Internet Interventions 1 (2014) 49–57

Contents lists available at ScienceDirect

Internet Interventions

journal homepage: www.invent-journal.com/

The working alliance in a randomized controlled trial comparing Internet-based self-help and face-to-face cognitive behavior therapy for chronic tinnitus

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ARTICLE INFO

Article history:
Received 30 January 2014
Received in revised form 29 April 2014
Accepted 29 April 2014
Available online 11 May 2014

Keywords:
Internet-based cognitive behavior therapy
Cognitive behavior group therapy
Therapeutic alliance
Working alliance
Tinnitus

ABSTRACT

Objective: This study (ID: NCT01205906) compared the impact of the working alliance between the therapist and the client on treatment outcome in a group and an Internet-based cognitive behavior therapy (GCBT vs. ICBT) for chronic tinnitus.
Methods: The Working Alliance Inventory — Short Revised (WAI-SR, scale range: 1–5) was administered to 26 GCBT and 38 ICBT participants after treatment weeks 2, 5, and 9, and the Tinnitus Handicap Inventory (THI) before and after the treatment.
Results: High alliance ratings were found in both ICBT (WAI-SR total scores at week 9: $M = 3.59$, $SD = 0.72$) and GCBT (WAI-SR total scores at week 9: $M = 4.20$, $SD = 0.49$), but significantly higher ratings occurred in GCBT on most WAI-SR scales ($ps < .01$). Significant time × group interactions for most WAI-SR scales indicated differences in alliance growth patterns between the treatments ($ps < .001$). Residual gain scores for the therapy outcome measure 'tinnitus distress' were significantly correlated with the agreement on treatment tasks between therapist and client in ICBT ($r = .40$, $p = .014$) and with the affective therapeutic bond in GCBT ($r = .40$, $p = .043$) at mid-treatment (week 5).
Conclusion: More time was needed to build a strong alliance in ICBT although GCBT yielded generally higher alliance ratings. Moreover, different aspects of the therapeutic alliance might be important for treatment success in ICBT versus GCBT.

1. Introduction

The therapeutic alliance is defined by the achievement of a collaborative stance between a client and a therapist (Bordin, 1979, 1994). Bordin (1979, 1994) proposed three components of the working alliance, which are relevant in all change processes in psychotherapy: agreement on therapeutic goals, consensus on tasks, and the bond between client and therapist. Four separate meta-analyses have reported a robust, albeit small, relation between the quality of the working alliance and treatment outcome across a broad spectrum of psychological treatments in a variety of client/problem contexts (Martin et al., 2000; Horvath et al., 2011a; Horvath et al., 2011b; Horvath and Bedi, 2002). Furthermore, there is evidence that the alliance not only plays a crucial role in psychotherapy approaches, where the alliance is the central aspect of the treatment (e.g., psychoanalysis, client centered therapy), but also in psychotherapeutic treatments that concentrate on behavioral interventions such as cognitive behavior therapy (CBT; Flückiger et al., 2012).

The Internet has gained importance as an alternative way to deliver psychological treatments for somatic health problems (Andersson et al., 2011). Research in this area has mainly focused on Internet-based CBT (ICBT) programs (Ritterband et al., 2006; Andersson et al., 2009b). Several studies have reported similar outcomes of ICBT compared with regular face-to-face therapy across different mental disorders such as anxiety disorders (Kiropoulos et al., 2008; Bergström et al., 2010; Carlbring et al., 2005; Andrews et al., 2011; Hedman et al., 2011a), depression (Wagner et al., 2014; Andersson et al., 2013), and mental health concerns associated with bodily symptoms such as health

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http://dx.doi.org/10.1016/j.invent.2014.04.002

anxiety (Hedman et al., 2011b) and tinnitus (Kaldo et al., 2008; Jasper et al., 2014). Despite the growing body of evidence regarding the effects of ICBT, the mechanisms underlying these favorable outcomes are still largely unknown (Andersson, 2010; Andersson et al., 2012). Personal contact with a supportive person is often discussed as an important aspect in ICBT. Low-intensity guidance by a therapist through a highly standardized self-help program (e.g., via e-mail), or even a clear deadline for a live follow-up interview, tends to reduce attrition rates and enhance the treatment effects (Andersson et al., 2009a; Spek et al., 2007; Nordin et al., 2010).

The working alliance might explain the importance of guidance by a therapist in ICBT. Although the client in an ICBT program may never meet the therapist in person, their communication via Internet may be seen as a therapeutic interaction (Andersson et al., 2012). There is some evidence that the therapist in ICBT applies common therapist behaviors such as empathetic utterances or alliance bolstering (Andersson et al., 2012; Paxling et al., 2013). Moreover, the self-help text itself might help to form a therapeutic alliance, because a client might assume that an empathic clinician prepared the text material (Andersson et al., 2012). Common factors that influence the therapeutic relationship (e.g., empathy and warmth) may be incorporated by the authors in their writings (Richardson et al., 2010). Participants' ratings of the therapeutic alliance are therefore likely to be based on information obtained by online interactions with a therapist, interactions with a treatment system, and the self-help texts (Andersson et al., 2012).

The results of a recent review indicated that a positive alliance can be formed over the Internet (Sucala et al., 2012). High alliance ratings were reported for online interventions regarding posttraumatic stress disorder (PTSD; Knaevelsrud and Maercker, 2006; Knaevelsrud and Maercker, 2007; Wagner et al., 2012; Klein et al., 2009a), depression (Andersson et al., 2012; Preschl et al., 2011; Ruwaard et al., 2009), anxiety disorders (Kiropoulos et al., 2008; Andersson et al., 2012; Klein et al., 2009b; Bergman Nordgren et al., 2013), and recurrent headache (Trautmann and Kröner-Herwig, 2010). Furthermore, there is evidence that the strength of the therapeutic alliance in online and face-to-face therapy is comparable (Sucala et al., 2012). This evidence mainly stems from studies that compared the working alliance in an online sample with data on face-to-face therapy concerning a variety of mental health concerns (Cook and Doyle, 2002; Reynolds et al., 2006). Two studies even applied a randomized control group design (Kiropoulos et al., 2008; Preschl et al., 2011), one featuring depression (Preschl et al., 2011), and the other panic disorders (Kiropoulos et al., 2008).

Research on the role of the therapeutic alliance as a predictor of treatment outcome in online treatments is scarce and the results have been rather contradictory. A significant association between an intensive therapeutic alliance and a better therapy outcome was found in two studies on ICBT for anxiety disorders (Bergman Nordgren et al., 2013; Anderson et al., 2012), and for an online intervention for PTSD (Knaevelsrud and Maercker, 2007; Wagner et al., 2012); but another study by Knaevelsrud and Maerker (Knaevelsrud and Maercker, 2006), which investigated the same online treatment for PTSD, did not report a significant relationship between alliance and outcome. Preschl et al. (2011) and Andersson et al. (2012) also did not find a significant relationship with the primary outcome measures in the context of highly structured ICBT for depression, generalized anxiety disorders, and social anxiety.

In sum, research on the therapeutic alliance in Internet interventions is scant and it is particularly rare to find randomized controlled trials (RCTs) that directly compare the working alliance in ICBT with that of face-to-face psychotherapy. The mixed results of the little research that has been done leave it unclear whether the therapeutic alliance is as relevant for treatment success in ICBT as it is in regular face-to-face psychotherapy. Concerning ICBT for bodily related mental health issues in particular, there has not been much research targeting the therapeutic alliance, therefore more studies are necessary to address this topic.

On the basis of these findings, we decided to investigate working alliance ratings in a RCT directly comparing ICBT with cognitive behavioral group therapy (GCBT), in a sample of patients with chronic tinnitus. In order to enhance the external validity of our results we decided to compare a standard face-to-face treatment with an Internet-based CBT for tinnitus, both of which have already been evaluated in several studies and applied in routine care (Jasper et al., 2014). We predicted that a strong therapeutic alliance would be generated in both treatment groups and that the strength of the alliance would not differ significantly between the two types of therapy. The second aim of the current study was to examine the association between the working alliance and treatment outcome.

2. Method

2.1. Participants

A total of 128 participants were enrolled between April 2010 and March 2011 following recruitment via public media, and tinnitus-related health-care sources (e.g., the German Tinnitus Association, ear–nose–throat practitioners). Inclusion was based on the following criteria: (a) age at least 18 years, (b) a score ≥18 on the Tinnitus Handicap Inventory (THI, Newman et al., 1996) or a score ≥8 on the Mini-Tinnitus Questionnaire (Mini-TQ; Hiller and Goebel, 2004), (c) tinnitus duration of at least 6 months, (d) tinnitus as primary problem, (e) Internet access, (f) willingness and ability to attend the weekly group sessions, (g) no anticipated absence of more than 2 weeks during the course of the study, (h) no CBT for tinnitus within the last 2 years, (i) no major medical or psychiatric condition, and (j) no acute suicidality. For economic reasons, inclusion of participants was based on a three-stage selection procedure (i.e., pre-assessment, telephone interview, face-to-face interview). First, individuals who reported interest in participating in the trial received written information via a study webpage and access to an online pre-assessment. Following this, potential participants underwent a brief telephone screening and then a face-to-face interview. The telephone interview focused on the willingness and possibility to participate in both treatments (i.e., inclusion criteria e–g). The face-to-face interview primarily aimed at assessing tinnitus distress, as well as other medical and psychiatric conditions (i.e., inclusion criteria c–d, h–j). Comorbid psychiatric conditions were checked using the International Diagnostic Checklists for DSM-IV (Janca and Hiller, 1996). The telephone and face-to-face interviews were both standardized.

2.2. Procedure and study design

Data were collected in association with a randomized controlled study comparing the effects of ICBT and GCBT on chronic tinnitus (Jasper et al., 2014). The study was designed as a RCT. It was approved by the Ethics Committee of the Department of Psychology of the University of Mainz (Germany) and registered at www.clinicaltrials.gov (ID: NCT01205906). After signing informed consent statements, participants were randomized to one of three conditions: ICBT, GCBT, or an online discussion forum (DF) as an active control group. After a 10-week waiting period, DF participants were randomly assigned to either ICBT or GCBT. Randomization was achieved by an online service which uses a pseudo-random number algorithm (www.randomization.com).

Results on the treatment effects of the two interventions are presented in the paper by Jasper et al. (2014). Statistical analyses revealed that the DF did not lead to significant changes in tinnitus distress and that participation in ICBT or GCBT resulted in equally significant improvements in tinnitus distress (Jasper et al., 2014). On the basis of these results, we decided to include the DF participants in our study according to their randomization (i.e., either ICBT or GCBT), with the aim to gain larger sample sets for the current analyses.