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A Randomized Pilot Study of Motivation Enhancement Therapy to Increase Utilization of Cognitive-Behavioral Therapy for Social Anxiety

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A RANDOMIZED PILOT STUDY OF MOTIVATION ENHANCEMENT THERAPY TO INCREASE UTILIZATION OF COGNITIVE-BEHAVIORAL THERAPY FOR SOCIAL ANXIETY

By

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To my parents
for their unwavering support of my education

To Lee
with love and gratitude

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ABSTRACT

Despite the efficacy of cognitive-behavioral therapy (CBT), most socially anxious individuals do not seek treatment. The current study evaluated the efficacy of three-session motivation enhancement therapy (MET) designed to increase CBT utilization among those with social anxiety. Twenty-seven non-treatment-seeking socially anxious individuals (92.6% of whom had social anxiety disorder) were randomly assigned to either MET for CBT (*n*=12) or a psychoeducation control condition (*n* = 15). After the intervention, 41.7% of MET participants attended at least one session of CBT compared to 13.3% of controls. Further, willingness to schedule a CBT appointment increased at a significantly greater rate in the MET condition. Results suggest MET for CBT may be a time-efficient means to increase CBT utilization among socially anxious individuals.

INTRODUCTION

There are currently several efficacious treatment options for individuals with social anxiety. In particular, cognitive-behavioral therapy (CBT) appears to be the psychosocial treatment of choice for social anxiety (see Fedoroff & Taylor, 2001; Feske & Chambless, 1995; Gould et al., 1997; Heimberg, 2002; Rodebaugh et al., 2004a; Taylor, 1996). In addition to demonstrating better long-term outcomes than at least one antidepressant medication (Liebowitz et al., 1999), CBT may produce outcomes superior to those of other psychosocial treatments. In a meta-analysis comparing CBT, social skills training, exposure, cognitive restructuring to placebo and waiting list controls, only CBT resulted in a significantly larger effect size than placebo (Taylor, 1996). In addition CBT appears to produce long-term gains as evidenced by significant improvements in quality of life that are evident at follow-up interviews (Eng et al., 2001; Safren et al., 1997).

Despite the efficacy of treatments such as CBT for social anxiety, the vast majority of individuals suffering from social anxiety do not receive treatment (Magee et al., 1996). According to epidemiological data, 80-95% of people with social anxiety disorder (SAD) report receiving *no* treatment for their SAD (Grant et al., 2005; Schneier et al., 1992). Further, the mean age of first SAD treatment among those who did seek treatment was found to be 27 years old, approximately 12 years after the onset of the disorder (Grant et al., 2005). Individuals with SAD are also not likely to report psychological symptoms to their general practitioners (Weiller et al., 1996). In spite of substantial functional impairment, community participants in the 1996 National Anxiety Disorders Screening Day with social anxiety symptoms were significantly more likely to report a variety of reasons for not seeking treatment relative to individuals without social anxiety symptoms including believing treatment would not help, uncertainty of where to go for help, financial barriers, and, consistent with their elevated fear of scrutiny (American Psychiatric Association, 1994), concern regarding what others might think or say if they sought treatment (Olfson et al., 2000).

The finding that the majority of individuals with social anxiety do not seek treatment is cause for concern given that social anxiety is a prevalent and impairing psychiatric condition. Estimates of the lifetime prevalence of DSM-IV SAD (American Psychiatric Association, 1994) range from 3.5-12.1% (Grant et al., 2004; Kessler et al., 2005a; Wittchen et al., 1998) and rates of twelve-month DSM-IV SAD range from 3.6-6.8% (Kessler et al., 2005b; Wittchen et al., 1998), suggesting that SAD is one of the most prevalent psychiatric disorders. Furthermore, SAD (as per either DSM-III-R or DSM-IV criteria) appears to be one of the most prevalent disorders in numerous countries worldwide (e.g., Canada, Chile, Germany, United States) (Grant et al., 2004; Offord et al., 1996; Vicente et al., 2006; Wittchen et al., 1998).

High SAD prevalence rates are noteworthy given that SAD tends to show early onset with a chronic, unremitting course (Amies et al., 1983; Grant et al., 2005; Öst, 1987). SAD is associated with significant impairment across several domains of functioning including lower educational, occupational, and economic attainment, social and romantic relationships, and restriction of and/or interference with people's plans and activities (Grant et al., 2005; Schneier et al., 1994; Stein & Kean, 2000). Individuals with SAD also report greater psychiatric and medical complaints, including high rates of suicidal ideation and suicide attempts, other anxiety and mood disorders, and substance use disorders (Agosti et al., 2002; Buckner et al., 2008b; Davidson et al.,

1993; Grant et al., 2005; Weiller et al., 1996). SAD is also associated with greater societal costs compared to those without SAD, such higher rates of public assistance utilization (Greenberg et al., 1999; Schneier et al., 1992). Thus, failure to seek treatment for social anxiety could result in significant personal and public health costs.

Despite well-documented problems with treatment utilization, surprisingly little empirical work has been conducted to increase treatment utilization among socially anxious individuals. One area that appears particularly promising is that of motivation. Motivation is posited as essential for behavioral change (Miller & Rollnick, 2002; Ryan & Deci, 2000). According to the Transtheoretical States of Change Model, an individual's motivation can move between at least four stages of change (DiClemente & Velasquez, 2002; Prochaska et al., 1992): Precontemplation (no intention to change), Contemplation (aware of problem and seriously thinking about change with no commitment to action), Action (overt behavioral change), and Maintenance (behaviors focused on sustaining attained gains).

Although the concept of stages of change have been traditionally used in reference to substance abuse treatment, stages of change concerning anxiety-related behaviors have been found to be related to help-seeking, treatment retention, and treatment outcomes among anxious undergraduates as well as patients receiving psychosocial and/or pharmacological treatments for anxiety disorders. Dozois, Westra, Collins, Fung, and Garry (2004) examined stages of change among anxious undergraduate and patients with panic disorder. Among anxious undergraduates, Precontemplation was related to reduced help-seeking. In CBT for panic disorder, treatment completers demonstrated higher baseline scores in the Action stage than did patients who dropped out of treatment. Further, patients classified as CBT responders (those who demonstrated significant decrease in panic symptoms and scores close to non-clinical range at post-treatment) scored higher in baseline Contemplation than non-responders. In a randomized control trial of sustained release adinazolam for patients with panic disorder, higher scores on Precontemplation were associated with less symptom change over the course of treatment compared to patients scoring high on Contemplation, Action, and/or Maintenance (Beitman et al., 1994; Reid et al., 1996). Similar patterns have been noted for pharmacological treatments of generalized anxiety disorder (GAD), with high Precontemplation scores associated with less change in anxiety during treatment and high Contemplation and high Action scores related to greater changes in anxiety (Wilson et al., 1997). Contrary to expectation, however, patients with GAD and high Maintenance scores demonstrated higher drop-out rates compared to patients with lower Maintenance scores.

Motivation for behavioral change may be particularly relevant to seeking CBT among those with social anxiety. Engaging socially anxious patients in CBT is an inherently difficult process as exposure to feared situations is a central but aversive component of CBT for social anxiety (Heimberg & Becker, 2002; Hope et al., 2000; Hope et al., 2006). Moreover, given that avoidance is a hallmark feature of most anxiety disorders including SAD (American Psychiatric Association, 1994), it is not surprising that many patients opt to avoid treatments that require them to confront their fears. It therefore follows that techniques that specifically target motivation to seek CBT could lead to increased treatment utilization.

A promising method to increase motivation is motivational interviewing (MI), a client-centered, directive method for enhancing intrinsic motivation to change problematic behaviors by exploring and resolving ambivalence regarding behavioral

change (Miller & Rollnick, 2002). From an MI perspective, what is typically referred to as "non-compliance" or "resistance" in therapy is viewed as "ambivalence". Thus, although patients recognize that their problematic behaviors cause impairment, they may be reluctant to change these behaviors for a variety of reasons (e.g., fear of change, fear of failure, perceived benefits of the problematic behavior). The goal of MI is to work collaboratively with the patient to explore and resolve ambivalence regarding change. Miller and Rollnick propose that trying to convince patients to change will actually decrease the likelihood of change for a variety of reasons (e.g., patients will become defensive). Therefore, within an MI framework, therapists work with patients to explore discrepancies between patients' present behaviors and their own goals and values to encourage them to consider new perspectives on change. Resolving ambivalence is accomplished using client-centered, directive interviewing to elicit change-related statements from the patient in a non-confrontational manner. In the end, the patient, not the therapist, is responsible for choosing to change and for carrying out strategies to enact change.

Motivation enhancement therapy (MET) is a specific MI-based treatment developed to serve as a brief treatment for alcohol use disorders (Miller et al., 1992). MET combines feedback regarding the patient's alcohol use behaviors with MI techniques to quickly increase motivation to change alcohol-related behaviors. Treatments that use MI techniques appear efficacious in soliciting change for the treatment of problematic substance use (see Burke et al., 2003; Dunn et al., 2001). Despite the brevity of many MET interventions (e.g., 2-4 sessions), it demonstrates efficacy equal to that of other alcohol treatments which are often administered over a larger number of sessions (Project MATCH Research Group, 1997). Interventions that incorporate MI techniques have also demonstrated efficacy in non-substance use domains, such as increasing exercise (Marcus et al., 1992) and decreasing bulimic behaviors (Treasure et al., 1999).

Given the success of MET to change other types of problematic behaviors, it may be that MET can be used to increase motivation to seek SAD treatment. In line with MI principles, socially anxious individuals will be less likely to seek treatment (e.g., CBT) if they are ambivalent about whether treatment is right for them. MET may therefore be used to help non-treatment-seekers examine their ambivalence and increase motivation to seek CBT for social anxiety. Specifically, MET could be used to target many of the treatment barriers reported by socially anxious individuals (Olfson et al., 2000). To illustrate, given that MET is comprised of a psychoeducational component, individuals could be provided with information that could assuage some of their concerns regarding treatment. Regarding the concern that treatment would not help, data regarding the efficacy of CBT for SAD could be provided. Concerning uncertainty of where to go for help and financial barriers, therapists could provide information on low-cost CBT for SAD in their community. MI techniques could be used to address fears that serve as treatment barriers. For instance, to address fears of what others might think or say if they sought treatment, therapists could work with individuals to weigh the pros and cons of seeking CBT to explore how this fear could be helping or hurting patients reach their long- and short-terms goals.

No known studies have tested the utility of MET to increase treatment-seeking among non-treatment seekers with elevated social anxiety. There is some data indicating that MET can be used successfully with patients with anxiety disorders. One case report outlined the treatment of a patient for whom MET was used to decrease

worry and social anxiety for a patient that did not respond to CBT for GAD (Westra & Phoenix, 2003). An MET-based intervention for post-traumatic stress disorder (PTSD) increased patients' recognition that PTSD-related behaviors were problematic (Murphy et al., 2004). Only three known published reports have examined the utility of MET with patients in treatment for SAD. In one, MET did not reduce anxiety for a patient who did not respond to exposure treatment for SAD (Westra & Phoenix, 2003). Yet, in another study, MET was related to changes in alcohol use behaviors for a patient with a primary diagnosis of SAD with a comorbid alcohol use disorder (Buckner et al., 2008a). A different study examined the utility of a pre-CBT MI intervention for patients receiving CBT for anxiety disorders (including patients with SAD) (Westra & Dozois, 2006). The pre-CBT MI resulted in reduced post-CBT symptoms relative to patients who did not receive the pre-CBT MI.

Only one known study has investigated the utility of MET to increase motivation to engage in treatment for an anxiety disorder (Maltby & Tolin, 2005). In this investigation, treatment-refusing individuals with obsessive-compulsive disorder (OCD) were randomly assigned to a four-session, MET-based readiness intervention (RI) for exposure and response prevention (ERP), a form of CBT found to be efficacious for the treatment of OCD. It was found that 86% of patients in the RI condition agreed to participate in treatment upon completion of RI versus only 20% of patients in the waitlist control group. Although the small sample size of this study (N = 12) suggests the need for further work in this area, these data illustrate the potential utility of interventions aimed at increasing motivation to engage in treatment for at least some anxiety conditions.

The present study is the first known investigation of the efficacy of a manualized MET protocol designed specifically to increase willingness to schedule a CBT appointment and actual treatment-seeking behaviors among non-treatment-seeking individuals with clinically relevant social anxiety. Participants were randomly assigned to receive MET for CBT or to participate in a psychoeducation control condition. Primary outcome variables included willingness to schedule a CBT appointment and post-intervention treatment-seeking behavior. Consistent with prior work (Maltby & Tolin, 2005), it as hypothesized that, relative to patients in the control condition, patients in the MET for CBT condition would exhibit increased willingness to engage in CBT for social anxiety during the course of the intervention and would be more likely to attend CBT after completing the intervention. Because MET for CBT is thought to work by increasing motivation to change problematic behaviors, the relationship between condition and motivation to change social anxiety-related behaviors was also examined. It was predicted that the MET for CBT condition was be associated with greater increases in motivation to change social anxiety during the course of the study.

Given evidence that MET can result in lower psychiatric symptoms (Treasure et al., 1999), a secondary aim of the proposed study was to examine the impact of MET for CBT on symptoms of social anxiety and depression. However, the focus of the intervention was increasing motivation to seek CBT, not decreasing behaviors associated with social anxiety and/or depression. Further, prior work suggests that MI administered prior to CBT does not appear to reduce social anxiety among patients with SAD (Westra & Dozois, 2006). Thus, MET for CBT was not expected to result in lower levels of social anxiety or depression relative to the control condition.

METHOD

Participants

The sample consisted of 27 undergraduate introductory psychology students at a large, southeastern university who received research credit for participation. Participants were invited to participate based on their responses on a mass screening conducted in their psychology classes during which they completed the *Social Interaction Anxiety Scale (SIAS)* (Mattick & Clarke, 1998). Because previous research found that one standard deviation above a community sample mean on the SIAS (*M* = 19.9, *SD* = 14.2) correctly classified 82% of SAD individuals (Heimberg et al., 1992), participants scoring at or above this cut-off were invited to participate in the present study. Of the 2,886 students that participated in screenings between September 2006 and July 2007, 508 met initial inclusion/exclusion criteria and were invited via email to participate in the present study. The email invited them to participate in a study called an "Interview Study of Anxiety". Participants were informed that the goal of the study was to learn more about anxiety. This cover story was used to mask that the actual intention was to increase motivation to seek CBT for SAD.

The study took place at the university's outpatient psychology clinic. A total of 75 students signed up to participate. Participants were randomized to study condition prior to their initial appointment. Of the 75 students who signed up, 12 cancelled or did not show for their first appointment, four underwent MET as training cases for study therapists, and 59 completed the diagnostic interview to assess eligibility between October 2006 and July 2007.

Inclusion criteria included: (1) at least 18 years of age, (2) social anxiety primary, and (2) English language proficiency as all therapists were English-speaking and all verbal and written materials were administered in English. Exclusion criteria included: (1) current significant suicidal ideation, (2) current or prior history of CBT, cognitive therapy, or exposure, and (3) current or past diagnosis of schizophrenia, bipolar disorder, other psychosis, or organic mental syndrome. The number of individuals excluded for each reason was: no longer exhibited elevated social anxiety (*n* = 14), social anxiety not primary (*n* = 15), currently receiving therapy (*n* = 1), prior CBT experience (*n* = 1), treatment-seeking (*n* = 1), and did not have time to complete all three sessions before end of the semester (*n* = 1).[1] Thus, 27 met inclusion-exclusion criteria. Those participants who did not meet eligibility requirements were referred to appropriate mental health services in the local community.

Demographic variables at baseline for the 27 eligible participants are presented in Table 1. Participants were primarily women, Caucasian, and unemployed. All participants reported they were unmarried. Regarding educational history, most were in their first year of college and reported grade point averages greater than 3.0. Only one participant reported a history of anxiety treatment (not CBT). The following primary diagnoses were assigned to the sample: generalized SAD (*n* = 22), SAD (*n* = 3), and no diagnosis (*n* = 2). Participants with no SAD diagnosis demonstrated clinically relevant social anxiety (total scores of 38 and 64) on the clinician-administered Liebowitz Social Anxiety Scale (Liebowitz, 1987) and reported during the diagnostic interview that their social concerns caused them at least some distress and/or impairment. Concerning comorbidity, 40.7% of the total sample (*n* = 11) received at least one comorbid Axis I diagnosis, with 33.3% (*n* = 9) receiving one comorbid Axis I diagnosis and 7.4% (*n* = 2) receiving more than one comorbid Axis I diagnosis. The following comorbid diagnoses

were made: specific phobia (*n* = 4), alcohol use disorder (*n* = 3), generalized anxiety disorder (*n* = 3), dysthymia (*n* = 1), obsessive-compulsive disorder (*n* = 1), and illicit substance use disorder (*n* = 1).[1]

Therapists

Three doctoral students in clinical psychology delivered the therapy. Ongoing supervision consisted of a weekly review of session videotapes combined with case discussion. Supervision also focused on issues regarding implementation and adherence to treatment protocols as well as preparation for upcoming treatment sessions.

Training of study therapists consisted of 6 hours of didactic instruction that covered study aims, study procedures, MI and MET, and the present study's treatment manual (e.g., order of MET steps). Training involved role plays of MI techniques as well as shadowing the principle investigator (J.D.B.) during two MET for CBT cases. Therapists saw at least one training participant. Videotapes of training sessions were reviewed in supervision meetings and sessions were rated using the study's adherence measure (described in detail below) to ascertain therapist proficiency in the use of MET and adherence to the present study's protocol. Two therapists saw one training case whereas one therapist saw two training cases.

Measures

*Anxiety Disorders Interview Schedule-IV-L (*ADIS-IV) (DiNardo et al., 1994)*.* The ADIS-IV was the primary measure of diagnostic status. The ADIS-IV is a structured diagnostic interview designed to provide detailed and thorough coverage of current DSM-IV anxiety disorders and to differentiate between commonly comorbid disorders including mood disorders, substance use disorders, somatoform disorders, and psychosis. The ADIS-IV-L has been shown to be a reliable and valid measure of DSM anxiety disorders (Brown et al., 2001). Interviews were conducted by trained clinical graduate students under the supervision of a doctoral-level licensed clinical psychologist. Diagnosticians were trained in the ADIS by the principle investigator (J.D.B.) and each had at least one year of diagnostic interviewing experience. In the case of comorbidity, primary diagnoses were determined by therapists ascertaining the most functionally disabling and/or distressing disorder at baseline. ADIS's were reviewed during weekly team meetings with a doctoral-level licensed clinical psychologist. Teams used all available data, including videotapes of the clinical interviews. A consensus of team members was required to confirm diagnoses. Diagnostic reliability was established for primary diagnoses by comparing the original diagnosis with blind ratings from another study therapist for a random 15% of study participants (percent agreement was 75%).

Liebowitz Social Anxiety Scale – clinician administered version (LSAS). The LSAS, a widely used instrument for the assessment of social anxiety, assesses fear and avoidance of 24 social interaction and performance situations (Liebowitz, 1987). Participants were asked to rate fear for each situation on a scale of 0 (*not at all*) to 3 (*severely*) and to rate avoidance from 0 (*never*) to 3 (*usually 67-100%*). A score of 30 for SAD and 60 for generalized SAD have been found to represent the best balance of sensitivity and specificity (Mennin et al., 2002). The LSAS demonstrates excellent psychometric properties including reliability, convergent and discriminant validity, and treatment sensitivity (Heimberg & Holaway, 2007; Heimberg et al., 1999). Given empirical data indicating that the fear and avoidance subscales do not seem to adequately tap distinct constructs (Heimberg & Holaway, 2007; Heimberg et al., 1999),

the LSAS total score was used in the present study. At baseline, the LSAS demonstrated very good internal consistency (α = .88) with scores ranging from 38-105.

Willingness to Schedule a CBT Appointment. Willingness to schedule an appointment served as one of the primary outcome measures. Willingness was assessed using one self-report item that asked, “How willing are you to schedule an appointment for CBT for social anxiety (circle one)?” from 0-10 with 0=*not at all willing to schedule CBT appointment*, 5=*neither willing nor not willing*, and 10=*definitely willing to schedule CBT appointment*. This item was developed for the present study based on face validity and is consistent with the practice of using single-item measures to assess motivation (Huppert et al., 2006). At baseline, scores ranged from 0-10. At post-intervention (i.e., end of appointment 3), participants were also asked whether they would like a therapist from the university’s Anxiety and Behavioral Health Clinic to contact them to schedule an appointment for CBT for SAD (yes, no).

University of Rhode Island Change Assessment (URICA). Change in motivation was assessed using the URICA (McConnaughy et al., 1983). The URICA was developed to evaluate the process of change in therapy. This self-report measure includes 32 items concerning readiness to change problematic behaviors rated on a five-point scale (1=*Strongly Disagree*, 3=*Neutral*, 5=*Strongly Agree*). The URICA includes questions such as "It might be worthwhile to work on my problem,” “Being here is pretty much a waste of time for me because the problem doesn't have to do with me,” and “I wish I had more ideas on how to solve the problem.” Although used most extensively in the treatment of substance use (Project MATCH Research Group, 1993), the URICA was designed in such a way that it can be applied to a broad range of problems. The relevant problem (in this case social anxiety) is indicated at the top of the form. The URICA has demonstrated excellent reliability among anxious undergraduates and patients with panic disorder (Dozois et al., 2004) and to be predictive of treatment retention and outcome among patients in treatment anxiety disorders (Beitman et al., 1994; Dozois et al., 2004; Wilson et al., 1997). McDonald and Warren developed a method to consider stages of change is to take into consideration the overall pattern of URICA scores (as cited in Vogel et al., 2006) by calculating a Readiness for Change Index (RCI) in which mean Precontemplation scores are subtracted from the sum of the means of the other three URICA scales. This strategy was utilized to examine motivation in the current study. At baseline, RCI scores ranged from 3.88-11.63.

Importance/Confidence Form (ICF). Created for the purposes of this study, this self-report measure consisted of two items rated on 0-10 scales that assess importance and confidence to change social anxiety behaviors. These items are consistent with Miller and Rollnick (2002)’s importance/confidence rulers, as both importance of behavioral change and confidence in one’s ability to make such change are seen as related yet separate constructs relevant to motivation. The first item asked “On a scale of 0-10, rate how important it is for you to change your social anxiety-related behaviors” in which 0=*not at all important*, 5=*neither important nor unimportant*, and 10=*most important*. The second item asked “On a scale of 0-10, rate how confident you are that you can change your social anxiety-related behaviors” in which 0=*not at all confident*, 5=*neither confident nor not confident*, and 10=*most confident*. These items were developed for the present study based on face validity and are consistent with the practice of using single-item measures to assess motivation (Huppert et al., 2006). Further, increases in Importance and Confidence to change problematic behaviors were found to correspond with change in problematic behaviors in a case study of a patient

receiving CBT for SAD (Buckner et al., 2008a). Given the limitations of single-item measures, correlations were conducted among ICF items as well as between ICF items, willingness to schedule a CBT appointment, and URICA subscales assessed at baseline to determine whether each ICF item tapped a unique aspect of motivation as well as whether the ICF and Willingness items were related to a standardized measure of motivation (i.e., the URICA; see Table 2). The correlations among the items suggest that although there is some overlap, Importance, Confidence, and Willingness appear to tap distinct constructs. Specifically, although Importance and Willingness were significantly positively correlated, they were unrelated to Confidence. Importance, Confidence, and Willingness also differentially related to URICA subscales, suggesting Importance and Willingness are higher among those higher in Contemplation whereas Confidence is more strongly related to the Action stage. At baseline, Importance scores ranged from 2-10 and Confidence scores from 1-10.

Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale (SPS). The SIAS and SPS are widely used self-report measures of social anxiety (Mattick & Clarke, 1998). Each measure assesses cognitive, affective, and behavioral reactions to social interaction situations (SIAS) or situations involving being observed by others (SPS). Both measures are comprised of 20 items rated on a five-point scale ranging from 0 (*not at all characteristic or true of me*) to 4 (*extremely characteristic or true of me*). They demonstrate high levels of internal consistency across clinical, community, and student samples (Heimberg et al., 1992; Mattick & Clarke, 1998; Osman et al., 1998; Weeks et al., 2005) and test-retest reliability in clinical and non-clinical samples (Heimberg et al., 1992; Mattick & Clarke, 1998). Individuals with SAD score higher than individuals with other anxiety disorders and non-anxious individuals on these measures (Brown et al., 1997). At baseline, reliability was excellent for each scale the SIAS (α = .89) and the SPS (α = .91) independently and the combined SIAS-SPS total (α = .95) in the current sample. Scores on the combined SIAS-SPS ranged from 35-199.

Brief Fear of Negative Evaluation Scale (BNFE). The BNFE was used to provide another measure of social anxiety (Leary, 1983). The BFNE is a self-report measure that consists of 12 items rated on a five-point scale, ranging from 1 (*not at all characteristic of me*) to 5 (*extremely characteristic of me*). This measure has been shown to have good discriminant, convergent, and construct validity (Rodebaugh et al., 2004b; Weeks et al., 2005). The BFNE was administered at each assessment point to monitor the participants' social anxiety throughout the intervention. In the present sample, the BDI showed excellent reliability at baseline.(α = .96) with scores ranging from 13-48.

Social Anxiety Session Change Index (SASCI). The SASCI was designed as a brief self-report measure that can provide a session-by-session assessment of progress during social anxiety treatment (Hayes et al., in press). Scores on this four-item measure can range from 4-28, with scores of 4-15 indicating improvement. SASCI scores have been found to decrease during the course of CBT for SAD, with change in SASCI scores corresponding with changes in longer measures (BFNE, LSAS) of social anxiety (Buckner et al., 2008a; Hayes et al., in press). This measure was administered at four assessment points (post-psychoeducation, end of appointment 1, end of appointment 2, post-intervention) to assess progress on aspects of social anxiety and avoidance since baseline. At the first assessment in the present sample (i.e., post-psychoeducation), the SASCI demonstrated excellent internal consistency (α = .92) with scores ranging from 14-27.

Beck Depression Inventory-II (BDI-II). The BDI was administered to assess whether condition was associated with changes in depression. The BDI-II is a 21-item self-report inventory that evaluates the presence of depressive symptoms (Beck et al., 1996). Participants indicated which statement best described the way they had been feeling over the past 2 weeks on a 0 to 3 scale. Total scores can range from 0 to 63, with higher scores reflecting greater levels of depression. The BDI has demonstrated good internal consistency, test-retest reliability, and divergent validity in patients with SAD (Coles et al., 2001). In the present sample, the BDI showed excellent reliability at baseline (α = .93) with scores ranging from 2-43.

Follow-up Assessment

All 27 participants were emailed one month after completion of Appointment 3 and invited to complete a brief on-line survey created for this study using SurveyMonkey, a web-based survey software available at www.surveymokey.com. This assessment included four questions assessing treatment-seeking behaviors. Participants were asked if they had sought treatment for their social anxiety (yes or no). If yes, they were asked to indicate what type/s of treatment were sought. They could chose from a list of options all options that applied (CBT, self-help, medication, talk therapy, other). They were also asked to indicate how far they had gotten in treatment (scheduled appointment, attended first appointment, stopped treatment, still in treatment). If participants had not sought treatment, they were asked to indicate the reasons for not seeking treatment. They were able to choose all reasons that applied from a list of possible reasons derived from Olfson et al. (2000): *I don't believe I have clinically meaningful social anxie*ty, *I worry what others might think or say if I sought treatment, I'm afraid I will have to take medications, I don't have insurance, I can't afford treatment, I'm unsure where to go for help, I can handle the situation on my own*, and *other*. Participants were compensated $20 for completion of the follow-up assessment. See Appendix A for assessment instruments.

Procedures

Flow of participants through the study is diagramed in Figure 1. Participants were randomly assigned to one of two conditions: MET for CBT or control condition. Randomization occurred prior to attendance of their baseline appointment using computer-generated random numbers table in which consecutive participants were assigned to the next available random number. Because not all participants assessed at baseline were eligible for the study, the practice of randomization prior to baseline assessment resulted in unequal *n*'s in study conditions.

On the day of the baseline assessment, participants were greeted by a trained graduate student therapist and informed that the study could consist to up to three appointments. All 59 interested students provided written informed consent and underwent the diagnostic interview (comprised of ADIS, LSAS) to determine eligibility. Participants eligible for the study upon completion of this interview then completed the self-report measures (e.g., ICF, URICA, SIAS, BDI). In order to minimize the impact of social desirability on responses to self-report measures, participants were given large manila envelopes with self-report packets. They were asked to seal completed packets in the envelope and to give the sealed envelop to the clinic receptionist so that therapists would not see their responses. Therapists then left the room to allow participant to complete self-report packets in solitude.

After completing the self-report measures, therapists rejoined participants and presented all participants with psychoeducation regarding social anxiety and CBT. Specifically, therapists informed participants:

> "Based on your responses to the interview and the questionnaires, it appears as though you have clinically meaningful social anxiety. The good news is that there is effective treatment for social anxiety. Cognitive behavioral therapy, or CBT, is an effective treatment for social anxiety. In CBT, we view emotions (such as social anxiety) to be related to cognitions (or thoughts) and behaviors".

Therapists then showed participants a diagram illustrating the interactional relations between thoughts, feelings, and behaviors. Therapists then explained:

> "As you can see in this diagram, our thoughts can affect our emotions just as our emotions can affect our thoughts. Similarly our thoughts can affect our behaviors and vice-versa. Our behaviors can also affect our emotions and our emotions can affect our behaviors. CBT challenges those thoughts and behaviors that contribute to the social anxiety. At the end of this study, we will give all participants information on how to get CBT for social anxiety."

Therapists were not instructed to inform participants that they themselves were therapists nor did they indicate that they would be the participants therapist should they chose to seek CBT.

Participants were next asked to complete a self-report packet that was also completed in solitude and sealed in an envelope that was given to the clinic receptionist. Upon completion of these forms, therapists informed participants of their condition assignment.

Appointment 2 occurred approximately two days after Appointment 1 and Appointment 3 occurred approximately two days after Appointment 2. Participants completed self-report measures at the end of Appointments 1, 2, and 3. All self-report packets were completed in solitude and placed in a sealed envelope that was given to the clinic receptionist (see Table 3 for assessment schedule).

Independent Assessment

To evaluate post-intervention social anxiety, an independent assessor, unaware of condition, completed the LSAS at the end of Appointment 3 (i.e., at post-intervention).

Interventions

MET for CBT Condition. This intervention was comprised of techniques drawn primarily from Miller's MI/MET treatment guides (Miller & Rollnick, 2002; Miller et al., 1992). Traditional MI and MET techniques were modified to target ambivalence regarding seeking CBT for SAD (see Appendix B for MET for CBT manual). Therapists elicited change talk through the use of MI techniques such as empathy, rolling with resistance, simple reflection, amplified reflection, double-sided reflection, etc. Further, specific MET strategies were manualized to ensure all participants in the MET condition received comparable doses of MI techniques thought to be particularly relevant to the concerns of individuals with elevated social anxiety (see Olfson et al., 2000).

MET for CBT was conducted over approximately 3.5 hours administered over three sessions. This timeframe was used given evidence that 2-4 sessions of MET can effect behavioral change among patients with anxiety (Buckner et al., 2008a; Maltby & Tolin, 2005; Westra & Dozois, 2006; Westra & Phoenix, 2003). As outlined in Table 4, MET for CBT consisted of eight steps. The first seven steps were approximately ½ hour per step (a minimum of 20 minutes and a maximum of 40 minutes will be spent on each step), whereas the eighth step (development of change plan) consisted of 15 minutes.

Each step was comprised of specific MET techniques to increase motivation to seek CBT for social anxiety.

The first step of MET occurred during Appointment 1, following the administration of the post-psychoeducation assessment. During step 1, therapists provided assessment feedback by discussing the participants' social anxiety as it related to both clinical and non-clinical norms. Appointment 2 consisted of the delivery of steps 2-5. Step 2 concerned an exploration of the participant's importance and confidence in regards to engaging in CBT for social anxiety, providing opportunities to explore participant's impressions of factors that make change important, how the change would fit with other aspects of the participant's life, what events would need to occur before the change would seem more important, etc. In step 3, participants described a typical day in their lives and how social anxiety affects various aspects of a typical day. Step 4 involved an exploration of the pros and cons of seeking CBT to reduce social anxiety. Therapists began by asking participants to describe the pros (or good things) about CBT for social anxiety. Once the participant exhausted the list of pros, the therapist summarized the pros and asked the client to describe the cons (or less good things) about CBT for social anxiety. The therapist summarized cons, emphasized any change statements that were made, and solicited participant feedback on this discussion. Upon completion of Step 4, participants complete the self-report battery. These steps were chosen to encourage participants to consider barriers to treatment reported by those with social anxiety (Olfson et al., 2000). For instance, participants could discuss whether they believed their friends or family might judge them negatively should they seek treatment during the weighing of pros and cons and were encouraged to explore the impact this concern has on their treatment-seeking behaviors.

Appointment 3 began with step 5 in which participants were encouraged to outline their short- and long-term goals and to examine how social anxiety-related behaviors affected these goals. Step 6 consisted of Values Exploration during which the therapist asked participants to describe their ideal selves and discuss discrepancies between ideal and actual selves. Step 7 consisted of Looking Forward, a technique in which participants were asked to describe what their lives might look like in 20 years without having sought CBT for social anxiety and to contrast that description to one of their lives in 20 years if they had sought CBT for social anxiety. These steps encourage participants to consider whether CBT may help them improve their quality of life by decreasing their social anxiety, addressing concerns regarding whether CBT would help them (a belief that serves as a barrier for treatment as per Olfson et al., 2000). Step 8 was an opportunity for the therapist and participant to develop a change plan which outlined any behavioral changes the participant planned to make (e.g., seek CBT), the steps necessary to make that change (e.g., call to schedule an appointment), and problem-solving of any potential roadblocks to making those changes (e.g., how to pay for treatment). Upon completion of Step 8, participants completed the self-report battery. All participants were referred to the Florida State University (FSU) Anxiety and Behavioral Health Clinic, a low-cost out-patient clinic that specializes in CBT for anxiety disorders.

Control Condition. The control condition was comprised of participants who received identical psychoeducation about their social anxiety symptoms and CBT. Participants in the control condition returned to the laboratory for two additional appointments approximately 2 days apart (consistent with the timeframe of the MET for CBT condition). During these appointments, control participants completed the self-

report packets. Although control participants encountered laboratory personnel during these visits (e.g., to obtain packets), use of specific MET or other therapeutic techniques was not permitted.

The control condition did not control for the 3.5 hours MET for CBT participants spent with the study therapist. This decision was guided by the fact that equal time spent with a study therapist discussing topics unrelated to CBT or social anxiety would most likely consist of MI-specific techniques (e.g., empathy, reflective listening). Further, it was thought that after receiving psychoeducation regarding CBT and social anxiety, control participants may want to further discuss their social anxiety and/or CBT with study personnel.

Rather, the control group was designed to control for a wide range of other relevant variables including: (1) the receipt of psychoeducation regarding social anxiety symptoms, (2) receipt of psychoedcuation regarding the efficacy of CBT, (3) receipt of psychoeducation regarding location of low-cost CBT in the participants' community, (4) repeated assessment of motivation to change social anxiety-related behaviors, (5) repeated assessment of social anxiety and depression symptomatology, (6) repeated assessment of willingness to seek CBT for SAD, (7) repeated assessment of motivation to change social anxiety behaviors, and (8) repeated exposure to a psychological clinic. Upon completion of appointment 3, control participants were also referred to the FSU Anxiety and Behavioral Health Clinic.

Assessment of Intervention Integrity

All MET sessions were videotaped for supervision and assessment of fidelity to the MET for CBT manual (Appendix B). Intervention fidelity was evaluated in several ways. First, to assess therapist adherence to the order of particular MET steps, each tape was reviewed in supervision to ensure both that (1) the MET step was used and (2) steps were delivered in order. All therapists complied with this aspect of the intervention. Second, to assess therapist skill level in implementing MET, a random selection of 25% of session videotapes was rated by independent evaluators who were trained in this use of the *Motivational Interviewing Treatment Integrity code, Version 2.0* (Moyers et al., 2003). Independent raters were one first-year graduate student and five undergraduate students none of whom was a therapist in this study. The MITI rates therapist behaviors in two ways. First, it includes two global scores: empathy and the overall display of "motivational interviewing spirit" rated on a scale of 1 (low) to 7 (high). Second, it allows for the count of specific behaviors thought to be key to MI: giving information, MI adherent statements (e.g., asking permission before giving advice, affirming the client, emphasizing the client's control), MI non-adherent statements e.g., advising without permission, confronting, directing), closed questions, open questions, simple reflections, and complex reflections (Appendix C). MITI version 2.0 has been demonstrated good to excellent reliability and validity when used with graduate student and undergraduate raters as well as sensitivity to changes in therapist behaviors as a result of therapist-training in MI (Moyers et al., 2005; Pierson et al., 2007).

Rater training included receiving and individually reviewing the MET for CBT manual. In addition, there were five training sessions. The first was a 1.5 hour meeting in which the MITI training manual was reviewed and questions were answered. Raters continued to review relevant sections of the MITI training manual as well as relevant segments from the Motivational Interviewing: Professional Training Videotape Series (Miller et al., 1998) during three more training sessions (for a total of 4.5 hours of didactic training). During their training, raters provided MITI ratings for one MI interview

from the Miller et al. (1998) series. This tape was rated in a group setting by all raters according to the instructions in the MITI manual. A coded transcript of the MI interview was obtained from the Motivational Interviewing website (http://www.motivationalinterview.org/) and study raters' behavior codes were compared with the coded transcript. The trainer reviewed the tape with the raters to demonstrate how to code therapist statements appropriately. All raters then independently coded another MI interview from the series. Intraclass correlation coefficients (ICC) were conducted for this second tape as a measure of interrater reliability. As all raters coded the same tape (i.e., a complete block design), a two-way mixed-effects model ICC was calculated (Shrout & Fleiss, 1979) and there was high agreement among the raters (average ICC=.98). All raters also independently rated one tape from the current study as part of their training and there was high agreement among raters for the MET for CBT tape (average ICC=.86). This tape was also reviewed during training session to address any questions that arose concerning rating the MET for CBT tapes.

After the training, raters coded tapes within a two-week period. After week 1, a 1-hour meeting was held, the purpose of which was to discuss MITI ratings to control for rater drift (Moyers et al., 2003). Interrater reliability for the MET for CBT tapes was done on the basis of 2 randomly selected MET for CBT tapes rated by all six raters. Again, high interrater reliability was observed with average ICC ratings of .98 and .95.

With regard to therapist adherence to MET, mean proficiency ratings for study therapists were as follows: global ratings=6.4, reflection to question ratio=1.1, percent open-ended questions=54.1%, percent complex reflections=53.6%, and percent MI-adherent statement=96.2%. These ratings are above those recommended for beginning proficiency in MI (Moyers et al., 2003).

Data Analytic Strategy

All participants attended all sessions. Thus, all participants were included in the analyses examining the effects of condition during the course of the intervention (i.e., from baseline to post-intervention). However, due to therapist error, one participant in the control condition did not receive the post-psychoeducation assessment battery and another control participant did not receive the appointment 1 battery. The number of participants assessed at each assessment point is outlined in Figure 1.

Baseline demographic characteristics were analyzed using analysis of variance (ANOVA) models for continuous variables and χ^2 tests for nominal/categorical variables. Next, actual treatment-seeking behavior was determined by reported frequencies of those in each condition known to have attended at least one session of CBT. Further, among those participants who completed the follow-up assessment and did not seek treatment, the number of participants who endorsed each reason for not seeking treatment was reported.

In order to examine changes in willingness to schedule a CBT appointment across the three appointments, a 2 (condition: MET for CBT, control) × 5 (time: baseline, post-psychoeducation, appointment 1, appointment 2, post-intervention) repeated measures analysis of covariance (ANCOVA) was performed to examine both between and within subject effects. Analyses covaried any demographic variables on which the conditions differed. Examination of the Condition x Time interaction provides information regarding whether differences in motivation between conditions became more or less pronounced over time. In addition, simple effects were examined to determine whether the conditions differed on Willingness at specific time points. Finally, the baseline to post-intervention interaction contrast was examined to determine

whether Willingness increased at a greater rate among those in the MET condition compared to those in the control condition.

To examine whether MET for CBT was associated with increases in measures of motivation, additional 2 (condition) × 5 (time: baseline, post-psychoeducation, appointment 1, appointment 2, post-intervention) ANCOVA analyses were performed. Dependent variables included Importance, Confidence, and RCI. Separate models were conducted for each dependent variable.

Additional analyses were conducted to investigate whether condition was associated with differences in social anxiety and/or depression. To examine both between and within subjects effects, additional 2 (condition) × 5 (time: baseline, post-psychoeducation, appointment 1, appointment 2, post-intervention) ANCOVAs were performed to examine interactions and main effects. Dependent variables included measures of social anxiety (LSAS, combined SIAS-SPS, BFNE, SASCI) and depression (BDI) and separate models were conducted for each dependent variable. Because the SASCI is designed in such a way that it cannot be administered at baseline, change over time and maintenance of treatment gains were evaluated with 2 (condition) × 4 (time: post-psychoeducation, appointment 1, appointment 2, post-intervention) repeated measures ANCOVA. The LSAS was examined using a 2 (condition) × 2 (time: baseline, post-intervention) repeated measures ANCOVA.

For all repeated measures ANCOVA analyses, Greenhouse-Geisser corrections (with adjusted degrees of freedom) were applied when necessary (Mauchley's Sphericity Test < .05). Omega squared effect sizes were calculated for repeated measures effects and covariates remained in the model (Olejnik & Algina, 2000).

RESULTS

Sample characteristics

Demographic variables for each treatment condition are presented in Table 1. The only significant difference between the study conditions was that there were more employed participants in the control condition than the MET for CBT condition. ANCOVAs were therefore performed with employment status as a covariate to statistically controlled for this difference.[2]

Attrition

Sixteen participants completed the one-month follow-up assessment. Interestingly, there was a trend for participants in the control condition (73.3%) to be more likely to complete the follow-up compared to those in the MET condition (41.7%), $\chi^2(1, 27)=2.77$, $p = .09$. In addition to these 16 participants, three MET participants attended at least one session of CBT at our outpatient clinic allowing for the documentation of their treatment-seeking behavior.

Treatment-seeking behavior

With regard to post-intervention treatment-seeking behavior, 41.7% of participants in the MET condition attended at least one session of CBT compared to 13.3% of control participants. Among those for whom treatment-seeking data were available, the MET condition was associated with significantly greater likelihood of CBT attendance compared to controls, $\chi^2(1, 19)=3.91$, $p = .048$. Among the 12 participants who completed the follow-up assessment who did not seek CBT, reasons cited for not seeking treatment included: belief can handle situation on own ($n = 9$), not believing social anxiety was clinically meaningful ($n = 7$), inability to afford treatment ($n = 4$), worry what others may think/say ($n = 2$), fear will have to take medications ($n = 2$), not having insurance ($n = 1$), unsure where to go for treatment ($n = 1$), and not enough time to commit to treatment ($n = 1$).[1]

Relations between condition and willingness to schedule CBT appointment over time

At post-intervention, participants were asked if they would like to be contact by the FSU Anxiety and Behavioral Health Clinic to schedule a CBT appointment. There was a marginally significantly difference between conditions such a greater percent of participants in the MET for CBT condition (72.7%) responded “yes” compared to controls (33.3%), $\chi^2(1, 23) = 3.57$, $p = .059$.

Baseline, post-psychoeducation, appointment 1, appointment 2, and post-intervention means and standard errors for Willingness to schedule CBT appointment for each condition are presented in Table 5. There was not a significant main effect of time, $F(1.88, 39.45) = 2.38$, $p = .11$, or condition $F(1, 21) = 1.17$, $p = .29$. There was a significant Time X Condition interaction (Figure 2), $F(1.88, 39.45) = 4.75$, $p = .02$. However, the size of this effect was small ($\omega^2 = .02$) (Olejnik & Algina, 2000). To examine whether the two conditions differed on Willingness at specific assessment points, the simple effects were examined. There were no significant differences between the conditions at any time point (Table 5). The baseline to post interaction contrast was significant, $F(1, 21) = 5.27$, $p = .03$, suggesting Willingness increased at a greater rate among those in the MET condition compared to those in the control condition.

Relations between condition and measures of motivation over time

Baseline, post-psychoeducation, appointment 1, appointment 2, and post-intervention means and standard errors for measures of motivation to change social

anxiety (Importance, Confidence, RCI) for each condition are presented in Table 6. With regard to RCI, although there was a significant main effect of Time, $F(1.62, 29.24) = 3.59$, $p = .049$, the main effect of condition was non-significant, $F(1, 18) = 89$, $p = .36$. The Time X Condition interaction was also non-significant, $F(1.64, 29.24) = .87$, $p = .41$, and $\omega^2 = .00$, a small effect (Olejnik & Algina, 2000). Further there was no significant difference between conditions at any assessment point (Table 6) and the baseline to post interaction contrast was not significant, $F(1, 21) = .02$, $p = .90$.

Regarding Importance to change social anxiety-related behaviors, there was no significant main effect of Time, $F(2.56, 53.81) = .63$, $p = .57$, or condition, $F(1, 21) = 1.05$, $p = .32$. The Time X Condition interaction was also non-significant, $F(2.56, 53.81) = .43$, $p = .70$, and $\omega^2 = .00$, a small effect (Olejnik & Algina, 2000). Further there was no significant difference between conditions at any assessment point (Table 6) and the baseline to post-intervention interaction contrast was not significant, $F(1, 21) = .02$, $p = .90$.

With regard to Confidence to change social anxiety-related behaviors, there was a marginally significant main effect of time, $F(4, 84) = 2.18$, $p = .08$, but the main effect of Condition was non-significant, $F(1, 21) = .83$, $p = .37$. There was also a marginally significant Time X Condition interaction (Figure 3), $F(4, 84) = 2.32$, $p = .06$, and $\omega^2 = .02$, a small effect (Olejnik & Algina, 2000). Although there was no significant difference between conditions at any assessment point (Table 6), the baseline to post interaction contrast was significant, $F(1, 21) = 5.57$, $p = .03$, indicating that Confidence increased at a greater rate among those in the MET condition relative to those in the control condition.

Relations between condition and psychiatric measures over time

Baseline, post-psychoeducation, appointment 1, appointment 2, and post-intervention means and standard errors for measures of social anxiety and depression for each condition as well as Condition X Time interactions are presented in Table 7. There were no significant interactions or simple effects regarding social anxiety or depression. Further, the baseline to post-intervention interaction contract was not significant for SIAS-SPS, $F(1, 16) = .96$, $p = .34$, BFNE, $F(1, 21) = .00$, $p = .96$, SASCI, $F(1, 21) = .36$, $p = .56$, LSAS, $F(1, 22) = .06$, $p = .81$, or BDI, $F(1, 19) = .07$, $p = .80$.

DISCUSSION

Overall, the results of this randomized pilot study provide preliminary support for the utility of MET for CBT to increase treatment-seeking behaviors among non-treatment-seeking individuals with elevated social anxiety. Individuals who received MET for CBT were significantly more likely to attend at least one session of CBT. Willingness to schedule a CBT appointment increased at a greater rate in the MET for CBT condition compared to controls. Data also suggest a trend such that participants in the MET for CBT condition reported greater interest in having a therapist contact them to schedule a CBT appointment. With regard to motivation, confidence to change social anxiety-related behaviors increased at a greater rate among those in the MET for CBT condition compared to controls. MET for CBT was also not related to reductions in social anxiety or depression. This finding was consistent with expectation given that the focus of MET for CBT was not symptom reduction but rather increasing motivation to seek CBT. Contrary to study hypotheses, MET for CBT was not associated with change in Importance to change social anxiety behaviors or readiness to change social anxiety (RCI).

The finding that MET for CBT, conducted with non-treatment-seeking individuals, could have a positive influence on treatment-seeking behavior for individuals with social anxiety has several noteworthy implications. First, CBT appears to be an efficacious treatment for SAD (see Fedoroff & Taylor, 2001; Feske & Chambless, 1995; Gould et al., 1997; Heimberg, 2002; Rodebaugh et al., 2004a; Taylor, 1996), despite the fact that the majority of individuals with elevated social anxiety do not seek treatment for their psychological symptoms (Grant et al., 2005; Schneier et al., 1992; Weiller et al., 1996). Given that SAD is among the most prevalent psychiatric disorders (Grant et al., 2004; Kessler et al., 2005a; Kessler et al., 2005b; Wittchen et al., 1998), an intervention that results in greater CBT utilization could result in the amelioration of the substantial impairment experienced by those with SAD (Grant et al., 2005; Schneier et al., 1994; Stein & Kean, 2000). Given the brief course of MET for CBT, this intervention represents a time efficient method to encourage CBT utilization among socially anxious individuals.

Interestingly, MET for CBT was not associated with increases in measures of motivation. This finding was unexpected given that the target of the intervention was motivation to change problematic behaviors. This finding seems contrary to prior work suggesting that motivation appears related to treatment behaviors among patients in treatment for anxiety disorders (e.g., Dozois et al., 2004). These data also seem contrary to findings from a case study in which MET resulted in increased Importance and Confidence to change problematic behaviors for a patient receiving CBT for SAD (Buckner et al., 2008a). Yet, it may be that the measure of motivation used in the current study (URICA) is related to treatment behaviors for certain anxiety-disordered populations but not others. For instance, pre-treatment URICA scores were unrelated to treatment outcome among patients in CBT for OCD (Vogel et al., 2006). Also, it may be that the assessments used in the current study did not accurately assess motivation. The measures used assessed motivation to change social anxiety-related behaviors (e.g., Importance/Confidence to change social anxiety-related behaviors, RCI questions focused on changing social anxiety). Yet the focus of MET for CBT was to increase motivation to seek CBT, not to change social anxiety-related behaviors. In other words, the “problematic behaviors” of interest in MET for CBT were those concerning

treatment-seeking (or lack thereof), versus those behaviors that maintain elevated social anxiety. Therefore, future work is necessary to assess whether MET for CBT affects motivation to seek CBT.

Findings from the present study suggest several additional avenues for additional work in this area. For instance, additional mechanisms underlying observed behavioral changes could be investigated. One area that may be particularly relevant is that of beliefs or expectations regarding efficacy of CBT for SAD. Expectations regarding CBT for SAD have been found to be related to some treatment outcome measures among those in group CBT for SAD (Chambless et al., 1997). It is plausible that MET for CBT could improve expectations regarding CBT for SAD given the psychoeducation component that includes a discussion of the efficacy of CBT for SAD. Another area of future research concerns expectancies regarding the ability to change anxiety-related behaviors. There may be individual differences in beliefs regarding whether social anxiety-related thoughts, feelings, and behaviors can be changed, especially given that many individuals report that their SAD onset in early childhood (e.g., Grant et al., 2005). Beliefs regarding the malleability of anxiety have been found to change in anxiety and worry among patients receiving CBT for GAD (Dozois & Westra, 2005). Future work could benefit from examining of the role of expectancies in treatment-seeking behaviors among non-treatment-seekers undergoing MET for CBT.

There are several additional directions for future research in this area. For instance, future work is warranted to determine whether MET for CBT affects treatment outcomes among those individuals who do seek CBT for SAD. There is evidence suggesting that a pre-CBT MET intervention can improve treatment outcomes among patients with anxiety disorders (Maltby & Tolin, 2005; Westra & Dozois, 2006). These data suggest that engaging in MET for CBT may not only improve treatment-seeking behavior but could increase treatment adherence among those individuals who do seek CBT, although future research is necessary to test this hypothesis. Also the present study used a highly structured form of MET. This strategy was chosen to facilitate both therapist training and ease of replication. However, given that MET is traditionally administered in a more unstructured format (Miller & Rollnick, 2002; Miller et al., 1992), future research is necessary to determine if an unstructured form of MET for CBT results in even greater CBT utilization. Further, MET for CBT was developed to encourage treatment-seeking among those with social anxiety because socially anxious individuals are at particular risk for not seeking treatment for their psychiatric symptoms (Grant et al., 2005; Schneier et al., 1992; Weiller et al., 1996). However, MET for CBT may be useful for increasing treatment-seeking for other populations and future work is necessary to determine whether observed changes in treatment-seeking generalize to individuals with other psychiatric disorders. Similarly, in the present study, MET for CBT was used with non-treatment-seeking undergraduates and future work is necessary to test the transportability of this intervention to other settings in which non-treatment-seekers can be identified and encouraged to participate in this intervention. For instance, prior work suggests schools may be a promising institution in which to identify children suffering from elevated anxiety (Dadds et al., 1999). Given the early age of onset of social anxiety (e.g., Grant et al., 2005), future work could examine whether MET for CBT increases CBT utilization among school-age children.

The present study should be considered in light of limitations that suggest additional areas of additional work in this area. First, the control group did not control for time spent with the study therapists (approximately 3.5 hours) and future work is

necessary to determine whether simply talking with an empathetic stranger increases willingness to seek CBT and/or treatment-seeking behavior. Second, three measures of motivation in the current study were single-item assessments. Although these single items were highly correlated with an established measure of motivation (URICA), there are limitations to the use of single items and future work using more psychometrically sound measures of Importance, Confidence, and Willingness is warranted. Third, given the present study's small *N*, the present findings should be interpreted with caution and replication with larger samples will strengthen confidence in the observed effects. Fourth, participants were recruited to participate in an "Interview Study of Anxiety". Although this approach masked the goal of the current study by providing an alternate explanation of why participants were being asked to discuss their social anxiety, this recruitment procedure may have resulting in a sampling bias such that only those individuals willing to discuss their anxiety symptoms participated. Alternate recruitment strategies should be considered for future work in this area.

In sum, the present study does provide preliminary support for the utility of MET for CBT for non-treatment-seeking individuals with elevated levels of social anxiety. This finding is particularly noteworthy given that the vast majority of people with SAD do not seek treatment for their psychiatric symptoms (Grant et al., 2005; Schneier et al., 1992; Weiller et al., 1996). Given the chronic course of SAD (Grant et al., 2005) combined with high prevalent rates (Kessler et al., 2005a) and substantial functional impairment associated with this disorder (Stein & Kean, 2000), an intervention that can increase behaviors concerned with seeking efficacious treatment for this disorder (e.g., CBT) has the potential to ameliorate a significant amount of suffering. Future work is necessary to elucidate the mechanisms underlying these behavioral changes to determine if interventions can be developed to increase treatment-seeking for non-treatment-seekers with other types of psychiatric disorders. Work aimed at increasing motivation to seek empirically supported treatments will increase the likelihood that individuals suffering from social anxiety and its associated impairment receive efficacious treatments.

FOOTNOTES

[1] *n*'s > than total because some participants endorsed more than one.
[2] Data analyses were conducted with and without employment status as a covariate with a similar pattern of findings (see Appendix D).

Table 1
Demographic Characteristics of Randomized Sample for Total Sample and by Treatment Condition

Dependent Variable	Total *N*=27	Control *n* = 15	MET for CBT *n* = 12	χ^2	*F*	*p*
		Categorical Variables %				
Women	63.0	66.7	58.3	.20		.66
Race/ethnicity						
African American	7.4	6.7	8.3	.03		.87
Asian American	7.4	6.7	8.3	.03		.87
Caucasian	70.4	80.0	58.3	1.50		.22
Hispanic/Latino	14.8	6.7	25.0	1.78		.18
Employed	19.2	35.7	0.0	5.31		.02
Unmarried	100.0	100.0	100.0	-		-
GPA > 3.0	61.5	60.0	63.6	.04		.85
Anxiety treatment history	3.7	6.7	0.0	.83		.36
		Continuous Variables *M (SD)*				
Age	18.8 (.8)	18.7 (.7)	18.9 (.9)		.40	.53
Family income[a]	83,541.67 (59,953.59)	83,230.77 (69,993.04)	83,909.09 (48,868.10)		.00	.98
Years of college	1.2 (.5)	1.2 (.4)	1.3 (.6)		.12	.73

Note. MET=motivation enhancement therapy, CBT=cognitive-behavioral therapy.
[a]To promote data analyses, responses given as ranges were recorded to the mean (e.g., $30,000-40,000 was recoded as $35,000).

Table 2
Bivariate correlations between willingness to schedule CBT appointment and measures of motivation

	1	2	3	4	5	6	7	8
1. Willingness	-							
2. Importance	.61**	-						
3. Confidence	.17	.37	-					
4. Precontemplation	-.47*	-.50**	-.26	-				
5. Contemplation	.49**	.61**	.12	-.55**	-			
6. Action	.28	.35	.47*	-.09	.41*	-		
7. Maintenance	.15	.25	.26	.15	.54**	.57**	-	
8. Readiness to change index (RCI)	.49*	.58**	.43*	-.48*	.86**	.77**	.74**	-

Note. Willingness=willingness to schedule CBT appointment, Importance=importance to change social anxiety, Confidence=confidence to change social anxiety. Stages of change and RCI assessed using the *University of Rhode Island Change Assessment* (McConnaughy et al., 1983). * $p < 0.05$. ** $p < 0.01$.

Table 3

Assessment Schedule

Measure	Screen	Appointment 1					
		Baseline	Post-Psychoeducation	End[a]	Appointment 2 [a]	Appointment 3 [a]	Follow-up
Clinician-administered							
ADIS		X					
LSAS		X				X	
Self-report							
Importance/confidence		X	X	X	X	X	
Willingness to schedule CBT		X	X	X	X	X	
URICA (social anxiety)		X	X	X	X	X	
SIAS	X	X	X	X	X	X	
SPS		X	X	X	X	X	
BFNE		X	X	X	X	X	
SASCI			X	X	X	X	
BDI-II		X	X	X	X	X	
Treatment-seeking behavior							X

Note. ADIS = *Anxiety Disorders Interview Schedule-IV* (T. A. Brown et al., 1994), LSAS = *Liebowitz Social Anxiety Scale – clinician administered version* (Liebowitz, 1987), URICA = *University of Rhode Island Change Assessment* (McConnaughy et al., 1983), SIAS = *Social Interaction Anxiety Scale and SPS = Social Phobia Scale* (Mattick & Clarke, 1998), BFNE = *Brief Fear of Negative Evaluation Scale* (Leary, 1983), SASCI = *Social Anxiety Session Change Index* (Hayes et al., in press), BDI = *Beck Depression Inventory-II* (Beck et al., 1996).

[a] Measures were administered at the end of each appointment.

Table 4

Description of the Eight Steps of MET for CBT for Social Anxiety

MET for CBT Steps	Description
Appointment 1	
Step 1	Assessment feedback
Appointment 2	
Step 2	Explore importance and confidence
Step 3	Review a typical day
Step 4	Explore pros and cons of social anxiety
Appointment 3	
Step 5	Review short- and long-term goals
Step 6	Values exploration
Step 7	Looking forward
Step 8	Change plan

Note. Techniques are derived from Miller and Rollnick (2002).

Table 5

Willingness to schedule CBT appointment at each assessment point

Dependent Variable	Control *n* = 15		MET for CBT *n* = 12				
	M	*SE*	*M*	*SE*	*Df*	*F*	*p*
Baseline	6.69	.68	6.06	.93	1, 21	.39	.54
Feedback	6.19	.70	7.40	.96	1, 21	1.36	.26
Appointment 1	6.06	.81	7.77	1.12	1, 21	1.99	.17
Appointment 2	6.50	.86	8.58	1.19	1, 21	2.62	.12
Post-intervention	6.56	.91	8.35	1.25	1, 21	1.74	.20

Note. Means reported are estimated marginal means adjusted to account for covariate (employment status). MET = motivation enhancement therapy; CBT = cognitive behavioral therapy.

Table 6

Motivation to change social anxiety at each assessment point

Dependent Variable	Control *n* = 15		MET for CBT *n* = 12				
	M	*SE*	*M*	*SE*	*Df*	*F*	*P*
Readiness to Change Index (RCI)							
Baseline	7.40	.83	7.92	1.02	1, 18	.28	.60
Feedback	7.74	.91	8.59	1.12	1, 18	.62	.44
Appointment 1	7.75	.94	9.07	1.16	1, 18	1.38	.25
Appointment 2	8.52	.98	9.84	1.21	1, 18	1.28	.27
Post-intervention	7.83	1.02	8.85	1.25	1, 18	.71	.41
Importance to change social anxiety-related behaviors							
Baseline	7.19	.52	7.90	.72	1, 21	.83	.37
Feedback	7.44	.56	8.73	.77	1, 21	2.42	.13
Appointment 1	7.56	.61	8.69	.84	1, 21	1.53	.23
Appointment 2	7.50	.66	8.00	.90	1, 21	.26	.62
Post-intervention	7.38	.86	8.21	1.18	1, 21	.42	.52
Confidence to change social anxiety-related behaviors							
Baseline	5.63	.65	5.46	.90	1, 21	.03	.87
Feedback	6.06	.60	6.60	.82	1, 21	.37	.55
Appointment 1	6.13	.67	6.71	.92	1, 21	.34	.57
Appointment 2	5.94	.66	7.31	.91	1, 21	1.93	.18
Post-intervention	5.81	.72	7.52	.99	1, 21	2.52	.13

Note. MET = motivation enhancement therapy; CBT = cognitive behavioral therapy. RCI assessed using the *University of Rhode Island Change Assessment* (McConnaughy et al., 1983). Means reported are estimated marginal means adjusted to account for covariate (employment status).

Table 7

Social anxiety and depression at each assessment point

Dependent variable	Control *n* = 15		MET for CBT *n* = 12		Condition X Time			Simple effects		
	M	*SE*	*M*	*SE*	*Df*	*F*	*p*	*df*	*F*	*P*
Self-report										
SIAS-SPS					1.84, 29.39	.71	.49			
Baseline	71.50	10.54	79.40	13.42				1, 16	.37	.55
Feedback	74.18	11.25	77.62	14.33				1, 16	.06	.81
Appointment 1	74.11	12.74	76.19	16.22				1, 16	.02	.90
Appointment 2	78.61	12.57	79.39	16.01				1, 16	.00	.96
Post	79.82	13.32	80.58	16.96					.00	.96
BFNE					2.26, 47.50	.05	.96			
Baseline	34.81	3.29	36.10	4.52				1, 21	.07	.79
Feedback	34.94	3.65	35.23	5.02				1, 21	.00	.96
Appointment 1	34.88	3.96	35.54	5.44				1, 21	.01	.91
Appointment 2	29.06	4.00	30.60	5.50				1, 21	.07	.80
Post	32.56	4.15	34.02	5.70				1, 21	.06	.82
SASCI					1.87, 39.22	1.30	.28			
Baseline	NA	NA	NA	NA						
Feedback	19.88	1.34	20.63	1.84				1, 21	.14	.71
Appointment 1	19.81	1.35	20.60	1.86				1, 21	.15	.70
Appointment 2	19.13	1.18	17.63	1.62				1, 21	.73	.40
Post	19.13	1.49	19.21	2.05				1, 21	.00	.97
BDI					1.47, 27.94	.25	.71			
Baseline	14.11	3.51	22.03	4.87				1, 19	2.14	.16
Feedback	13.11	3.55	21.76	4.93				1, 19	2.50	.13
Appointment 1	13.05	3.61	21.01	5.02				1, 19	2.04	.17
Appointment 2	12.30	3.73	19.26	5.18				1, 19	1.46	.24
Post	12.82	3.66	20.04	5.08				1, 19	1.64	.22
Clinician-administered										
LSAS					1, 22	.06	.81			
Baseline	70.93	4.84	80.76	6.88				1, 22	1.61	.22
Feedback	NA	NA	NA	NA						
Appointment 1	NA	NA	NA	NA						
Appointment 2	NA	NA	NA	NA						
Post	69.89	5.54	81.26	7.88				1, 22	1.65	.21

Note. MET = motivation enhancement therapy; CBT = cognitive behavioral therapy. Means reported are estimated marginal means adjusted to account for covariate (employment status). SIAS = *Social Interaction Anxiety Scale and SPS = Social Phobia Scale* (Mattick & Clarke, 1998), BFNE = *Brief Fear of Negative Evaluation Scale* (Leary, 1983), SASCI = *Social Anxiety Session Change Index* (Hayes et al., in press), LSAS = *Liebowitz Social Anxiety Scale – clinician administered version* (Liebowitz, 1987), BDI = *Beck Depression Inventory-II* (Beck et al., 1996).

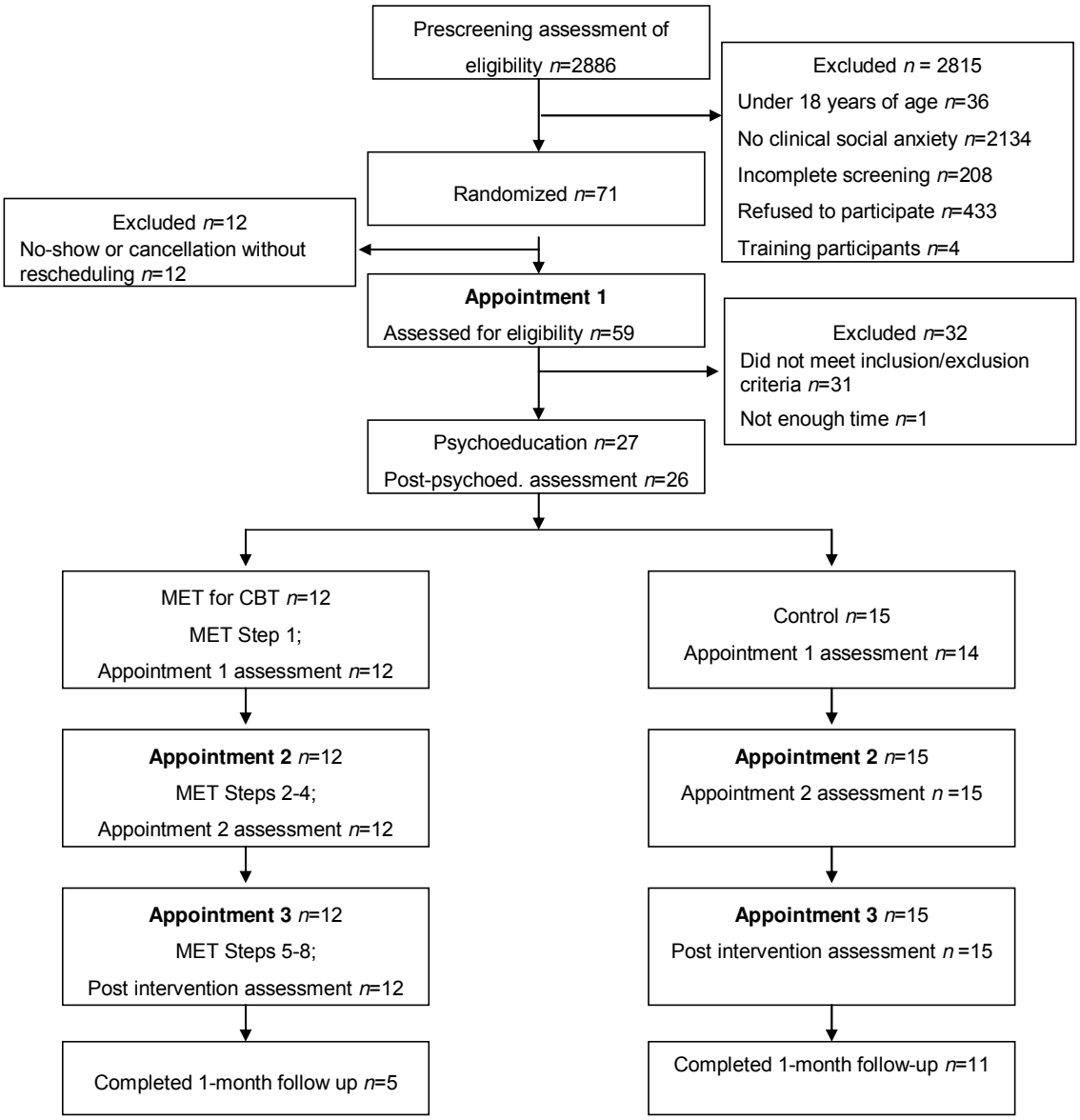
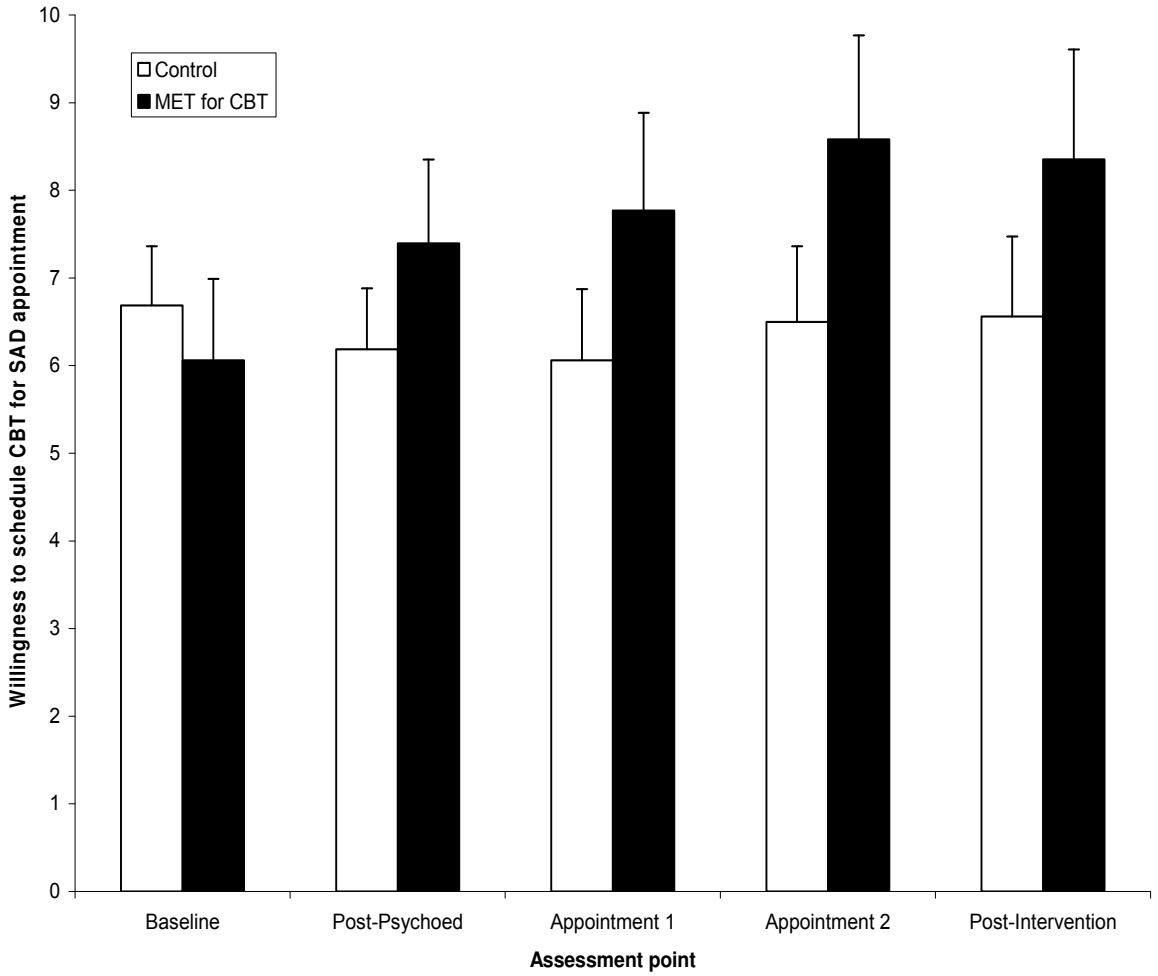
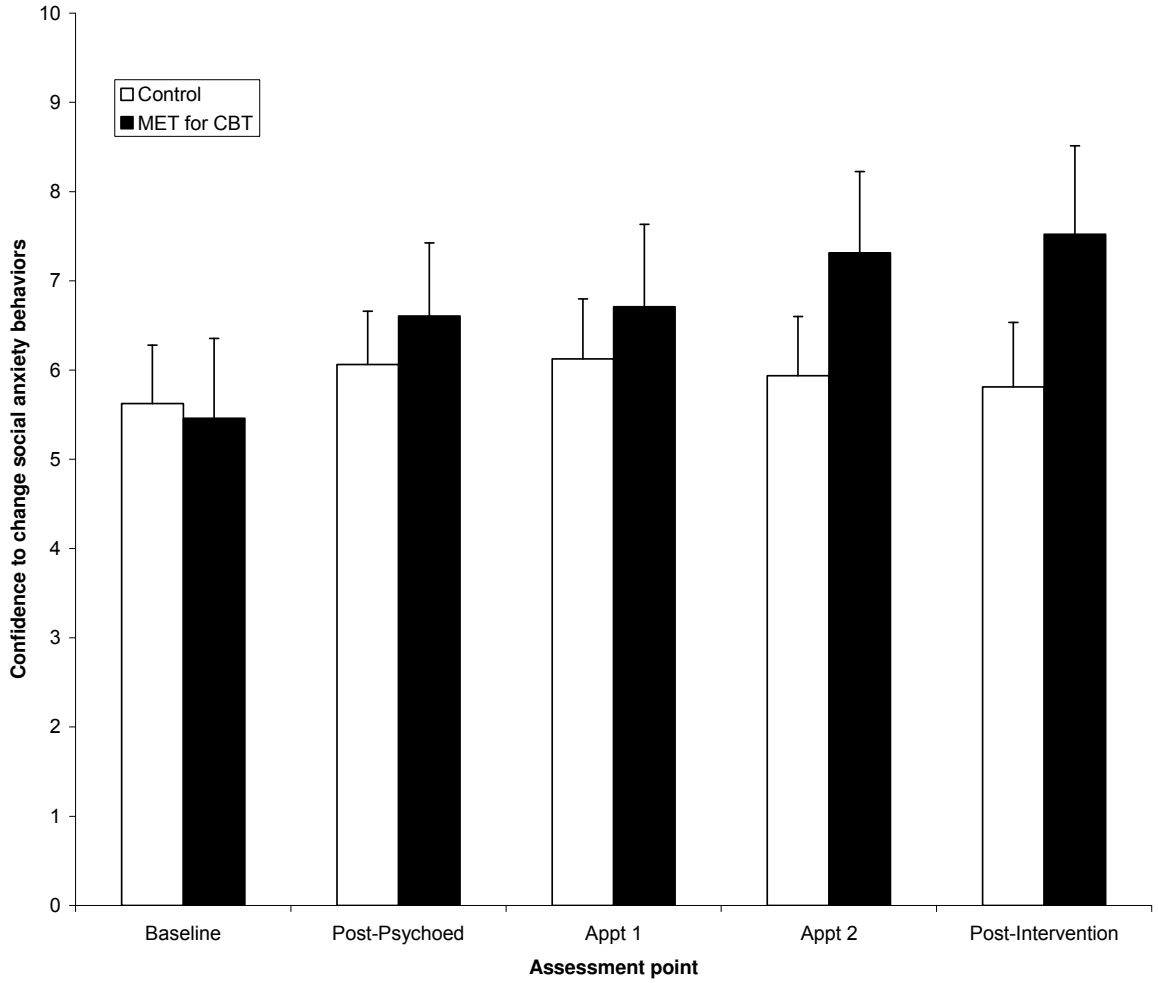


Figure 1. Appointment flowchart by study condition.



Note. The difference between baseline and post-intervention Willingness to schedule CBT appointment for the MET for CBT condition was significantly greater than for the control condition, $F(1, 21) = 5.27$, $p = .03$. MET = motivation enhancement therapy; CBT = cognitive behavioral therapy.

Figure 2. Condition X Time interaction for willingness to schedule a CBT for SAD appointment.



Note. The difference between baseline and post-intervention Confidence to change social anxiety behaviors for the MET for CBT condition was significantly greater than for the control condition, $F(1, 21) = 5.57$, $p = .03$. MET = motivation enhancement therapy; CBT = cognitive behavioral therapy.

Figure 3. Condition X Time interaction for confidence to change social anxiety-related behaviors.

APPENDIX A

MEASURES

LSAS

0 Not at All	0 Never
1 Mildly	1 Occasionally (1-33%)
2 Moderately	2 Often (34-66%)
3 Severely	3 Usually (67-100%)

	Fear or Anxiety		Avoidance
1. Telephoning in public			
2. Participating in small groups			
3. Eating in public places			
4. Drinking with others in public places			
5. Talking to people in authority			
6. Acting, performing, or giving a talk in front of an audience			
7. Going to a party			
8. Working while being observed			
9. Writing while being observed			
10. Calling someone you don't know very well			
11. Talking with people you don't know very well			
12. Meeting strangers			
13. Urinating in a public bathroom			
14. Entering a room when others are already seated			
15. Being the center of attention			
16. Speaking up at a meeting			
17. Taking a written test			
18. Expressing appropriate disagreement or disapproval to people you don't know very well			
19. Looking at people you don't know very well in the eyes			
20. Giving a report to a group			
21. Trying to pick up someone			
22. Returning goods to a store			
23. Giving an average party			
24. Resisting a high pressure sales person			
Totals:		+	

Importance/Confidence Form

ID: _____ Date: _____

Please rate each question using the scale below:

1) On a scale of 0-10, rate how important it is for you to change your social anxiety-related behaviors.

0	1	2	3	4	5	6	7	8	9	10
not at all important				neither important nor unimportant						most important

2) On a scale of 0-10, rate how confident you are that you can change your social anxiety-related behaviors.

0	1	2	3	4	5	6	7	8	9	10
not at all confident				neither confident nor not confident						most confident

3) How willing are you to schedule an appointment for CBT for social anxiety (circle one)?

0	1	2	3	4	5	6	7	8	9	10
not at all willing to schedule CBT appointment						neither willing nor not willing				definitely willing to schedule CBT appointment

URICA

This questionnaire is to help us improve services. Each statement describes how a person might feel when starting therapy or approaching problems in their lives. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel. For all the statements that refer to your "problem," answer in terms of your social anxiety. In these questions, the word "here" refers to this program.

PROBLEM: SOCIAL ANXIETY _____

There are FIVE possible responses to each of the items in the questionnaire:

1 - Strongly Disagree
2 - Disagree
3 - Undecided
4 - Agree
5 - Strongly Agree

Circle the response that best describes how much you agree or disagree with each statement.

1. As far as I am concerned, I don't have any problem that needs changing.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

2. I think I might be ready for some self-improvement.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

3. I am doing something about the problems that have been bothering me.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

4. It might be worthwhile to work on my problem.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

5. I am not the one with a problem. It doesn't make much sense for me to be here.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

6. It worries me that I might slip back on a problem I have already changed, so I am here to seek help.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

7. I am finally doing some work on my problem.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

8. I've been thinking that I might want to change something about myself.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

9. I have been successful in working on my problem, but I'm not sure I can keep up the effort on my own.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

10. At times my problem is difficult, but I'm working on it.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

11. Being here is pretty much of a waste of time for me because the problem doesn't have to do with me.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

12. I'm hoping this place will help me to better understand myself.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

13. I guess I have faults, but there is nothing that I really need to change.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

14. I am really working hard to change.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

15. I have a problem and I really think I should work on it.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

16. I'm not following through with what I had already changed as well as I had hoped, and I'm here to prevent a relapse of the problem.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

17. Even though I'm not always successful in changing, I am at least working on my problem.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

18. I thought once I had resolved the problem I would be free of it, but sometimes I still find myself struggling with it.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

19. I wish I had more ideas on how to solve my problem.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

20. I have started working on my problems, but I would like help.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

21. Maybe this place will be able to help me.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

22. I may need a boost right now to help me maintain the changes I've already made.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

23. I may be part of the problem, but I don't really think I am.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

24. I hope that someone here will have some good advice for me.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

25. Anyone can talk about changing; I'm actually doing something about it.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

26. All this talk about psychology is boring. Why can't people just forget about their problems?

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

27. I'm here to prevent myself from having a relapse of my problem.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

28. It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

29. I have worries but so does the next guy. Why spend time thinking about them?

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

30. I am actively working on my problem.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

31. I would rather cope with my faults than try to change them.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

32. After all I have done to try to change my problem, every now and again it comes back to haunt me.

1	2	3	4	5
Strongly Disagree		Undecided		Strongly Agree

SIAS

For each question please circle a number to indicate the degree to which you feel the statement is characteristic
or true of you. The rating scale is as follows:

0= Not at all characteristic or true of me
1= Slightly characteristic or true of me
2= Moderately characteristic or true of me
3= Very characteristic or true of me
4= Extremely characteristic or true of me

	NEVER	SLIGHTLY	MODERATELY	VERY	EXTREMELY
1. I get nervous if I have to speak with someone in authority (teacher, boss, etc.).	0	1	2	3	4
2. I have difficulty making eye-contact with others.	0	1	2	3	4
3. I become tense if I have to talk about myself or my feelings.	0	1	2	3	4
4. I find difficulty mixing comfortably with the people I work with.	0	1	2	3	4
5. I find it easy to make friends of my own age.	0	1	2	3	4
6. I tense-up if I meet an acquaintance on the street.	0	1	2	3	4
7. When mixing socially, I am uncomfortable.	0	1	2	3	4
8. I feel tense if I am alone with just one person.	0	1	2	3	4
9. I am at ease meeting people at parties, etc.	0	1	2	3	4
10. I have difficulty talking with other people.	0	1	2	3	4
11. I find it easy to think of things to talk about.	0	1	2	3	4
12. I worry about expressing myself in case I appear awkward.	0	1	2	3	4
13. I find it difficult to disagree with another's point of view.	0	1	2	3	4
14. I have difficulty talking to an attractive person of the opposite sex.	0	1	2	3	4
15. I find myself worrying that I won't know what to say in social situations.	0	1	2	3	4
16. I am nervous mixing with people I don't know well.	0	1	2	3	4
17. I feel I'll say something embarrassing when talking.	0	1	2	3	4
18. When mixing in a group, I find myself worrying I will be ignored.	0	1	2	3	4
19. I am tense mixing in a group.	0	1	2	3	4
20. I am unsure whether to greet someone I know only slightly.	0	1	2	3	4

FNE

Instructions: Check the appropriate blank corresponding to the one phrase that best represents the extent to which you agree with the item. If any of the items concern something that is not part of your experience, answer on the basis of how you think you might feel *if you had* such an experience. Otherwise, answer all items on the basis of your own experience.

	VERY LITTLE	A LITTLE	SOME	MUCH	VERY MUCH
1. Sometimes I think I am too concerned with what other people think.					
2. I worry about what kind of impression I make on people.					
3. I am afraid that people will find fault with me.					
4. I am concerned about other people's opinions of me.					
5. When I am talking to someone, I worry about what they may be thinking of me.					
6. I am afraid that others will not approve of me.					
7. I am usually worried about the kind of impression I make.					
8. I am frequently afraid of other people noticing my shortcomings.					
9. I worry what other people will think of me when I know it doesn't make any difference.					
10. It bothers me when people form an unfavorable opinion of me.					
11. I often worry that I will say or do the wrong things.					
12. If I know that someone is judging me, it tends to bother me.					

SASCI

Using the scale below, please answer the following questions concerning how you are doing today with how you were doing **BEFORE YOU BEGAN TREATMENT**. Put your rating in the blank to the right of the question.

1	2	3	4	5	6	7
much less	moderately less	slightly less	not different	slightly more	moderately more	much more

<u>Compared with how you felt BEFORE THE BEGINNING OF TREATMENT</u>

1. How anxious do you currently become in anticipation of or when in social/performance situations (situations where you interact with or do something in front of people)? _____
2. How much do you currently avoid social/performance situations, being the center of attention, or talking with people? _____
3. How concerned are you, currently, about doing/saying something embarrassing or humiliating in front of others, or that others might think badly of you for what you do or say? _____
4. Currently, how much does your anxiety about social/performance situations interfere with your ability to participate in work/school or in social activities? _____

BDI-II

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the one statement in each group that best describes the way you have been feeling during the past two weeks, including today. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness

0 I do not feel sad.
1 I feel sad much of the time.
2 I am sad all the time.
3 I am so sad or unhappy that I can't stand it.

2. Pessimism

0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will only get worse.

3. Past Failure

0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back, I see a lot of failures.
3 I feel I am a total failure as a person.

4. Loss of Pleasure

0 I get as much pleasure as I ever did from the things I enjoy.
1 I don’t enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can’t get any pleasure from the things I used to enjoy.

5. Guilty Feelings

0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6. Punishment Feelings

0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. Self-Dislike

0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. Self-Criticalness

0 I don't criticize or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticize myself for all my faults.
3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes

0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. Crying

0 I don't cry any more than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying, but I can't.

11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I don't feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy

0 I have as much enery as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.

3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping pattern.

1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.

2a I sleep a lot more than usual.
2b I sleep a lot less than usual.

3a I sleep most of the day.
3b I wake up 1-2 hours early and can't get back to sleep.

17. Irritability

0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my appetite.

1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.

2a My appetite is much less than before.
2b My appetite is much greater than usual.

3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

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.

Follow-up Assessment of Treatment-Seeking

1. You may remember you completed a study in which you met with one of our experimenters for 3 sessions and filled out measures and discussed your social anxiety. Since that time, have sought treatment for your social anxiety?

Yes No

2. If yes, what type of treatment did you seek:

Not applicable (I haven't sought treatment)	True	False
Cognitive behavioral therapy (CBT)	yes	no
Self-help	yes	no
Medication	yes	no
Talk Therapy	yes	no
Other (please describe):	yes	no

3. How far have you gotten in treatment (click all that apply to you)

Not applicable (I haven't sought treatment)	True	False
Scheduled appointment	yes	no
Attended first appointment	yes	no
Stopped treatment	yes	no
Still in treatment	yes	no
Total number of sessions attended:	yes	no

4. If you have not sought treatment, please indicate the reasons you have not sought treatment (click all the reasons that you have not sought treatment)

Not applicable (I have sought treatment)	True	False
I don't believe I have clinically meaningful social anxiety	yes	no
I worry what others might think or say if I sought treatment	yes	no
I'm afraid I will have to take medications	yes	no
I don't have insurance	yes	no
I can't afford treatment	yes	no
I'm unsure where to go for help	yes	no
I can handle the situation on my own	yes	no
Other reasons I have not sought treatment	yes	no

(please describe):

APPENDIX B

MET FOR CBT MANUAL

MET for CBT for Social Anxiety
Treatment Manual and Research Study Protocol

Developed by
Julia D. Buckner
Florida State University

Author Note: The MET for CBT for Social Anxiety Treatment Manual is an instrument-in-development. Feedback on this draft is very welcome and should be addressed to the author at jbuckner@lsu.edu. Please use only with permission from the author.

Appointment 1

Appointment 1 consists of 4 components: (1) obtaining informed consent, (2) ADIS and clinician-administered LSAS, (3) completion of self-report measures, and (4) psychoeducation, (5) inform participant of condition specific protocol.

1) Obtaining informed consent. Please review the consent form and the limits of confidentiality with all participants. Please ask participants to read through the consent form and ask you if they have any questions. Once all questions are answered, they can sign the consent to indicate willingness to participate in this study. All participants should be offered a copy of the consent for their records.
2) ADIS. All ADIS interviews should be videotaped. Please be sure all cameras are recording and all microphones are turned on before beginning the interview. Please be sure to label each videotape with the subject's ID number. The administration of the clinician-administered LSAS does not need to be videotaped, although it can be if you do not want to interrupt the flow of the interview by leaving to stop tape.
3) Self-report measures. If the subject is eligible based on ADIS and LSAS, please have them complete the self-report packet. Please be sure to explain that they are to place the packets in the manilla envelops and give to the reception. Stress that this procedure is to maintain their confidentiality – even from you as you won't even see their responses! Please leave then alone in room to complete packet but let them know how to reach you to answer any questions they may have regarding the measures.
    a. Eligibility criteria: primary diagnostic concerns are those regarding social anxiety (i.e., subject does not need dx of social anxiety disorder (SAD), but must indicate that social concerns are their primary concerns)
    b. Exclusion criteria: history of hallucinations or delusions, bipolar, schizophrenia spectrum disorders, current rating of high risk for suicide, currently treatment-seeking, history of CBT.
    c. If subject is ineligible, please see Ineligible Protocol below.

4) Psychoeducation. After the subject completes the self-report packet, please provide the following feedback:

"Based on your responses to the interview and the questionnaires, it appears as though you have clinically meaningful social anxiety. The good news is that there is effective treatment for social anxiety. Cognitive behavioral therapy, or CBT, is an effective treatment for social anxiety. In CBT, we view emotions (such as social anxiety) to be related to cognitions (or thoughts) and behaviors. **[show subject CBT triangle handout]** As you can see in this diagram, our thoughts can affect our emotions just as our emotions can affect our thoughts. Similarly our thoughts can affect our behaviors and vice-versa. Our behaviors can also affect our emotions and our emotions can affect our behaviors. CBT challenges those thoughts and behaviors that contribute to the social anxiety. At the end of this study, we will give all participants information on how to get CBT for social anxiety."

ADMINISTER POST PSYCHOEDUCATION SELF-REPORT MEASURES

5) Inform participant of condition specific protocol.

Based on the color of the subject's file folder the subject is assigned to one of two conditions: (1) teal = MET for CBT, (2) pink = control.

a. If subject is in MET for CBT:

"For this study you have been assigned to one of two conditions. In your condition, you will come back to the clinic for two more appointments where we will discuss your social anxiety and CBT and you will fill out additional questionnaires." **[Schedule next 2 appointments]**

If subject is in Control Condition:

> "For this study you have been assigned to one of two conditions. In your condition, you will come back to the clinic for two more appointments where you will fill out additional questionnaires." **[Schedule next 2 appointments]**

ADMINISTER APPOINTMENT 1 SELF-REPORT MEASURES TO CONTROL CONDITION

***Please note*: all assessment measures from this point on are administered at the END of each appointment.**

MET for CBT for Social Anxiety

Subjects in the MET for CBT will begin the first step of CBT during appointment. Table B1 is an outline of the steps of MET for CBT.

Table B1
Description of the Seven Steps of MET for CBT for Social Anxiety

MET for CBT Steps	Description
Appointment 1	
Step 1	Assessment Feedback
Appointment 2	
Step 2	Explore Importance and Confidence
Step 3	Review a Typical Day
Step 4	Explore Pros and Cons of Not doing CBT for Social Anxiety
Appointment 3	
Step 5	Review patient's short- and long-term goals
Step 6	Values Exploration
Step 7	Looking Forward
Step 8	Change Plan (15 minutes)

Note. Techniques are derived from Miller and Rollnick (2002).

***Please note*: all assessment measures from this point on are administered at the END of each appointment.**

MET for CBT
Step 1: Assessment Feedback

During Step 1, please be sure to cover the following materials:

1. Review diagnostic criteria for SAD and any comorbid conditions. If the subject does not meet threshold for SAD, you can still review the criteria as their high level of social anxiety puts them at risk for developing the diagnosis.

Script:

"First, if it's OK with you, I want to discuss the results of the interview we just did. You told me that recently you've been experiencing these symptoms, ____ and ____, and that you've been feeling ____ and ____. These symptoms and feelings cluster together into a syndrome. There's a name for the syndrome that you've described, and it's called _____. **[hand subject copy of DSM criteria for SAD. Review each DSM symptom and ask the subject if that symptom is consistent with their experiences].** The good news is that we know a lot about this syndrome, both scientifically and clinically. As I mentioned earlier, research shows that CBT for social anxiety is an effective method to treat social anxiety. There is a lot of information available about this disorder. However, I'd like to caution you that much of the information you will find about this disorder (online, from a friend, or in a bookstore) may be incorrect. Because of this I'm happy to talk to you more about this diagnosis to make sure you receive accurate information. What are your reactions to seeing your diagnosis/diagnoses?" **[Repeat review of DSM criteria for comorbid diagnoses]**

2. Show subject where their social anxiety is relevant to clinical and non-clinical norms by graphing subject's LSAS score and discuss how scores relate to means for those with generalized SAD (*note: consistent with MI principles, be sure to ask the subject's permission before giving them information such as this*):
3. Ask the client for feedback regarding this information
4. Review CBT for social anxiety
    a. Ask the subject if they have ever heard of CBT for social anxiety and what their thoughts are on treatment
    b. Ask the subject if they have any questions about CBT and answer them
    c. Ask subject their reactions to the information on CBT

Some questions you can ask during Step 1:

1. What did you come in here knowing about social anxiety/depression/alcohol use disorders/etc.?
2. What did you know about therapy/CBT before today?
3. What have been the experiences of people you know who have done therapy in the past?

ADMINISTER APPOINTMENT 1 SELF-REPORT MEASURES

Appointment 2
Step 2: Explore Important/Confidence

1. Ask the subject to rate on a scale of 0-10 how important it is to change social anxiety-related behaviors, where 0=not at all important and 10 is the most important thing in your life right now.

Here are some examples from http://www.nova.edu/gsc/forms/MI_WorkshopOverview_sm.doc *on using this technique:*

Scaling Question Example 1

Therapist: How would you rate the importance to change these behaviors today?

Client: I would say a (#).

Th: Is that unusual for you?

Th: So, what would it take to go from (#) to (#)?

6. Scaling Question Example 2

Therapist: Suppose 10 means you will do anything to stop drinking, change your life around, and do what is good for you and 1 means all you are willing to do is to sit and do nothing; where would you say you are today?

Client: I am at a 5 today.

Therapist: So, you've come a long way. What do you have to do to move up from 5 to 6?

2. Ask the subject to rate on scale of 0-10 how confident they are they can change their social-anxiety-related behaviors using CBT, where 0=not at all confident can use CBT to change social anxiety and 10 is totally confident can use CBT to change their social anxiety.

Appointment 2
Step 3: Review a Typical Day

1. In this step, ask the client to outline a typical day in their life and how their social anxiety affects them or not during each thing they do throughout the day.

2. Ask the subject to discuss their reaction to seeing how social anxiety affects them on a typical day.

Appointment 2

Step 4: Advantages and Disadvantages of not pursuing CBT for social anxiety

1. Using Handout 2, ask the subject to detail the advantages to not pursuing CBT for social anxiety. You can transition by saying something like:

"It sounds like social anxiety really affects you on a daily basis (or from the time you wake up until you go to bed, etc.). I wonder what some of the reasons are that you haven't done something like CBT to try to manage your social anxiety. There must be some advantages to not doing CBT to help reduce your social anxiety. If it's OK with you, I'd like us to outline the advantages to NOT pursuing CBT for social anxiety".

2. After you detail the Advantages, do the same with the Disadvantages to NOT pursuing CBT to decrease your social anxiety.

3. Once the lists are complete, hand the list to the subject and ask them what their reactions are to seeing the Advantages and Disadvantages outlined.

ADMINISTER APPOINTMENT 2 SELF-REPORT MEASURES

Appointment 3
Step 5: Review short- and long-term goals

When asking subjects to detail their goals, the therapist may find it helpful to write these goals down and then pick and choose which goals to review with the subject.

3. Ask the subject to detail their short-term goals (e.g., this year, while in college)
4. Ask the subject to detail their long-term goals (e.g., where they see themselves at 30 or 40 – what type of job they'd like, their goals for family, etc.)
5. Ask the subject to discuss how their social anxiety may or may not affect their short-term goals.
6. Ask the subject to discuss how their social anxiety may or may not affect their long-term goals.
7. Ask for the subject's feedback on the ways social anxiety may be affecting goals.

Appointment 3
Step 6: Values Exploration

1. Using Handout 3, please ask the subject to list all the qualities of their ideal self. Therapist records answers.
2. Using Handout 3, please ask the subject to list all the qualities of their actual self. Therapist records answers.
3. Hand the subject Handout 3 and ask the subject for their reaction to seeing the differences between the ideal and actual self.

Appointment 3
Step 7: Looking Forward

1. Using Handout 4, please ask the subject to describe what their life will look like in 30 years if they DO NOT pursue CBT to reduce their social anxiety. Therapist records answers.
2. Using Handout 4, please ask the subject to describe what their life will look like in 30 years if they DO pursue CBT to reduce their social anxiety. Therapist records answers.
3. Hand the subject Handout 4 and ask the subject for their reaction to seeing the differences between the two versions of their life.

Some MI techniques (Miller & Rollnick, 2002) to use during this step include:

Looking Forward

- If you keep going the way you are going where will you be 20-30 years from now?
- Where would you like to be 20-30 years from now?
- Put goals in order of priorities. Which is most important? Which is least important? Then ask them where their behavior fits in? Point to the highest priorities and ask them “How many of your priorities would you be willing to give up for your current behavior”?

Appointment 3
Step 8: Discussion of Change Plan (15 minutes)

1. This step is an opportunity to wrap up what has been discussed during Steps 1-7 and ask the patient what s/he plans to do, if anything, after having discussed social anxiety and CBT to reduce social anxiety.
2. If the patient has expressed change statements (e.g., “I really need CBT”), this is a good opportunity to problem solve with the patient about how they will go about enacting the change plan of seeking CBT to reduce social anxiety.
3. If the patient hasn’t expressed change statements, now is a good opportunity to try to elicit them. Below are some techniques that could aid in this process:
4. Looking at ways to begin the process of changing (e.g., identify client’s strengths; develop action plans)

ADMINISTER APPOINTMENT 3 SELF-REPORT MEASURES

Control Condition

Subjects in the control condition return to the clinic using the same assessment schedule as subjects in the MET for CBT condition. However, they do NOT discuss their social anxiety with the therapists or complete the MET steps in any way.

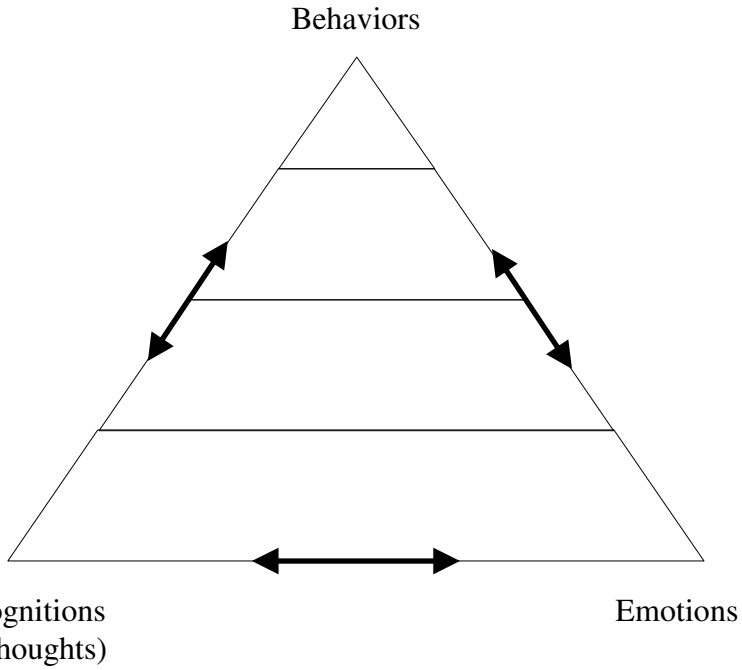
ADMINISTER SELF-REPORT MEASURES AT THE END OF EACH APPOINTMENT

End of Appointment 3: Both Conditions

At the end of appointment 3, regardless of condition, subjects are given Handout 5: Information about CBT and told:
“That completes our study. We appreciate your time and participation. We would like to give you information on how to obtain CBT for social anxiety here at FSU if you are interested. On this form is information regarding the Anxiety and Behavioral Health Clinic, a clinic that specializes in CBT for anxiety. If you are interested in treatment, please email them at the address provided and they will contact you to schedule an appointment. Thanks again for your time”

Study Handouts

Handout 1: CBT Triangle



Handout 2: Advantages/Disadvantages Form

In the space below, list the advantages and disadvantages to not seeking CBT to reduce social anxiety

Advantages	Disadvantages

Handout 3: Ideal vs Actual Self Form

In the space below, list qualities and attributes that characterize your ideal self. Then list qualities and attributes that characterize your actual self.

Ideal	Actual

Handout 4: Looking Forward Form

In the space below, describe what life will look like in 30 years if you DO NOT pursue CBT to reduce your social anxiety. Then describe what life will look like in 30 years if you DO pursue CBT to reduce your social anxiety

30 yrs w/o CBT to reduce social anxiety	**30 yrs w/ CBT to reduce social anxiety**

Handout 5: Information about CBT in Tallahassee

Thank you for participating in our study!

We would now like to offer you treatment for your social anxiety. The Anxiety and Behavioral Health Clinic at Florida State University offers CBT for social anxiety at a low-cost, reduced rate for students.

If you would like to receive CBT at the FSU Anxiety and Behavioral Health Clinic, please email the clinic at abhc@psy.fsu.edu.

Please indicate on the subject line of your email that you completed the Social Anxiety study and would like to pursue CBT for social anxiety by scheduling an appointment.

Once again, thanks so much for your participation. Your involvement is greatly appreciated!!!!

MI Techniques
(from http://www.nova.edu/gsc/forms/MI_WorkshopOverview_sm.doc)

Goal: To get people to resolve their ambivalence (i.e., conflict) about changing their behavior, while not evoking resistance (e.g., get confrontational, blame, label)

What Is Motivational Interviewing?
A directive, client-centered counseling style.
It elicits behavior change by helping clients explore and resolve ambivalence.
It helps resolve ambivalence by increasing discrepancy between client's current behaviors and desired goals while minimizing resistance.
During MI empathic listening is essential to minimizing resistance.

Motivational Techniques Can Help People To Change By:

- Recognizing their high risk behavior (e.g., personalized feedback; pie chart--- where do I fit in?)
- Evaluating how much of a problem their behavior is for them currently in relation to other issues in their life (e.g., Decisional Balance exercise, personalized goal evaluation)
- Looking at ways to begin the process of changing (e.g., identify client's strengths; develop action plans)

Empathy: Empathy is one of the most important elements of motivational interviewing; high levels of empathy during treatment have been shown to be associated with positive treatment outcomes across different types of psychotherapy.

Expressing Empathy: What is it?

- Listening in a supportive, reflective manner; demonstrating you understand their concerns and feelings.
- A specifiable and learnable skill for understanding another's meaning through the use of reflective listening.
- It requires sharp attention to each new client statement, and the continual generation of hypotheses as to the underlying meaning.
- The key to expressing empathy is reflective listening.

An Empathic Style……

- Communicates respect for and acceptance of clients and their feelings
- Encourages a nonjudgmental, collaborative relationship
- Establishes a safe and open environment for the client that is conducive to examining issues and eliciting personal reasons and methods for change
- Allows clinician to be supportive and a knowledgeable consultant
- Compliments rather than denigrates
- Listens rather than tells
- Gently persuades, with the understanding that change is up to the client
- Provides support throughout the process of recovery
- Understands each individual client's unique perspective, feelings, and values

Five Basic Motivational Interviewing Skills:
Ask Open-Ended Questions (OE)
Therapist (T): Tell me a bit about your work (OE).
Client (CL): I'm a lawyer with a large company. There is a lot of pressure to produce and bring in new clients.

Reflective Listening (RL): Paraphrase clients' comments. Make reflections as statements where the inflexion goes down at the end. Primary way to respond to clients.

T: It sounds like your work is quite stressful. (RL)
CL: Yes, but it is quite challenging, pays well and I like going to court to try cases.
T: So even though your work is stressful, you find it rewarding (RL)
CL: Well most of the time, but lately I wonder where it is all going.
T: What other concerns do you have about your work? (OE)
CL: That's a good question. Actually there have been cut backs lately--downsizing they call it. I just can't relax anymore.
T: What kinds of things have you done in the past to relax? (OE)
CL: Biking, but lately I'm too tired.
T: What other kinds of things help you relax? (OE)
CL: Going to a good restaurant at the end of the week with my wife and having friends over and preparing a gourmet meal for them. But again, lately I haven't done those things much either.

Different Types of Reflective Listening
Simple Reflection: reflects exactly what is heard
Client: I don't want to quit
Therapist: You don't think quitting will work for you

Double-Sided Reflection: reflection presents both sides of what the client is saying; extremely useful with pointing out ambivalence

Client: There is no question that my children come first. However, after I put them to bed I do not really see any problem in continuing to smoke weed every night. I am very careful where I buy it so I don't get caught in a sting.

Therapist: So on the one hand you seem to be very clear that your children are very important to you and they come first. However, you also appear to be saying that you really don't see anything wrong with your regular use of weed and even appear to discount any risk you might be taking.

Amplified Reflection: amplifies or heightens the resistance that is heard
Client: I could not quit. What would my friends think?

Therapist: It sounds like there would be a lot of pressure from your friends if you tried to stop.

Elicit Self-Motivational Statements: Get clients to give voice to how they are changing; point out any changes you have observed with the client and ask them how they did this.
T: It sounds like you have made real progress. How do you feel about that?

Affirm (support, encourage, recognize client's difficulties)
T: It sounds like you are still struggling with making these changes, but you have made some changes. How do you think you might reduce your drinking even further?

Summary Statements (SS): pull together the comments made; transition to next topic)
T: You mentioned a number of things about your current lifestyle, such as cutbacks at work and the stress you feel. You spoke of having little energy for doing some of the things you use to like to do and did to relax. What do you think might help you get back doing some of the things you once enjoyed (SS)

Reframing: Places a different meaning on what the person says so that the person doesn't seem so resistant.

Client: My parents have really gone crazy over my being caught at school smoking cigarettes, and want me to seek counseling. Sure I know the school was going to suspend me but my parents intervened and said I could come here for counseling.

Therapist: It sounds like you feel your parents were being over reactive, but their actions also seem to have been the one thing that kept the school from suspending you. What do you think about that?

Developing Discrepancy: Create a gap between where the person has been or currently is and where they want to be; goal is to resolve discrepancy by changing behavior.

Strategies

- Tell me some of the good things and less good things about your behavior/concern.
- What will your life be like (# years from) if you don't make changes and continue to use?
- Explore how a client's life would be different if he/she did not have the problem or were not engaging in the behavior.
- What was your life like before you started having problems with (the behavior)?
- Describe a typical day.
- Verbalizing Ambivalence
- In what ways has your behavior been a problem?
- What have other people said?
- If it is not viewed as a problem now, how might your use eventually become a problem?
- In what ways has it been inconvenient for you?
- Recognizing Ambivalence (decisional balance)
- What are the good things about your behavior?
- What are the less good things about behavior?

- If you keep heading down the road that you're on what can you imagine happening?
- What would be the best outcome you could see for yourself?

Looking Forward

- If you keep going the way you are going where will you be five years from now?
- Where would you like to be five years from now?
- What goals/things do you want for yourself? Have them list these on cards, and then put the cards in order of priorities. Which is most important? Which is least important? Then ask them where their behavior fits in? Point to the highest priorities and ask them "How many of your priorities would you be willing to give up for your current behavior"?

Elaboration: When clients offer something bad about their behavior, ask them to talk more about it. Ask for an example, and then ask for another example.

Colombo Technique: Used when clients are presenting conflicting information or behaviors.
Therapist: "On the one hand you say you are terrified of going to prison, but you continue to (engage in the behavior). I'm confused. Help me understand this."

Therapeutic Paradox: side with the side of the ambivalence; presents the client with a challenge; do not have sarcasm in your voice this needs to be stated genuinely.
Example 1 (therapist): "Maybe what I'm asking is just to difficult for you. Maybe you are not ready to change."
Example 2 (therapist): "You have been continuing to drink heavily and yet you say that you want to get you children back. Maybe you are not ready to change."

Emphasizing Personal Choice and Control: If you tell someone what to do this is confrontational and fosters resistance. Allowing personal choice and control over their problems can help minimize resistance

Ineligible Protocol

1. If subject is ineligible, please thank them for their participation. Please inform them that you were able to gather all the information necessary in just one session and they have completed the study. Please give them the information on finding treatment in Tallahassee and the ABHC recruitment flyer.

APPENDIX C

ADHERENCE MEASURE

Tape # (include subject # and appointment #): _____

Global Ratings							
Empathy/Understanding	1 Low	2	3	4	5	6 High	7
Motivational Interviewing Spirit	1 Low	2	3	4	5	6	7 High

Behavior Counts			
		Count behaviors here	
Giving Information			
MI Adherent	Asking permission, affirm, emphasize control, support		
MI Non-adherent	Advise, confront, direct		
Question (subclassify)	Closed question		
	Open question		
Reflect (subclassify)	Simple		
	Complex		

First sentence:_____

Last sentence:_____

Motivational Interviewing Treatment Integrity code, Version 2.0 (Moyers et al., 2003)

APPENDIX D

REPEATED MEASURES ANOVA WITHOUT EMPLOYMENT STATUS AS COVARIATE

Table D1

Willingness to schedule CBT appointment and motivation to change social anxiety at each assessment point

Dependent variable	Control *n* = 15		MET *n* = 12		Condition X Time			Simple effects		
	M	*SE*	*M*	*SE*	*df*	*F*	*p*	*df*	*F*	*p*
Willingness					1.83, 42.18	3.56	.04			
Baseline	6.08	.69	5.75	.72				1, 23	.11	.75
Feedback	5.62	.67	6.83	.70				1, 23	1.58	.22
Appointment 1	5.46	.76	7.08	.79				1, 23	2.17	.15
Appointment 2	5.69	.83	7.33	.87				1, 23	1.86	.19
Post	5.77	.87	7.17	.90				1, 23	1.24	.28
RCI					1.60, 32.08	.54	.55			
Baseline	59.00	5.01	65.00	4.58				1, 20	.78	.39
Feedback	60.80	5.50	69.08	5.02				1, 20	1.24	.28
Appointment 1	59.90	5.71	71.08	5.22				1, 20	2.09	.16
Appointment 2	62.70	6.13	72.42	5.60				1, 20	1.37	.26
Post	59.80	6.18	68.42	5.64				1, 20	1.06	.32
Importance					1.04, 58.75	.61	.58			
Baseline	7.08	.45	7.58	.47				1, 23	.60	.45
Feedback	7.08	.52	7.67	.54				1, 23	.61	.44
Appointment 1	7.23	.56	7.75	.58				1, 23	.42	.52
Appointment 2	7.15	.60	7.00	.62				1, 23	.03	.86
Post	7.00	.77	7.08	.81				1, 23	.01	.94
Confidence					4, 92	3.30	.01			
Baseline	5.62	.57	5.58	.59					.00	.97
Feedback	5.92	.53	6.67	.55					.95	.34
Appointment 1	6.00	.59	6.83	.62					.94	.34
Appointment 2	5.85	.59	7.50	.61					3.82	.06
Post	5.77	.63	7.58	.65					4.03	.06

Note. MET=motivation enhancement therapy; CBT=cognitive behavioral therapy. Means are estimated marginal means adjusted to account for covariate (employment status).

Table D2

Social anxiety and depression at each assessment point

Dependent variable	Control *n* = 15		MET for CBT *n* = 12		Condition X Time			Simple effects		
	M	*SE*	*M*	*SE*	*df*	*F*	*p*	*df*	*F*	*p*
SIAS-SPS					1.92, 34.56	1.26	.30			
Baseline	66.30	8.11	74.90	8.11				1, 18	.56	.46
Feedback	69.10	8.61	73.30	8.61				1, 18	.12	.73
Appointment 1	69.80	9.72	73.80	9.72				1, 18	.08	.77
Appointment 2	72.00	9.64	72.50	9.64				1, 18	.00	.97
Post-intervention	72.10	10.24	71.90	10.24				1, 18	.00	.99
BFNE					2.15, 49.44	.80	.46			
Baseline	33.85	2.91	35.67	3.03				1, 23	.19	.67
Feedback	34.08	3.21	34.92	3.34				1, 23	.03	.86
Appointment 1	34.08	3.47	35.42	3.61				1, 23	.07	.79
Appointment 2	30.15	3.60	35.42	3.75				1, 23	1.02	.32
Post-intervention	31.08	3.66	31.83	3.81				1, 23	.02	.89
SASCI					1.87, 43.04	1.90	1.7			
Baseline	NA	NA	NA	NA						
Feedback	19.23	1.19	19.50	1.24				1, 23	.02	.88
Appointment 1	19.15	1.21	19.42	1.26				1, 23	.02	.88
Appointment 2	18.54	1.05	16.50	1.10				1, 23	1.80	.19
Post-intervention	18.46	1.33	17.83	1.38				1, 23	.11	.75
BDI					1.50, 31.57	.56	.53			
Baseline	12.92	3.14	19.64	3.28				1, 21	2.19	.15
Feedback	11.83	3.19	18.36	3.34				1, 21	2.00	.17
Appointment 1	11.67	3.25	17.82	3.40				1, 21	1.71	.21
Appointment 2	10.92	3.36	15.82	3.51				1, 21	1.02	.32
Post-intervention	11.25	3.31	16.36	3.46				1, 21	1.14	.30

Note. MET=motivation enhancement therapy; CBT=cognitive behavioral therapy. Means reported are estimated marginal means adjusted to account for covariate (employment status). SIAS = *Social Interaction Anxiety Scale, SPS=Social Phobia Scale* (Mattick & Clarke, 1998), BFNE=*Brief Fear of Negative Evaluation Scale* (Leary, 1983), SASCI=*Social Anxiety Session Change Index* (Hayes et al., in press), BDI=*Beck Depression Inventory-II* (Beck et al., 1996)

APPENDIX E

FLORIDA STATE UNIVERSITY HUMAN SUBJECTS COMMITTEE APPROVAL LETTERS

Florida State
UNIVERSITY
Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8633 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 9/21/2006

To:
Julia D. Buckner
MC 1270

Dept.: **PSYCHOLOGY DEPARTMENT**

From: **Thomas L. Jacobson, Chair**

Re: **Use of Human Subjects in Research**
Motivation Enhancement Intervention for Social Anxiety Treatment

The forms that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Human Subjects Committee at its meeting on **9/13/2006**. Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If the project has not been completed by **9/12/2007** you must request renewed approval for continuation of the project.

You are advised that any change in protocol in this project must be approved by resubmission of the project to the Committee for approval. The principal investigator must promptly report, in writing, any unexpected problems causing risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446.

cc: Norman B. Schmidt
HSC No. 2006.0778

Florida State
UNIVERSITY

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

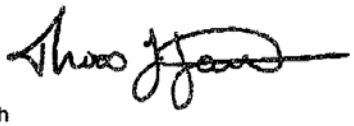
APPROVAL MEMORANDUM (for change in research protocol)

Date: 3/8/2007

To:
Julia D. Buckner
MC 1270

Dept: PSYCHOLOGY DEPARTMENT

From: Thomas L. Jacobson, Chair



Re: Use of Human subjects in Research
Project entitled: Motivation Enhancement Intervention for Social Anxiety Treatment

The memorandum that you submitted to this office in regard to the requested change in your research protocol for the above-referenced project have been reviewed and approved. Thank you for informing the Committee of this change.

A reminder that if the project has not been completed by 9/12/2007, you must request renewed approval for continuation of the project.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols of such investigations as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Protection from Research Risks. The Assurance Number is IRB00000446..

cc: Norman B. Schmidt
APPLICATION NO. 2006.0778

APPENDIX F

INFORMED CONSENT FORMS

Consent for Social Anxiety Study

I, _____, being 18 years of age or older, freely and voluntarily and without undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion, consent to be a participant in the above named research project, to be conducted at the Florida State University by Julia D. Buckner, M.S., a graduate student in psychology, for her dissertation project. Listed below are the procedures to be followed in this research and their purposes, any risks, discomfort, and benefits associated with participation in this study, and the measures which will be taken to ensure confidentiality of the information obtained.

Procedures for the research: I understand that if I participate in the project I will be asked questions about my current mood. I will also be asked to fill out questionnaires about my current mood. I understand that this study consists of three visits to the Anxiety and Behavioral Health Clinic (ABHC). On the first appointment, I will complete the interview about my current mood, complete a battery of self report measures about my mood, and then discuss the findings of these questionnaires. I will then be assigned to one of two conditions. In the first condition, I agree to come back to ABHC for two more appointments. Each appointment will occur 2-3 days after the prior appointment. If I am assigned to the first condition, appointments 2 and 3 will consist of the completion of self report measures about my mood. If I am assigned to the second condition, I agree to come to ABHC for 2 more appointments (2-3 days after the prior appointment). During these appointments I will discuss with a therapists my current mood and my thoughts and behaviors related to anxiety. At the end of each appointment I will complete the self report measures. Total participation time will be approximately 4.5 hours (approximately 1.5 hours per appointment). If I participate I will receive 5 hours of PSY2012 credit for my time

Potential risks or discomforts: I understand there is minimal risk involved in this study, although some individuals may be uncomfortable describing their symptoms. I have the right to refuse or discontinue participation at any time.

Potential benefits to you or others: I have not been given any guarantee that I will benefit from my participation in this study. I may derive benefit from the interview, self-assessment, and discussions about my anxiety and willingness to seek out treatment, as it may increase my awareness of my thoughts, feelings, and behaviors. I will also be provided referrals to appropriate clinical services. I may also develop a better understanding of research methodology and will be providing researchers with valuable insight.

Confidentiality: I understand my participation is totally voluntary and I may stop participation at any time. All my answers to the questions will be kept confidential to the fullest extent allowed by law. My name will not appear on any of the results. No individual responses will be reported. Only group findings will be reported. My confidentiality will be protected to the full extent allowed by law. All data will be destroyed on or before December 31, 2015. All information will remain confidential to the fullest extent allowed by law.

I understand that this consent may be withdrawn at any time without prejudice, penalty or loss of benefits to which I am otherwise entitled. I have been given the right to ask any inquiry concerning the study. Questions, if any, have been answered to my satisfaction. I understand that I may contact Julia Buckner, Florida State University, Department of Psychology, (850) 645-1766, or her supervisor, Norman B. Schmidt, Ph.D., 850-644-1707, for answers to questions about this research or my rights. Group results will be sent to me upon my request. I understand that if I have any questions about my rights as a participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633.

I have read and understand this consent form.

_____ _____

(Participant) (Date)

Consent for Social Anxiety Study

I freely and voluntarily and without undue inducement or any element of force, fraud, deceit, duress, or other form of constraint or coercion, consent to be a participant in the above named research project, to be conducted at the Florida State University by Julia D. Buckner, M.S., a graduate student in psychology, for her dissertation project.

Procedures for the research: I understand that I must be 18 years of age or older to participate. I understand that, if I participate in the project I will be asked questions about my current mood. I understand that this study consists of three visits to the Anxiety and Behavioral Health Clinic (ABHC). On the first appointment, I will complete the interview about my current mood, complete a battery of self report measures about my mood, and then discuss the findings of these questionnaires. I will then be assigned to one of two conditions. In the first condition, I agree to come back to ABHC for two more appointments. Each appointment will occur 2-3 days after the prior appointment. If I am assigned to the first condition, appointments 2 and 3 will consist of the completion of self report measures about my mood. If I am assigned to the second condition, I agree to come to ABHC for 2 more appointments (2-3 days after the prior appointment). During these appointments I will discuss with a therapists my current mood and my thoughts and behaviors related to anxiety. At the end of each appointment I will complete the self report measures. Total participation time will be approximately 4.5 hours (approximately 1.5 hours per appointment). If I participate I will receive 5 hours of PSY2012 credit for my time. I understand that I will also be contacted in approximately 4 weeks and asked to complete a follow-up battery of self report measures about my mood using web-based data collection (approximately 30-45 minutes long). I understand that my participation in this follow-up data collection is completely voluntary and will not affect the PSY2012 credits I will receive nor my ability to receive mental health services. Because participation in the follow-up data collection is separate from the hours toward my PSY2012 credits, I will receive $10 for my participation in the follow-up data collection.

Potential risks or discomforts: I understand there is minimal risk involved in this study, although some individuals may be uncomfortable describing their symptoms. I have the right to refuse or discontinue participation at any time.

Potential benefits to you or others: I have not been given any guarantee that I will benefit from my participation in this study. I may derive benefit from the interview, self-assessment, and discussions about my anxiety and willingness to seek out treatment, as it may increase my awareness of my thoughts, feelings, and behaviors. I will also be provided referrals to appropriate clinical services. I may also develop a better understanding of research methodology and will be providing researchers with valuable insight.

Confidentiality: I understand my participation is totally voluntary and I may stop participation at any time. All my answers to the questions will be kept confidential to the fullest extent allowed by law. My name will not appear on any of the results. Should I participate in the 4 week follow-up, I understand web-based data will be collected using a code number, not my name. No individual responses will be reported. Only group findings will be reported. My confidentiality will be protected to the full extent allowed by law. All data will be destroyed on or before December 31, 2015. All information will remain confidential to the fullest extent allowed by law.

I understand that this consent may be withdrawn at any time without prejudice, penalty or loss of benefits to which I am otherwise entitled. I have been given the right to ask any inquiry concerning the study. Questions, if any, have been answered to my satisfaction. I understand that I may contact Julia Buckner (645-1766) or Norman B. Schmidt, Ph.D. (644-1707), Florida State University, Department of Psychology for answers to questions about this research or my rights. Group results will be sent to me upon my request. I understand that if I have any questions about my rights as a participant in this research, or if I feel I have been placed at risk, I can contact the Chair of the Human Subjects Committee, Institutional Review Board, through the Vice President for the Office of Research at (850) 644-8633.

I have read and understand this consent form.

_____ _____

(Participant) (Date)

REFERENCES

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BIOGRAPHICAL SKETCH

CIRRICULUM VITAE

Education:
Predoctoral Clinical Psychology Fellow*, 2007-2008*
Department of Psychiatry (APA-Accredited)
Yale University School of Medicine, New Haven, Connecticut

Ph.D., Clinical Psychology*, 2005-2008*
Department of Psychology
Florida State University, Tallahassee, Florida
Dissertation Title*: A Randomized Pilot Study of Motivation Enhancement Therapy to Increase Utilization of Cognitive-Behavioral Therapy for Social Anxiety*

M.S. in Clinical Psychology, *2003-2005*
Department of Psychology
Florida State University
Thesis Title: Social Anxiety and Selective Attention: A Test of the Vigilance Avoidance Model

M.A. in Clinical Psychology, 2001-2002
Department of Psychology
Teachers College, Columbia University, New York, New York

B.A. in Psychology and Drama, 1993-1997
Kenyon College, Gambier, Ohio

Academic Appointments:
Department of Psychology, Louisiana State University
Assistant Professor, scheduled to begin August 2008

Grants and Fellowships:
Social anxiety and problematic cannabis use.
Principal Investigator: Julia D. Buckner, M.S.
Agency: National Research Service Award (NRSA), National Institute on Drug Abuse
1F31 DA12457-01
Period: 5/23/06-5/22/08
Role on Project: Principal Investigator
Direct Costs: $63,000

MET-CBT for comorbid social anxiety and alcohol use disorders.
Principal Investigators: Richard G. Heimberg, PhD, Deborah Roth Ledley, PhD, & Norman B. Schmidt, PhD
Agency: National Institute of Alcohol Abuse and Alcoholism
Period: submitted 6/1/06, revision submitted 6/1/07
Role on Project: Co-Investigator

Interactive computer treatment for panic disorder.
Principal Investigator: Norman B. Schmidt, PhD
Agency: National Institute of Mental Health

R21 MH62056-01A2
Period: 1/4/02-12/31/04 (no cost extension through 6/30/06)
Role on Project: Project Coordinator
Direct Costs: $375,000

Honors and Awards:

2008	The College on Problems of Drug Dependence Early Career Investigator Award
2007	American Psychological Association of Graduate Students (APAGS) David Pilon Scholarship for Training in Professional Psychology
2007	American Psychological Association Div12 Distinguished Student Practice Award
2007	American Psychological Association of Graduate Students (APAGS)-ACT Excellence in Campus Leadership Award
2007	Daisy Parker Flory Graduate Scholar Award, FSU chapter of Phi Kappa Phi
2007	Florida State University Psychology Clinic Original Manuscript Award
2006	Florida State University Dissertation Research Grant
2006	Florida State University Graduate Student Leadership Award
2005-2007	Anxiety and Behavioral Health Clinic Conference Presentation Grants
2005-2007	FSU Congress of Graduate Students Conference Presentation Grants

Publications:

Books:

1. **Buckner, J.D**., Castro, Y., Holm-Denoma, J., & Joiner, T.E. (Eds.) (2007). *Mental Health Care for People of Diverse Backgrounds within an Empirically Informed Framework.* Oxford: Radcliffe Publishing.

Peer-Reviewed Journal Articles and Book Chapters:

Accepted for Publication

2. Schmidt, N.B., Richey, J.A., **Buckner, J.D., &** Timpano, K.R. (in press). Attention training for generalized social anxiety disorder. *Journal of Abnormal Psychology.*

3. **Buckner, J.D.,** & Schmidt, N.B. (in press). Understanding social anxiety as a risk for alcohol use disorders: Fear of scrutiny, not social interaction fears, prospectively predicts alcohol use disorders. *Journal of Psychiatric Research*.

4. **Buckner, J.D.,** Timpano, K.R., Zvolensky, M.J., Sachs-Ericsson, N., & Schmidt, N.B. (in press). Implications of comorbid alcohol dependence among individuals with social anxiety disorder. *Depression and Anxiety.*

5. **Buckner, J.D.,** Leen-Feldner, E.W., Zvolensky, M.J., & Schmidt, N.B. (in press). The interactive effect of anxiety sensitivity and frequency of marijuana use in terms of anxious responding to bodily sensations among youth. *Psychiatry Research.*

6. **Buckner, J.D.,** & Schmidt, N.B. (in press). Marijuana effect expectancies: Relations to social anxiety and marijuana use problems. *Addictive Behaviors.*

7. **Buckner, J.D.,** Maner, J.K., & Schmidt, N.B. (in press). Difficulty disengaging attention from social threat in social anxiety. *Cognitive Therapy and Research.*

8. **Buckner, J.D.,** Cromer, K.R., Merrill, K.A., Mallott, M.A., Schmidt, N.B., Lopez, C., Holm-Denoma, J.M., & Joiner, T.E., Jr. (in press). Pretreatment intervention increases treatment outcomes for patients with anxiety disorders. *Cognitive Therapy and Research.*

9. Holm-Denoma, J.M., Gordon, K.H., Donohue, K.F., Waesche, M.C., Castro, Y., Brown, J.S., Jakobsons, L.J., Merrill, K.A., **Buckner, J.D.**, & Joiner, T.E., Jr. (in press). Patients' affective reactions to receiving diagnostic feedback. *Journal of Social and Clinical Psychology.*

10. Timpano, K.R., **Buckner, J.D.,** Richey, J.A., & Schmidt, N.B. (in press). Exploration of anxiety sensitivity and distress tolerance as vulnerability factors for hoarding behaviors. *Depression and Anxiety.*

11. Zvolensky, M. J., Lewinsohn, P., Bernstein, A., Schmidt, N. B., **Buckner, J. D.,** Seeley, J., Bonn-Miller, M. O. (in press). Prospective associations between cannabis use, abuse, and dependence and panic attacks and disorder. *Journal of Psychiatric Research*.

2008

12. **Buckner, J.D.,** Schmidt, N.B., Lang, A.R., Small, J., Schlauch, R.C., & Lewinsohn, P.M. (2008). Specificity of social anxiety disorder as a risk factor for alcohol and cannabis dependence. *Journal of Psychiatric Research, 42,* 230-239.

13. **Buckner, J.D.,** Ledley, D.R., Heimberg, R.G., & Schmidt, N.B. (2008). Treating comorbid social anxiety and alcohol use disorders: Combining motivation enhancement therapy with cognitive-behavioral therapy. *Clinical Case Studies, 7,* 208-223.

14. **Buckner, J.D.,** Lopez, C., Dunkel, S., & Joiner, T.E. (2008). Behavior management training for reactive attachment disorder. *Child Maltreatment, 13*, 289-297.

15. **Buckner, J.D.**, Joiner, T.E., Jr., Pettit, J.W., Lewinsohn, P.M., & Schmidt, N.B. (2008). Implications of the DSM's emphasis on sadness and anhedonia in major depressive disorder. *Psychiatry Research, 159,* 25-30.

16. **Buckner, J.D.,** Bernert, R.A., Cromer, K.R., Joiner, T.E., & Schmidt, N.B. (2008). Social anxiety and insomnia: The mediating role of depressive symptoms. *Depression and Anxiety, 25*, 124-130.

17. Schmidt, N.B., Timpano, K.R., & **Buckner, J.D.** (2008). Fear responding to 35% CO2 challenge as a vulnerability marker for later social anxiety symptoms. *Journal of Psychiatric Research, 42,* 763-768.

2007

18. **Buckner, J.D.,** Bonn-Miller, M.O., Zvolensky, M.J., & Schmidt, N.B. (2007). Marijuana use motives and social anxiety among marijuana using young adults. *Addictive Behaviors, 32,* 2238-2252.

19. **Buckner, J.D.,** Keough, M.E., & Schmidt, N.B. (2007). Problematic cannabis and alcohol use among young adults: the roles of depression and discomfort and distress intolerance. *Addictive Behaviors, 32,* 1957-1963.

20. Castro, Y, Holm-Denoma, J.M., & **Buckner, J.D.** (2007). Introduction to empirically informed mental health services for diverse populations. In **J.D. Buckner**, Y. Castro, J.M. Holm-Denoma, & T.E. Joiner (Eds.). *Mental Health Care for People of Diverse Backgrounds within an Empirically Informed Framework* (pp. 1-8). Oxford: Radcliffe Publishing.

21. Jakobsons, L. & **Buckner, J.D.** (2007). The assessment, diagnosis, and treatment of Hispanic/Latino Clients. In **J.D. Buckner**, Y. Castro, J.M. Holm-Denoma, & T.E. Joiner (Eds.). *Mental Health Care for People of Diverse Backgrounds within an Empirically Informed Framework* (pp. 9-24). Oxford: Radcliffe Publishing.

22. Hollar, D., **Buckner, J.D.,** Holm-Denoma, J.M., Wingate, L., Waesche, M.C., & Ainestis, M. (2007). The assessment, diagnosis, and treatment of African American clients. In **J.D. Buckner**, Y. Castro, J.M. Holm-Denoma, & T.E. Joiner (Eds.). *Mental Health Care for People of Diverse Backgrounds within an Empirically Informed Framework* (pp.25-42). Oxford: Radcliffe Publishing.

23. Hunter, L.R., **Buckner, J.D.,** Holm-Denoma, J.M., & Castro, Y (2007). The delivery of mental health services for clients of diverse backgrounds: Summary and Future Directions. In **J.D. Buckner**, Y. Castro, J.M. Holm-Denoma, & T.E. Joiner (Eds.). *Mental Health Care for People of Diverse Backgrounds within an Empirically Informed Framework* (pp. 121-128). Oxford: Radcliffe Publishing.

24. Schmidt, N.B., **Buckner, J.D.**, & Keough, M.E. (2007). Anxiety sensitivity as a prospective predictor of alcohol use disorders. *Behavior Modification, 31,* 202-219.

25. Schmidt, N. B., **Buckner, J.D.**, & Richey, J.A. (2007). Panic and agoraphobia. In M. Hersen & J.C. Thomas (Eds.). *Comprehensive Handbook of Interviewing*. Thousand Oaks, CA.: Sage Publications (pp. 184-201).

26. Schmidt, N.B., Richey, J.A., Cromer, K.R., & **Buckner, J.D.** (2007). Discomfort intolerance: evaluation of a potential risk factor for anxiety pathology. *Behavior Therapy, 38,* 247-255.

2006

27. **Buckner, J.D.,** Schmidt, N.B., Bobadilla, L., & Taylor, J. (2006). Social anxiety and problematic cannabis use: evaluating the moderating role of stress reactivity and perceived coping. *Behaviour Research and Therapy, 44,* 1007-1015.

28. **Buckner, J.D.,** Mallott, M.A., Schmidt, N.B., & Taylor, J. (2006). Peer influence and gender differences in problematic cannabis use among individuals with social anxiety. *Journal of Anxiety Disorders*, *20*, 1087-1102.

29. **Buckner, J.D.,** Eggleston, A.M., & Schmidt, N.B. (2006). Social anxiety and problematic alcohol consumption: the mediating role of drinking motives and situations. *Behavior Therapy, 37,* 381-391.

30. Zvolensky, M.J., Bernstein, A., Sachs-Ericcson, N., Schmidt, N.B., **Buckner, J.D.**, & Bonn-Miller, M.O. (2006). Lifetime association between cannabis use, abuse, and dependence and panic attacks in a representative sample. *Journal of Psychiatric Research, 44,* 1007-1015.

2005 (*publications under the name Julia D. Smith*)

31. Schmidt, N.B. & **Smith, J.D.** (2005). Do medications matter in the context of cognitive behavior therapy for Panic Disorder? *Journal of Cognitive Psychotherapy, 19,*347-354.

32. Schmidt, N.B., Eggleston, A.M., Trakowski, J., & **Smith, J.D.** (2005). Effects of coping on response to CO_2 challenge in panic disorder. *Behaviour Research and Therapy, 43,* 1311-1319.

Newsletters, Abstracts, and Other Publications:

33. **Buckner, J.D.,** Schmidt, N.B., Lang, A.R., Small, J., Schlauch, R.C., & Lewinsohn, P.M. (2007, Fall/Winter). Specificity of social anxiety disorder as a risk factor for alcohol and cannabis dependence. *The APA Division 50 Addictions Newsletter, 14,* 17.

34. **Smith, J.D.**, Schmidt, N.B., Bobadilla, L., & Taylor, J. (2004, Fall). Perceived Coping Moderates the Relationship Between Social Anxiety and Cannabis Use. *Anxiety Disorders: A Quarterly Report*, 11.

35. **Smith, J.D.** & Schmidt, N.B. (2004). Accessibility to efficacious treatments: Developing computerized self-help treatments. *Florida Psychologist, 55*, 24-25.

36. **Smith, J.D.**, Woolaway-Bickel, K., & Schmidt, N.B. (2004). Treating panic disorder: Medications, psychosocial treatments, and combined approaches. *The Clinical Psychologist, 57,* 14-19.

37. Richey, J.A., **Smith, J.D.**, Oliver, M. Brown, M. Quevedo, J., Botero, N, Chisholm, T.L. & Schmidt, N.B. (2004, Winter). Empirically Validated Therapies – "Myths" and Reality: A Reply to Koocher (2004). *Florida Psychologist, 55*, 24-25.

38. **Buckner, J.D.** & Schmidt, N.B. (under development). Motivational Enhancement Treatment for Cognitive-Behavioral Treatment for Social Anxiety Disorder: A Treatment Manual.

39. **Buckner, J.D.** Ledley, D.R., Schmidt, N.B., & Heimberg, R.G. (under development). Combined Motivational Interviewing and Cognitive-Behavioral Therapy for the Treatment of Dually Diagnosed Patients with Anxiety and Substance Use Disorders: A Treatment Manual.

Conference Paper Presentations:

1. Sullivan, T.P., Cavanaugh, C.E., & **Buckner, J.D.** (2008, April). *Intimate partner violence (IPV) and drug and alcohol use problems among community women: The roles of physical, sexual, and psychological IPV and PTSD.* Paper accepted for presentation at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH.

2. **Buckner, J.D.,** & Carroll, K.M. (2008, May). *Effect of Anxiety on Treatment Presentation and Outcome: Results from the Marijuana Treatment Project.* In **J.D. Buckner** (Chair). Addressing Anxiety in Psychosocial Treatments for Addiction: Implications for Advancing the Dissemination of CBT. Symposium accepted for presentation at the annual Association for Behavioral and Cognitive Therapies convention, Orlando, FL.

3. **Buckner, J.D.,** & Schmidt, N.B. (2008, May). *Motivational Enhancement Therapy Increases Cognitive-Behavior Therapy Utilization among Non-Treatment-Seekers with Social Anxiety Disorder.* In H.A. Westra (Chair). Using Motivational Interviewing and Motivational Enhancement to Engage Individuals with Cognitive Behavioral Therapy for Anxiety. Symposium accepted for presentation at the annual Association for Behavioral and Cognitive Therapies convention, Orlando, FL.

4. **Buckner, J.D.,** & Schmidt, N.B. (2008, May). *Do Depressive Symptoms Account for Insomnia among those with Social Anxiety?* In K.A. Babson (Chair). Anxiety and Sleep Problems: Integrating Laboratory-Based Research into Treatment Development and Refinement. Symposium accepted for presentation at the annual Association for Behavioral and Cognitive Therapies convention, Orlando, FL.

5. **Buckner, J.D.**, Cromer, K.R., & Schmidt, N. B. (2007, November). *Clinical Implications of the Role of Distress Intolerance in the Relationships between Social Anxiety and Problematic Marijuana and Alcohol Use.* In **J.D. Buckner** (Chair), Distress Tolerance and Its Relation to Anxiety and Substance Use Pathology: Clinical Implications of Empirical Work. Symposium presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

6. **Buckner, J.D.**, Cromer, K.R., & Schmidt, N. B. (2007, November). *Clinical Implications of Empirical Research of Obsessive-Compulsive and Alcohol Use Disorders among Undergraduates: Social Anxiety Disorder, Drinking Motives, and Drinking Situations.* In L.S. Ham (Chair), Drinking to Cope with Anxiety: Understanding the Mechanisms and Clinical Implications for College Students. Symposium presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

7. **Buckner, J.D.,** & Schmidt, N.B. (2007, November). *Social Anxiety Disorder as a Specific Risk Factor for Marijuana Dependence: A Translational Perspective.* In E.C. Marshall & M.J. Zvolensky (Chairs), How Can Basic Research Inform Clinical Perspectives on Substance Use and Anxiety Comorbidity? Symposium presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

8. Cromer, K.R., **Buckner, J. D.**, Murphy, D.L., & Schmidt, N. B. (2007, November). *Distress tolerance as a vulnerability factor for compulsive hoarding.* In **J.D. Buckner** (Chair), Distress Tolerance and Its Relation to Anxiety and Substance Use Pathology: Clinical Implications for Empirical Work. Symposium presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

9. **Buckner, J.D.**, Donohue, K., Schmidt, N.B., & Lang, A.R. (2006, March). *Social Anxiety and Problematic Alcohol Use: "What Do People Think Of Me When I'm Drinking?"* Paper presented at the annual meeting of the Anxiety Disorders Association of America, Miami, FL.

10. **Smith, J.D.,** & Schmidt, N.B. (2005, March). *Unified CBT for Anxiety: False Safety Behavior Elimination Therapy (F-SET).* Paper presented at the annual meeting of the Anxiety Disorders Association of America, Seattle, WA.

11. **Smith, J.D.,** Schmidt, N.B., Bobadilla, L., & Taylor, J. (2005, March). *Social Anxiety and Cannabis Use: Evaluating the Moderating Role of Stress Reactivity and Perceived Coping*. Paper presented at the annual meeting of the Anxiety Disorders Association of America, Seattle, WA.

<u>Conference Poster Presentations</u>:

12. Silgado, J., **Buckner J.D.**, Lewinsohn, P.M. (2008, June). *Temporal relations between specific anxiety and eating disorders: A longitudinal investigation*. Poster submitted to be presented at the annual Association for Behavioral and Cognitive Therapies Anxiety SIG, Orlando, Fl.

13. **Buckner, J.D.**, Pusser, A.T., & Schmidt, N.B. (2008, June). *Social Anxiety and Problematic Alcohol Use: Development of a Scale to Measure Perceptions of How Others Judge Drinking Behaviors.* Poster submitted for presentation at the annual Association for Behavioral and Cognitive Therapies convention, Anxiety Disorders Special Interest Group, Orlando, FL.

14. **Buckner, J.D.** & Carroll, K.M. (2008, May). *The role of anxiety in the treatment of marijuana dependence*. Poster presented at the annual meeting of The College on Problems of Drug Dependence, San Juan, Puerto Rico.

15. Hunter, L.R., **Buckner, J.D.**, & Schmidt, N.B. (2008, March). Interpreting facial expressions: The influence of social anxiety, emotional valence, and race. Poster presented at the annual meeting of the Anxiety Disorders Association of America, Savannah, GA

16. Silgado, J., Timpano, K.R., **Buckner, J.D.**, & Schmidt, N.B. (2008, March). *Understanding the high comorbidity between social anxiety and eating disorder symptomatology: The role of perfectionism*. Poster presented at the annual meeting of the Anxiety Disorders Association of America, Savannah, GA.

17. **Buckner, J.D.** (2007, November). *A Prospective Examination of the Role of Social Support and Peer Influence in the High Rates of Comorbid Alcohol Use and Social Anxiety Disorders.* Poster presented at the annual Association for Behavioral and Cognitive Therapies convention, Addictive Behaviors Special Interest Group, Philadelphia, PA.

18. **Buckner, J.D.**, Silgado, J., Cromer, K.R., Keough, M.E., Hunter, L.R., Stevens, B., Bernert, R.A., & Schmidt, N.B. (2007, November). *Laboratory-Induced Social Anxiety Increases Marijuana Craving*. Poster presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

19. Keough, M.E., Cromer, K.R., **Buckner, J.D.,** & Schmidt, N.B. (2007, November). *The Interaction Between Distress Tolerance and Life Stress in the Prediction Anxiety Sensitivity*. Poster presented at the annual Association for Behavioral and Cognitive Therapies convention, Philadelphia, PA.

20. Cromer, K.R., **Buckner, J.D.,** Schmidt, N.B., & Murphy, D.L. (2007, February). *Identifying sub-phenotypes for genetic investigations: Comorbidity patterns between OCD, social anxiety, and alcohol use disorders.* Poster presented at the Obsessive Compulsive Foundation Genetics Collaborative Meeting, Amelia Island, FL.

21. **Buckner, J.D.**, Zvolensky, M.J, Leen-Feldner, E.W., & Schmidt, N.B. (2006, November). *Marijuana Use Moderates Anxious Responding among Adolescents with High Anxiety Sensitivity*. Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Addictive Behaviors Special Interest Group, Chicago, IL.

22. **Buckner, J.D.**, Cromer, K.R., & Schmidt, N.B. (2006, November). *Anxiety and Cannabis Related Impairment: The Roles of Self-Reported Versus Actual Risk-Taking Behaviors.* Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Anxiety Disorders Special Interest Group, Chicago, IL.

23. Keough, M.E., **Buckner, J.D.,** & Schmidt, N.B. (2006, November). *Anxiety Sensitivity as a Prospective Predictor of Alcohol Use Disorders*. Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Anxiety Disorders Special Interest Group, Chicago, IL.

24. **Buckner, J.D.**, Mallott, M.A., & Schmidt, N.B. (2006, November). *Discomfort and Distress Intolerance in Individuals with Social Anxiety and Problematic Cannabis and Alcohol Use*.

Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Chicago, IL.

25. **Buckner, J.D.**, Cromer, K.R., & Schmidt, N.B. (2006, November). *Social Anxiety Mediates the Relationship between Obsessive-Compulsive Disorder and Problematic Cannabis Use*. Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Chicago, IL.

26. **Buckner, J.D.,** Keough, M.E., & Schmidt, N.B. (2006, November). *Depression and Problematic Substance Use: The Role of Discomfort and Distress Tolerance.* Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Chicago, IL.

27. Cromer, K.R., **Buckner, J.D.**, Schmidt, N.B., & Murphy, D.L. (2006, November). *Elucidating Patterns Of Comorbidity: The Relationship between Obsessive-Compulsive Disorder, Social Anxiety, and Alcohol Abuse Disorders.* Poster presented at the 40th annual Association for Behavioral and Cognitive Therapies convention, Chicago, IL.

28. **Buckner, J.D.**, Cromer, K.R., & Schmidt, N.B. (2006, April). *The role of social anxiety in the association between obsessive-compulsive symptoms and problematic cannabis use: Identifying a potential phenotype.* Poster accepted to be presented at Addictions 2006, satellite conference of the annual meeting of the College on Problems of Drug Dependence Mesa, AZ.

29. Cromer, K.R., **Buckner, J.D.**, Schmidt, N.B., & Murphy, D.L. (2006, April). *OCD, social anxiety, and alcohol abuse disorders: Comorbidity patterns to identify phenotypes.* Poster accepted to be presented at Addictions 2006, satellite conference of the annual meeting of the College on Problems of Drug Dependence Mesa, AZ.

30. **Buckner, J.D.**, Schmidt, N.B., & Silgado, J. (2006, March). *Social Anxiety and Selective Attention: A Test of the Vigilance-Avoidance Model.* Poster presented at the annual meeting of the Anxiety Disorders Association of America, Miami, FL.

31. **Buckner, J.D.**, Mallott, M.A., Schmidt, N.B., & Taylor, J. (2006, March). *Problematic Cannabis Use Among Individuals with Social Anxiety: Peer Influence and Gender Differences.* Poster presented at the annual meeting of the Anxiety Disorders Association of America, Miami, FL.

32. **Buckner, J.D.**, Silgado, J., Bernert, R., Cromer, K., & Schmidt, N.B. (2006, March). *Insomnia Among Individuals with Social Anxiety.* Poster presented at the annual meeting of the Anxiety Disorders Association of America, Miami, FL.

33. **Buckner, J.D.**, Schmidt, N.B., & Eggleston, A.M. (2005, November). *Drinking Motives and Situation-Specific Alcohol Consumption in Individuals with Social Anxiety.* Poster session presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Washington, DC.

34. **Buckner, J.D.**, Schmidt, N.B., & Lewinsohn, P.M. (2005, November). *Social Anxiety and Cannabis Use: Evaluating the Moderating Role of Intrapersonal and Familial Risk Factors.* Poster session presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Washington, DC.

35. **Smith, J.D.**, Schmidt, N.B., Bobadilla, L., & Taylor, J. (2004, November). *Perceived coping moderates the relationship between social anxiety and cannabis use.* Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Anxiety Disorders Special Interest Group, New Orleans, LA.

36. **Smith, J.D.**, Joiner, T.E., Lewinsohn, P.M., Pettit, J.W., & Schmidt, N.B. (2004, November). *Implications of the DSM's Emphasis on Depressed Mood and Anhedonia in Major Depressive Disorder.* Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, New Orleans, LA.

37. **Smith, J.D.**, Schmidt, N.B., & Eggleston, A.M. (2004, March). *Effects of Coping Strategies on CO_2 Challenge Induced Fear Among Patients with Panic Disorder*. Poster session presented at the Anxiety Disorder Association of America Annual Meeting, Miami, FL.

38. Weiss, A., DuHamel, K., Barrett, T., Seremetis, S., **Smith, J.**, Barnes, A., Rakowski, W., Jandorf, L., Thompson, H., Manne, S., Hurley, K., Winkel, G., Itzkowitz, S., & Redd, W. (2001, March). *Increasing Colorectal Cancer Screening Compliance in Average Risk Individuals.* Poster session presented at the Society of Behavioral Medicine Annual Meeting, Seattle, WA.

39. Weiss, A., DuHamel, K., **Smith, J.**, Barrett, T., Minian, N., Barnes, A., Michener, J., Thompson, H., Manne, S., Redd, W., Rakowski, W., & Winkel, G. (2001, March). *Barriers and Promoters of Colorectal Cancer Screening in African-Americans.* Poster session presented at the Society of Behavioral Medicine Annual Meeting, Seattle, WA.

40. Weiss, A., DuHamel, K., Barrett, T., Seremetis, S., **Smith, J.**, Barnes, A., Rakowski, W., Jandorf, L., Thompson, H., Manne, S., Hurley, K., Winkel, G., Itzkowitz, S., & Redd, W. (2001, February). *Increasing Colorectal Cancer Screening Compliance in Average Risk Individuals*. Paper presented at Grand Rounds, Mount Sinai School of Medicine, New York, NY.

Ad hoc review activities (years completed in parentheses):
Addictive Behaviors (2008)
Behavior Modification (2005)
Cognitive Therapy and Research (2006-2008)
Journal of Cognitive Psychotherapy (2005)
Journal of Psychiatric Research (2006)
Psychological Assessment (2007)
Psychological Reports and Perceptual and Motor Skills (2008)

Professional Affiliations:
- American Psychological Association
  - APA Division 12-Clinical Psychology
  - APA Division 12, Section 3- Society for a Science of Clinical Psychology (SSCP)
  - APA Division 50-Addictions
  - American Psychological Association of Graduate Students (APAGS)
- Anxiety Disorders Association of America
- Association of the Advancement of Behavior Therapy
  - Addictive Behaviors Special Interest Group
  - Anxiety Disorders Special Interest Group

Departmental/University Service at Florida State University:
Campus Representative, Florida Psychological Association of Graduate Students, 2007.
Campus Representative, American Psychological Association of Graduate Students (APAGS), 2006-2007
Student Representative, Council for Directors of Clinical Programs, 2006-2007.
Graduate Student Advisory Committee, Department of Psychology, Clinical Area, 2004-2007.
Student Advisory Committee, Department of Psychology, Clinical Area, 2004-2005.
Interview Weekend Committee, Department of Psychology, Clinical Area, 2003-2004.

Research Experience:
Laboratory Coordinator, 2003 – 2006
Anxiety and Behavioral Health Research Laboratory
Florida State University
Supervisor: Norman Brad Schmidt, PhD

Research Supervisor. 2002 – 2003
Behavioral Alcohol Research for Clinical Advancement (BARCA) Laboratory
Yale University
Supervisor: William R. Corbin, PhD

Research Associate, 2002 – 2003
Department of Psychiatry
Yale University School of Medicine
Supervisor: Suniya S. Luthar, PhD

Graduate Research Assistant, 2001 - 2002
Department of Psychology
Columbia University, New York, NY
Supervisor: George Bonanno, PhD

Research Assistant, 2000 – 2001
New York State Psychiatric Institute Anxiety Disorders Clinic
Columbia University, New York, NY
Supervisor: Abby Fyer, MD

Project Coordinator, 2000 - 2001
Derald H. Ruttenberg Cancer Center
Mount Sinai School of Medicine, New York, NY
Supervisor: Katherine DuHamel, PhD

Research Assistant, 1996
Office of Statistics and Evaluation, Women's Health Unit
Massachusetts Department of Public Health, Boston, MA
Supervisor: Carol Dolan, PhD

Research Assistant, 1994 – 1995
Department of Psychology
Kenyon College
Supervisors: Michael Levine, PhD and Linda Smolak, PhD

Teaching and Supervisory Experience:
Instructor, 2003-2007
Department of Psychology
Florida State University
Directed Independent Study (undergraduate-level course)

Guest Lectures – Undergraduate-level courses, 2005-2007
Department of Psychology
Florida State University
Abnormal Psychology

- Lecture entitled: *Substance-Related Disorders I*
- Lecture entitled: *Substance-Related Disorders II*

Clinical and Counseling Psychology

- Lecture entitled: *Marijuana: Beyond Reefer Madness*.

Guest Lectures – Graduate-level courses, 2005-2007
Department of Psychology
Florida State University
Current Issues in Clinical Psychology.

- Lecture entitled: *Social Anxiety and Problematic Cannabis Use: Evaluating the Moderating Role of Stress Reactivity and Perceived Coping*
- Lecture entitled: *Social Anxiety and Problematic Alcohol Use*
- As guest discussant, reviewed strategies for applying for pre-doctoral grant, the NIH's National Research Service Award (F31)

Teaching Psychology Practicum.

- As guest discussant, reviewed general issues relating to teaching college courses

Workshops Conducted, 2005-2007
Psychology Clinic
Florida State University

1. *Administration of the Structured Clinical Interview for DSM-IV Axis I Disorders.* One-hour workshop to graduate student therapists
2. *Cognitive Behavioral Therapy for Social Anxiety Disorder: Managing Social Anxiety.* Three-hour workshop to graduate student therapists

Other Presentations, 2007-2008
Buckner, J.D. (2008, May). *The Role of Anxiety in the Treatment of Marijuana Dependence.* Presented to psychiatry faculty and post-doctoral fellows in the Division of Substance Abuse Seminar in the Department of Psychiatry, Yale University School of Medicine.

Buckner, J.D. (2007, November). *Addiction and Anxiety: Uncovering Mechanisms for Change.* Presented to psychiatry faculty and post-doctoral and pre-doctoral fellows at The Consultation Center, Yale University School of Medicine.

Buckner, J.D. (2007, October). *Addiction and Social Anxiety: Temporal Relations, Underlying Mechanisms, and Treatment*. Presented to psychiatry faculty and post-doctoral fellows in the Division of Substance Abuse Seminar in the Department of Psychiatry, Yale University School of Medicine.

Buckner, J.D. (2007, April). *Social Anxiety Disorder and Marijuana Dependence: Uncovering Temporal Relations and Underlying Psychosocial Mechanisms***.** Presented to psychology faculty and graduate students at the Florida State University Graduate Research Day.

Supervisory Experience, 2005-2008
Department of Psychology
Florida State University

- Co-supervisor of an undergraduate student's Honors Thesis entitled, *Social anxiety and eating disorders: The moderating role of perfectionism*
- Supervised and trained graduate student therapists on MET for CBT for non-treatment seeking individuals with social anxiety disorder. Led weekly supervision meetings
- Supervised and trained graduate student therapists on the administration of structured diagnostic interviews to patients with anxiety disorders in a community outpatient clinic. Coordinated weekly supervision meetings. Supervised graduate student therapists on the delivery of empirically supported treatments.
- Supervised and training graduate and undergraduate students ratings of treatment fidelity using the *Motivational Interviewing Treatment Integrity code, Version 2.0.*

Clinical Experience:
Predoctoral Clinical Psychology Fellow, 2007– 2008
Department of Psychiatry
Yale University School of Medicine
Outpatient therapy and assessment for adults and adolescents with primary substance use disorders.
Primary Supervisors: Drs. Samuel Ball & Kathleen Carroll

Assistant Director, 2004 – 2007
Anxiety and Behavioral Health Clinic
Florida State University
Outpatient therapy and assessment for adults and children with primary anxiety disorder diagnoses.
Supervisor: Norman B. Schmidt, PhD

Treatment Development, 2005 - Present
Department of Psychology
Florida State University
Developing two new treatment manuals. The first concerns the integration of MET and CBT for the treatment of patients with comorbid anxiety and substance use disorders. The second involves the use of MET to increase motivation for CBT for Social Anxiety.
Supervisors: Norman B. Schmidt, PhD and Richard G. Heimberg, PhD

Anxiety Specialist, 2004 - 2007
Anxiety and Behavioral Health Clinic
Florida State University
Outpatient therapy and assessment for adults and children with primary anxiety disorder diagnoses.
Supervisor: Norman B. Schmidt, PhD

Psychological Trainee, 2004 – 2006
Psychology Clinic
Florida State University

Outpatient therapy and assessment for adults and children with a wide range of psychological disorders.
Supervisors: Norman B. Schmidt, PhD and Thomas Joiner, Jr., PhD

Clinical Interviewer, 2004 – 2007
Anxiety and Behavioral Health Research Laboratory
Florida State University
Supervisor: Norman B. Schmidt, PhD

Crisis Hotline Counselor, 1999 – 2000
Victim Services Hotlines, New York, NY
Telephone counseling hotline servicing the domestic violence, rape and sexual assault, elder abuse, and crime victims hotlines throughout New York City.
Supervisor: Lorraine Belasco.

Crisis Hotline Counselor, 1999 – 2000
Samaritans Suicide Hotline, New York, NY
Suicide prevention hotline servicing the greater New York City area.
Supervisor: Alan Ross.