Acceptance based behavior therapy for social anxiety disorder through videoconferencing

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A B S T R A C T

Most individuals with social anxiety disorder (SAD) do not receive any type of treatment. Reasons include logistical barriers (e.g., geographic location, travel time), fear of stigmatization, and fear of the social interactions associated with seeking treatment. Videoconferencing technology holds great promise in the widespread delivery of evidence-based treatments to those who would otherwise not receive treatment. This pilot study assessed the feasibility, acceptability, and initial efficacy of an acceptance-based behavioral intervention using Skype videoconferencing to treat adults with generalized SAD. Twenty-four participants received 12 sessions of weekly therapy and were assessed at pre-treatment, mid-treatment, post-treatment, and 3-month follow-up. Participants and therapists rated the intervention as acceptable and feasible. Analyses revealed significant pre-treatment to follow-up improvements in social anxiety, depression, disability, quality of life, and experiential avoidance, with effect sizes comparable to or larger than previously published results of studies delivering in-person CBT for SAD. Implications and future directions are discussed.

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1. Introduction

Numerous barriers exist to providing competent psychological treatment to individuals who suffer from mental health difficulties. Many persons in need are unable to meet regularly with a therapist due to logistical barriers, such as lack of finances, transportation, or time (Olfson et al., 2000). Due to the limited geographic availability of therapists specializing in evidence-based treatment of specific disorders, some patients may have to travel long distances in order to receive proper care, which may not be feasible (Nelson & Velasquez, 2011). Others are unwilling to seek treatment due to concerns about stigmatization or anxiety related to travel or in-person interactions (Olfson et al., 2000).

Remote treatments, which allow individuals to connect with treatment providers from the comfort of their own homes, is a modality that has great potential to bridge the gap between quality psychological treatments and those in need. Internet-mediated interventions, in particular, are promising due to the increasing number of households with access to high-speed Internet connection (Horrigan, 2009). Furthermore, individuals who are unable to afford basic Internet and/or telephone services may have the option of going to a family member or friend's home to use the technology, or to a public library, some of which have private conference rooms with Internet-connected computers that can be reserved.

Self-help websites appear to be effective in treating a variety of disorders (Andersson, 2009), including panic disorder with agoraphobia (Carlbring et al., 2006), social anxiety disorder (Berger, Hohl, & Caspar, 2009), post-traumatic stress disorder (Litz, Engel, Bryant, & Papa, 2007), and depression (Andersson et al., 2005). Patients can access self-help websites from a location and time of their choosing, reducing many of the logistical barriers that prevent people from entering treatment. However, this modality has limited one-on-one real-time contact with a therapist, which may adversely affect patient motivation and adherence to treatment.

Videoconferencing therapy, on the other hand, allows real-time video and audio communication, even though patient and therapist are physically distant. Videoconferencing can take place through Local Area Network connections and dedicated videoconference

clinics, a model commonly used by Veteran Affairs Medical Centers (Tuerk, Yoder, Ruggiero, Gros, & Acierno, 2010), or simply through the Internet with a personal computer, or even a smartphone. Videoconferencing therapy reduces many of the logistical barriers (e.g., distance, time) associated with obtaining traditional in-person therapy, as patients do not have to travel to and from a provider's office; this can promote more regular sessions amongst those living far away. In addition, patients who refuse to seek in-person treatment due to anxiety about travel, crowds, or social interaction may be more willing to engage in remote treatment.

The growing research literature examining videoconferencing therapy provides preliminary support for remote interventions through videoconferencing as a viable alternative to in-person treatment (for a review, see Simpson, 2009). Videoconferencing appears to be as effective as face-to-face treatment for childhood depression (Nelson, Barnard, & Cain, 2006), older adults with memory problems (Poon, Hui, Dai, Kwok, & Woo, 2005), and a variety of problems at a community counseling center (Day & Schnider, 2002). Videoconferencing has been used to effectively treat panic disorder with agoraphobia (Bouchard et al., 2004), OCD (Goetter et al., 2013; Himle et al., 2006), PTSD (Frueh et al., 2007; Germain, Marchand, Bouchard, Guay, & Drouin, 2010; Tuerk et al., 2010), anxiety in cancer patients (Shepherd et al., 2006), and depressed adolescents and children (Pesamaa et al., 2004). The research evidence to date does not find traditional face-to-face treatment superior to comparable remotely delivered treatment (Harris & Younggren, 2011; Morland et al., 2010). Patients generally report being satisfied with videoconferencing treatment (Simpson, 2009), with therapeutic alliances comparable to in person treatment (Germain et al., 2010). Some patients may even prefer videoconferencing to in-person treatment and be more willing to reveal personal information in remote treatments (Himle et al., 2006; Simpson, Doze, Urness, Hailey, & Jacobs, 2001).

To our knowledge, no published studies exist on videoconferencing therapy specifically for the treatment of social anxiety disorder (SAD). SAD is a debilitating anxiety disorder associated with high personal and economic costs, including decreased quality of life, work productivity, quality of social relationships, and financial independence (Lipsitz & Schneier, 2000). Lifetime prevalence rates for SAD range from 5 to 12% (Grant et al., 2005; Kessler, Berglund, Demler, Jin, & Walters, 2005). Over 80% of people with SAD do not receive any treatment (Grant et al., 2005). Many individuals with SAD avoid discussing their social fears and difficulties with others, including health care workers, due to embarrassment or shame (Olfson et al., 2000). Thus, due to the nature of social anxiety, a significant number of adults with SAD are unwilling or reluctant to seek psychological treatment (Grant et al., 2005).

Research supports various CBT protocols for treating SAD of which exposure is a key component (Dalrymple & Herbert, 2007; Heimberg & Becker, 2002; Rodebaugh, Holaway, & Heimberg, 2004). Exposure via in-session role-play exercises with confederates (e.g., initiating and maintaining conversations, delivering speeches, acting assertively) is often used in treatment programs for SAD. This raises the question of how well therapist-guided exposure exercises can be accomplished via videoconferencing. Furthermore, videoconferencing allows for real-time communication between the therapist and patient, as well as for the exchange of visual information. This real-time visual component can potentially enhance communication and allow the therapist to observe and provide feedback on the patient's social skills, which is an important component of social skills training in the treatment of SAD (Herbert et al., 2005).

Given how consumers have embraced technology-driven communication, it is important for the mental health field to understand how these technologies, such as videoconferencing, can be utilized to provide effective services (Maheu, Pulier, McMenamin, & Posen,

2012). Clinical research is greatly needed in order to increase the field's understanding of the advantages and disadvantages of using telehealth in lieu of face-to-face therapy (Harwood et al., 2011). To explore these questions, we examined the feasibility and efficacy of delivering exposure therapy for SAD through videoconferencing. We hypothesized that patients and therapists would report the videoconferencing modality as acceptable and feasible. We also hypothesized that levels of social anxiety, depression, disability, quality of life, and experiential avoidance would improve from pre-treatment to post-treatment.

2. Method

2.1. Participants

Participants were 24 adults (75% male) with a mean age of 35.0 ($SD = 10.8$) and ranging from 19 to 63 years old (see Table 1 for demographics). Participants were recruited through community media and professional referrals through a university-based anxiety clinic. Eight percent of participants lived in a rural area, as defined by the Census 2000 Urban and Rural Classification (U.S. Census Bureau Geography Division, 2000). Potential participants were administered the SCID-IV for Axis I disorders and social phobia section of the ADIS to determine Generalized SAD as the primary Axis I disorder, a requirement for eligibility. Fifty four percent of participants had no other current Axis I disorder in addition to SAD. Comorbid disorders to SAD were as follows: 13% had current major depressive disorder, 13% had generalized anxiety disorder, 8% had depression NOS, 8% had a specific phobia, 4% had alcohol abuse, 4% had agoraphobia without panic disorder, and 4% had panic disorder without agoraphobia. Participants agreed to refrain from any other therapy during the treatment phase of this study, and participants on psychotropic medication (21%) were maintained at a stable dosage. Participants were also required to have access to a computer that could run the Skype videoconferencing application, a web camera, and broadband connection to the Internet (DSL, cable, wireless). Exclusion criteria included: psychotic symptoms, acute suicide potential, history of substance dependence within the past 6 months, mental retardation, and a pervasive developmental

Table 1
Demographic data.

	Percentage ($n = 24$)
Gender	
Male	75% (18)
Female	25% (6)
Ethnicity	
Caucasian	75% (18)
Asian	8% (2)
African American	4% (1)
Hispanic	4% (1)
Education	
Some high school	4% (1)
GED	4% (1)
High school diploma	4% (1)
Some college	25% (6)
College degree	42% (10)
Graduate degree	21% (5)
Employment	
Unemployed	38% (9)
Part-time	12% (3)
Full-time	46% (11)
Student	4% (1)
Marital status	
Single	46% (11)
Married	46% (11)
Other	8% (2)