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Telepsychotherapy for trichotillomania: A randomized controlled trial of ACT enhanced behavior therapy

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ABSTRACT

Despite its prevalence, quality treatment for trichotillomania is often difficult to find. The use of telepsychology has been an effective method for disseminating treatment services for a variety of mental health conditions. However, no research has examined the use of telepsychology to treat trichotillomania. This randomized controlled trial used Acceptance and Commitment Therapy Enhanced Behavior Therapy delivered by way of telepsychology to treat trichotillomania in adults. The study compared an active treatment condition (n = 12) to a delayed treatment waitlist control condition (n = 10). Results showed significant reductions in hair pulling severity from pre- to post-treatment compared to the waitlist condition. The 22 participants all received treatment and were combined to examine overall treatment effects from pre-treatment to a 12-week follow-up. The effect of treatment on hair pulling severity remained significant at follow-up. Measures of psychological flexibility and perceived shame also saw significant improvement. Quality of life, however, did not improve over the course of treatment. The findings demonstrate that telepsychology is a viable option to disseminate treatment for trichotillomania.

1. Introduction

Trichotillomania is characterized by repetitive hair pulling that leads to noticeable hair loss and causes significant distress and social or functional impairment (American Psychiatric Association, 2013). The dysfunctional effects of trichotillomania may include significant social interference, such as the inability to maintain close relationships with others; occupational interference, such as avoiding job interviews or position advancement; academic functioning, such as missing school or having difficulties studying due to pulling; and affective disturbances, such as depression, anxiety, or stress (Grant et al., 2017; Wetterneck, Woods, Norberg, & Begotka, 2006; Woods et al., 2006). Additionally, those with trichotillomania generally have lower overall quality of life compared to healthy controls (Odlaug, Kim, & Grant, 2010).

The best estimates of the prevalence of trichotillomania range from .6% to 3.4% among adults, dependent on how restrictively one defines the disorder (Christenson, Pyle, & Mitchell, 1991; Duke, Keeley, Geffken, & Storch, 2010; Stanley, Borden, Bell, & Wagner, 1994). Despite its prevalence, trichotillomania continues to be misunderstood by many mental health professionals. For example, a survey of over 500 psychologists and physicians in the United States found that professionals are relatively uninformed about trichotillomania and its treatment (Marcks, Wetterneck, & Woods, 2006). Additionally, the majority of the professionals surveyed did not have referral resources to direct those with trichotillomania to find quality help.

Thus, finding quality treatment for trichotillomania may be impossible depending on location. The United States Department of Health and Human Services (2014) estimated that there are approximately 4000 Mental Health Professional Shortage Areas in the United States that include 96.5 million people who do not have access to adequate mental health services. This lack of adequate mental health care presents a significant problem for those seeking treatment for trichotillomania. The problem of providing care to those without access and the low number of trained providers for trichotillomania can potentially be addressed through the use of technology and telepsychotherapy.

The use of telepsychotherapy has been shown to be an effective method of treating a wide variety of mental health conditions including, post-traumatic stress disorder (Gros, Yoder, Tuerk, Lozano, & Acierno, 2011), schizophrenia (Rotondi et al., 2005), alcohol abuse (Frueh, Henderson, & Myrick, 2005), insomnia (Lichstein et al., 2013), Tourette's syndrome (Himle, Olufs, Himle, Tucker, & Woods, 2010), agoraphobia (Alcañiz et al., 2003), and eating disorders (Shingleton, Richards, & Thompson-Brenner, 2013). However, no research has been conducted on the effectiveness of telehealth to treat trichotillomania.

Telepsychology refers to a type of telehealth that consists of the

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delivery of traditional psychological services by way of technology-assisted means (Nelson, Bui, & Velasquez, 2011). Telepsychology services might enable those with debilitating levels of anxiety, depression, or shame, who might not be willing to attend a traditional therapy session, to receive treatment from the safety and convenience of their own homes (Hedman et al., 2011; Maheu, Pulier, McMenamin, & Posen, 2012). Additionally, the format allows therapists to provide services to underserved areas and populations where access to quality care for less understood conditions, such as trichotillomania, might be difficult to obtain.

While no study has tested the use of telepsychology for treating trichotillomania, research is growing with regard to treatments delivered by way of traditional face-to-face methods. Habit reversal training is the most extensively researched of these treatments. Over 30 controlled trials have been performed that examined habit reversal training for multiple disorders with both children and adults (Twohig, Bluett, Morrison, & Woidneck, 2014). Despite this, habit reversal training often fails to adequately target internal states associated with some pulling behavior. This has lead researchers to modify habit reversal training in attempts to better target issues such as anxiety, distress, and lack of motivation that are often present in trichotillomania. These modifications have included addition of traditional cognitive behavior therapy techniques (Lerner, Franklin, Meadows, Hembree, & Foa, 1999; Rangaswami, 1997), dialectical behavior therapy (DBT; Keuthen et al., 2012), metacognitive therapy (Shareh, 2017), and acceptance and commitment therapy (ACT; Twohig & Woods, 2004). While limited, the research on ACT as a treatment for trichotillomania is promising.

ACT has been examined as a stand-alone treatment for trichotillomania and related disorders. These include two small multiple-baseline across participants design studies (Crosby, Dehlin, Mitchell, & Twohig, 2012; Twohig, Hayes, & Masuda, 2006) and a randomized controlled trial treating adolescents and adults (Lee et al., In press). These studies provide evidence for ACT as a stand-alone treatment for trichotillomania. More research has examined ACT as an enhancement to habit reversal techniques. ACT-enhanced Behavior Therapy was developed to target overt, automatic pulling through the use of behavioral techniques like habit reversal training and covert, internal experiences that lead to focused pulling through the use of ACT (Woods & Twohig, 2008a). An initial pilot study examined the use of an ACT-enhanced behavior therapy protocol on six adults with trichotillomania utilizing a multiple-baseline across participants design (Twohig & Woods, 2004). Four of the six participants reduced their hair pulling behavior significantly and three were able to maintain their gains at three-month follow-up. Next, a follow-up RCT was performed with a larger sample size of 25, that also found significant reductions in hair pulling (Woods & Wetterneck, 2006). Another study examined ACT-enhanced behavior therapy with regard to the sequence in which the two types of therapy (i.e., ACT and habit reversal training) are presented with five participants with trichotillomania or skin picking (Flessner, Busch, Heideman, & Woods, 2008). The researchers found that participants responded best when both ACT and habit reversal training were utilized, but no differences were seen as a result of sequencing. Finally, a recent RCT including 85 participants found that an ACT-enhanced behavior therapy condition significantly outperformed a psychoeducation and supportive therapy condition at post-treatment; however, this finding was not maintained at a three-month follow-up (Woods et al., 2018). In summary, there is good support for ACT-enhanced behavior therapy as a treatment for trichotillomania, making it a good candidate for evaluation in a telepsychotherapy format.

At this time, no research has examined treatment of trichotillomania using telepsychology. While treatment for trichotillomania has improved over time, access to providers who are familiar with trichotillomania and its treatment has not. Telepsychology appears to be a promising component to the solution of this problem. The current study is an attempt to examine the feasibility of delivering ACT-enhanced behavior therapy as a treatment for trichotillomania by way of telepsychology through the use of a randomized controlled trial. We predicted that treatment would significantly improve hair pulling severity and quality of life compared to the waitlist condition. Additionally, we predicted that psychological flexibility and shame, variables that have previously been shown to be related to trichotillomania, would improve over the course of treatment. Finally, we explored how telepsychology might affect working alliance and treatment satisfaction.

2. Method

2.1. Participants

Participants were recruited from multiple university campuses and mental health providers as well as via advertising on the internet. To be included in the study, participants were required to: (a) meet the DSM-5 criteria for trichotillomania; (b) be seeking treatment primarily for trichotillomania-related concerns; (c) be at least 18 years old; (d) reside in Utah; and (e) be a fluent English speaker. Participants were excluded from the study if they: (a) were currently receiving psychotherapy; (b) had started or changed psychotropic medication in the past 30 days; or (c) were planning to start or change psychotropic medication during the course of the current study.

The majority of participants were women (86.4%), heterosexual (81.8%), and White (95.5%). On average, participants were 32.5 (SD = 8.3) years old. Education varied among participants with highest completion levels as follows: high school (13.6%), some college (31.8%), bachelor's degree (27.3%), and graduate degree (27.3%). Results of a diagnostic interview indicated that seven (31.8%) participants met criteria for a comorbid psychological disorder: persistent depressive disorder (18.2%), generalized anxiety disorder (13.6%), and major depressive disorder (9.1%). Six met criteria for a single comorbid diagnosis and one met criteria for four comorbid diagnoses. Additionally, six (27.3%) reported being on a stable dose of an antidepressant and one (4.5%) reported being on a stable dose of a stimulant. On average, participants reported that hair pulling had been a significant problem for 16.3 (SD = 9.7, range = 22–51) years. Moreover, 11 (50.0%) participants had previously sought individual therapy and two (9.1%) had previously used self-help books as treatment for trichotillomania. Detailed information regarding what type of prior treatment was not gathered. See Table 1 for demographic data by condition.

A power analysis was conducted using G*Power software (Faul, Erdfelder, Lang, & Buchner, 2007) in order to determine the number of participants to include in the study. A past trial of ACT-enhanced behavior therapy for trichotillomania resulted in a large effect size (d = .81; Woods & Wetterneck, 2006). Therefore, a power analysis was performed using this same effect size, with alpha set at .05 and power at .80 specifying a sample of 24. At the conclusion of the recruitment period, 28 individuals were assessed for eligibility and 22 met requirements and participated in the study. See Fig. 1 for a participant flowchart.

2.2. Procedures

The current study was approved by a university internal review board. The effect of treatment was assessed through a randomized controlled trial. Participants were randomized into either a treatment or delayed treatment waitlist control group following the baseline assessment during the intake process. An online random number generator was used to create a list of participant identifiers that were randomly assigned to one of two equally sized groups. Following the intake session, participants were given the next available identifier and assigned to the corresponding group. The intake session consisted of gathering consent and information about hair pulling and completing an assessment battery. Participants placed in the treatment group