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Afraid of the Therapist: The Value of Internet-Based Treatments for Social Anxiety

Bryanna Lucyk*

Social Anxiety Disorder (SAD) is one of the most common mental disorders, with lifetime prevalence rates reportedly reaching 13% of the general population. The disorder impairs personal and occupational functioning, and has created a large economic burden. An estimated 80% of individuals with SAD do not seek treatment, deterred by financial barriers, lack of awareness about treatment options, and fears about contacting health professionals. In the past decade, Internet-Based Therapies (IBTs) have been developed to eliminate some of the obstacles preventing sufferers from seeking treatment. The present paper argues that there is a clear need to develop and raise awareness about IBTs, discussing how these treatments may be more cost-effective, accessible, and appealing to individuals who have SAD. The paper also cites recent findings demonstrating the efficacy of IBTs for treating SAD, and notes suggestions for how these therapies can be improved to increase effectiveness.

Social Anxiety Disorder (SAD), also called Social Phobia, is considered to be one of the most prevalent mental disorders, affecting an estimated three to 13% of the population (American Psychiatric Association, 2000). Despite the existence of empirically validated therapies and medications, approximately 80% of sufferers still do not seek treatment (Grant et al., 2005). Thus, in the last decade, focus has shifted to developing treatments that may be more appealing and available to individuals with SAD. For example, recent investigations into the benefits of Internet-Based Therapies (IBTs) for SAD have been shown to be more cost-effective and accessible than other treatments, while still being just as efficacious. Consequently, the present paper argues that if researchers and clinicians continue to refine and raise awareness about IBTs, the number of sufferers who acquire treatment for SAD can be increased.

Social Anxiety Disorder

According to the DSM-IV-TR, individuals with SAD feel intense emotional discomfort in social situations due to fears of being ridiculed, judged or embarrassed by others (American Psychiatric Association, 2000). In addition, individuals may experience physical symptoms,

such as sweating, shaking, muscle tension, blushing, confusion, and gastrointestinal discomfort (American Psychiatric Association, 2000). As a result, many people with SAD avoid anxiety-provoking situations or anticipate such situations with dread (American Psychiatric Association, 2000). A diagnosis of SAD is assigned if the anxiety interferes with personal, occupational or social functioning, or causes a great deal of distress (American Psychiatric Association, 2000). If an individual experiences anxiety in nearly all social situations, he or she is classified as having Generalized SAD (American Psychiatric Association, 2000). Conversely, if an individual feels anxious in certain situations, such as during public speaking commitments, he or she is classified as having Specific or Nongeneralized SAD (American Psychiatric Association, 2000).

The anxiety experienced by individuals with SAD can also create financial and occupational complications. For example, individuals with SAD may avoid promotions or advancements, fearing the social demands accompanying increased responsibility (Bruch, Fallon, & Heimberg, 2003). They may also be frequently absent from work (Wittchen & Beloch, 1996) or school (Lee & Miltenberger, 1996), resulting in lost productivity. Moreover,

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the high prevalence rate of SAD has created a large economic burden on society (Hedman et al., 2011b). The lifetime prevalence rates of SAD are reportedly 10.3% for females and 8.7% for males, and the disorder most often has its onset in adolescence (McLean, Asnaani, Litz, & Hofmann, 2011). It is estimated that the associated costs of SAD amount to \$385 million per million people (Acarturk et al., 2009; Hedman et al., 2011b).

It is rare for SAD to remit on its own (Rapee & Spence, 2004). More often, individuals require therapeutic or pharmacotherapeutic intervention to treat the disorder. Medications such as Benzodiazepines (BDZs), Monamine Oxidase Inhibitors (MAOIs), and Selective-Serotonin Reuptake Inhibitors (SSRIs) are considered to be some of the most effective treatments of SAD in the short-term, although few follow-up studies have assessed their long-term effects (Acarturk, Cuijpers, van Straten, & de Graaf, 2009). For individuals who do not wish to take medication or for whom medication does not work, there are a number of therapies available. Cognitive-Behavioural Therapy (CBT), Cognitive-Behavioural Group Therapy (CBGT), Exposure Therapy (ET), Acceptance and Commitment Therapy (ACT) and Interpersonal Therapy (IPT) are some of the more common forms of therapy used to treat SAD. These empirically-validated treatments have been shown to be helpful for individuals willing or able to access them. Nevertheless, an aforementioned 80% (Grant et al., 2005) of SAD sufferers do not receive any form of treatment.

In general, it is common for individuals with mental disorders to be apprehensive about obtaining treatment (Butcher, Rouse, and Perry, 1998). However, for an individual with SAD, the disorder itself may be a deterrent. Contacting mental health professionals may require individuals to endure situations in which they experience anxiety. In order to avoid these uncomfortable social situations, such as contacting physicians by telephone or interacting with therapists, sufferers may choose not to seek treatment. Olfson et al. (2000)

surveyed individuals with SAD and found that many had not sought therapy due to financial concerns, lack of information about the options available to them, or fear of judgment.

In-person modalities of treatment do not address the deterrents for treatment of SAD and thus do not reduce the large number of individuals who remain untreated for these reasons. Alternately, IBTs may minimize many of the deterrents preventing clients from seeking therapy. There is evidence that many individuals with SAD may be avid Internet users and thus IBTs may be more accessible than other forms of treatment. Indeed, two national American surveys (National Public Radio, 2000; Nie & Hillygus, 2002) have associated time spent online with decreased time spent in face-to-face interactions. Researchers have proposed the “social compensation hypothesis” (Tian, 2011) to account for this phenomenon. Proponents of this hypothesis suggest that individuals who are isolated, lonely or have a mental illness may use the Internet to distract from or replace inadequate offline interactions. In particular, individuals with SAD may prefer online rather than face-to-face communication due to increased anonymity, greater control of conversation pace and content, and a reduction in nonverbal social cues (Tian, 2011). Individuals with SAD report feeling safer and more comfortable in online interactions (Weidman et al., 2012) and experience decreased symptoms of anxiety overall (Yen et al., 2012). Reportedly, Internet use has been positively correlated with social anxiety (Erwin, Turk, Heimberg, Fresco, & Hantula, 2004; Pierce, 2009), depression (Caplan, 2002; Weidman et al., 2012), loneliness (Caplan, 2002), low quality of life (Weidman et al., 2012; Caplan, 2002), lack of social skills, and motivation for social compensation (Peter, Valkenburg, & Schouten, 2005). Furthermore, Statistics Canada (2009) has reported that over 90% of Canadians aged 15-24 are Internet users, which corresponds with the average age of onset of SAD (McLean, Asnaani, Litz, & Hofmann, 2011). To assist a population inclined to spend time and seek information online, researchers

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have developed resources and therapies for SAD that can be offered on the Internet (Erwin, Turk, Heimberg, Fresco, & Hantula, 2004).

In addition to being more accessible than in-person therapies, IBTs also appear to be highly effective. Over the past decade, numerous studies have demonstrated the clinical significance of IBTs by assessing their effect sizes. Researchers have commonly used Cohen's d as a measure of effect size when comparing symptom reduction in groups receiving an IBT to groups receiving no treatment or an alternative treatment. It is important to note that the meaning of the magnitude of Cohen's d is dependent upon the context of the study, and thus it is necessary to consult the relevant literature for typical treatment effect sizes. The authors of a meta-analysis of psychological and pharmacological treatments of SAD (Acarturk, Cuijpers, van Straten, & de Graaf, 2009) suggest that effect sizes of $d = 0$ to $d = 0.32$ are to be considered small, effect sizes ranging from $d = 0.33$ to $d = 0.55$ are to be considered moderate, and effects of $d = 0.56$ and above are to be considered large. Hedges' g is another measure of effect size used in the literature that provides a more conservative value, and uses the same rating system of small, moderate and large as Cohen's d .

Numerous studies have found Internet Cognitive-Behavioral Therapy (ICBT) to be effective in reducing symptoms of SAD (e.g. Andersson, Carlbring, & Furmark, 2012; Andersson et al., 2012; Berger, Hohl, & Caspar, 2009; Botella et al., 2009; Furmark et al., 2009; Hedman et al., 2011a; Hedman et al., 2011b; Hedman et al., 2011c; Tillfors et al., 2013; Titov, Andrews, Choi, Schwencke, & Mahoney, 2008; Titov, Andrews, & Schwencke, 2008; Titov, Andrews, Schwencke, Drobny, & Einstein, 2008). The effect sizes found in these studies were large, ranging from $d = 0.63$ (Furmark et al., 2009) to $d = 1.28$ (Tillfors et al., 2013). For studies which reported Hedge's g , effect sizes for ICBT were found to be moderate and large, ranging from $g = 0.5$ (Hedman, 2011b) to $g = 0.75$ (Andersson, Carlbring, &

Furmark, 2012). These effect sizes are similar to those achieved with in-person therapies; for example, Fedoroff and Taylor (2001) reported the effect sizes for CBT to be $d = 0.94$, exposure therapy to be $d = 1.31$, and cognitive therapy to be $d = 0.78$. ICBT has also been found to be effective for treating adults (Titov, Andrews, Kemp, & Robinson, 2010) and high school students (Tillfors et al., 2013). Moreover, studies have shown that improvements in quality of life (QOL), and reductions in symptoms of SAD, depression and general anxiety were maintained for 12 months (Botella et al., 2009), 30 months (Carlbring, Nordgren, Furmark & Andersson, 2009) and five years (Hedman et al., 2011c), after treatment.

Researchers have worried that the therapeutic alliance may be compromised in IBTs as clients spend significantly less time conferring with therapists, and may never meet their therapists in person (Andersson et al., 2012). However, a study assessing therapeutic alliance in ICBT treatments for depression, Generalized Anxiety Disorder, and SAD found that the mean ratings of therapeutic alliance reported by participants receiving ICBT were similar to those reported by individuals receiving in-person treatments (Andersson et al., 2012). Furthermore, even though the researchers found large treatment effects for ICBT, there was a non-significant correlation between clients' ratings of therapeutic alliance and treatment outcomes. This suggests the strength of the therapeutic alliance may not necessarily affect the outcomes of ICBT, and therefore its success depends on other factors. This is supported by a study by Furmark et al. (2009), which found that the effect size of guided ICBT was comparable to unguided bibliotherapy. However, two others studies (Nordgreen et al., 2012; Titov et al., 2008) have found that guided ICBT increased participants' adherence to the self-help modules better than unguided ICBT, and resulted in the completion of more modules. Although therapist guidance increases the cost of treatment, it also encourages individuals to complete more modules, thereby increasing the likelihood they

will benefit from treatment. Thus, guided IBTs may reduce the overall economic burden of SAD better than unguided IBTs.

Further research is clearly required to assess the necessity of therapist guidance in ICBT, as it may be an additional cost that deters individuals from seeking help. Nevertheless, therapist-led ICBT is still much less expensive than face-to-face CBT and CBGT. Indeed, an examination of the cost-effectiveness of therapist-guided ICBT to CGBT (Hedman et al., 2011b) found that both therapies equally reduced the economic burden associated with the disorder. However, because ICBT also had lower intervention costs, the researchers considered it to be more cost-effective. Furthermore, since CGBT is generally less expensive than CBT, it suggests that ICBT is more cost-effective than CBT.

Virtual Reality Therapy (VRT) is another type of therapy for SAD that has been successfully delivered on the Internet. Indeed, Yuen et al. (2013) report that Acceptance Based Behavioral Therapy (ABBT) can be effectively offered using a free, online, interactive game called “Second Life”. In the game, clients communicate through headsets or typed messages to therapists, and participate in exposure exercises that appear to be as effective as real-life exposure. Yuen et al. (2013), for instance, demonstrated that VRT yielded very large effect sizes of $d = 1.14$ to $d = 1.50$ on post-treatment measures of SAD. Although the study was conducted with only 14 participants and therefore has insufficient statistical power, the results are consistent with other preliminary studies in which VRT was found to be an effective treatment for SAD and public speaking fears (Anderson, Rothbaum, & Hodges, 2003; Anderson, Zimand, Hodges, & Rothbaum, 2005; Harris, Kemmerling, & North, 2002). These studies demonstrate that online games can be used to provide both long-distance therapy, as well as treatment to individuals reluctant to seek in-person therapy.

Assisted Population

As with any treatment, there are certain populations appearing to benefit more from ICBT. For example, a study of the determinants of treatment effects for both ICBT and CBGT (Hedman et al., 2012a) found that the clients who showed the largest reduction in symptoms were those who worked full time, were able to adhere to treatment, and had “children”, “less depressive symptoms” and a “higher expectancy of treatment effectiveness” (p. 126). However, research about the assisted population remains limited. For instance, previous studies assessing the effectiveness of IBTs for SAD excluded participants who had co-morbid diagnoses or were in immediate crisis, and thus it is not currently known how effective IBTs might be for individuals with more complex diagnoses.

Furthermore, studies have mainly included participants under the age of 64. For this reason, it is currently unclear whether individuals aged 65 years and over would find IBTs helpful. Social Anxiety Disorder is still a significant concern in later life, with the 12-month prevalence rate reported to be 1.32% for individuals aged 55 or older (Cairney et al., 2007). Additionally, 70% of Canadians over 55, and 51% of Canadians aged 65 to 74 are Internet users (Statistics Canada, 2009). Therefore, it would be beneficial for future studies to examine how an older population might respond to IBTs, and how treatments might be modified for this population.

Individuals who do not have access to a computer or Internet cannot benefit from IBTs. However, an estimated 79% of Canadian households reportedly have Internet access (Statistics Canada, 2011). Consequently, ICBT may be able to reach a larger and more diverse population compared to in-person therapies. Indeed, a study comparing a clinical population of SAD sufferers to a group who sought help from an Internet clinic revealed that individuals in the Internet group were “older, less likely to be male” as well as “less likely to be married but equally well educated and as likely to be employed” (Titov, Andrews, Kemp & Robinson, 2010, p. 4). Individuals in the

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Internet group were also found to be less distressed, but more disabled by the disorder. As a result, the authors suggested that the Internet group was more representative of the general population of SAD sufferers, implying IBTs do reach a more diverse population than in-person treatments.

Limitations and Future Directions

There are a number of limitations of IBTs that must be noted. For example, Velting, Setzer, and Albano (2004) caution that exposure hierarchies created without therapist direction may not be developed properly. This may result in the client facing fears before he or she is ready or dropping out of therapy altogether (Velting, Setzer, & Albano, 2004). Furthermore, Tillfors et al. (2013) assessed the effectiveness of a CBT self-help manual that had been adapted for use on the Internet and found that participants only completed an average of 2.9 out of nine modules. Hence, researchers have focused on developing ways to increase adherence to IBTs. For example, an assessment of a computer-based CBT program designed for adolescents experiencing anxiety revealed that using a wide range of media, such as “text, music, illustrations, audio voice-overs, cartoons, animated flow charts, interactive forms, and live video” (Cunningham & Wuthrich, 2008, p. 13), can enhance the interest of the clients. Hudson & Kendall (2002) have also made several other suggestions that may improve drop-out rates, such as not using the term “homework”, ordering tasks from easy to difficult, and having a reward system. Implementing these and other strategies could bolster the effectiveness of IBTs, making them a valuable alternative to in-person therapies.

Conclusion

Despite the aforementioned limitations of IBTs, the benefits are profound. Numerous studies have demonstrated that IBTs can produce moderate to large effect sizes, making them as effective as other treatment strategies. Internet-based therapies also possess numerous qualities that appeal to individuals with SAD.

They are more cost-effective than in-person treatments, more readily available, and eliminate or reduce the anxiety associated with meeting with therapists or doctors. Internet-based therapies therefore appear to be a promising solution for the 80% of SAD sufferers (Grant et al., 2005) who remain untreated. Future endeavors should therefore continue to focus on increasing public awareness of the availability of IBTs and contributing to the expanding body of literature on this important topic, as IBTs offer individuals who would not normally seek treatment an alternative strategy for recovery.

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