in Appendix J.

Table 5

Phase 1 Bread of Healing Participant Reports of Increased Knowledge of Group Topics

Activity	*n*	*M (SD)*
Depression	6	3.67 (.82)
Progressive Muscle Relaxation	6	4.00 (1.26)
Paced Breathing	6	3.83 (.98)
Cardiovascular Disease and Diabetes	6	4.00 (1.10)
Mindfulness and Pain	6	3.83 (.75)
Anger	4	4.50 (.58)
Strategies for Seeking Social Support	5	4.00 (.00)
Strategies for Seeking Employment	4	3.00 (.82)

Note. Questions generally asked “How much do you feel you’ve learned about” the specific component “today”. Questions used the three anchor points (“1 = Nothing, 3 = Some, 5 = A lot ”. Actual Questions are provided in Appendix J.

Table 6

Phase 1 Bread of Healing Participant Reports of Overall Relevance of Group

Session	*n*	*M (SD)*
1	6	3.67 (1.63)
2	3	4.00 (1.00)
3	N/A [a]	-
4	6	4.00 (1.10)
5	6	3.67 (1.03)
6	6	3.50 (1.05)
7	6	4.33 (.82)
8	6	3.83 (1.48)
9	4	4.50 (.58)
10	4	3.25 (.96)
11	5	4.20 (.45)

Note. Questions generally asked "Based on what you learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems". Questions used the three anchor points ("1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant ". Actual Questions are provided in Appendix J.
[a]N/A denotes that acceptability domain was not assessed for specific component.

Table 7

Phase 1 Silver Spring Community Nursing Center Participant Reports of Clarity, Relevance, and Sufficiency of Time for Behavioral Activation (BA) Components

	Clarity		Relevance		Amount of Time	
BA Component	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Psychoeducation	4	5.00 (0)	4	5.00 (0)	4	3.25 (1.71)
Activity Monitoring	4	4.50 (1.00)	4	4.50 (1.00)	4	3.25 (1.71)
Activity Scheduling	2 - 4	4.25 (.96) – 5.00 (0)[a]	2 - 4	5.00 (0)	1 - 4	3.00 (1.73) – 3.75 (.50)[a]
Activity Hierarchy	2 - 3	4.33 (1.15) – 5.00 (0)[a]	2 - 3	4.33 (1.15) – 5.00 (0)[a]	2	3.50 (.71) – 4.00 (1.41)[a]
Values and Goals	2 - 3	5.00 (0)	2 - 3	4.33 (1.15) – 5.00 (0)[a]	2 - 3	2.67 (1.53) – 3.50 (.71)[a]
Homework Review	N/A[b]	-	N/A[b]	-	1 - 4	3.00 (0) – (4.00) (1.00)

Note. Clarity and Relevance questions generally asked "How clear/relevant was the presentation of" the specific component. Questions assessing clarity and relevance used three anchor points ("1 = Not at all clear, 3 = Clear, 5 = Extremely clear" and "1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant"). Questions assessing adequacy of time generally asked "What are your thoughts about the amount of time spent on" the specific component. Questions assessing adequacy of time used three anchor points ("1= Way too little time, 3 = Just enough time, 5 = Way too much time). Actual Questions are provided in Appendix J.

[a]Question was assessed on multiple days. Range of means and respective standard deviations are presented.

[b]N/A denotes that acceptability domain was not assessed for specific component.

Table 8

Phase 1 Silver Spring Community Nursing Center Participant Reports of Clarity, Relevance, and Sufficiency of Time for Culturally-Adapted Components

	Clarity		Relevance		Amount of Time	
Cultural Components	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Stress Education						
Stress-Depression Relationship	3	5.00 (0)	3	5.00 (0)	2	3.25 (1.71)
Progressive Muscle Relaxation	3	5.00 (0)	3	4.00 (0)	3	2.33 (1.15)
Paced Breathing	3	5.00 (0)	3	4.67 (.58)	3	4.00 (1.41)
Diabetes Cardiovascular Disease (DCVD)						
DCVD-Depression Relationship	4	5.00 (0)	4	5.00 (0)	4	3.25 (1.71)
Healthy Living Tips	4	5.00 (0)	4	5.00 (0)	4	2.77 (1.26)

Table 8 Continued

	Clarity		Relevance		Amount of Time	
Cultural Components	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Consequences of Healthy Living	4	4.50 (1.00)	4	5.00 (0)	4	3.00 (1.63)
Health Resource Packets	N/A[a]	-	4	5.00 (0)	N/A[a]	-
Chronic Pain (CP)						
CP-Depression Relationship	4	4.25 (.96)	N/A[a]	-	4	3.00 (0)
CP-Mindfulness Relationship	4	4.00 (1.15)	N/A[a]	-	N/A[a]	-
Mindfulness Activities	3	4.33 (1.15)	4	4.00 (1.15)	4	3.25 (.50)
Consequences of Pain	4	4.25 (.96)	4	3.75 (1.00)	N/A[a]	-
Mindfulness of Pain Exercise	N/A[a]	-	4	3.50 (1.00)	N/A[a]	-
Racism/Anger						
Racism-Anger Relationship	4	4.50 (1.00)	4	4.00 (1.15)	N/A[a]	-

Table 8 Continued

	Clarity		Relevance		Amount of Time	
Cultural Components	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
Anger-Depression Relationship	4	4.00 (1.15)	4	4.50 (1.00)	4	3.25 (.50)
Components of Anger Exercise	4	4.50 (1.00)	4	5.00 (0)	4	3.00 (0)
Managing Anger Skills	4	5.00 (0)	4	4.50 (1.00)	4	3.25 (.50)
Unemployment (UE)						
UE-Depression Relationship	3	5.00 (0)	4	4.50 (1.00)	4	3.25 (.50)
Benefits of UE Exercise	3	5.00 (0)	3	5.00 (0)	3	2.33 (1.15)
Employment-Seeking Exercise	3	4.67 (.58)	3	5.00 (0)	3	2.67 (1.53)
Resource Packet	N/A[a]	-	3	3.33 (.58)	N/A[a]	-
Social Support (SS) & Spirituality (S)						
SS-Depression Relationship	4	4.50 (1.00)	4	4.50 (1.00)	4	3.50 (1.00)

Table 8 Continued

	Clarity		Relevance		Amount of Time	
Cultural Components	*n*	*M (SD)*	*n*	*M (SD)*	*n*	*M (SD)*
SS Seeking Tips	4	4.50 (.58)	4	4.00 (.82)	4	3.25 (.50)
S-Depression Relationship	4	4.50 (1.00)	4	4.00 (1.15)	4	3.00 (1.41)
S Assessment	4	4.00 (1.15)	4	4.50 (1.00)	4	3.50 (.58)
S Meditation	4	4.00 (1.15)	4	3.50 (1.00)	N/A[a]	-

Note. Clarity and Relevance questions generally asked "How clear/relevant was the presentation of" the specific component. Questions assessing clarity and relevance used three anchor points ("1 = Not at all clear, 3 = Clear, 5 = Extremely clear" and "1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant"). Questions assessing adequacy of time generally asked "What are your thoughts about the amount of time spent on" the specific component. Questions assessing adequacy of time used three anchor points ("1= Way too little time, 3 = Just enough time, 5 = Way too much time). Actual Questions are provided in Appendix J.

[a]N/A denotes that acceptability domain was not assessed for specific component.

Table 9

Phase 1 Silver Spring Community Nursing Center Participant Reports of Likeliness to Engage in Skills

Activity	*n*	*M (SD)*
Healthy Living Tips	3	4.67 (.58)
Mindfulness for Pain	4	3.75 (.96)
Anger Management Skills	4	4.75 (.50)
Resource Packet	3	4.33 (1.15)
Employment Seeking	3	4.67 (.58)
Social Support Activation	4	4.00 (.82)
Spiritual Activation	4	4.75 (.50)

Note. Questions generally asked “How likely is it that you will start to use” specific component “over the next week”. Questions used the three anchor points (“1 = Extremely unlikely, 3 = Likely, 5 = Extremely likely”. Actual Questions are provided in Appendix J.

Table 10

Phase 1 Silver Spring Community Nursing Center Participant Reports of Helpfulness of Skills

Activity	*n*	*M (SD)*
Progressive Muscle Relaxation		
Previous Week		
Week 3	3	4.33 (1.15)
Week 4	2	3.50 (.71)
Week 5	2	3.00 (0)
Week 6	4	4.50 (.58)
Week 7	4	3.00 (1.63)
Week 8	2	2.50 (.71)
Week 9	4	3.25 (1.26)
Week 10	1	3 (-)
Week 11	2	4 (1.41)
Week 12	3	3.33 (1.53)

Table 10 Continued

Activity	*n*	*M (SD)*
Paced Breathing Previous Week		
Week 3	3	4.33 (1.15)
Week 4	2	3.50 (.71)
Week 5	2	3.00 (0)
Week 6	4	4.25 (.96)
Week 7	4	3.25 (1.71)
Week 8	2	2.00 (1.41)
Week 9	4	3.50 (1.00)
Week 10	1	5.00 (-)
Week 11	2	4.00 (1.41)
Week 12	3	4.33 (1.15)
Healthy Living Tips		
Week 6	4	4.25 (.96)

Table 10 Continued

Activity	*n*	*M (SD)*
Week 7	4	3.75 (.96)
Healthy Living Tips		
Week 8	3	3.33 (.58)
Week 9	4	4.25 (.96)
Week 10	1	5.00 (-)
Week 11	2	4.00 (1.41)
Week 12	3	3.67 (1.15)
Mindfulness for Pain		
Week 7	4	1.75 (.9574)
Week 8	3	2.67 (1.53)
Week 9	4	3.00 (0)
Week 10	1	5.00 (-)
Week 11	2	2.50 (.71)

Table 10 Continued

Activity	*n*	*M (SD)*
Week 12	3	4.33 (1.15)
Anger Management Skills		
Week 8	3	3.00 (0)
Week 9	4	4.25 (.96)
Week 10	1	5.00 (0)
Week 11	2	4.00 (1.41)
Week 12	3	4.33 (1.15)
Resource Packet		
Week 11	4	3.25 (.50)
Steps Initiating Employment Seeking		
Week 9	4	2.00 (.82)
Week 10	1	1.00 (-)
Week 11	2	2.00 (1.41)

Table 10 Continued

Activity	*n*	*M (SD)*
Week 12	3	3.00 (2.00)
Social Support Activation		
Week 10	1	3.00 (-)
Week 11	2	3.50 (.71)
Week 12	3	3.67 (2.31)
Spirituality Activation		
Week 10	1	5.00 (-)
Week 11	2	5.00 (0)
Week 12	3	5.00 (0)

Note. Helpfulness questions generally asked “How helpful was” specific component “over the past week” or “How much success did you have using” specific component “over the past week”. Questions assessing helpfulness used the three anchor points (“1 = Not helpful at all, 3 = Helpful, 5 = Extremely helpful” or “1 = No success at all, 3 = Success, 5 = A lot of success”). Actual Questions are provided in Appendix J.

Table 11

Phase 1 Silver Spring Community Nursing Center Participant Reports of Increased Knowledge of Group Topics

Activity	*n*	*M (SD)*
Depression	3	4.75 (.50)
Progressive Muscle Relaxation	1	5.00 (-)
Paced Breathing	3	4.67 (.58)
Cardiovascular Disease and Diabetes	4	4.50 (1.00)
Mindfulness and Pain	4	4.25 (.96)
Anger	4	4.75 (.50)
Strategies for Seeking Social Support	4	4.50 (.58)
Strategies for Seeking Employment	3	4.67 (.58)

Note. Questions generally asked "How much do you feel you've learned about" the specific component "today". Questions used the three anchor points ("1 = Nothing, 3 = Some, 5 = A lot ". Actual Questions are provided in Appendix J.

Table 12

Phase 1 Silver Spring Community Nursing Center Participant Reports of Overall Relevance of Group

Session	*n*	*M (SD)*
1	4	4.75 (.50)
2	3	5.00 (0)
3	3	4.33 (1.15)
4	2	5.00 (0)
5	4	5.00 (0)
6	4	3.25 (.50)
7	4	4.50 (1.00)
8	3	5.00 (0)
9	4	4.25 (.96)
10	1	3.00 (1)
11	2	5.00 (0)

Table 12 Continued

Session	*n*	*M (SD)*
12	3	4.33 (1.16)

Note. Questions generally asked "Based on what you learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems". Questions used the three anchor points ("1 = Not at all relevant, 3 = Relevant, 5 = Extremely relevant ". Actual Questions are provided in Appendix J.

Table 13

Phase 1 Beck Depression Inventory-II Scores Across Treatment for Bread of Healing and Silver Spring Community Nursing Center Groups

	BOH		SSCNC	
Time	*M* (*SD*)	*n*	*M* (*SD*)	*n*
		LOCF[a]		
Baseline	24.67 (8.87)	6	26.50 (18.81)	4
Post-Treatment	12.83 (11.51)	6	20.00 (14.63)	4
1 Week Post-Treatment	10.83 (10.25)	6	-	
1 Month Post-Treatment	10.00 (10.20)	6	-	

Table 13 Continued

	BOH		SSCNC	
Time	*M* (*SD*)	*n*	*M* (*SD*)	n
		MI[a]		
Baseline	24.67 (8.87)	6	26.50 (18.81)	4
Post-Treatment	14.94 (9.71)	6	24.99 (10.68)	4
1 Week Post-Treatment	10.83 (10.25)	6	-	
1 Month Post-Treatment	10.00 (10.20)	6	-	

Note. Dashes represent time points at which BDI-II scores were not obtained from participants. BOH = Bread of Healing. SSCNC = Silver Spring Community Nursing Center. LOCF = Last observation carried forward. MI = Multiple Imputation.
[a]LOCF and MI were the two methods used to compute missing values at post-treatment for each of the groups.

Table 14

Phase 2 Descriptive Statistics at Baseline for Secondary Measures

Scales/Subscales	*M* (*SD*)	*n*
BADS-SF Total	24.48 (6.31)	6
SF-36 General Health	38.33 (29.78)	6
SF-36 Physical Functioning	50.83 (40.05)	6
SF-36 Role Limitations Due to Physical Functioning	39.58 (26.42)	6
SF-36 Social Functioning	39.58 (26.42)	6
SF-36 Pain	47.92 (36.93)	6
QLES-SF % score	32.83 (18.94)	6
STAXI-Trait-Anger Temperament	10.90 (4.99)	6
STAXI-Trait-Anger-Reaction	9.33 (3.88)	

Table 14 Continued

Scales/Subscales	*M* (*SD*)	*n*
		6
STAXI-Anger-In	19.67 (5.39)	
		6
STAXI-Anger-Out	13.07 (2.55)	
		6
STAXI-Anger-Control	24.69 (5.13)	

Note. Mean scores are derived from both waitlist and active group participants who completed self-report measures during the baseline period. BADS-SF = Behavioral Activation Depression Scale –Short Form. SF-36 = Short Form-36. STAXI = State-Trait Anger Expression Inventory.

Table 15

Phase 2 Hamilton Rating Scale for Depression Scores for Active and Waitlist Group Participants at Three Study Assessment Points

ID	Baseline HRSD	Mid-Treat. HRSD	Post-Treat. HRSD
	BA Group		
18	29	-	-
19	16	-	-
22	30	10	0
23	20	-	-
25	18	-	-
27	22	19	
30	21	-	-
	Waitlist Group		
16	25	-	-
17	20	-	-
20	23	22	21

Table 15 Continued

ID	Baseline HRSD	Mid-Treat. HRSD	Post-Treat. HRSD
21	25	-	-
24	21	-	-
26	25	-	-
28	21	-	-
29	29	-	-

Note. Dashes indicate that participant did not complete the assessment for the given time point. ID = Participant ID. BA = Behavioral Activation. HRSD = Hamilton Rating Scale for Depression. Mid-Treat. = Mid-Treatment. Post-Treat = Post-Treatment.

Table 16

Phase 2 Weekly Beck Depression Inventory II Scores for Active and Waitlist Group Participants

ID	Wk 1 BDI II	Wk 2 BDI II	Wk 3 BDI II	Wk 4 BDI II	Wk 5 BDI II	Wk 6 BDI II	Wk 7 BDI II	Wk 8 BDI II	Wk 9 BDI II	Wk 10 BDI II	Wk 11 BDI II	Wk 12 BDI II
					BA Group							
18	-	43	33	-	-	-	-	-	-	-	-	-
19	6	-	-	-	-	-	-	-	-	-	-	-
22	50	33	33	21	0	-	-	-	0	-	-	-
23	21	27	-	23	-	-	-	-	-	-	-	-
25	29	-	-	-	-	-	-	-	-	-	-	-
27	34	36	24	23	23	-	-	10	-	12	8	3
30	40	-	-	-	-	-	-	-	-	-	-	-
					Waitlist Group							
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-
20	44	-	-	-	-	44	-	-	-	-	-	45
21	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	49	-	-	-	-	-	-	-	-	-	-	49

Note. Dashes represent weeks during which BDI-II scores were not obtained from participants. BDI-II = Beck Depression Inventory II. ID = Participant ID. Wk = Week. BA = Behavioral Activation.

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Appendix A

Beck Depression Inventory II

Beck Depression Inventory

On this questionnaire are groups of statements. Please read each group carefully. then pick the one statement in each group which best describes the way you have been feeling the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

1.	0	I do not feel sad.	9.	0	I don't have any thoughts of killing myself.
	1	I feel sad.		1	I have thoughts of killing myself but I would not carry them out.
	2	I am sad all the time.		2	I would like to kill myself.
	3	I am so sad or unhappy that I can't stand it.		3	I would kill myself if I had the chance.
2.	0	I am not particularly discourage by the future.	10.	0	I don't cry anymore than usual.
	1	I feel discouraged about the future.		1	I cry more now than I used to.
	2	I feel I have nothing to look forward to.		2	I cry all the time now.
	3	I feel that the future is hopeless and that things cannot improve.		3	I used to be able to cry, but now I can't cry even though I want to.
3.	0	I do not feel like a failure.	11.	0	I am no more irritated now than I ever am.
	1	I feel I have failed more than the average person.		1	I get annoyed or irritated more easily than I used to.
	2	As I look back on my life, all I can see is a lot of failures.		2	I feel irritated all the time now.

	3	I feel I am a complete failure as a person.		3	I don't get irritated at all by the things that used to irritate me.
4.	0	I get as much satisfaction out of things as I used to.	12.	0	I have not lost interest in other people.
	1	I don't enjoy things the way I used to.		1	I am less interested in other people than I used to be.
	2	I don't get real satisfaction out of anything anymore.		2	I have lost most of my interest in other people.
	3	I am dissatisfied or bored with everything.		3	I have lost all my interest in other people.
5.	0	I don't feel particularly guilty.	13.	0	I make decisions about as well as I ever could.
	1	I feel guilty a good part of the time.		1	I put off making decisions more than I used to.
	2	I feel quite guilty most of the time.		2	I have greater difficulty in making decisions than before.
	3	I feel guilty all of the time.		3	I can't make decisions at all anymore.
6.	0	I don't feel I am being punished.	14.	0	I don't feel I look any worse than I used to.
	1	I feel I may be punished.		1	I am worried I am looking old or unattractive.
	2	I expect to be punished.		2	I feel that there are permanent changes in my appearance that make me look unattractive.
	3	I feel I am being punished.		3	I believe that I look ugly.
7.	0	I don't feel disappointed in	15.	0	I can work about as well as

myself.

1 I am disappointed in myself.

2 I am disgusted with myself.

3 I hate myself.

8. 0 I don't feel I am worse than anybody else.

1 I am critical of myself for my weaknesses or mistakes.

2 I blame myself all the time for my faults.

3 I blame myself for everything bad that happens.

16. 0 I can sleep as well as usual.

1 I don't sleep as well as I used to.

2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.

3 I wake up several hours earlier than I used to and cannot get back to sleep.

17. 0 I don't get more tired than usual.

1 I get tired more easily than I used to.

before.

1 It takes an extra effort to get started at doing something.

2 I have to push myself very hard to do anything.

3 I can't work at all.

19. 0 I haven't lost much weight, if any lately.

1 I have lost more than 5 pounds.

2 I have lost more than 10 pounds.

3 I have lost more than 15 pounds.

I am purposely trying to lose weight by eating less.

Yes _____ No _____

20. 0 I am no more worried about my health than usual.

1 I am worried about physical problems such as aches

2 I get tired from doing almost anything.

3 I am too tired to do anything.

18.

0 My appetite is no worse than usual.

1 My appetite is not as good as it used to be.

2 My appetite is much worse now.

3 I have no appetite at all anymore.

and pains or upset stomach and constipation.

2 I am very worried about physical problems and it's hard to think about anything else.

3 I am so worried about physical problems, that I cannot think about anything else.

21.

0 I have not noticed any recent change in my interest in sex.

1 I am less interested in sex than I used to be.

2 I am much less interested in sex now.

3 I have lost interest in sex completely.

Appendix B

Recruitment Script Phase 1

Thank you for your interest in our study. Our research laboratory at the University of Wisconsin has adapted a therapy for depression consistent with values and stressors relevant to African Americans. Participants who qualify for the study and choose to participate will receive 12 weekly sessions of group cognitive-behavioral therapy for depression beginning at the start of the study.

The group therapy offered in this study is free and will be facilitated by a licensed clinical psychologist and an advanced practice mental health nurse with a doctoral degree specializing in the treatment of depression. Sessions will take place at either the Silver Spring Community Nursing Center on 5460 North 64th Street in Milwaukee, or at the Bread of Healing Clinic located at 1821 North 16 Street in the city. The therapy used has been designed specifically address depression in African-American populations. Therapy will work on helping you to manage stress, and get active in areas that are important to you. As a part of therapy, you will be expected to share your experience with depression and listen to other group members' experiences. You will be given opportunities to practice the skills you learn inside and outside of session in order to help you better manage your depression. Therapy sessions will last for 2 hours. There will be 7 - 10 participants like you in the same group, receiving the same treatment.

In addition to receiving therapy you will be asked to complete brief questionnaires at the end of each session that will take 10 -15 minutes to complete. Participants will be asked to arrive at session five minutes early, to fill out a clinical measure that will help therapists keep track of the progress you are making on a weekly basis. These measures are to allow you to give us your feedback on the therapy, which will be very helpful to us for making future changes to our treatment to make it better and more effective. Once therapy is done, you will also be asked to attend a focus group session lasting 2 hours, where we will ask you, along with other group members, to share your experiences with the treatment overall. You will be asked to share any thoughts that you have regarding what aspects of therapy were helpful, clear, and any additional things we could add to make this therapy even better.

Those who qualify for the study will receive payment for their participation. First, you will receive $10 for completing the screen, regardless of whether you qualify or not. If you qualify and choose to participate in this study, you will also receive $10 for completing the questions at the end of each of the 12 sessions, for a total of $120 if you completing all of the questions at the end of the sessions. Finally, you will receive $20 for your participation in the 2 hour focus group at the end of treatment. You are therefore eligible to receive $150 over the course of the study if you qualify and complete all of the measures.

In order to determine whether you qualify for this study I will need to ask you some questions about your age, ethnicity, education level, ability to read and write, depression and any therapy or medication that you may currently be receiving for depression. You will also be asked questions about your mood, drugs, alcohol, anxiety, thoughts and behaviors. These questions generally take approximately 20 minutes. The interview can be completed either today, or at a more convenient time before the first week of the study. If you choose to participate, your answers to these questions will be stored separately from your name in a locked file cabinet in a locked research office at UWM. You are free not to answer any of these screening questions, but failure to answer questions will make you ineligible for the study. If you choose not to answer any of the questions, or if you choose not to participate in this screen, your ability to receive services from or participate in research at UWM, Silver Spring Community Nursing Center and Bread of Healing Clinic will not be affected. Would you like to continue with the screen?".

Appendix C

Weekly Acceptability Questions

BHS1Q1 How clear was the presentation of education about depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS1Q2 How clear was the presentation of activity monitoring?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS1Q3 How clear was the presentation of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS1Q4 How clear was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS1Q5 How relevant was the presentation of about depression?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Relevant

BHS1Q6 How relevant was the presentation of activity monitoring?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Relevant

BHS1Q7 How relevant was the presentation of values and goals?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Relevant

BHS1Q8 How relevant was the scheduling of activity practice?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Relevant

BHS1Q9 Based on what you've learned today about what you will be doing during this group, how relevant do you think this group is to dealing with your specific problems?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Relevant

BHS1Q10 What are your thoughts on the amount of time spent on education about depression?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS1Q11 What are your thoughts on the amount of time spent on activity monitoring?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS1Q12 What are your thoughts on the amount of time spent on values and goals?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS1Q13 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS1Q14 How much do you feel you've learned about depression today?

1	2	3	4	5
Nothing		Some		A lot

BHS1Q15 Please describe any aspects of education about depression, activity monitoring, values and goals assessment, and activity scheduling that remain confusing or unclear to you?

BHS1Q16 Please describe any aspects of the education on depression, activity monitoring, values and goals assessment, and activity scheduling that you felt were not relevant and why these were not relevant.

BHS1Q17 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS1Q18 Please provide any additional positive and negative feedback regarding today's session. Describe any ways we can improve the material

BHS2Q1 How clear was the presentation of activity monitoring?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q2 How clear was the presentation of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q3 How clear was the presentation on scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q4 How clear was the education about stress?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q5 How clear was the education on progressive muscle relaxation?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q6 How clear was the review of paced breathing?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q7 How clear was the presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS2Q8 How relevant was the presentation of activity monitoring?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q9 How relevant was the presentation of values and goals?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q10 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q11 How relevant was the presentation about stress?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q12 How relevant was the presentation of progressive muscle relaxation?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q13 How relevant was the presentation of paced breathing?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q14 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely Releveant

BHS2Q15 How much do you feel you've learned about stress reduction strategies today?

1	2	3	4	5
Nothing		Some		A lot

BHS2Q16 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely Helpful

BHS2Q17 Please describe any aspects of education about stress, stress reduction strategies, activity monitoring, values and goals assessment, creating the activity hierarchy and activity scheduling that remain confusing or unclear to you?

BHS2Q18 Please describe any aspects of the education on stress, stress reduction strategies, activity monitoring, values and goals assessment, and activity scheduling that you felt were not relevant and why these were not relevant.

BHS2Q19Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS2Q20 Please provide any additional positive and negative feedback you have on any of the components of today's session.

BHS2Q20 Please describe any specific difficulties you had with completing your activity practice assignments over the last week. Describe any ways we can improve the material.

BHS4Q1 How clear was the education about stress?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS4Q2 How clear was the education on progressive muscle relaxation?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS4Q3 How clear was the review of paced breathing?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS4Q4 How clear was the presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS4Q5 How relevant was the presentation about stress?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS4Q6 How relevant was the presentation of progressive muscle relaxation?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS4Q7 How relevant was the presentation of paced breathing?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS4Q8 Based on what you've learned today about what you will be doing in therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS4Q9 How much do you feel you've learned about stress reduction strategies today?

1	2	3	4	5
Nothing		Some		A lot

BHS4Q10 How helpful was it to work wit a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS4Q11 Please describe any aspects of education about stress, stress reduction strategies, creating the activity hierarchy, and activity scheduling that remain confusing or unclear to you?

BHS4Q12

Please describe any aspects of the education on stress, stress reduction strategies, and activity scheduling that you felt were not relevant and why these were not relevant.

BHS4Q13

Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS4Q14

Please provide any additional positive and negative feedback you have on any of the components of today's session.

BHS4Q15

Please describe any specific difficulties you had with completing your activity practice assignments over the last week. Describe any ways we can improve the material.

BHS5Q1 How clear was the review of paced breathing?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS5Q2 How clear was the review of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS5Q3 How clear was the presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS5Q4 How relevant was the presentation of paced breathing?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS5Q5 How relevant was the review of values and goals?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS5Q6 How relevant was the construction of the activity hierarchy?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS5Q7 Based on what you've learned today about what you will be doing during thearapy, how relevant do think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all Relevant		Relevant		Extremely relevant

BHS5Q8 What are your thoughts on the amount of time spent learning relaxation strategies?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS5Q9 What are your thoughts on the amount of time discussing values and goals?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS5Q10 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS5Q11 What are your thoughts on the amount of time spent creating the hierarchy?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS5Q12 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		helpful		Extremely helpful

BHS5Q13 Please describe any aspects of stress reduction strategies, activity monitoring, values and goals assessment, creating the activity hierarchy, and activity scheduling that remain confusing or unclear to you?

BHS5Q14 Please describe any aspects of stress reduction strategies, activity monitoring, values and goals assessment, and activity scheduling that you felt were not relevant and why these were not relevant.

BHS5Q15 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS5Q16 Please provide any additional positive and negative feedback you have on any of the components of today's session.

BHS5Q17 Please describe any specific difficulties you had with completing your activity practice assignments over the last week. Describe any ways we can improve the material.

BHS6Q1 How clear was the presentation scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS6Q2 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q3 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS6Q4 How clear was the education about stress?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS6Q5 How clear was the review of paced breathing?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS6Q6 How clear was presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS6Q7 How relevant was the presentation about stress?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q8How relevant was the presentation of paced breathing?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q9 How relevant was the construction of the activity hierarchy?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q10 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q11 What are your thoughts on the amount of time spent on learning relaxation strategies?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS6Q12 What are your thoughts on the amount of time spent creating the activity hierarchy?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS6Q13How much do you feel you've learned about stress reduction strategies today?

1	2	3	4	5
Nothing		Some		A lot

BHS6Q14 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS6Q15 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS6Q16 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS6Q17 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS6Q18 Please describe any aspects of paced breathing, relaxation strategies, values and goals assessment, activity scheduling, and creating the activity hierarchy that remain confusing or unclear to you?

BHS6Q19 Please describe any aspects of paced breathing, relaxation strategies,, values and goals assessment, activity scheduling, and creating an activity hierarchy that you felt were not relevant and why these were not relevant.

BHS6Q20 Please describe any aspects of the education on stress, stress reduction strategies, creating the activity hierarchy and activity scheduling that you felt were not relevant and why these were not relevant.

BHS6Q21 Please describe any specific difficulties you had with completing your activity practice assignments over the last week. Describe any ways we can improve the material.

BHS6Q22 Please describe any aspects of functional assessment procedures and interventions that remain unclear or confusing?

BHS6Q23 Please describe any aspects functional assessment procedures and interventions that you felt were not relevant and why these were not relevant.

BHS6Q24 Please describe any difficulties you had with using the stress reduction strategies taught during the previous week.

BHSQ25 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material

BHS7Q1 How clear was the education about Cardiovascular Disease and diabetes?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS7Q2 How clear was the review of tips for healthy living?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS7Q3 How clear was the activity where you thought about the consequences of unhealthy living?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS7Q4 How relevant was the presentation on Cardiovascular Disease and diabetes?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS7Q5 How relevant was the presentation of tips for healthy living?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS7Q6 How relevant was the exercise regarding consequences of unhealthy living?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS7Q7 How relevant was the provision of health resource packets?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS7Q8 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS7Q9 What are your thoughts on the amount of time spent on education about cardiovascular disease and diabetes?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS7Q10 What are your thoughts on the amount of time spent on tips for healthy living?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS7Q11 What are your thoughts on the amount of time spent discussing consequences of unhealthy living?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS7Q12 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS7Q13 How much do you feel you've learned about Cardiovascular Disease and diabetes today?

1	2	3	4	5
Nothing		Some		A lot

BHS7Q14 How likely is it that you will start to engage in some of the healthy living tips learned today?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS7Q15 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS7Q16 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS7Q17 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS7Q18 Please describe any aspects of education about cardiovascular disease and diabetes, healthy living tips, consequences of unhealthy living, functional assessment procedures, and activity scheduling that remain confusing or unclear to you?

BHS7Q19Please describe any aspects of the education on cardiovascular disease and diabetes, healthy living tips, consequences of unhealthy living, functional assessment procedures, and activity scheduling that you felt were not relevant and why these were not relevant.

BHS7Q20 Please describe any additional topics related to cardiovascular disease and diabetes that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS7Q21Please describe any difficulties you had with using the stress reduction strategies taught during the previous week.

BHS7Q22Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

BHS8Q1How clear was the exercise from last session about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS8Q2 How clear was the education about Chronic pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS8Q3 How clear was the discussion of the relationship between mindfulness and pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS8Q4 How clear were the mindfulness activities?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS8Q5 How clear was the discussion of the consequences of chronic pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS8Q6 How relevant was the exercise from last session about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS8Q7 How relevant were the mindfulness exercises in teaching you mindfulness?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS8Q8 How relevant was use of mindfulness for pain?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS8Q9 How relevant was the exercise regarding consequences of pain?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS8Q10 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS8Q11 What are your thoughts on the amount of time spent on the exercise from last session about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS8Q12 What are your thoughts on the amount of time spent on education of chronic pain and mindfulness?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS8Q13 What are your thoughts on the amount of time spent on mindfulness practice?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS8Q14 What are your thoughts on the amount of time spent discussing consequences of chronic pain?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS8Q15 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS8Q16 How much do you feel you've learned about mindfulness and chronic pain today?

1	2	3	4	5
Nothing		Some		A lot

BHS8Q17 How likely is it that you will start to engage in mindfulness practice for pain over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS8Q18 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS8Q19 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS8Q20 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS8Q21 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS8Q22 Please describe any aspects of education about mindfulness and chronic pain, functional assessment procedures, and activity scheduling or anything else reviewed today that remain confusing or unclear to you?

BHS8Q23 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

BHS8Q24 Please describe any additional topics related to chronic pain and mindfulness that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS8Q25 Please describe any difficulties you had with using the stress reduction strategies, or healthy living tips taught during the previous weeks.

BHS8Q26 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

BHS9Q1 How clear was the education about anger and racism?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS9Q2 How clear was the discussion of the relationship between racism, anger and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS9Q3 How clear was the exercise where you reviewed all of the different components of anger?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS9Q4 How clear were the skills taught for managing anger?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS9Q5 How relevant were the education about racism and anger?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS9Q6 How relevant was the discussion of the relationship between anger, depression and racism?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS9Q7 How relevant was the exercise regarding the different components of anger?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS9Q8 How relevant were the skills taught for managing anger?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS9Q9 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS9Q10 What are your thoughts on the amount of time spent on education of anger discrimination and depression?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS9Q11 What are your thoughts on the amount of time spent on reviewing the components of anger?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS9Q12 What are your thoughts on the amount of time spent discussing skills for managing your anger?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS9Q13 How much do you feel you've learned about anger today?

1	2	3	4	5
Nothing		Some		A lot

BHS9Q14 How likely is it that you will start to engage in anger managements strategies over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS9Q15 How much do you feel your therapists understand your experience of discrimination?

1	2	3	4	5
Not at all		Somewhat		A lot

BHS9Q16 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS9Q17 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS9Q18 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS9Q19 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS9Q20 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS9Q21 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS9Q22 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS9Q23 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

BHS9Q24 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

BHS9Q25 Please describe any additional topics related to anger and discrimination that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS9Q26 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, or mindfulness of pain taught during the previous weeks.

BHS9Q27 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

BHS10Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS10Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q3 How clear was the education about unemployment and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS10Q4 How clear was the exercise where you reviewed the benefits of obtaining better employment?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS10Q5 How clear were the steps discussed for initiating employment seeking?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS10Q6 How relevant were the education about unemployment and depression?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS10Q7 How relevant was the exercise reviewing steps for initiating employment seeking?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS10Q8 How relevant was the exercise reviewing the benefits of obtaining better employment?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS10Q9 What are your thoughts on the amount of time spent on education of depression and unemployment?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q10 What are your thoughts on the amount of time spent on reviewing tips for initiating employment seeking?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q11 What are your thoughts on the amount of time spent discussing the benefits of seeking employment?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q12 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q13 How much do you feel you've learned about strategies for unemployment today?

1	2	3	4	5
Nothing		Some		A lot

BHS10Q14 How likely is it that you will start to engage in tasks for seeking better employment over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS10Q15 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS10Q16 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS10Q17 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS10Q18 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS10Q19 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS10Q20 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS10Q21 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS10Q22 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS10Q23 How much success did you have with managing anger strategies over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS10Q24 How helpful were strategies for managing anger effectively over the past week?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

BHS10Q25 How helpful do you think the community resource packet will be?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

BHS10Q26 What is the likelihood that you will use this packet?

1	2	3	4	5
None		Some		A lot

BHS10Q27 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

BHS10Q28 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

BHS10Q29 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS10Q30 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, mindfulness of pain, or effectively managing anger taught during the previous weeks.

BHS10Q31 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

BHS11Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS11Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q3 How clear was the education about social support and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS11Q4 How clear was the discussion of spirituality?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS11Q5 How clear was the discussion of steps for seeking social support?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS11Q6 How clear was the spirituality assessment?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS11Q7 How clear was the reason for including the spirituality meditation?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

BHS11Q8 How relevant were the education on social support and depression?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q9 How relevant was the discussion on spirituality?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q10 How relevant was the discussion of steps for seeking social support?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q11 How relevant was the spirituality assessment?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q12 How relevant was the spirituality meditation?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q13 What are your thoughts on the amount of time spent on discussing social support?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q14 What are your thoughts on the amount of time spent on discussing spirituality?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q15 What are your thoughts on the amount of time spent discussing the benefits of seeking social support?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q16 What are your thoughts on the amount of time spent discussing the benefits of spirituality?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q17 How much do you feel you've learned about seeking social support today?

1	2	3	4	5
Nothing		Some		A lot

BHS11Q18 How likely is it that you will start to engage in tasks for seeking more social support the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS11Q19 How likely is it that you will start to engage in tasks related to becoming more spiritual in the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

BHS11Q20 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

BHS11Q21 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

BHS11Q22 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS11Q23 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS11Q24 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS11Q25 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

BHS11Q26 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS11Q27 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS11Q28 How much success did you have with managing anger strategies over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS11Q29 How helpful were strategies for managing anger effectively over the past week?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

BHS11Q30 How helpful was the resource packet for financial assistance?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

BHS11Q31 How much success did you have engaging in employment related activities over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

BHS11Q32 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

BHS11Q33 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

BHS11Q34 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

BHS11Q35 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, mindfulness of pain, or effectively managing anger taught during the previous weeks.

BHS11Q36 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS1Q1 How clear was the presentation of education about depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS1Q2 How clear was the presentation of activity monitoring?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS1Q3 How clear was the presentation scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS1Q4 How relevant was the presentation about depression?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS1Q5 How relevant was the presentation of activity monitoring?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS1Q6 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS1Q7 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS1Q8 What are your thoughts on the amount of time spent on education about depression?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS1Q9 What are your thoughts on the amount of time spent on activity monitoring?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS1Q10 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS1Q11 How much do you feel you've learned about depression today?

1	2	3	4	5
Nothing		Some		A lot

SSS1Q12 Please describe any aspects of education about depression, activity monitoring, and activity scheduling that remain confusing or unclear to you?

SSS1Q13 Please describe any aspects of the education on depression, activity monitoring, and activity scheduling that you felt were not relevant and why these were not relevant.

SSS1Q14 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS1Q15 Please provide any additional positive and negative feedback regarding today's session. Describe any ways we can improve the material.

SSS2Q1 How clear was the education about stress?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q2How clear was the education on progressive muscle relaxation?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q3How clear was the review of paced breathing?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q4How clear was the review of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q5 How clear was presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q6 How clear was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS2Q7 How relevant was the presentation about stress?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q8 How relevant was the presentation of progressive muscle relaxation?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q9 How relevant was the presentation of paced breathing?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q10 How relevant was the review of values and goals?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q11 How relevant was the construction of the activity hierarchy?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q12 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q13 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS2Q14 What are your thoughts on the amount of time spent on education about stress?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS2Q15 What are your thoughts on the amount of time spent on learning relaxation strategies?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS2Q16 What are your thoughts on the amount of time spent discussing values and goals?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS2Q17 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS2Q18 What are your thoughts on the amount of time spent creating the activity hierarchy?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS2Q19 How much do you feel you've learned about stress reduction strategies today?

1	2	3	4	5
Nothing		Some		A lot

SSS2Q20 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS2Q21 Please describe any aspects of education about stress, stress reduction strategies, activity monitoring, values and goals assessment, creating the activity hierarchy and activity scheduling that remain confusing or unclear to you?

SSS2Q22 Please describe any aspects of the education on stress, stress reduction strategies, activity monitoring, values and goals assessment, and activity scheduling that you felt were not relevant and why these were not relevant.

SSS2Q23 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS2Q24 Please provide any additional positive and negative feedback you have on any of the components of today's session.

SSS2Q25 Please describe any specific difficulties you had with completing your activity practice assignments over the last week. Describe any ways we can improve the material.

SSS3Q1 How clear was the presentation of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS3Q2 How clear was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS3Q3 How relevant was the presentation of values and goals?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS3Q4 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS3Q5 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS3Q6 What are your thoughts on the amount of time spent on values and goals?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS3Q7 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS3Q8 How clear was presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS3Q9 How relevant was the construction of the activity hierarchy?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS3Q10 What are your thoughts on the amount of time spent creating the activity hierarchy?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS3Q11 How much do you feel you've learned about stress reduction strategies today?

1	2	3	4	5
Nothing		Some		A lot

SSS3Q12 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS3Q13 How helpful was Progressive Muscle Relaxation over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS3Q14 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS3Q15 Please describe any aspects of the values and goals assessment, the activity list (hierarchy) and activity scheduling that remain confusing or unclear to you?

SSS3Q16 Please describe any aspects of the values and goals assessment, the activity list and activity scheduling that you felt were not relevant and why these were not relevant.

SSS3Q17 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS3Q18 Please provide any additional positive and negative feedback regarding any of the components of today's session. Describe any ways we can improve the material.

SSS4Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS4Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS4Q3 How clear was the presentation of values and goals?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS4Q4 How clear was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS4Q5 How relevant was the presentation of values and goals?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS4Q6 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS4Q7 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS4Q8 What are your thoughts on the amount of time spent on values and goals?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS4Q9 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS4Q10 How clear was presentation of the activity hierarchy?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS4Q11 How relevant was the construction of the activity hierarchy?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS4Q12 What are your thoughts on the amount of time spent creating the activity hierarchy?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS4Q13 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS4Q14 How helpful was Progressive Muscle Relaxation over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS4Q15 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS4Q16 Please describe any aspects of the values and goals assessment, the activity list (hierarchy) and activity scheduling that remain confusing or unclear to you?

SSS4Q17 Please describe any aspects of the values and goals assessment, the activity list and activity scheduling that you felt were not relevant and why these were not relevant.

SSS4Q18 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS4Q19 Please provide any additional positive and negative feedback regarding any of the components of today's session. Describe any ways we can improve the material.

SSS5Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS5Q2 How clear was the education about Cardiovascular Disease and diabetes?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS5Q3 How clear was the review of tips for healthy living?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS5Q4 How clear was the activity where you thought about the consequences of unhealthy living?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS5Q5 How relevant was the presentation on Cardiovascular Disease and diabetes?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q6 How relevant was the presentation of tips for healthy living?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q7 How relevant was the exercise regarding consequences of unhealthy living?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q8 How relevant was the provision of health resource packets?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q9 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q10 What are your thoughts on the amount of time spent on education about cardiovascular disease and diabetes?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS5Q11 What are your thoughts on the amount of time spent on tips for healthy living?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS5Q12 What are your thoughts on the amount of time spent discussing consequences of unhealthy living?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS5Q13 How much do you feel you've learned about Cardiovascular Disease and diabetes today?

1	2	3	4	5
Nothing		Some		A lot

SSS5Q14 How likely is it that you will start to engage in some of the healthy living tips learned today?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS5Q15 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS5Q16 How clear was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS5Q17 How relevant was the presentation of scheduling activity practice?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS5Q18 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS5Q19 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS5Q20 How helpful was Progressive Muscle Relaxation over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS5Q21 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS5Q22 Please describe any aspects of the values and goals assessment, the activity list (hierarchy) and activity scheduling that remain confusing or unclear to you?

SSS5Q23 Please describe any aspects of the values and goals assessment, the activity list and activity scheduling that you felt were not relevant and why these were not relevant.

SSS5Q24 Please describe any additional topics related to depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS5Q25 Please provide any additional positive and negative feedback regarding any of the components of today's session. Describe any ways we can improve the material.

SSS6Q1 How clear was the education about Chronic pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS6Q2 How clear was the discussion of the relationship between mindfulness and pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS6Q3 How clear were the mindfulness activities?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS6Q4 How clear was the discussion of the consequences of chronic pain?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS6Q5 How relevant were the mindfulness exercises in teaching you mindfulness?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS6Q6 How relevant was use of mindfulness for pain?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS6Q7 How relevant was the exercise regarding consequences of pain?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS6Q8 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS6Q9 What are your thoughts on the amount of time spent on education of chronic pain and mindfulness?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS6Q10 What are your thoughts on the amount of time spent on mindfulness practice?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS6Q11 What are your thoughts on the amount of time spent discussing consequences of chronic pain?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS6Q12 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS6Q13 How much do you feel you've learned about mindfulness and chronic pain today?

1	2	3	4	5
Nothing		Some		A lot

SSS6Q14 How likely is it that you will start to engage in mindfulness practice for pain over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS6Q15 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS6Q16How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS6Q17 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS6Q18 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS6Q19 Please describe any aspects of education about mindfulness and chronic pain and activity scheduling or anything else reviewed today that remain confusing or unclear to you?

SS6Q20 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS6Q21 Please describe any additional topics related to chronic pain and mindfulness that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS6Q22 Please describe any difficulties you had with using the stress reduction strategies, or healthy living tips taught during the previous weeks.

SSS6Q23 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS7Q1 How clear was the education about anger and racism?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS7Q2 How clear was the discussion of the relationship between racism, anger and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS7Q3 How clear was the exercise where you reviewed all of the different components of anger?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS7Q4 How clear were the skills taught for managing anger effectively?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS7Q5 How relevant were the education about racism and anger?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS7Q6 How relevant was the discussion of the relationship between anger, depression and racism?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS7Q7 How relevant was the exercise regarding the different components of anger?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS7Q8 How relevant were the skills taught for managing anger effectively?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS7Q9 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS7Q10 What are your thoughts on the amount of time spent on education of anger discrimination and depression?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS7Q11 What are your thoughts on the amount of time spent on reviewing the components of anger?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS7Q12 What are your thoughts on the amount of time spent discussing skills for managing your anger effectively?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS7Q13 How much do you feel you've learned about anger today?

1	2	3	4	5
Nothing		Some		A lot

SSS7Q14 How likely is it that you will start to engage in anger managements strategies over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS7Q15 How much do you feel your therapists understand your experience of discrimination?

1	2	3	4	5
Not at all		Somewhat		A lot

SSS7Q16 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS7Q17 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS7Q18 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS7Q19 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS7Q20 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS7Q21 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS7Q22 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS7Q23 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS7Q24 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS7Q25 Please describe any additional topics related to anger and discrimination that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS7Q26 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, or mindfulness of pain taught during the previous weeks.

SSS7Q27 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS8Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS8Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q3 How clear was the education about unemployment and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS8Q4 How clear was the exercise where you reviewed the benefits of obtaining better employment?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS8Q5 How clear were the steps discussed for initiating employment seeking?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS8Q6 How relevant were the education about unemployment and depression?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS8Q7 How relevant was the exercise reviewing steps for initiating employment seeking?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS8Q8 How relevant was the exercise reviewing the benefits of obtaining better employment?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS8Q9 What are your thoughts on the amount of time spent on education of depression and unemployment?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q10 What are your thoughts on the amount of time spent on reviewing tips for initiating employment seeking?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q11 What are your thoughts on the amount of time spent discussing the benefits of seeking employment?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q12 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q13 How much do you feel you've learned about strategies for unemployment today?

1	2	3	4	5
Nothing		Some		A lot

SSS8Q14 How likely is it that you will start to engage in tasks for seeking better employment over the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS8Q15 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS8Q16 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS8Q17 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS8Q18 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS8Q19 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS8Q20 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS8Q21 How much success did you have with mindfulness for pain and difficult emotions over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS8Q22 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS8Q23 How much success did you have with managing anger strategies over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS8Q24 How helpful were strategies for managing anger effectively over the past week?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

SSS8Q25 How helpful do you think the community resource packet will be?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

SSS8Q26 What is the likelihood that you will use this packet?

1	2	3	4	5
None		Some		A lot

SSS8Q27 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS8Q28 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS8Q29 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS8Q30 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, mindfulness of pain, or effectively managing anger taught during the previous weeks.

SSS8Q31 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS9Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS9Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q3 How clear was the education about social support and depression?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS9Q4 How clear was the discussion of spirituality?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS9Q5 How clear was the discussion of steps for seeking social support?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS9Q6 How clear was the spirituality assessment?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS9Q7 How clear was the reason for including the spirituality meditation?

1	2	3	4	5
Not at all Clear		Clear		Extremely Clear

SSS9Q8 How relevant were the education on social support and depression?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q9 How relevant was the discussion on spirituality?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q10 How relevant was the discussion of steps for seeking social support?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q11 How relevant was the spirituality assessment?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q12 How relevant was the spirituality meditation?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q13 What are your thoughts on the amount of time spent on discussing social support?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q14 What are your thoughts on the amount of time spent on discussing spirituality?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q15 What are your thoughts on the amount of time spent discussing the benefits of seeking social support?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q16 What are your thoughts on the amount of time spent discussing the benefits of spirituality?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q17 How much do you feel you've learned about seeking social support today?

1	2	3	4	5
Nothing		Some		A lot

SSS9Q18 How likely is it that you will start to engage in tasks for seeking more social support the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS9Q19 How likely is it that you will start to engage in tasks related to becoming more spiritual in the next week?

1	2	3	4	5
Extremely unlikely		Likely		Extremely Likley

SSS9Q20 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS9Q21 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS9Q22 How helpful was it to work with a partner in developing activity practice assignments?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS9Q23 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS9Q24 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS9Q25 How helpful was practicing mindfulness of pain over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS9Q26 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS9Q27 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS9Q28 How much success did you have with managing anger strategies over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS9Q29 How helpful were strategies for managing anger effectively over the past week?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

SSS9Q30 How helpful was the resource packet for financial assistance?

1	2	3	4	5
No help at all		Helpful		Extremely helpful

SSS9Q31 How much success did you have engaging in employment related activities over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS9Q32 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS9Q33 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS9Q34 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS9Q35 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, mindfulness of pain, employment tips or effectively managing anger taught during the previous weeks.

SSS9Q36 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS10Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS10Q2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS10Q3 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS10Q 4 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS10Q 5 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS10Q 6 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS10Q 7 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 8 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 9 How much success did you have with managing anger strategies over the past week

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 10 How much success did you have engaging in employment related activities over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 11 How much success did you have seeking social support in the previous week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 12 How much success did you have with connecting with spirituality of some form in relation to your depression?

1	2	3	4	5
No success at all		Success		A lot of success

SSS10Q 13 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS10Q 14 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS10Q 15 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS10Q 16 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, or mindfulness of pain, anger management strategies, seeking social support, or using spirituality taught during the previous weeks.

SSS10Q 17 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS11Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS11Q 2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS11Q 3 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS11Q 4 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS11Q 5 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS11Q 6 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS11Q 7 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 8 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 9 How much success did you have with managing anger strategies over the past week

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 10 How much success did you have engaging in employment related activities over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 11 How much success did you have seeking social support in the previous week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 12 How much success did you have with connecting with spirituality of some form in relation to your depression?

1	2	3	4	5
No success at all		Success		A lot of success

SSS11Q 13 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS11Q 14 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS11Q 15 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS11Q 16 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, or mindfulness of pain, anger management strategies, seeking social support, or using spirituality taught during the previous weeks.

SSS11Q 17 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

SSS12Q1 How helpful was homework review in addressing specific problems that you encountered with assignments over the previous week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS12Q 2 What are your thoughts on the amount of time spent on homework review?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS12Q 3 What are your thoughts on the amount of time spent on activity scheduling?

1	2	3	4	5
Way too little time		Just enough time		Way too much time

SSS12Q 4 Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?

1	2	3	4	5
Not at all relevant		Relevant		Extremely relevant

SSS12Q 5 How helpful was PMR over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS12Q 6 How helpful was paced breathing over the past week?

1	2	3	4	5
Not helpful at all		Helpful		Extremely helpful

SSS12Q 7 How much success did you have with healthy living over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 8 How much success did you have with mindfulness for pain over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 9 How much success did you have with managing anger strategies over the past week

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 10 How much success did you have engaging in employment related activities over the past week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 11 How much success did you have seeking social support in the previous week?

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 12 How much success did you have with connecting with spirituality of some form in relation to your depression?

1	2	3	4	5
No success at all		Success		A lot of success

SSS12Q 13 How confident are you in using the skills you've learned once the group ends

1	2	3	4	5
Not at all confident		Confident		Extremely Confident

SSS12Q 14 Please describe any aspects of education or components reviewed today that remain confusing or unclear to you?

SSS12Q 15 Please describe any aspects of the materials reviewed today that you felt were not relevant and why these were not relevant.

SSS12Q 16 Please describe any additional topics related to unemployment and depression that we did not cover, but which you would like to learn more about and why you would like to learn more about these.

SSS12Q 17 Please describe any difficulties you had with using the stress reduction strategies, healthy living tips, or mindfulness of pain, anger management strategies, seeking social support, or using spirituality taught during the previous weeks.

SSS12Q 18 Please describe how you plan to continue using the skills learned once the group stops meeting.

SSS12Q 19 Please provide any additional positive and negative feedback you have on any of the components of today's session. Describe any ways we can improve the material.

Appendix D

Focus Group Questions

The purpose of focus groups is to generate a discussion. As a result, there are not many specific questions formulate a priori. In order to facilitate discussion, basic questions will be asked such as:

What are the things you liked best about therapy?

What are aspects of the therapy that you did not like?

What was most helpful? How was it helpful?

What should we be doing more of with our therapy?

What should we doing less of with our therapy?

What would be some improvements that you would suggest?

How did we do with our attempt to be culturally sensitive to the needs of African Americans?

Appendix E

Suicide Protocol

OVERVIEW

This Suicide Protocol was adapted from the Assessment and Treatment of Suicidal Behavior (Linehan, 1998). These guidelines aim to assist in conducting comprehensive risk assessments and in managing suicidal emergencies.

When to conduct suicide assessment?

A suicide assessment should be conducted when the patient has given information that suggests s/he may be at risk such as:

1. a score of 2 or greater on item 9 of the Beck Depression Inventory (BDI), or
2. an affirmative response to an MMPI critical item, or
3. response of "sometimes" or higher on item 8 on the Outcome Questionnaire (OQ), or
4. Polaris information?, or
5. given any other information that suggest s/he may be at risk.

What to do?

1. Clarify the patient's responses to complete the *Suicide Risk Assessment Worksheet*.
2. Review the *Suicide Risk Assessment Worksheet* and consult with another clinician if you have any doubt about the patient's safety. Do this ***immediately*, do not wait.** Do not continue with the interview until you are sure that the patient is not at imminent risk.
3. Use the *Managing Imminent Suicide Risk Worksheet*. If at the end of this worksheet, suicide risk is still present, call your supervisor back for more consultation.
4. Provide the patient the crisis line phone number and the phone number for the Emergency Rooms for various hospitals in the area.
5. Once the interview is complete, call your supervisor to tell him/her how it ended. Write a brief narrative explaining the risk assessment, plan of action, and follow-up information.
6. PIs Dr. Kanter and William Bowe, should be notified of suicidal clients in the clinic as soon as possible.

SUICIDE RISK ASSESSMENT WORKSHEET

Y	N	1.	Serious suicide ideation. What is your urge to harm yourself right now? What is your intent to kill yourself right now? How often do you think about suicide? How well can you control your thinking about suicide right now?
Y	N	2.	Credible suicide threats. How well can you control your emotions right now? How well can you control your actions and behavior right now?
Y	N	3.	Suicide planning and/or preparation. Do you have a preferred plan or method for committing suicide? What have you done to prepare for suicide? Have you made any plans for committing suicide? If you were to commit suicide, how would you attempt it?
Y	N	4.	Suicide note written or in progress. Have you written a goodbye letter, a suicide note or a letter of explanation? Have you thought about what you might say in such a note?
Y	N	5.	Methods available or easily obtained. Tell me what you were thinking about? Are the means available? (e.g., if the person prefers a gun, do they have a gun in the house?) Is it locked up? Do you know how to use it? Is it loaded? Do you have bullets? What about pills?
Y	N	6.	Precautions against discovery or intervention; deception or concealment about timing, place, etc. Are you doing anything to ensure that people don't find out about your suicide attempt? Would you take steps to save your life? Would they call a therapist, friend, and crisis line if you were feeling suicidal?
Y	N	7.	Indirect references to own death, arrangements for death.
Y	N	8.	History of parasuicide under very similar precipitating circumstances.
Y	N	9.	Recent disruption or loss of interpersonal relationship; negative environmental changes in past month; recent psychiatric hospital discharge.
Y	N	10.	Isolation. Would you ask someone to come over if they were feeling suicidal? Are you socializing with people? Are there people you can socialize with?
Y	N	11.	Indifference to or dissatisfaction with therapy.
Y	N	12.	Recent medical care.
Y	N	13.	Abrupt clinical change, either negative or positive.
Y	N	14.	Current hopelessness, anger, guilt, or a combination.

Y	N	15.	Depressive turmoil, severe anxiety, panic attacks, severe mood cycling.
Y	N	16.	Global insomnia
Y	N	17.	Severe anhedonia
Y	N	18.	Diminished concentration, indecision
Y	N	19.	Alcohol consumption. Has the person been drinking recently? Are they drinking when they think about suicide?
Y	N	20.	Drug use.
Y	N	21.	DeterrentsWhat is stopping you from committing suicide? Pay attention to how stable or unstable the deterrents are.

MANAGING IMMINENT SUICIDE RISK WORKSHEET

1. **Behaviors/information that precipitated risk assessment:**
   ____Identify the events which have set off the current emotional response.
   ____Formulate and summarize the problem situation with the person.

2. **Focus on problem solving:**
   ____Emphatically instruct the person not to commit suicide.
   ____Confront the patient's ideas of suicidal behavior directly.
   ____Give advice and make direct suggestions (offer skills suggestions).
   ____Clarify and reinforce adaptive responses by the client.
   ____Predict future consequences of various plans of action.

3. **Address environmental high risk factors:**
   ____Remove or convince the patient to remove availability of lethal means.
   ____Remove or counteract effects of modeling of suicidal behaviors.
   ____Highlight (create or threaten) negative consequences for suicidal behavior.
   ____Highlight (create or promise) positive consequences for non-suicidal behavior.
   ____Increase social support (when suicide is imminent and high, keep or arrange contact with patient, and communicate to network).
   ____Remove or reduce stressful/prompting events. (when suicide is imminent and high, intervene and arrange intervention to stop suicide event that the patient cannot control. Also can remove the patient from the environment by escorting person to Emergency Room or calling police.).

4. **Address behavioral high risk factors**:
   ____Pay attention to affect/current emotion rather than content (focus on affect tolerance).
   ____Address function rather than meaning of current ideation/ruminations.
   ____Consider short term biologic treatment (especially for insomnia, severe agitation/panic,
   psychotic processes.
   ____Generate hope and reasons for living.

5. **Develop and commit to a plan of action.**
   ____Ask the person to agree to not to hurt themselves until they gets appropriate treatment. This agreement should be written down and the person should be able to convince you that they will follow the plan of action if suicidal.
   ____Ask directly if the patient intends to keep the agreement and if the contract will be sufficient to keep her from hurting herself until she receives proper treatment.
   ____Identify factors interfering with productive plans of action.

6. **Arrange for someone to pick the person up**.
   Find out if there is a relative or a close friend that can come pick the person up and stay with him. Find out who the person is, and encourage the person to call them from the clinic. Then, find out from the person if someone is coming to pick them up, who they are, and when they are coming. Then stay with the person until the person arrives.

7. **Voluntary admission to a hospital.**
   If the person is unwilling to make a contract, and no one can come pick them up, ask

if they would go with you to the Emergency Room. If at this point they say that they are not willing to go, you can either:

A. Try either 3, 4 or 5 again, or;
B. Express to them the dilemma that you can't let them leave if you are convinced that they are going to commit suicide, and attempt to engage them in solving this problem.

Once the person has agreed to go to a hospital, you should try to go to the nearest one. See list of other hospitals available. When you contact any one of these hospitals, you need to tell them who you are and what the situation is (i.e., tell them where you work and that you have a suicidal individual who wishes to come to the hospital). You also need to find out if they have a bed, and if it is voluntary or involuntary. You do not want to request an involuntary bed for a voluntary admission. If you have been able to contact a friend or relative and the person still wants to go to the hospital, you can arrange for the friend or relative to take her there.

8. Involuntary admission to hospital.

Involuntary commitment in Wisconsin is extremely hard. In Wisconsin state, the police can take a person to the hospital for an Emergency Detention, during which an assessment for Involuntary Commitment is conducted. The **only** time you should call the police (911) is when you are convinced an individual is at risk for suicide, unwilling to make a contract, no one is able to pick him up and assume responsibility for him, and he is unwilling to go to the hospital voluntarily.

9. Anticipate a recurrence of the crisis response.

10. Re-assess suicide potential.

OTHER NOTES:

GENERAL GUIDELINES FOR PROTOCOL

1. Talk about suicide openly and matter-of-factly. Talking about suicide with a depressed individual is unlikely to create a crisis. Simple questions and empathic responses will create a more comfortable interaction and subjects may be more willing to talk about suicidal intent. Be assertive about asking questions – you need to know the answers to all of the questions on the Suicide Risk Assessment Worksheet.
2. Avoid pejorative explanations of suicidal behavioral or motives.
3. Present a problem-solving theory of suicidal behavior and maintain the stance that suicide is a maladaptive and/or ineffective solution.
4. Support the person's current feelings of hopelessness and despair, but emphasize that suicide is not the best solution. Repeatedly tell the person that you understand their feelings of hopelessness and despair given their current situation, but emphasize that although suicide seems attractive, a better solution can be found.
5. Generate hopeful statements and alternative solutions.
6. Give honest reactions to the person's situation. If you can't see a way out, say so. However, emphasize that this does not mean that a way out doesn't exist.
7. Focus on the person's strengths. Ask what they've done in the past to reduce or tolerate their distress. Tell them that they have already showed a lot of motivation to work things out by coming for help, and that this is a good sign that things can get better.
8. Focus on a short-term behavior plan. Figure out what they are going to do in the next couple of days. Tell them not to expect to feel better before doing things, just to make a schedule and stick to it.
9. Tell them that you don't want them to commit suicide. Obviously, you cannot stop them, but try to convey your sincere hope that they won't do it.
10. Involve significant others, including friends, partners, parents, or siblings.
11. Maintain consultation with your supervisor.

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Bongar, B. (1992). Suicide: Guidelines for Assessment, Management, and Treatment. Oxford University Press, New York.

Bongar, B. (1991). The suicidal patient: Clinical and legal standards of care. American Psychological Association. Washington DC.

Jacobs, D.G. (1998). The Harvard Medical School Guide to Suicide Assessment and Intervention. Jossey-Bass Publishers, S.F. (Marsha's chapter is of particular interest).

Linehan, M. (1998). Assessment and Treatment of Suicidal Behavior Manual. Copy can be obtained by contacting M. Linehan at University of Washington, Sea.

Appendix F

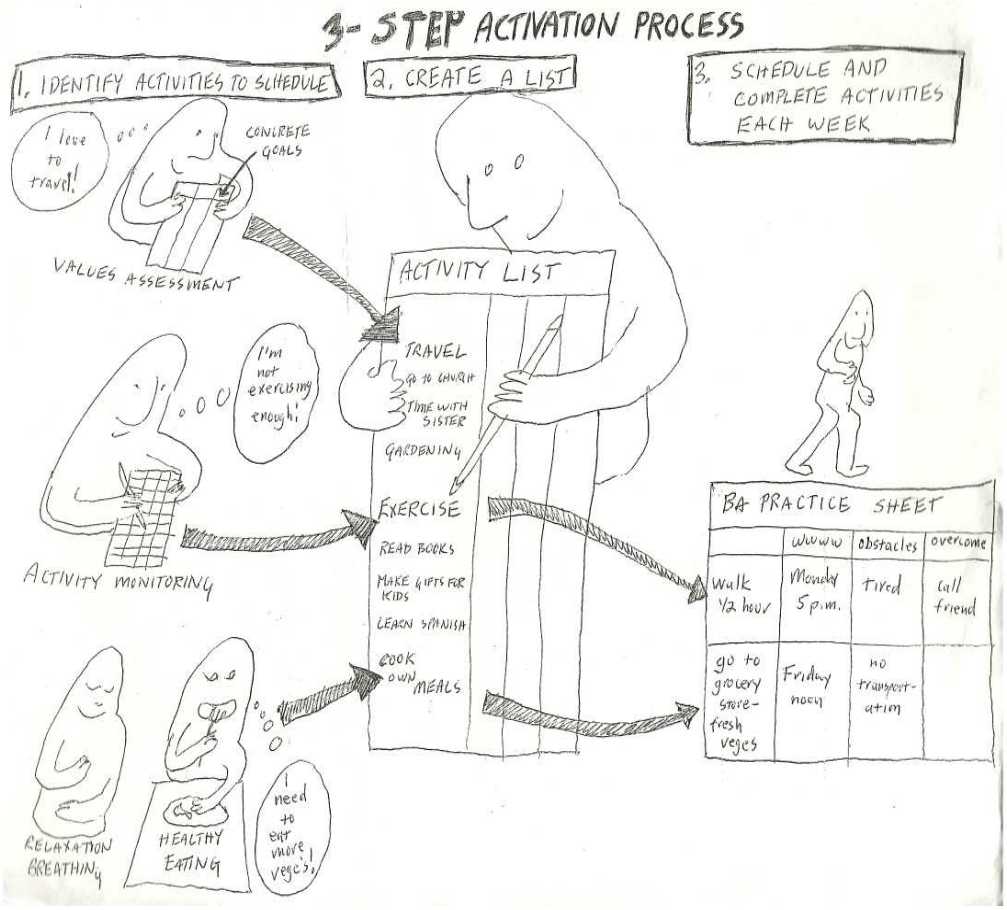
Activity Monitoring Sample Sheet

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
11p - 12am	Watching TV	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping
12 – 1 am	Watching TV	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping
1 – 2 am	Watching TV	Sleeping	Woke up (can't go back to sleep)	Sleeping	Sleeping	Sleeping	Sleeping
2 – 3 am	Sleeping	Sleeping	Watching TV	Sleeping	Sleeping	Sleeping	Sleeping
3 – 4 am	Sleeping	Sleeping	Watching TV	Sleeping	Sleeping	Sleeping	Sleeping
4 – 5 am	Sleeping	Sleeping	Sleeping	Sleeping	Sleeping	Woke up (can't go back to sleep)	Sleeping
5 – 6 am	Sleeping	Sleeping	Sleeping	Woke up (can't go back to sleep)	Sleeping	Folded laundry	Sleeping
6 – 7 am	Sleeping	Sleeping	Sleeping	Did a crossword puzzle.	Sleeping	Began cleaning.	child woke up / made him a snack and went back to bed
7 – 8 am	Sleeping	Woke up kids and got them on the bus.	Woke up kids and got them on the bus.	Woke up kids and got them on the bus.	Woke up kids and got them on the bus.	Woke up kids and got them on the bus.	Sleeping
8 – 9 am	Fixed kids breakfast.	Mailed some bills	Went back to sleep.	Ate snacks and watched TV.	Ate snacks and watched TV.	Finished cleaning.	Fixed kids breakfast.
9 – 10 am	Dropped kids off at Sunday School (Their aunt will pick them up)	Sleeping	Sleeping	Walked to the mailbox	Sleeping	Called one place to ask about a job.	Had kids help clean up.
10 – 11 am	Ate left overs	Sleeping	Sleeping	Watched TV	Kids' father stopped by / huge argument	Walked to mailbox to mail one app.	
11 – 12 am	Went back to sleep.	Sleeping	Ate a meal.	School called / had to pick up child		Ate breakfast.	Took kids to friend's house.
12 – 1 pm	Sleeping	Ate a meal.	Went to the laundromat.	Took care of child	Ate a meal / went to sleep	Sleeping	Sleeping

1 – 2 pm	Sleeping	Went to the grocery store.	(read magazines while there)	Took care of child	Sleeping	Sleeping	Sleeping
2 – 3 pm	Sleeping			Watched TV / took a nap.	Sleeping	Sleeping	Sleeping
3 – 4 pm	Sleeping	Took a nap / Kids got in from school.	Ate lunch /watch TV/kids came in from school and went outside to play.	The rest of the kids came in from school. Gave them snacks and went back to sleep.	Kids came in from school / My sister picked them up for church choir rehearsal.	Kids came in from school and went outside to play.	Ate lunch /watched TV
4 – 5 pm	Sleeping		Watched TV	Sleeping	Watched TV	Watched TV	Sleeping
5 – 6 pm	Went to sisters for Sunday dinner with the family	Fixed Dinner	Fixed Dinner	Still sleeping.	Went to store to get newspaper	Fixed Dinner	Sleeping
6 – 7 pm		Checked kids homework.	Ate dinner with kids	Reheated leftovers and ate dinner with the kids.	Looked through want ads.	Helped kids with homework.	Kids came home.
7 – 8 pm	Brought kids home	Shower and bed for kids	Shower and bed for kids	Kids had more homework to do.	Kids came home. Shower and bed for kids.	Shower and bed for kids	Made dinner
8 – 9 pm	Put kids to bed	Friend came over for a visit.	Watched a movie	Late shower and bed for kids.	Looked through want ads.	Watched TV	Watched movie with kids
9 – 10 pm	Watched TV	Sleeping		Opened mail / went to sleep.	Sleeping	Sleeping	Sleeping
10 – 11 pm	Sleeping	Sleeping	Shower and bed	Sleeping	Sleeping	Sleeping	Sleeping

Appendix G

Three Step Activation Process



Appendix H

Revised Psychoeducation Sheet

What Do I Need to Know About Depression?

What Causes Depression?

- There is no one cause for depression: Different professionals will focus on different aspects of depression. A psychiatrist, who prescribes anti-depressant medications, will focus on biochemical changes in the brain as causes for depression. Others will look at genetic causes of depression. Some psychologists will focus on how people think as causes for depression. Other psychologists will look for problems in people's relationships as causes for depression.

Research suggests that all of these factors can be seen as causes of depression. Different causes matter more for different people.

- Negative life experiences: Everyone with depression, however, is not happy with what is happening in his or her life. Everyone with depression has negative experiences in their lives that have made them feel depressed. These experiences can be different for different people, but may include death of a loved one, receiving the diagnosis of a chronic medical condition, or losing one's job. Negative experiences may also include the experience of ongoing stressors such as racism, poverty, single motherhood, witnessing violence, abuse, lack of family or social support and other sources of constant stress.

Our view is that these negative life experiences, whether it is a single big event like the loss of a job, or the accumulation of lots of experiences, like what it is like living in poverty, are the ultimate causes of depression.

These causes are things that happen to people from outside. They are not causes that are inside the person, like biochemicals in your brain or how you think or your personality. Those "inside" things matter too, but our approach focuses on causes that are in the environment around you. We believe that when people's environments are depressing, they are more likely to get depressed!

Now we would like to think about and discuss the environmental causes of your depression. Write them down in circle labeled "Negative Life Experiences" on the 3-circles handout.

What is Depression?

When there are enough negative experiences in people's lives, they feel bad. Exactly how they feel may be different from person to person, but for most depressed people there are two common reactions to negative life experiences:

1. Depressed mood. You may have learned to call this feeling different things, like "sad," "down," "depressed," "blue," or you may be feeling it and not know what to call it at all. You may experience it as being angry or irritable all the time, not sad.

2. Loss of interest or pleasure in things. When people get depressed, they stop enjoying things that they used to enjoy. Everything becomes a chore, and everything loses meaning.

In addition to these two primary common reactions, people with depression have several other common reactions to negative life experiences. These reactions vary from person to person but may include:

3. Sleeping more, or sleeping less
4. Eating more, or eating less
5. Feeling anxious and agitated, including palpitations, sweating, having indigestion, and having headaches
6. Feeling tired or exhausted, having really low energy and fatigue all the time, feeling heaviness in your stomach, back, head, arms and legs
7. Feeling very guilty and worthless and blaming yourself for all of your problems
8. Having trouble concentrating and remembering things
9. Feeling like you want to kill yourself, thinking about suicide, and actually trying to kill yourself

These nine reactions are known as the "symptoms" of depression. The way a doctor diagnoses depression is this:

If you are experiencing at least 5 of these symptoms (with one of them having to be either depressed mood or loss of interest or pleasure in things), most of the day, for nearly every day, for at least two weeks (but often for much, much longer), and these symptoms are causing you a lot of distress and really interfering with your life, then you will be diagnosed with "Major Depression".

There are many other diagnoses of depression in addition to Major Depression. If you are interested in learning more about these other diagnoses, please ask your group leader for more information.

The important thing we want you to understand is that when negative experiences happen in people's lives, they feel these sorts of symptoms. There is nothing wrong with the person for having these reactions. In fact, these reactions are quite common and make sense. It is a fundamental human reaction. It is normal and natural to feel this way when bad things happen in your life. We like to call the symptoms "natural reactions" to emphasize that these reactions are natural and do not mean you are crazy or there is something wrong with you for having them.

Now we would like you to explore and identify the kinds of natural reactions to negative life experiences that you have been having. Write them down in the second circle of the 3-circles handout.

What Happens When I Feel These Symptoms of Depression?

Lots of people have negative experiences in their lives, and they have natural reactions when these experiences happen. These reactions are normal. But "Major Depression" happens when someone feels these symptoms *all the time* and the feelings *cause a lot of distress and interfere with life.*

The real problem with Major Depression is not whether you have these reactions, it is how you deal with them. Remember, the reactions are normal and natural. But for many depressed people, when you have these feelings, you react in ways that make things worse. You give up, shut down, stop trying, and become hopeless. You feel so tired all the time that you just stay in bed all day long. You have lost interest in so many things that you stop seeing your friends and families. You feel so sad all the time that you stop going in to work, or stop looking for work.

Please think about the specific ways in which you have given up. Write them down in the third circle of the 3-circles handout.

When you give up, what do you think happens?

This just makes everything worse. Now you have even more negative experiences in your life, as you have started to have problems related to missed responsibilities, you have lost contact with family and friends, and you are not even trying to find a job! In turn, you start experiencing even more natural reactions. In this way, people spiral deeper and deeper into Major Depression.

Our Approach to Recovering From Depression

Our approach to recovering from depression will be to focus on the events and experiences in your lives, and to help you behave in ways that produce more positive experiences and fewer negative experiences. We will help you identify the specific goals you have in your life, the specific problems and obstacles that you are facing, the ways in which you used to experience mastery, joy, and pleasure, and help you take action steps each week in these positive ways. We will break the spiral of depression by focusing on your behavior and what you can do, each week, that is positive and important in your life.

How Common is Major Depression?

Major Depression is very common. Up to 25% of women will have depression at some point in their lives, and about half that many men will have depression. Depression has been described as the third most serious health condition in the world. Estimates suggest

that up to 20 million middle age individuals are affected by depression each year in the United States alone.

Because African Americans are more likely to experience the negative life experiences that cause depression such as poverty, single motherhood, racism, discrimination, and physical health problems such as cardiovascular disease and diabetes, African Americans – especially low income African Americans living in inner cities – may have very high rates of depression.

Other Approaches to Recovering From Depression

There are several other approaches to treating depression that you should know about.

Antidepressant Medication. There are a number of medications used to treat depression. Antidepressants have been around since the 1950s, and many of the drugs used today have not changed much from back then. All types of antidepressants have been shown to have specific side effects. These side effects may affect individuals differently. Our approach will not focus on medication, but if you are interested in learning more about medication, we can discuss this with you.

Therapies for depression

Therapy involves meeting with a counselor to work towards goals and receive help in managing various problems in life. Individual therapy involves meeting with a clinician one-on-one, while group therapy usually involves one to two therapists and a group of individuals working on similar problems. Group therapy is what you are receiving here. There are many different kinds of therapy for depression. This handout reviews 3 of the commonly used therapies that have received support for their effectiveness in research.

Interpersonal therapy. Interpersonal therapy focuses on grief and loss, one's role in life, and difficulties communicating with others as related to depression. The therapy targets grief or loss by getting clients to experience their emotions associated with loss and any other difficult changes. When individuals have difficulties with relationships, the therapist and client also explore how the client can best express emotions and communicate to others effectively to reach goals. This kind of therapy is short term, and usually consists of 12 sessions on average.

Cognitive therapy. Cognitive therapy focuses on the individual's thoughts and beliefs. It assumes that depressed individuals have negative beliefs and frequent negative automatic thoughts about themselves, the world, and the future. These thoughts are in turn assumed to lead to feelings of sadness, along with depressed behaviors such as lower activity levels. The purpose of cognitive therapy is to have clients recognize and challenge these negative beliefs and thoughts by examining all the available evidence, and replace depressed thoughts and beliefs with more realistic ones. Cognitive therapy is also generally meant to be a short term treatment.

Behavioral therapies. Behavioral therapies focus on the relation of activity to negative feelings, emotions and thoughts associated with depression. Behavioral therapies focus on what the client is currently doing and not doing in his or her life, and how the client can make behavioral changes that will positively affect mood and depression symptoms, by becoming more active in pursuing important life goals.

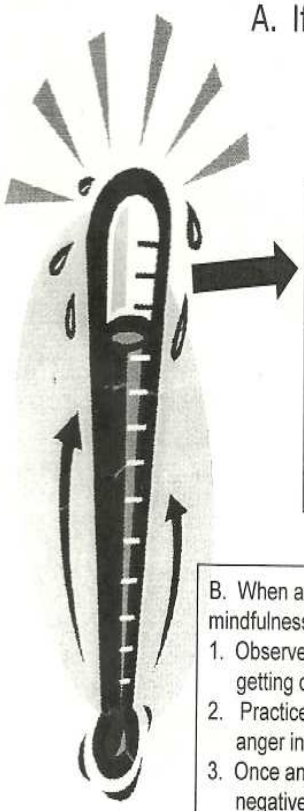
Effectiveness of treatments for depression. The therapies we have discussed above, and medications, have been shown to be effective as treatments for depression. Many studies have suggested that therapy may work as effectively as medication for the treatment of depression. One concern about medication, however, is that if you go off the medication after being treated with it, you may be at a high risk for getting depressed again.

Appendix I

Tips for Managing Anger Sheet

Transforming Ineffective Anger into Effective Action

Be mindful of where your anger thermometer. If you are at, or close to, your danger point, follow the steps below under A. If your anger is below your boiling point, follow the steps listed under B.



A. When anger is near or at danger point, your goal is to remove yourself from the situation and do things to calm yourself, so you don't do something you will regret:

1. Take a time out if you are currently interacting with another.
2. Choose an activity to help bring down your anger such as paced breathing, progressive muscle relaxation, or some of the strategies on the other handout.

B. When anger is below the danger point, your goal is to focus on mindfulness and effective action:

1. Observe and describe the presence of judgmental thoughts, without getting caught up in them. Be watchful of your judgmental thoughts.
2. Practice observing and describing body sensations associated with anger in a non-judgmental way.
3. Once anger has started to go down, observe and describe the negative consequences that may have occurred in the past from acting on your urges, or allowing judgments to run the show. Factually observe and describe the facts of the situation, without judging (like we did with the orange). Describe the anticipated positive consequences of using your anger skills to engage in effective action.
4. Once your anger has decreased to a less dangerous point, remember to engage in activities that are important for you. Go back to your values list. Ask yourself – what type of person do I want to be regarding this situation that made me angry? Is there an effective action I can do that is hard for me, but important to do?

Appendix J

Phase 1 Acceptability Questions from which Data Was Obtained for Tables 1 - 12

Component	Referent Table	Question from Weekly Acceptability Measure
Clarity of Psychoeducation	1 & 7	How Clear was the presentation of education about depression?
Clarity of Activity Monitoring	1 & 7	How clear was the presentation of activity monitoring?
Clarity of Activity Scheduling	1 & 7	How clear was the presentation of scheduling activity practice?
Clarity of Activity Hierarchy	1 & 7	How clear was the presentation of the activity hierarchy?
Clarity of Values and Goals	1 & 7	How clear was the presentation of values and goals?
Clarity of Values Experiential Exercise	1	How clear was the exercise about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?
Relevance of Psychoeducation	1 & 7	How relevant was the presentation about depression?
Relevance of Activity Monitoring	1 & 7	How relevant was the presentation of activity monitoring?
Relevance of Activity Scheduling	1 & 7	How relevant was the scheduling of activity practice?
Relevance of Activity Hierarchy	1 & 7	How relevant was the construction of the activity hierarchy?
Relevance of Values and Goals	1 & 7	How relevant was the presentation of values and goals?
Relevance of Values Experiential Exercise	1 & 7	How relevant was the exercise about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?
Amount of time for Psychoeducation	1 & 7	What are your thoughts on the amount of time spent on education about depression?
Amount of time for Monitoring	1 & 7	What are your thoughts on the amount of time spent on activity monitoring?
Amount of time for Scheduling	1 & 7	What are your thoughts on the amount of time spent on activity scheduling?
Amount of time for Hierarchy	1 & 7	What are your thoughts on the amount of time spent creating the hierarchy?
Amount of time for Values and Goals	1 & 7	What are your thoughts on the amount of time discussing values and goals?
Amount of time for Values Experiential Exercise	1 & 7	What are your thoughts on the amount of time spent on the exercise about getting in touch with your ideal values and goals by thinking about what you would like to have read at your funeral?
Amount of time for Homework Review	1 & 7	What are your thoughts about the amount of time spent on homework review?
Clarity of Stress-Depression Relationship	2 & 8	How clear was the education about stress?
Clarity of Progressive Muscle Relaxation	2 & 8	How clear was the education on progressive muscle relaxation?
Clarity of Paced Breathing	2 & 8	How clear was the review of paced breathing?
Clarity of Diabetes/Cardiovascular Disease (DCVD)-Depression	2 & 8	How clear was the education about Cardiovascular Disease and Diabetes?

Relationship		
Clarity of Healthy Living Tips	2 & 8	How clear was the review of tips for healthy living?
Clarity of Consequences of Healthy Living	2 & 8	How clear was the activity where you thought about the consequences of unhealthy living?
Clarity of Chronic Pain-Depression Relationship	2 & 8	How clear was the education about chronic pain?
Clarity of Chronic Pain-Mindfulness Relationship	2 & 8	How clear was the discussion of the relationship between mindfulness and pain?
Clarity of Mindfulness Activities	2 & 8	How clear were the mindfulness activities?
Clarity of Consequences of Pain	2 & 8	How clear was the discussion of the consequences of chronic pain?
Clarity of Racism-Anger Relationship	2 & 8	How clear was the education about racism and anger?
Clarity of Anger-Depression Relationship	2 & 8	How clear was the discussion of the relationship between anger, racism, and depression?
Clarity of Components of Anger Exercise	2 & 8	How clear was the exercise where you reviewed all of the different components of anger?
Clarity of Managing Anger Skills	2 & 8	How clear were the skills taught for managing anger?
Clarity of Unemployment-Depression Relationship	2 & 8	How clear was the education about unemployment and depression?
Clarity of Benefits of Unemployment Exercise	2 & 8	How clear was the exercise where you reviewed the benefits of obtaining better employment?
Clarity of Employment-Seeking Exercise	2 & 8	How clear were the steps dicussed for initiating employment seeking?
Clarity of Social Support and Depression Relationship	2 & 8	How clear was the education about social support and depression?
Clarity of Social Support Seeking Tips	2 & 8	How clear was the discussion of steps for seeking social support?
Clarity of Spirituality-Depression Relationship	2 & 8	How clear was the discussion of spirituality?
Clarity of Spirituality Assessment	2 & 8	How clear was the spirituality assessment?
Clarity of Spirituality Meditation	2 & 8	How clear was the reason for including the spirituality meditation?
Relevance of Stress-Depression Relationship	2 & 8	How relevant was presentation about stress?
Relevance of Progressive Muscle Relaxation	2 & 8	How relevant was presentation of progressive muscle relaxation?
Relevance of Paced Breathing	2 & 8	How relevant was the presentation of paced breathing?
Relevance of DCVD-Depression Relationship	2 & 8	How relevant was presentation of Cardiovascular Disease and Diabetes?
Relevance of Healthy Living Tips	2 & 8	How relevant was presentation of tips for healthy living?
Relevance of Consequences of Healthy Living	2 & 8	How relevant was the exercise regarding the consequences of unhealthy living?
Relevance of Health Resource Packets	2 & 8	How relevant was the provision of health resource packets?
Relevance of Mindfulness Activities	2 & 8	How relevant were the mindfulness exercises in teaching you mindfulness?
Relevance of Consequences of Pain	2 & 8	How relevant was the exercise regarding the consequences of pain?
Relevance of Mindfulness of Pain Exercise	2 & 8	How relevant was the use of mindfulness for pain?
Relevance of Racism-Anger	2 & 8	How relevant was the education about racism and

Relationship		anger?
Relevance of Anger-Depression Relationship	2 & 8	How relevant was the discussion of the relationship between anger, depression and racism?
Relevance of Components of Anger Exercise	2 & 8	How relevant was the exercise regarding the different components of anger?
Relevance of Managing Anger Skills	2 & 8	How relevant were the skills taught for managing anger?
Relevance of Unemployment-Depression Relationship	2 & 8	How relevant was the education about unemployment and depression?
Relevance of Benefits of Unemployment Exercise	2 & 8	How relevant was the exercise reviewing the benefits of obtaining better employment?
Relevance of Employment-Seeking Exercise	2 & 8	How relevant was the exercise reviewing steps for initiating employment seeking?
Relevance of Resource Packet	2 & 8	What is the likelihood that you will use this packet?
Relevance of Social Support and Depression Relationship	2 & 8	How relevant was the education on social support and depression?
Relevance of Social Support Seeking Tips	2 & 8	How relevant was the discussion of steps for seeking social support?
Relevance of Spirituality-Depression Relationship	2 & 8	How relevant was the discussion on spirituality?
Relevance of Spirituality Assessment	2 & 8	How relevant was the spirituality assessment?
Relevance of Spirituality Meditation	2 & 8	How relevant was the spirituality meditation?
Amount of time for Progressive Muscle Relaxation	2 & 8	What are your thoughts on the amount of time spent learning relaxation strategies?
Amount of time for Paced Breathing	2 & 8	What are your thoughts on the amount of time spent on learning relaxation strategies?
Amount of time for DCVD-Depression Relationship	2 & 8	What are your thoughts about the amount of time spent on education about cardiovascular disease and diabetes?
Amount of time for Healthy Living Tips	2 & 8	What are your thoughts on the amount of time spent on tips for healthy living?
Amount of time for Consequences of Healthy Living	2 & 8	What are your thoughts about the amount of time discussing consequences of unhealthy living?
Amount of time for Chronic Pain-Depression Relationship	2 & 8	What are your thoughts on the amount of time spent on education of chronic pain and mindfulness?
Amount of time for Mindfulness Activities	2 & 8	What are your thoughts on the amount of time spent on mindfulness practice?
Amount of time for Consequences of Pain	2 & 8	What are your thoughts on the amount of time spent discussing consequences of chronic pain?
Amount of time for Racism-Anger-Depression Relationship	2 & 8	What are your thoughts on the amount of time spent on education of anger, discrimination and depression?
Amount of time for Components of Anger Exercise	2 & 8	What are your thoughts on the amount of time spent on reviewing the components of anger?
Amount of time for Managing Anger Skills	2 & 8	What are your thoughts on the amount of time spent discussing skills for managing your anger?
Amount of time for Unemployment-Depression Relationship	2 & 8	What are your thoughts on the amount of time spent on education of depression and unemployment?
Amount of time for Benefits of Unemployment Exercise	2 & 8	What are your thoughts on the amount of time spent discussing the benefits of seeking unemployment?
Amount of time for Employment-Seeking Exercise	2 & 8	What are your thoughts on the amount of time spent on reviewing tips for initiating employment seeking?
Amount of time for Social Support and Depression Relationship	2 & 8	What are your thoughts on the amount of time discussing social support?

Amount of time for Social Support Seeking Tips	2 & 8	From SSCNC
Amount of time for Spirituality-Depression Relationship	2 & 8	What are your thoughts on the amount of time spent on discussing spirituality?
Amount of time for Spirituality Assessment	2 & 8	What are your thoughts on the amount of time discussing the benefits of spirituality?
Helpfulness of Progressive Muscle Relaxation	4 & 10	How helpful was PMR over the past week?
Helpfulness of Paced Breathing	4 & 10	How helpful was paced breathing over the past week?
Helpfulness of Healthy Living Tips	4 & 10	How much success did you have with healthy living over the past week?
Helpfulness of Mindfulness for Pain	4 & 10	How helpful was practicing mindfulness of pain over the past week? How much success did you have with mindfulness for pain over the past week?
Helpfulness of Anger Management Skills	4 & 10	How helpful were strategies for managing anger effectively over the past week? How much success did you have with managing anger strategies over the past week?
Helpfulness of Resource Packet	4 & 10	How helpful was the resource packet for financial assistance?
Helpfulness of Steps Initiating Employment Seeking	10	How much success did you have engaging in employment related activities over the past week?
Helpfulness of Social Support Activation	10	How much success did you have seeking social support in the previous week?
Helpfulness of Spirituality Activation	10	How of much success did you have with connecting with spirituality of some form in relation to your depression?
Likeliness to Engage in Healthy Living Tips	3 & 9	How likely is it that you will start to engage in some of the healthy living tips learned today?
Likeliness to Engage in Mindfulness for Pain	3 & 9	How likely is it that you will start to engage in mindfulness practice of pain over the next week?
Likeliness to Use Anger Management Skills	3 & 9	How likely is it that you will start to engage in anger management strategies over the next week?
Likeliness to Use Resource Packet	3 & 9	What is the likelihood that you will use this packet?
Likeliness to Engage in Employment Seeking	3 & 9	How likely is it that you will start to engage in tasks for seeking better employment over the next week?
Likeliness to Engage in Social Support Activation	3 & 9	How likely is it that you will start to engage in tasks for seeking more social support in the next week?
Likeliness to Engage in Spiritual Activation	3 & 9	How likely is it that you will start to engage in tasks related to becoming more spiritual in the next week?
Increased Knowledge of Depression	5 & 11	How much do you feel you've learned about depression today?
Increased Knowledge of Progressive Muscle Relaxation	5 & 11	How much do you feel you've learned about stress reduction strategies today?
Increased Knowledge of Paced Breathing	5 & 11	How much do you feel you've learned about stress reduction strategies today?
Increased Knowledge of Cardiovascular Disease and Diabetes	5 & 11	How much do you feel you've learned about Cardiovascular Disease and Diabetes today?
Increased Knowledge of Mindfulness and Pain	5 & 11	How much do you feel you've learned about mindfulness and chronic pain today?
Increased Knowledge of Anger	5 & 11	How much do you feel you've learned about anger today?

Increased Knowledge of Strategies for Seeking Social Support	5 & 11	How much do you feel you've learned about seeking social support today?
Increased Knowledge of Strategies for Seeking Employment	5 & 11	How much do you feel you've learned about strategies for unemployment today?
Overall Relevance of Group Session 1	6 & 12	Based on what you've learned today about what you will be doing during this group, how relevant do you think this group is to dealing with your specific problems?
Overall Relevance of Group Session 2	6 & 12	Based on what you've learned today about what you will be doing during therapy, how relevant do you think this treatment is to dealing with your specific problems?
Overall Relevance of Group Session 3	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 4	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 5	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 6	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 7	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 8	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 9	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 10	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 11	6 & 12	Based on what you've learned today about what you will be doing during therapy
Overall Relevance of Group Session 12	6 & 12	Based on what you've learned today about what you will be doing during therapy

Appendix K

Hamilton Rating Scale for Depression

Hamilton Rating Scale for Depression (HRSD)

OVERVIEW*:* I'd like to ask you some questions about the past week.

1. DEPRESSED MOOD

	DEPRESSED MOOD (sad, hopeless, helpless, worthless)
What's your mood been like this past week?	(0) absent
Have you been feeling down or depressed?	(1) **mild:** these feeling states indicated only on questioning and are not the predominant mood state; feels depressed no more than two days or only intermittently**.**

Sad? Hopeless?	(2) **moderate:** these feeling states spontaneously reported; feels depressed more days than not (i.e., the predominant mood state).
Have you been crying at all?	(3) **marked:** communicated feeling states non-verbally, i.e., facial expression, posture, voice tendency to weep; some functional impairment**.**

In the last week, how often have you felt this way (PATIENT'S OWN EQUIVALENT)? Every day? All day?	(4) **severe:** patient reports VIRTUALLY ONLY these feeling states in his spontaneous verbal and non-verbal communication; severe functional impairment.

2. FEELINGS OF GUILT

Have you been especially critical of yourself this past week, feeling you've done things wrong, or let others down? IF YES: What have your thoughts been?	FEELINGS OF GUILT: (0) absent
Have you been feeling guilty about anything that you've done or not done?	(1) self-reproach (whether or not there has been wrongdoing), feels she/he has let people down

Have you thought that you've brought your troubles on yourself in some way?	(2) ideas of guilt spontaneously expressed.
How often have you had these thoughts? Do these thoughts ever repeat themselves? How much have they bothered you? Are these thoughts uncontrollable? Do these thoughts ever sound like they come from the outside, like hearing someone else's voice? If so, whose voice is it? Do you think you're being punished for something you did?	(3) Present illness is a punishment; or repeated intrusive guilty thoughts (i.e., ruminations) over past errors or sinful deeds. (4) hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations; delusions of guilt.

3. SUICIDE

This past week, have you had any thoughts that life is not worth living, or that you'd be better off dead?	SUICIDE:

What about having thoughts of hurting or even killing yourself?

IF YES: What have you thought about? Have you actually done anything to hurt yourself?

(0) absent

(1) feels life is not worth living

(2) wishes she/he were dead or thoughts of possible death to self (other than suicidal)

(3) suicidal ideas or specific suicide plan

(4) attempts at suicide

SUM OF ITEMS 1, 2, AND 3: _____

"Typical" Sleep Items

4. INSOMNIA EARLY

How have you been sleeping over the last week?

Have you had any trouble falling asleep at the beginning of the night?

INSOMNIA EARLY:

(0) no difficulty falling asleep

(Right after you go to bed, how long has it been taking you to fall asleep?)	(1) **mild and/or infrequent**: less than 30 minutes most nights, or if longer no more than twice during the past week.
How many nights this week have you had trouble falling asleep?	(2) **definite and severe**, more than 30 minutes on most nights.

5. INSOMNIA MIDDLE

During the past week, have you been waking up in the middle of the night? If yes, how many nights? How often do you awaken?	INSOMNIA MIDDLE:
Do you get out of bed? What do you do? (Only to go to the bathroom?)	(0) no difficulty
When you get back in bed, are you able to fall right back asleep?	(1) **mild/ infrequent:** complains of being restless and disturbed some nights

Have you felt your sleeping has been restless or disturbed some nights?	(2) **definite and severe:** waking most every night (except for purposes of voiding); difficulty getting back to sleep (i.e., more than 30 minutes most nights) or multiple brief awakenings each night.

6. INSOMNIA LATE

What time have you been waking up in the morning for the last time, this past week?	INSOMNIA LATE:
Is this earlier than you would like?	(0) no difficulty

IF EARLY: Is that with an alarm clock, or do you just wake up by yourself?	(1) **mild, infrequent**: wakes earlier than usual some mornings (i.e., 30 minutes earlier than desired) or infrequently (i.e., 1 or 2 mornings). (2) **obvious and severe**: wakes 1-3 hours before usual time and is unable to sleep again.

Sum of items 4, 5, and 6: _____

Atypical Sleep Items

4A. HYPERSOMNIA (Retires earlier and/or rises later)

When do you go to bed?	HYPERSOMNIA (Retires earlier and/or rises later than usual. This does not necessarily mean that the patient sleeps longer, just spends more time in bed.)
Is this earlier than usual (when not depressed) for you?	(0) absent
If yes, how much earlier? (Weekends?)	(1) **mild;** less than 60 minutes
When do you get up?	(2) **obvious and definite;** goes to bed more than 60 minutes earlier on most nights**.**
Is this later when not depressed? (Weekends?)	

5A. HYPERSOMNIA (Oversleeping, sleeping more than usual)

Compare sleep length to euthymic and not to hypomanic sleep length. If this cannot be established, use 8 hours.	HYPERSOMNIA (Oversleeping, sleeping more than usual)

Oversleeping - Have you been sleeping more than usual this past week?

If yes, How much more?

If no, what about weekends?

(0) absent

(1) **mild or infrequent:** Oversleeps less than 60 minutes.

(2) **obvious and definite:** Oversleeps more than 60 minutes most days.

Sleep length used: (Circle one)

euthymic

8 hours

6A. HYPERSOMNIA (Napping - excessive daytime sleepiness)

Do you take naps?

If yes, when? How often? How long?

HYPERSOMNIA (Napping. Excessive daytime sleepiness.)

(0) absent

If no, How about weekends?

(1) **mild or infrequent**: naps less than 30 minutes**.**

(2) **obvious and definite:** sleeps more than 30 minutes most days during naps.

Sum of items 4A, 5A, and 6A: _____

SLEEP DISRUPTION TOTAL SCORE: _____

(Enter the sum of items 4, 5, and 6;

OR the sum of items

4A, 5A, and 6A, whichever is greater)

7. WORK AND ACTIVITIES

How have you been spending your time this past week (when not at work)?	WORK AND ACTIVITIES:
Do you have your normal interest in doing (THOSE THINGS), or do you feel you have to push yourself to do them?	(0) no difficulty
Are you less interested in things like your job, spending time with family, friends or hobbies?	(1) thoughts and feelings of incapacity, or disinterest related to activities, work or hobbies; mild and/or intermittent

Have you decreased or even stopped doing anything?	(2) decreased interest in activity, hobbies or work most days - either directly reported by the patient or indirect in listlessness, indecision and vacillation (feels he/she has to push self to work or engage in activities)
IF WORKING: Do you feel you are less efficient or effective at work?	(3) definite decrease in actual time spent in activities or decreased productivity due to depression.

Have you been able to have any fun? How has your ability to feel enjoyment or pleasure been?	(4) Complete loss of interest. Anhedonia. Stopped working or engaging in routine activities because of depression.

8. RETARDATION

RATING BASED ON OBSERVATION DURING INTERVIEW	RETARDATION (slowness of thought and speech; impaired ability to concentrate; decreased spontaneous motor activity; postural change - slumped, stooped):
	(0) normal speech and thought

(1) **mild**: slight flattening of affect, fixity of expression, or minimal slowing of speech and/or spontaneous movements.

(2) **moderate**: monotonous voice, delayed in answering questions, tends to sit motionless.

(3) **severe**: retardation prolongs interview to a marked degree, slowness of movement and gait with diminished associated movement.

(4) **extreme**: depressive stupor, interview impossible.

9. AGITATION

RATING BASED ON OBSERVATION DURING INTERVIEW

AGITATION (restlessness, repetitive "nervous" mannerisms, frequent posture changes, difficulty sitting still):

(0) none

(1) **mild**: fidgety at interview, clenching fists or side of chair, kicking feet.

(2) **moderate**: wringing hands, biting lips, pulling hair, gesturing with arms, picking at hands and clothes.

(3) **severe**: includes features of (2). In addition, cannot stay in chair during interview.

(4) **extreme**: hand-wringing, nail biting, hair-pulling, biting of lips, almost continual pacing. Patient looks bewildered and distraught.

SUM OF ITEMS 7, 8, AND 9: _____

10. ANXIETY PSYCHIC

Have you been feeling especially anxious, nervous, tense or irritable, frightened and/or apprehensive this past week?

Have you had a hard time relaxing this past week?

Have you been worrying a lot about little unimportant things, things you wouldn't ordinarily worry about?

IF YES: Like what, for example?

ANXIETY PSYCHIC:

(0) no difficulty

(1) **mild**, i.e., intermittent tension or irritability

(2) **moderate**: worried, tense, anxious or nervous more often than not; not incapacitated

(3) **severe**: psychic anxiety symptoms most of the time; anxiety is the predominant mood state, incapacitated by psychic anxiety symptoms.

(4) **fears expressed without questioning**

11. ANXIETY SOMATIC

In this past week, have you had any of these physical symptoms? READ EACH LIST TO THE RIGHT, PAUSING AFTER EACH THREE FOR REPLY

How much have these things been bothering you this past week? (How bad have they gotten? How much of the time, or how often, have you had them?)

ANXIETY SOMATIC - physiologic concomitants of anxiety, such as: dry mouth, gas, indigestion; diarrhea, cramps, belching; constipation, heart palpitations, headaches; dizziness, hyperventilating, sighing; having to urinate frequently, sweating, trouble swallowing

(0) absent

DO NOT RATE IF SYMPTOMS ARE ABSOLUTELY AND UNEQUIVOCALLY RELATED TO A TRANSIENT MEDICAL PHENOMENON (I.E., MENSTRUATION, AN INFECTION, OR ACUTE COCAINE INTOXICATION)

(1) **doubtful or infrequent**

(2) **mild**: reports at least several symptoms, which are not marked or incapacitating

(3) **moderate**: greater number and frequency of symptoms than (2). Accompanied by more severe subjective distress with some impairment of normal functioning

(4) **severe**: symptoms are numerous, persistent and incapacitating much of the time

12. APPETITE DECREASE

How has your appetite been this past week?	DECREASED APPETITE:
(What about compared to your usual appetite?)	(0) none
Have you had to force yourself to eat?	(1) decreased appetite but eating without encouragement
Have other people had to urge you to eat?	(2) definite decrease; difficulty eating without urging

12A. APPETITE INCREASE

Are you definitely eating more than usual?	INCREASED APPETITE (Change in appetite marked by increased food intake.)
Have you noticed cravings for specific foods, such as sweets or chocolates?	(0) absent
	(1) **mild**: minimal or slight increase in appetite; food craving

(2) **obvious:** definite and marked increase in food intake.

APPETITE DISTURBANCE SCORE: _____

(Enter the score for 12 OR 12A, whichever is greater)

SUM OF ITEMS 10 AND 11, PLUS APPETITE DISTURBANCE SCORE:

_____

13. ENERGY

How has your energy been this past week? Do you tire more easily than usual? If yes how much of the time?

Have you felt fatigued?

Do you feel heaviness in your limbs or other parts of your body? How often do you feel this way? How much has it affected you?

ENERGY:

(0) none

(1) mild, intermittent, infrequent. Loss of energy, and fatigue.

(2) definitely present most every day; subjectively experienced as severe

14. LIBIDO

How has your interest in sex been this week? (I'm not asking you about performance, but about your interest in sex - how much you think about it.)

Has there been any change in your interest in sex (from when you were not depressed?)

Is it something you've thought much about?

SEXUAL SYMPTOMS (such as loss of libido):

(0) absent

(1) **mild**: some decrease in libido, although not complete or persistent

(2) **severe**: complete absence/loss of sexual desire

15. HYPOCHONDRIASIS

In the last week, how much have your thoughts been focused on your physical health or how your body is working (compared to your normal thinking)?

Do you complain much about how you feel physically?

HYPOCHONDRIASIS:

(0) absent

(1) **mild**: some preoccupation with bodily functions and physical symptoms

Have you found yourself asking for help with things you could really do your self?

IF YES: Like what, for example? How often has that happened?

(2) **moderate**: much attention given to physical symptoms. Patient expresses thoughts of organic disease with a tendency to somaticize.

(3) **severe**: convictions of organic disease to explain present condition, e.g. brain tumor

(4) **extreme**: hypochondriacal delusions often with guilty association, e.g. rotting inside

16. LOSS OF WEIGHT

Have you lost any weight since this (DEPRESSION) began? IF YES: How much?

LOSS OF WEIGHT:

(0) no weight loss or weight loss associated with dieting

IF NOT SURE: Do you think your clothes are any looser on you?

(1) probable weight loss associated with present illness

(2) definite (according to patient) weight loss, at least 5 lbs. (2.2 kg) during the episode.

16A. WEIGHT GAIN

Have you gained any weight since this (DEPRESSION) began? IF YES: How much?

WEIGHT GAIN:

(0) no weight gain

IF NOT SURE: Do you think your clothes are any tighter on you?

(1) probable weight gain associated with present illness

(2) definite (according to patient) weight gain, at least 5 lbs. (2.2 kg) during the episode.

WEIGHT CHANGE SCORE: _____

(Enter the score for 16 OR 16A, whichever is greater)

SUM OF ITEMS 13, 14,AND 15, PLUS WEIGHT CHANGE SCORE:

_____

17. INSIGHT

RATING BASED ON OBSERVATION

Optional probe: What do you think the source of your current problem is?

INSIGHT:

(0) acknowledges being depressed and ill OR, if appropriate, not currently depressed

(1) acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest, etc.

(2) denies being ill at all; despite having definite symptoms

TOTAL 17-ITEM ADJUSTED HAMILTON DEPRESSION SCORE:

_____

(Add the totals at the *bottom* of pages 1, 3, 4, 5, and 6, *PLUS* Item 17)

Appendix L

Behavioral Activation for Depression Scale - Short Form (BADS-SF)

Please read each question carefully and then write the number which best describes how much the statement was true for you DURING THE PAST WEEK, INCLUDING TODAY. **(Don't use these directions when interviewing!!!)**

0 = Not at all 1 2 = A little 3 4 = A lot 5 6 = Completely	Please write your response in this column
There were certain things I needed to do that I didn't do.	
I am content with the amount and types of things I did.	
I engaged in many different activities.	
I made good decisions about what type of activities and /or	

situations I put myself in.	
I was an active person and accomplished the goals I set out to do.	
Most of what I did was to escape from or avoid something unpleasant.	
I spent a lot of time thinking over and over about my problems.	
I engaged in activities that would distract me from feeling bad.	
I did things that were enjoyable.	

Appendix M

Short Form 36 Health Survey

This survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. ***Thank you for completing this survey!***

For each of the following questions, please mark an ☒ in the one box that best describes your answer.

1. **In general, would you say your health is:**

Excellent	Very good	Good	Fair	Poor
▼	▼	▼	▼	▼
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

2. **Compared to one year ago, how would you rate your health in general now?**

Much better now than one year ago	Somewhat better now than one year ago	About the same as one year ago	Somewhat worse now than one year ago	Much worse now than one year ago
▼	▼	▼	▼	▼
☐ 1	☐ 2	☐ 3	☐ 4	☐ 5

3. **The following questions are about activities you might do during a typical day. Does <u>your health now limit you</u> in these activities? If so, how much?**

	Yes, limited a lot	Yes, limited a little	No, not limited at all
a. Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports	☐1	☐2	☐3
b. Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	☐1	☐2	☐3
c. Lifting or carrying groceries	☐1	☐2	☐3
d. Climbing several flights of stairs	☐1	☐2	☐3
e. Climbing one flight of stairs	☐1	☐2	☐3
f. Bending, kneeling, or stooping	☐1	☐2	☐3
g. Walking more than a mile	☐1	☐2	☐3
h. Walking several hundred yards	☐1	☐2	☐3
i. Walking one hundred yards	☐1	☐2	☐3
j. Bathing or dressing yourself	☐1	☐2	☐3

4. **During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Cut down on the amount of time you spent on work or other activities	☐1	☐2	☐3	☐4	☐5
b. Accomplished less than you would like	☐1	☐2	☐3	☐4	☐5
c. Were limited in the kind of work or other activities	☐1	☐2	☐3	☐4	☐5
d. Had difficulty performing the work or other activities (for example, it took extra effort)	☐1	☐2	☐3	☐4	☐5

5. **During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious)?**

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Cut down on the amount of time you spent on work or other activities	☐1	☐2	☐3	☐4	☐5
b. Accomplished less than you would like	☐1	☐2	☐3	☐4	☐5
c. Did work or other activities less carefully than usual	☐1	☐2	☐3	☐4	☐5

6. **During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?**

Not at all	Slightly	Moderately	Quite a bit	Extremely
☐1	☐2	☐3	☐4	☐5

7. **How much bodily pain have you had during the past 4 weeks?**

None	Very mild	Mild	Moderate	Severe	Very Severe
☐1	☐2	☐3	☐4	☐5	☐6

8. **During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?**

Not at all	A little bit	Moderately	Quite a bit	Extremely
☐1	☐2	☐3	☐4	☐5

9. These questions are about how you feel and how things have been with you during the past 4 weeks. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the past 4 weeks...

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. Did you feel full of life?	☐1	☐2	☐3	☐4	☐5
b. Have you been very nervous?	☐1	☐2	☐3	☐4	☐5
c. Have you felt so down in the dumps that nothing could cheer you up?	☐1	☐2	☐3	☐4	☐5
d. Have you felt calm and peaceful?	☐1	☐2	☐3	☐4	☐5
e. Did you have a lot of energy?	☐1	☐2	☐3	☐4	☐5
f. Have you felt downhearted and depressed?	☐1	☐2	☐3	☐4	☐5
g. Did you feel worn out?	☐1	☐2	☐3	☐4	☐5
h. Have you been happy?	☐1	☐2	☐3	☐4	☐5
i. Did you feel tired?	☐1	☐2	☐3	☐4	☐5

10. During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting friends, relatives, etc.)?

All of the time	Most of the time	Some of the time	A little of the time	None of the time
☐1	☐2	☐3	☐4	☐5

11. How TRUE or FALSE is <u>each</u> of the following statements for you?

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
a. I seem to get sick a little easier than other people	☐1	☐2	☐3	☐4	☐5
b. I am as healthy as anybody I know	☐1	☐2	☐3	☐4	☐5
c. I expect my health to get worse	☐1	☐2	☐3	☐4	☐5
d. My health is excellent	☐1	☐2	☐3	☐4	☐5

THANK YOU FOR COMPLETING THESE QUESTIONS!

Appendix N

State-Trait Anger Expression Inventory

Read each of the following statements that people have used to describe themselves and then the number next to question to indicate how you *generally* feel or react. There are no right or wrong answers. Do not spend too much time on anyone statement. Mark the answer that *best* describes how you *generally* feel or react.

1= almost never 2= sometimes 3= Often 4= almost always

How I generally feel

_____ 1. I am quick tempered

_____ 2. I have a fiery temper

_____ 3. I am a hotheaded person

_____ 4. I get angry when I'm slowed down by others' mistakes

_____ 5. I feel annoyed when I am not given recognition for doing good work

_____ 6. I fly off the handle

_____ 7. When I get mad, I say nasty things

_____ 8. It makes me furious when I am criticized in front of others

_____ 9. When I get frustrated, I feel like hitting someone

_____ 10. I feel infuriated when I do a good job and get a poor evaluatIon

Everyone feels angry or furious from time to time, but people differ in the ways that they react when they are angry. A number of statements are listed below which people use to describe their reactions when they feel *angry or furious.*

Read each statement and then write the number next to the question to indicate how *often* you *generally* react or behave in the manner described when you are feeling angry or furious. There are no right or wrong answers. Do not spend too much time on anyone statement.

1= almost never 2= sometimes 3= Often 4= almost always

How I Generally React or Behave When Angry or Furious ...

_____ 11. I control my temper

_____ 12. I express my anger

_____ 13. I take a deep breath and relax

_____ 14. I keep things in

_____ 15. I am patient with others

_____ 16. If someone annoys me, I'm apt to tell him or her how I feel

_____ 17. I try to calm myself as soon as possible

_____ 18. I pout or sulk

_____ 19. I control my urge to express my angry feelings

_____ 20. I lose my temper

_____ 21. I try to simmer down

_____ 22. I withdraw from people

_____ 23. I keep my cool

_____ 24. I make sarcastic remarks to others

_____ 25. I try to soothe my angry feelings

_____ 26. I boil inside, but I don't show it

_____ 27. I control my behavior

_____ 28. I do things like slam doors

_____ 29. I endeavor to become calm again

_____ 30. I tend to harbor grudges that I don't tell anyone about

_____ 31. I can stop myself from losing my temper

_____ 32. I argue with others

_____ 33. I reduce my anger as soon as possible

_____ 34. I am secretly quite critical of others

_____ 35. I try to be tolerant and understanding

_____ 36. I strike out at whatever infuriates me

_____ 37. I do something relaxing to calm down

_____ 38. I am angrier than I am willing to admit

_____ 39. I control my angry feelings

_____ 40. I say nasty things

_____ 41. I try to relax

_____ 42. I'm irritated a great deal more than people are aware of

Appendix O

Quality of Life Enjoyment and Satisfaction Inventory

Q-LES-Q-SF GENERAL ACTIVITIES

OVERALL LEVEL OF SATISFACTION

Taking everything into consideration, during the past week how satisfied have you been with your ...	Very Poor	Poor	Fair	Good
... physical health?	1	2	3	4
... mood?	1	2	3	4
... work?	1	2	3	4
... household activities?	1	2	3	4
... social relationships?	1	2	3	4
... family relationships?	1	2	3	4
... leisure time activities?	1	2	3	4
... ability to function in daily life?	1	2	3	4
... sexual drive, interest and/or performance?*	1	2	3	4
... economic status?	1	2	3	4
... living/housing situation?*	1	2	3	4
... ability to get around physically without feeling dizzy or unsteady or falling?*	1	2	3	4
... your vision in terms of ability to do work or hobbies?*	1	2	3	4
... overall sense of well being?	1	2	3	4
... medication? (If not taking any, check here _____ (139) and leave item blank)	1	2	3	4
How would you rate your overall life satisfaction and contentment during the past week?	1	2	3	4

Appendix P

Social Support Questionaire-Short Form

SOCIAL SUPPORT QUESTIONNAIRE

INSTRUCTIONS: The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the persons' initials and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have had no support for a question, check the words "No one," but still rate your level of satisfaction. Do not list more than nine persons per question.

Please answer all the questions as best you can. All your responses will be kept confidential.

EXAMPLE

Who do you whom you can trust with information that could get you in trouble?

__ No one	1) *S.N. (brother)*	4) *T.N. (father)*	7)
	2) *L.M. (friend)*	5) *A.P. (employer)*	8)
	3) *R.S. (boyfriend)*	6)	9)

How satisfied are you with the overall support you have in the manner described?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

1. Whom can you really count on to be dependable when you need help?

__ No one 1) 4) 7)

2) 5) 8)

3) 6) 9)

2. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

3. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

__ No one 1) 4) 7)

2) 5) 8)

3) 6) 9)

4. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

5. Who accepts you totally, including both your worst and you best points?

__ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

6. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

7. Whom can you really count on to care about you regardless of what is happening to you?

__ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

8. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

9. Whom can you really count on to help you feel better when you are feeling down-in-the-dumps?

__ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

10. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

11. Whom can you count on to console you when you are very upset?

__ No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

12. How satisfied?

6 – very satisfied	5 – fairly satisfied	4 – a little satisfied	3 – a little dissatisfied	2 – fairly dissatisfied	1 – very dissatisfied

Appendix Q

Client Satisfaction Inventory

This questionnaire is designed to measure the way you feel about the services you have received. It is not a test, so there are no right or wrong answers. Answer each item carefully and as accurately as you can by placing a number beside each one as follows.

1 = None of the time

2 = Very rarely

3 = A little of the time

4 = Some of the time

5 = A good part of the time

6 = Most of the time

7 = All of the time

X = Does not apply

1. _____ The services I get here are a big help to me.
2. _____ People here really seem to care about me.
3. _____ I would come back here if I need help again.
4. _____ I feel that no one here really listens to me.
5. _____ People here treat me like a person, not like a number.
6. _____ I have learned a lot here about how to deal with my problems.
7. _____ People here want to do things their way, instead of helping me find my way.
8. _____ I would recommend this place to people I care about.
9. _____ People here really know what they are doing.

10. _____ I get the kind of help here that I really need.

11. _____ People here accept me for who I am.

12. _____ I feel much better now than when I first came here.

13. _____ I thought no one could help me until I came here.

14. _____ The help I get here is really worth what it costs.

15. _____ People here put my needs ahead of their needs.

16. _____ People put me down when I disagree with them.

17. _____ The biggest help I get here is learning how to help myself.

18. _____ People here are just trying to get rid of me.

19. _____ People who know me say this place has made a positive change in me.

20. _____ People here have shown me how to get help from other places.

21. _____ People here seem to understand how I feel.

22. _____ People here are only concerned about getting paid.

23. _____ I feel I can really talk to people here.

24. _____ The help I get here is better than I expected.

25. _____ I look forward to the sessions I have with people.

Appendix R

Recruitment Script Phase 2

Phase 2

Thank you for your interest in our study. Our research laboratory at the University of Wisconsin has adapted a therapy for depression consistent with values and stressors relevant to African Americans. Participants who qualify for the study and choose to participate will either receive 12 weekly sessions of group cognitive-behavioral therapy for depression beginning at the start of the study, or will be assigned to a 13 week waiting-list after which you will receive the same group cognitive-behavioral therapy 14 weeks after the study begins. Assignment to these two conditions will be determined randomly. If you are assigned to the waiting-list, you are free to obtain other services and treatment for depression before receiving the free treatment we are offering as a part of this study.

The group therapy offered in this study is free and will be facilitated by a licensed clinical psychologist and an advanced practice mental health nurse with a doctoral degree specializing in the treatment of depression. Sessions will take place at either the Silver Spring Community Nursing Center on 5460 North 64th Street in Milwaukee, or at the Bread of Healing Clinic located at 1821 North 16th Street. The therapy used has been designed specifically address depression in African-American populations. Therapy will work on helping you to manage stress, and get active in areas that are important to you. As a part of therapy, you will be expected to share your experience with depression and listen to other group members' experiences. You will be given opportunities to practice the skills you learn inside and outside of session in order to help you better manage your depression. Therapy sessions will last for 2 hours. There will be 7 - 10 participants like you in the same group, receiving the same treatment.

If you qualify and wish to participate, you will be asked to complete various questionnaires at 3 points during the study. If you are assigned to the group that receives therapy at the start of the study, you will be asked to arrive 30 minutes before sessions 1 and 7 to complete various questionnaires relating to your background, depression, difficulties with physical health problems, attitudes toward depression seeking mental health services, anger, activity levels, employment seeking behaviors, religion, racism and

discrimination, your satisfaction with life, and satisfaction with available social support. You will also be asked to stay 30 minutes after the last session to complete these measures one last time, with the addition of a brief measure asking you about your satisfaction with services received. Between sessions 6 and 7, and after session 12, you will also be asked to complete an interview over the phone that asks about common depression symptoms. Each of these phone interviews will take approximately 20 minutes.

Participants who qualify for the study and are placed in the therapy group will receive up to $50 for completing these measures. They will receive a $10 for completing questionnaires before sessions1 and 7, and after session 12, for a total of $30. They will also receive $10 for completing each depression interview, for a total of $20, after session 6 and the last session. Participants will be mailed checks once they have completed these measures.

If you are assigned to the waiting list, you will be asked to complete these same questionnaires during weeks 1, 6, and 12 of being on the waitlist. You will receive the same amount of money for completing the measures as those who initially start off receiving therapy. The only exception is that you will not complete the measure assessing your satisfaction with therapy, since you will not yet be receiving therapy at this point. In order to complete the questionnaires, you will still need to come to study site at a designated time before the first week, and during the week after the 6^{th} and 12^{th} week that you have been on the wailtlist, even though you will not be receiving therapy at this point. Time on the waitlist is defined as the time elapsed since therapy starts for the group initially assigned to received therapy first. The questionnaires will take 20 - 30 minutes to complete at these three time points. You will also complete a 20 minute phone interview asking you questions about depression between weeks 6 and 7 and after week 12. These questionnaires and interviews are the same measures filled out by the therapy group at these times.

Starting 14 weeks after being on the waitlist, you will receive 12 sessions of free group therapy meeting weekly for 2 hours per session. The type of therapy received will be exactly the same as that received by the first group. You will not have to arrive early to these sessions in order to complete questionnaires. You will only be asked to fill out one brief depression questionnaire taking approximately 2 minutes before

each of your sessions. This measure is meant to help clinicians track your progress to ensure that you are receiving the best possible care.

In order to determine whether you qualify for this study I will need to ask you some questions about your age, ethnicity, education level, ability to read and write, depression, and any therapy or medication that you may currently be receiving for depression. You will also be asked questions about your mood, drugs, alcohol, anxiety, thoughts and behaviors. These questions generally take approximately 20 minutes. You are free not to answer any of these screening questions, but failure to answer questions will make you ineligible for the study. If you choose not to answer any of the questions, or if you choose not to participate in this screen, your ability to receive services from or participate in research at UWM, Silver Spring Community Nursing Center and Bread of Healing Clinic will not be affected. The interview can be completed either today, or at a more convenient time before the first week of the study. Would you like to continue with the screen?".

CURRICULUM VITAE

William M. Bowe, M.S.

EDUCATION

Ph.D. **University of Wisconsin - Milwaukee, Milwaukee, WI**
Dissertation Title: Refinement and Pilot Testing of a Culturally Enhanced Treatment for Depressed African Americans

Program:	Clinical Psychology, APA accredited
Preliminary Examination:	Passed, July 2011
Dissertation Status:	Proposed, October 2011; Data Collected

M.S. Thesis Title: Unique Effect of Depression on Employment Seeking in Unemployed Sample

Program:	Clinical Psychology
Degree Awarded:	May 2011
Cumulative GPA:	4.00

B.A. **Amherst College, Amherst, MA**

Majors:	Psychology, Economics
Degree Awarded:	January, 2001

High School **West Springfield High School, West Springfield, MA**

Diploma Awarded:	June, 1996, Valedictorian

CURRENT PROFESSIONAL INTERESTS

1. Treatment of mood, anxiety and personality disorders using conventional Cognitive Behavioral Therapy and third wave behavioral approaches

2. Development, implementation and evaluation of group and individual psychotherapy approaches for treating depression and other psychopathology in minority and non-minority populations using conventional and novel (e.g. web-based) means

3. Training and supervision of students and other healthcare professionals in the use of empirically supported psychotherapy approaches

CLINICAL EXPERIENCE

7/12 – Present **Predoctoral Internship in Clinical Psychology**
Duke University Medical Center, Department of Psychiatry, Adult CBT Track, Durham, NC

Psychology Intern working on four yearly rotations

CBT/DBT Rotation (40%):

Responsibilities include: Participation in fully adherent, outpatient Dialectical Behavior Therapy (DBT) program as skills training group leader, individual therapist, and consultation team member; Conducting individual psychiatric assessment and psychotherapy in an outpatient treatment setting with empirically supported interventions such as Cognitive Therapy (CT), Acceptance and Commitment Therapy (ACT), Functional Analytic Psychotherapy (FAP), Behavioral Activation (BA), Prolonged Exposure (PE), and Exposure and Response Prevention (ERP); Coordination of patient care with psychiatrists in the outpatient clinic when relevant

Individual therapy patient diagnoses include: Alcohol Dependence, Opioid Dependence, Major Depressive Disorder, Dysthymia, Post-Traumatic Stress Disorder (PTSD), Obsessive Compulsive Disorder (OCD), Generalized Anxiety Disorder (GAD), Social Phobia, Specific Phobia, Panic Disorder, Borderline Personality Disorder, Narcissistic Personality Disorder, Obsessive Compulsive Personality Disorder, and Dependent Personality Disorder

Supervisors: Clive Robins, Ph.D.; Zachary Rosenthal, Ph.D.

Mood Disorders Rotation (25%):

Responsibilities include: Conducting individual psychotherapy in an outpatient setting with patients presenting predominately with mood and anxiety disorders using empirically supported approaches such as BA, CT ACT, FAP, and exposure approaches; Coordination of patient care with psychiatrists in clinic when relevant

Patient diagnoses include: Major Depressive Disorder, Dysthymia, Panic Disorder, Generalized Anxiety Disorder, and Narcissistic Personality Disorder

Supervisor: Moria Smoski, Ph.D.

Psychiatric Inpatient Rotation (10%):

Responsibilities include: Assisting with coordination of care for patients experiencing acute psychiatric distress as a member of multidisciplinary treatment team comprised of social workers, psychiatric nurses, registered nurses, psychiatrists, and other physicians on a locked hospital unit; Conducting assessments and performing brief psychotherapy with patients using therapeutic approaches such as skills training in distress tolerance and emotion regulation; problem solving; values and goals clarification; BA; cognitive restructuring

Common patient diagnoses include: Bipolar I and II; Major Depressive Disorder; Borderline Personality Disorder; Psychotic Disorders, and Substance Use Disorders

Supervisor: Clive Robins, Ph.D.

Pain and Biofeedback Rotation (25%)

Responsibilities include: Performing psychosocial, psychiatric and pain evaluations to determine suitability of patients with physical pain for chronic opioid management, spinal cord stimulator surgery, and biofeedback training; Consulting with referring physicians from anesthesiology, neurology, and neurosurgery departments from initial referral through implementation of treatment recommendations; Using brief, individual CBT approach to address both chronic pain and concomitant psychiatric difficulties with and without patient biofeedback training

Common patient psychiatric diagnoses include: Major Depressive Disorder, Post-Traumatic Stress Disorder, Generalized Anxiety Disorder, and Adjustment Disorders

Supervisors: Christopher Edwards, Ph.D.; Miriam Feliu, Psy.D.

9/11 – 5/12 **Clinical Supervision Practicum**
Psychology Clinic, University of Wisconsin - Milwaukee, Milwaukee, WI

Responsibilities included: Participating in group and individual supervision of graduate trainees learning behavioral activation, acceptance and commitment therapy, and functional analytic psychotherapy for depression; Teaching and role playing therapy techniques and interactions; Assisting with case conceptualization; Reviewing taped sessions and providing feedback to student therapists

Supervisor: Jonathan Kanter, Ph.D.

5/10 – 5/12 **Community Placement**
Center for Behavioral Medicine, Brookfield, WI

Student trainee in adult outpatient psychotherapy and assessment

Therapy responsibilities included: Co-facilitating two ongoing stage 1 DBT skills training groups for clients with Borderline Personality Disorder and a number of Axis I and Axis II comorbidities; Providing individual DBT to clients with Borderline Personality Disorder; Providing individual CBT for patients Binge Eating Disorder

Assessment responsibilities included: Administering psychosocial interviews, the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II) and neuropsychological evaluations of general cognitive abilities and executive functioning using the Wechsler Adult Intelligence Scale 3rd Ed. (WAIS-III) and Delis-Kaplan Executive Function System (D-KEFS) for incoming clients; Writing assessment reports; Scoring and database maintenance of monthly self-report research packets; maintenance of weekly clinical data from client diary cards

Supervisors: Joan Russo, Ph.D.; Kimberly Skerven, Ph.D.; Neal Maglowski, LPC

8/10 – 5/12 **Research Therapist**
Depression Treatment Specialty Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI
Therapist in single subjects design examining the effectiveness of functional assessment procedure in Behavioral Activation (BA) on increasing homework compliance from a BA treatment manual I co-authored

Responsibilities included: Initial and ongoing case conceptualization and implementation of BA treatment protocol including activity monitoring, values assessment, activity scheduling, and implementation of stimulus control, contingency management, skills training and mindfulness interventions

Supervisor: Jonathan Kanter, Ph.D.

3/10 - 5/10 **Research Therapist**
Tic Disorders and Trichotillomania Specialty Clinic, University of Wisconsin-Milwaukee, WI

Therapist for group therapy pilot study evaluating effectiveness of habit reversal and concomitant parent support groups for children with trichotillomania

Responsibilities included: Co-facilitating support group for parents of children with Trichotillomania; Providing parents with education on disorder, stress and relaxation studies; Conducting functional assessments with parents on their role in maintenance of trichotillomania symptoms; Developing parent interventions for maximizing the effectiveness of treatment

Supervisors: Jonathan W. Kanter, Ph.D., Joan Russo, Ph.D., Douglas W. Woods, Ph.D.

9/09 - 5/10 **Practicum in Therapy**
Psychology Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Student trainee in conducting adult and child outpatient psychotherapy

Training included: Habit Reversal for Tourette's Syndrome and Trichotillomania; Acceptance and Commitment Enhanced Habit Reversal for Trichotillomania; Behavioral Activation, Functional Analytic Psychotherapy, and Acceptance and Commitment Therapy for Depression; Cognitive-Behavioral Therapy (CBT) for Specific Phobia and Panic Disorder

Supervisors: Jonathan Kanter, Ph.D.; Douglas Woods, Ph.D.

1/09 - 11/10 **Research Assessor**
Depression Treatment Specialty Clinic, University of Wisconsin-Milwaukee, WI

Assessor for study evaluating evidence for behavioral model of depression in experimental paradigm

Responsibilities included: Administering and scoring the Hamilton Rating Scale for Depression, Iowa Gambling Task, Wisconsin Card Sort, Stroop Test, and Shipley Institute of Living Scale

Supervisor: Jonathan Kanter, Ph.D.

9/08 - 5/09 **Practicum in Objective and Projective Assessment**
Psychology Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Training included: Administration, scoring and interpretation of psychiatric and neuropsychological instruments with clinic clients and with students in the Milwaukee Public School System; Clinical interviewing, Case conceptualization and writing integrative reports with recommendations for Individual Education Plans as well as recommendations for psychological interventions

Selected examples of neuropsychological assessment instruments administered: California Verbal Learning Test (CVLT), Das-Naglieri Cognitive Assessment System (CAS), Delis-Kaplan Executive Function System (D-KEFS), , Neuropsychological Assessment Battery (NAB), Wechsler Adult Intelligence Scale 3rd Ed. (WAIS-III), Wechsler Individual Achievement Test 4th ed. (WIAT-IV), Wechsler Intelligence Scale for Children 4th ed. (WISC-IV), Woodcock-Johnson III (WJ-III) Tests of Cognitive Abilities and Tests of Achievement

Selected examples of psychiatric assessment instruments administered: Anxiety Disorders Interview Schedule (ADIS), Minnesota Multiphasic Personality Inventory (MMPI-II), SCID-I, SCID-II, Millon Clinical Multiaxial Inventory (MCMI), Roberts Apperception Test, Rorschach

Supervisors: David Osmon, Ph.D.; Bonnie Klein-Tasman, Ph.D.

9/08 - 5/09 **Assessor**
Tic Disorders and Trichotillomania Specialty Clinic, University of Wisconsin-Milwaukee, WI

Training included: Administration and scoring of initial assessment batteries to children and adults seeking treatment for tic disorders and trichotillomania; Writing integrative reports; Consulting with client therapists regarding treatment recommendations

Selected examples of instruments administered: SCID-I, Diagnostic Interview Schedule for Children (DISC), Wechsler Abbreviated Scale of Intelligence (WASI), Yale Global Tic Severity Scale semi-structured interview, and various self-report measures assessing depression, anxiety, externalizing disorders and tic severity

Supervisor: Douglas Woods, Ph.D.

3/08 - 7/08 **Research Assessor**
Depression Treatment Specialty Clinic, University of Wisconsin-Milwaukee, WI

Assessor for study examining effectiveness of behavioral activation training workshop on subsequent clinician adoption of strategies and their effectiveness with depressed clients from a large HMO network

Responsibilities included: Administering and scoring pre- and post-treatment assessment interviews and measures over the phone using the HRSD, self-report measures for common psychiatric symptoms, and a qualitative interview addressing acceptability of research protocol to patients

Supervisor: Jonathan Kanter, Ph.D.

9/07 - 5/10 **Vertical Teams**
Psychology Clinic, University of Wisconsin-Milwaukee, WI

Participated on psychotherapy and assessment teams treating primarily depression, tic disorders, and trichotillomania

Learning experiences included: Researching and reporting on clinical issues related to current team therapy cases on as needed basis; Observing live and taped therapy sessions of assessment and therapy sessions from more experienced clinicians; Assisting with formulation of case conceptualizations and treatment recommendations

Supervisors: Jonathan Kanter, Ph.D.; Douglas Woods, Ph.D.

9/08 - 5/09 **Practicum in Empirically Supported Interventions**
Psychology Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Learning experiences included: Didactic training and practice using empirically supported cognitive-behavioral techniques such as interoceptive exposure, exposure and response prevention, cognitive restructuring for panic disorder, obsessive compulsive disorder, post-traumatic stress disorder, and depression

Supervisor: Shawn Cahill, Ph.D.

9/07 - 5/07 **First Year Practicum in Clinical Assessment**
Psychology Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Training included: Clinical interviewing using structured and unstructured approaches with student volunteers; Administering and scoring neuropsychological batteries to student volunteers and a clinic client from the Learning Disabilities Clinic

Selected examples of instruments administered: WJ-III Tests of Congitive Abilities and Achievement, NAB, Stroop, b-test, Dot Counting Test, Conners Adult ADHD Rating Scale (CAARS), NEO Personality Inventory-Revised (NEO), Personality Assessment Inventory (PAI), Stroop

Supervisor: David Osmon, Ph.D.

GRANT FUNDED RESEARCH EXPERIENCE

5/10 - present **Dissertation Research**

Title: Refinement and Pilot Testing of a Culturally Enhanced Treatment for Depressed African Americans

Co-principal investigator on two-phase, grant-funded dissertation project that refined initial draft of culturally enhanced behavioral activation manual for use with African American clients based on client and therapist feedback on acceptability and feasibility data obtained during Phase 1; Phase 2 consisted of a small randomized controlled trial comparing the revised manual with wait-list condition

Responsibilities included: Administration of activities related to hiring of study personnel; Training staff in therapy and assessment measures; Facilitating focus group discussions; Leading weekly treatment team meetings; Creation of Phase 2 manual; Coordination of study sites in community; Analysis of data; Filing reports with funding source

Funding Source: University of Wisconsin-Milwaukee
Research Growth Initiative Grant awarded to Jonathan Kanter
Grant proposal written by William Bowe and Jonathan Kanter
Direct Costs, $167,000

Supervisor: Jonathan Kanter, Ph.D.

9/09 - 3/11 **Thesis Research**

Title: Unique Effect of Depression on Employment Seeking in Unemployed Sample

Principal Investigator of study that evaluated the unique contribution of depression symptoms to job search intensity and reemployment in a predominately African American sample using a three month longitudinal design; Assessing validity of the Behavioral Activation for Depression Scale-Short Form with African Americans

Responsibilities included: Recruiting two hundred unemployed participants from job centers in Milwaukee; Administering measures at all study points; Creation of study database and completing all data analyses

Funding Source: Partially funded by a Medicaid Infrastructure Grant awarded to
Jonathan Kanter
Direct Costs, $100,000

Supervisor: Jonathan Kanter, Ph.D.

5/08 - 3/11 **Researcher**
Depression Treatment Specialty Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Project Coordinator for study developing a web-based module for training career counselors in
behavioral activation techniques for use with depressed clients seeking employment

Responsibilities included: Organization and facilitation of focus groups with state agencies working with unemployed populations; Development of all content for module and working with web developers to create web interface; Coordination of small pilot study testing effectiveness of web module in the community

Funding Source: Medicaid Infrastructure Grant awarded to Jonathan Kanter
Direct Costs, $100,000

Supervisor: Jonathan Kanter, Ph.D.

ADDITIONAL RESEARCH ACTIVITIES

9/07 - present **Researcher**
Depression Treatment Specialty Clinic

Participation in several studies related to treatment development of cognitive-behavioral treatments for depression and dissemination of these to new contexts and to underserved populations; Assisting advisor with writing grant proposals for reducing stigma of depression, culturally adapted treatments for Latino American depression, and stepped approach to administering behavioral activation; Administering stigma reduction programs for depression; Co-author of book chapters, journal articles, and behavioral activation treatment manual

3/08 - 11/09 **Researcher**

Depression Treatment Specialty Clinic, University of Wisconsin-Milwaukee, Milwaukee, WI

Project Coordinator for study examining support for behavioral conceptualization of depression

Responsibilities included: Organization of all study activities such as recruitment, running study
protocols, scoring measures, and analyzing data

PUBLICATIONS

Fine, K. M., Walther, M. R., Joseph, J. M., Robinson, J., Ricketts, E. J., Bowe, W. M., & Woods, D. W. (2012). Acceptance-enhanced behavior therapy for trichotillomania in adolescents. *Cognitive and Behavioral Practice, 19,* 463-471.

Kanter, J. W., Bowe, W. M., Baruch, D. E., & Busch, A. M. (2011). Behavioral activation for depression. In D.W. Springer, A. Rubin, C. G. Beevers (Eds.), *Clinicians guide to evidence-based practice: Treatment of depression in adolescents and adults* (pp. 113-182). Hoboken, NJ: John Wiley & Sons.

Baruch, D. E., Kanter, J. W., Bowe, W. M., & Phennig, S. (2011). Improving homework compliance in career counseling with a behavioral activation functional assessment procedure: A pilot study. *Cognitive and Behavioral Practice, 18,* 256 - 266.

Rusch, L., Kanter, J., Brondino, M., Weeks, C., & Bowe, W. (2010). Depression anti-stigma
Programs: The impact of on stigma and treatment seeking with a depressed low-income sample. *The Journal for Social and Clinical Psychology, 29,* 1020-1030..

Kanter, J. W., Manos, R. C.**,** Bowe, W. M., Baruch, D. E., Busch, A. M., & Rusch, L. C. (2010) What is behavioral activation? A review of the empirical literature. *Clinical Psychology Review, 30,* 608-620.

Busch, A., Manos, R., Rusch, L., Bowe, W., & Kanter, J. (2010). FAP and Behavioral Activation. In J. W. Kanter, M. Tsai, R. J. Kohlenberg (Eds.), *The practice of functional analytic psychotherapy* (pp. 65-81). New York, NY: Springer.

MANUSCRIPTS IN PROGRESS

Bowe, W. M. & Kanter, J. W. (2012). Evidentiary basis of cultural adaptations for treatment of African-American depression: Future directions. Manuscript in preparation.

Bowe, W. M. & Kanter, J. W. (2012). Effect of depression on employment seeking in a predominately African American Sample. Manuscript in preparation.

Bowe, W. M., Kanter, J. W., & Murphy, J. (2012). Validity of the behavioral activation for depression scale-short form with African Americans. Manuscript in preparation.

PRESENTATIONS

Bowe, W., Murphy, J., Cotter, S., Hermann, S., & Kanter, J. (2011, November). *The behavioral activation for depression scale - short form: Construct and predictive validity in a predominately African American sample.* Poster accepted at the annual meeting of the Association of Behavioral and Cognitive Therapies, Toronto, Canada.

Baruch, D. E., Busch, A. M., Weeks, C. E., Bowe, W. M., Rusch, L. C., Manos, R. C., & Kanter, J. W. (2009, November). *The effect of a behavioral activation workshop on the practice of community therapists.* Poster presented at the annual meeting of the Association of Behavioral and Cognitive Therapies, New York, NY.

Rusch, L. C., Kemp, J. J., Weeks, C. E., Bowe, W. M., Angelone, A. F., Baruch, D. E., Manos, R. C., & Kanter, J. W. (November, 2009). *The impact of models of depression on stigma and treatment seeking in a depressed African American community sample.* Poster presented at the annual meeting of the Association of Behavioral and Cognitive Therapies, New York, NY.

Bowe, W., Busch, A., Patrick, C., Andressen, E., & Kanter, J. (2009, November). *The effect of depression severity on sensitivities to positive reinforcement and punishment.* Poster presented at the annual meeting of the Association of Behavioral and Cognitive Therapies, New York, NY.

WORKSHOPS

Kanter, J. W., Busch, A. M., Weeks, C. E., Bowe, W. M., & Baruch D. E. (Feb, 2008). *Behavioral activation for depression*. Professional workshop presented at Aurora Behavioral Health, Milwaukee, WI.

Kanter, J.W., Brown-Popp,K.R., Busch, A.M., Rusch, L.C., Manos, R., Weeks, C.E., Bowe, W.M. (May, 2008). *A functional approach to behavioral activation in adult depression.* Professional workshop presented at ABAI, Chicago, Il.

Kanter, J.W., Baruch, D.E., & Bowe, W.M. (2009, June). *Behavioral activation training toolkit for career counselors.* Professional workshop presented at Curative Care Network, Milwaukee, WI.

TEACHING EXPERIENCE

9/07 - 5/11 **Teaching Assistant**
University of Wisconsin - Milwaukee, Milwaukee, WI

General responsibilities included: Preparing lesson plans for weekly discussion and lab sections; administering and grading quizzes; Teaching APA style and mechanics of writing lab reports; grading homework and lab reports; Teaching weekly lectures as guest lecturer; Creation and grading of exams and managing online grading system as Coordinator for Psychological Statistics for three semesters

Supervisors: Pamela Schafer, Ph.D. (Psychological Statistics, Spring 2010)
Anthony Greene, Ph.D. (Psychological Statistics, Spring 2007, 2008, 2009)
Susan Lima, Ph.D. (Research Methods, Fall 2008, 2009, 2010)
Katie Mosack, Ph.D. (Introduction to Psychology, Fall, 2007)

9/05 - 6/07 **High School Math Teacher**
Agawam High School, Agawam, MA

Responsibilities included: Creating lesson plans, exams, quizzes for Algebra I, Algebra II, and Geometry; Teaching students of all grade levels and abilities; Devising creative ways of teaching to students with highly variable learning styles and Individual Education Plans

1/05 - 6/05 **Middle School Math Teacher**
Kennedy Middle School, Springfield, MA

Responsibilities included: Creating lesson plans, exams, quizzes for Pre-Algebra classes; Teaching eighth grade students of varying abilities; Devising creative ways of teaching to students with limited academic resources

SELECTED PROFESSIONAL DEVELOPMENT

11/12 **CBT for Adults Diagnosed with Attention-Deficit/Hyperactivity Disorder**
Durham, NC. Sponsored by Duke Medical School, Department of Psychiatry
Two and a half hour workshop. Conducted by John Mitchell, Ph.D.

Learned CBT strategies such as cognitive restructuring, contingency management, and stimulus control for targeting ADHD symptoms with adults

9/12 & 10/12 **Prolonged Exposure Treatment for Post-Traumatic Stress Disorder**
Durham, NC. Sponsored by the Durham VA.
Five half-day workshops. Conducted by Eric Crawford, Ph.D.

Intensive training in implementing complete prolonged exposure treatment package for PTSD. Training included didactics and in-vivo practice of treatment components with feedback from workshop facilitator

9/12 **Motivational Interviewing Training**
Durham, NC. Sponsored by Duke Medical School, Department of Psychiatry
Half-day workshop. Conducted by Julie Seel, Ph.D.

Training included didactic and practice components of motivational interviewing strategies

7/12 **Dialectical Behavior Therapy (DBT) Training**
Durham, NC. Sponsored by Duke Medical School, Department of Psychiatry
Four half-day workshops. Conducted by Zachary Rosenthal, Ph.D. and Clive Robins, Ph.D.

Training emphasized conducting individual dialectical behavior therapy and included didactic
and experiential practice exercises

7/12 **Suicide Risk Training**
Durham, NC. Sponsored by Duke Medical School, Department of Psychiatry
Half-day workshop. Conducted by Clive Robins, Ph.D.

Didactic training on how to assess and respond to suicide risk and suicidal behaviors

7/12 **Biofeedback Training**
Durham, NC. Sponsored by Duke Pain and Palliative Care Clinic.
2 hour training. Conducted by Miriam Feliu, Psy.D.

Learned scientific basis for using biofeedback training to treat chronic pain and learned how to use biofeedback equipment with patients using brief pain management CBT protocol

9/11 **Using Dialectical Behavior Therapy with Trauma Clients**
Milwaukee, WI. Sponsored by the University of Wisconsin-Milwaukee
Three hour workshop. Conducted by Neal Maglowski, LPC

Learned biosocial theory of Borderline Personality Disorder and relevance of techniques
for clients with past trauma histories

5/11 **Mini International Neuropsychiatric Interview Training**
Milwaukee, WI. Sponsored by the University of Wisconsin-Milwaukee
Half-day training. Conducted by Juris Janavas, M.D.

Trained in administration of the MINI, a brief structured interview for common Axis I disorders by developer of instrument

5/11 **Implementing Chain Analyses with Clients with Borderline Personality Disorder**
Brookfield, WI. Sponsored by the Center for Behavioral Medicine
Half-day workshop. Conducted by Joan Russo, Ph.D.

Learned techniques for implementing chain analyses of self-harm behavior with clients with
Borderline Personality Disorder

11/10 **Strengthening Behavioral Analysis and Commitment Strategies**,
San Francisco, CA. Sponsored by the International Society for the Improvement and Teaching of Dialectical Behavior Therapy
Two hour workshop. Conducted by Kelly Koerner, Ph.D.

Didactic and experiential learning of enhancing commitment strategies and conducting chain analyses of impulsive behaviors with clients with Borderline Personality Disorder

9/09 **Behavioral Activation for Depression**
Milwaukee, WI. Sponsored by the University of Wisconsin - Milwaukee
2-day workshop conducted by Christopher Martell, Ph.D.

Didactic and experiential approach to learning behavioral activation approach to case conceptualization and implementation of treatment strategies

7/09 **Applied Multi-Level Modeling for Social Science and Public Health Research**,
Milwaukee, WI. Sponsored by the University of Wisconsin-Milwaukee
Two day workshop. Conducted by Donald Hedecker, Ph.D.

Learned theory of hierarchical linear models and their application to behavioral health research questions

PROFESSIONAL AFFILIATIONS

International Society for the Improvement and Teaching of Dialectical Behavior Therapy, 2010 - 2012

Association for Behavioral and Cognitive Therapies, 2007 - 2012

American Psychological Association, 2009 – Present

Association for Behavioral Analysis International, 2007 – 2008

COMMUNITY SERVICE

2/10 – 5/12 **Healthy Relationship Class Co-facilitator**
Social Development Commission, Milwaukee, WI

Volunteering with the Health Relationships Program at the Social Development Commission as a co-facilitator teaching African American, Latino, and White couples strategies for validating partners, reducing stress, and collaborating in development of goals at 3-day couples retreats

OTHER WORK EXPERIENCE

12/04 - 1/05 **Cost and Efficiency Analyst**
Conagra, Turners Falls, MA

Responsibilities included: Developing standardized costs for products; Maintenance of cost of goods sold entries in general ledger; Assisting controller with month and year end closes for finance cycle; Evaluating production line labor efficiencies through all phases of production; Working with operations management to introduce cost savings through implementation of new production line practices and capital expenditure; Streamlining finance and production processes through automation

5/02 - 12/04 **Cost and Efficiency Analyst**
Royal Harvest Foods, Springfield, MA

Responsibilities included: Monthly tracking of inventory valued at an average of $30 million; Evaluating production line efficiencies at facilities in multiple states; Developing standardized costs for products; Maintenance of cost of goods sold in general ledger; Assisting controller with month end and year end closes for accounting cycle; Routine accounting services for subsidiary grocery stores including general ledger, accounts payable, accounts receivable, and banking