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Self-views in social anxiety disorder: The impact of CBT versus MBSR

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ABSTRACT

This study examines the impact of Cognitive-Behavioral Group Therapy (CBGT) versus Mindfulness-Based Stress Reduction (MBSR) versus Waitlist (WL) on self-views in patients with social anxiety disorder (SAD). One hundred eight unmedicated patients with SAD were randomly assigned to 12 weeks of CBGT, MBSR, or WL, and completed a self-referential encoding task (SRET) that assessed self-endorsement of positive and negative self-views pre- and post-treatment. At baseline, 40 healthy controls (HCs) also completed the SRET. At baseline, patients with SAD endorsed greater negative and lesser positive self-views than HCs. Compared to baseline, patients in both CBGT and MBSR decreased negative self-views and increased positive self-views. Improvement in self-views, specifically increases in positive (but not decreases in negative) self-views, predicted CBGT- and MBSR-related decreases in social anxiety symptoms. Enhancement of positive self-views may be a shared therapeutic process for both CBGT and MBSR for SAD.

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1. Introduction

Social anxiety disorder (SAD) is characterized by debilitating fear, humiliation, and embarrassment in social situations (American Psychiatric Association, 2013) and is known to be highly prevalent with an early age of onset (Kessler, Petukhova, Sampson, Zaslavsky, & Wittchen, 2012). SAD is associated with various psychological (e.g., anxiety, stress, sadness) and physiological symptoms (e.g., increased heart and breathing rates, motor tremors) when facing situations that trigger symptoms (Stein & Stein, 2008). Individuals with SAD wish for interconnectedness with others but often hold distorted views of themselves and experience high levels of solitude (Stein & Stein, 2008). SAD negatively affects performance in school, work, and interpersonal domains, and is associated with reduced life satisfaction (Fink et al., 2009). Despite its high prevalence and early onset, SAD is often undiagnosed, undertreated, and its impact on daily functioning is typically underestimated (Fink et al., 2009).

1.1. Self-Views in SAD

Cognitive-behavioral models of SAD suggest that maladaptive self-views play a crucial role in the onset and maintenance of SAD (Clark & Wells, 1995; Heimberg, Brozovich, & Rapee, 2014). Maladaptive self-views give rise to fears of having negative self-attributes exposed to others in social situations. This type of self-referential fear, in contrast to fear of the social situation, has been proposed as a primary trigger of social anxiety (Moscovitch, 2009). The maladaptive pattern of greater negative self-views and lesser positive self-views in SAD, in comparison to healthy controls, has been demonstrated in previous research (Goldin et al., 2013; Moscovitch, Orr, Rowa, Reimer, & Antony, 2009). Treatment-related changes in self-views may be an important mechanism in the reduction of SAD symptom severity (Goldin, Ziv, Jazaieri, & Gross, 2012; Goldin et al., 2013). Thus, modifying self-views may be an important target to enhance the efficacy of clinical interventions for patients with SAD.

1.2. Treatment of SAD

The most well-studied and efficacious psychological treatment for SAD is cognitive-behavioral therapy (CBT). CBT emphasizes the identification of maladaptive patterns of thinking, which includes distorted self-beliefs. Both cognitive-behavioral group therapy (CBGT) and exposure group therapy for SAD have been shown to reduce negative self-perceptions during anticipation or recol-

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lection of a social stressor, and this modification of self-beliefs predicted reductions in social anxiety symptom severity and self-focused attention (Hofmann, 2000; Hofmann, Moscovitch, Kim, & Taylor, 2004; Woody, Chambless, & Glass, 1997). A recent study demonstrated that individual CBT for SAD produced decreases in endorsement of negative self-views as well as increases in positive self-views (Goldin et al., 2013). Furthermore, this study found that increases in positive self-views mediated the effect of individual CBT for SAD (vs. a waitlist control) on decreases in social anxiety symptoms. Thus, modification of self-views may be a mechanism by which CBT reduces social anxiety symptoms in patients with SAD.

An alternative treatment for SAD is mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1990). MBSR consists of a set of formal and informal meditation practices to cultivate attention, emotion awareness, emotion regulation and self-regulation skills (Tang, Hölzel, & Posner, 2015). MBSR has been shown to modify self-views in adults with SAD, specifically by increasing their positive self-views and decreasing their negative self-views (Goldin, Ramel, & Gross, 2009; Goldin et al., 2012). MBSR trains individuals to observe emotional and cognitive patterns with a curious, accepting, and non-judgmental perspective. Cultivating mindfulness skills may function to deconstruct maladaptive cognitions, including maladaptive self-schemas (Dahl, Lutz, & Davidson, 2015). MBSR is known to produce cognitively and affectively flexible mental states that reduce grasping at distorted self-beliefs. A recent study by Goldin et al. (2016) demonstrated that MBSR is as efficacious as CBGT at reducing the severity of social anxiety symptoms in adults with SAD. However, no study to date has directly compared the impact of CBT versus MBSR on self-views in SAD.

1.3. The present study

The primary goals of this study were to compare the endorsement of positive and negative self-views of patients with SAD and healthy controls (HCs), to examine the impact of CBGT vs. MBSR vs. WL on endorsement of positive and negative self-views in adults with SAD, and to test whether treatment-related changes in self-views predict reduction in severity of social anxiety symptoms. At baseline, we expected that, compared to HCs, patients with SAD would endorse significantly lesser positive and greater negative self-views (**Hypothesis 1a**) and that there would be a positive association between negative self-views and social anxiety symptoms and a negative association between positive self-views and social anxiety symptoms (**Hypothesis 1b**). We further expected that, compared to WL, both CBGT and MBSR would produce significantly greater increases in positive and decreases in negative self-views (**Hypothesis 2**), with no specific prediction of superiority of one treatment over the other. We also expected that changes in positive and negative self-views during CBGT and MBSR would predict post-treatment decreases in social anxiety symptoms (**Hypothesis 3**).

2. Method

2.1. Participants

As reported elsewhere (Goldin et al., 2016), we conducted interviews using the Anxiety Disorders Interview Schedule for the DSM-IV-Lifetime version (ADIS-IV-L; Di Nardo, Brown, & Barlow, 1994) to determine whether patients had a principal diagnosis of SAD based on the criteria of the DSM-IV (American Psychiatric Association, 1994). We also used the dual criteria of (a) moderate or greater social fear in 5 or more social situations as assessed by the ADIS-IV-L as a threshold for the "generalized" subtype of SAD, and (b) a score of 60 or higher on the Liebowitz Social Anxiety Scale – Self-Report (LSAS-SR), which is the cut-off score for the generalized subtype of SAD as determined by receiver operator characteristics analysis of the LSAS-SR (Rytwinski et al., 2009). Exclusion criteria were: psychotherapy or pharmacotherapy in the past year, CBT in the past two years, previous MBSR course experience, past history of a long-term meditation retreat, regular practice of meditation of

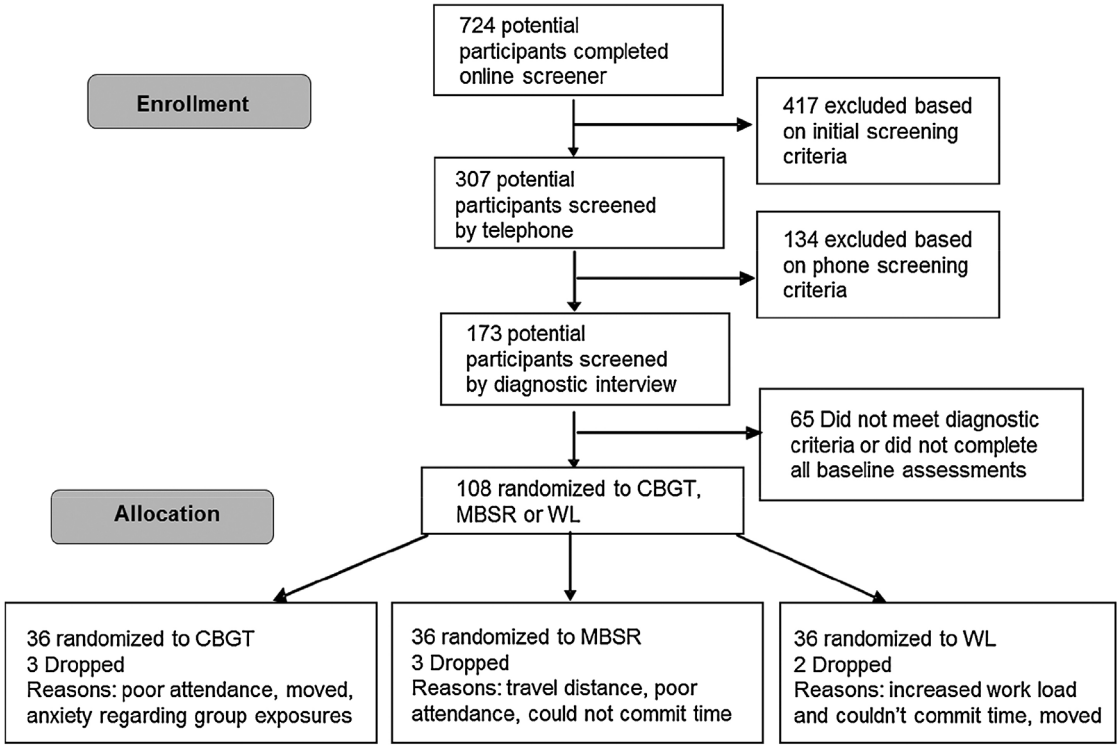

Fig. 1. Consort diagram; participant enrollment to allocation (Goldin et al., 2016).