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Therapeutic alliance in guided internet-delivered cognitive behavioural treatment of depression, generalized anxiety disorder and social anxiety disorder

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ABSTRACT

Guided internet-delivered cognitive behaviour therapy (ICBT) has been found to be effective in several controlled trials, but the mechanisms of change are largely unknown. Therapeutic alliance is a factor that has been studied in many psychotherapy trials, but the role of therapeutic alliance in ICBT is less well known. The present study investigated early alliance ratings in three separate samples. Participants from one sample of depressed individuals ($N = 49$), one sample of individuals with generalized anxiety disorder ($N = 35$), and one sample with social anxiety disorder ($N = 90$) completed the Working Alliance Inventory (WAI) modified for ICBT early in the treatment (weeks 3–4) when they took part in guided ICBT for their conditions. Results showed that alliance ratings were high in all three samples and that the WAI including the subscales of Task, Goal and Bond had high internal consistencies. Overall, correlations between the WAI and residualized change scores on the primary outcome measures were small and not statistically significant. We conclude that even if alliance ratings are in line with face-to-face studies, therapeutic alliance as measured by the WAI is probably less important in ICBT than in regular face-to-face psychotherapy.

Introduction

The concept of therapeutic alliance, also known as the working alliance, is often regarded as an important ingredient in psychotherapy across different psychotherapy orientations (Lambert & Barley, 2002), but has been studied to a lesser extent in alternative treatment formats such as group therapy and guided self-help. Bordin (1979) introduced a model for understanding therapeutic alliance in which he made distinctions between task, goal and bond, which together form the concept of alliance (Bordin, 1979).

During the last 15 years there has been a rapid development of new ways to deliver cognitive behaviour therapy (CBT), and of these new approaches the internet has probably been the format with the most studies (Andersson, 2009). Many studies on internet-delivered CBT (ICBT) have involved guidance which tends to boost the effect (Andersson & Cuijpers, 2009; Spek, Cuijpers et al., 2007), usually to the extent that guided ICBT and face-to-face therapy yield equivalent outcomes (Bergström et al., 2010; Hedman et al., 2011). Equal outcomes have been found in studies on panic disorder (Bergström et al., 2010; Carlbring et al., 2005; Kiropoulos et al., 2008), social anxiety disorder (Andrews, Davies, & Titov, 2011; Hedman et al., 2011), and subclinical depression (Spek, Nyklicek et al., 2007), but also in studies on conditions like tinnitus (Kaldo et al., 2008).

The role of the therapeutic alliance in guided ICBT is not obvious as there is much less therapist contact than in face-to-face treatments (approximately 1/10 of the time), and that the client may not even see the therapist in person. Still there is a therapeutic interaction as the therapist responds to messages sent from the client and uses both specific and common factors to encourage the client to work with the ICBT (Paxling et al., in press). The development of a therapeutic alliance may not necessarily require direct face-to-

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face contact with a therapist. It is possible that alliance is at least partly based on client expectations regarding both tasks and goals that may exist before the therapy starts. While the bond between the therapist and the client probably is different in ICBT than in face-to-face therapy questions regarding task, goal and bond are still relevant. Therefore we believe that a therapeutic alliance can be formed over the internet as the therapist in ICBT provides individualized encouragement on progress and also responds to difficulties the client may confront when working with self-help material. Moreover, self-help texts can include aspects that help form a therapeutic alliance and a client may perceive an understanding clinician who is behind the text material (Richardson, Richards, & Barkham, 2010). In other words the total information available for clients when rating the alliance can consist of interactions with a therapist online, interactions with a treatment system, and text material that can possibly boost the alliance.

There has been some previous research on the role of alliance in internet treatments. Cook and Doyle (2002) studied alliance ratings in a small sample ($N = 15$) and compared the ratings with those from a previous study sample who had received face-to-face therapy. Contrary to expectations the client rated alliance was higher in the online therapy group (Cook & Doyle, 2002). This finding was replicated in a study on e-mail counselling in which the authors found high ratings of alliance (D'Arcy, Reynolds, Stiles, & Grohol, 2006), that were within the range of what has been found in face-to-face studies. A limitation of both studies is the lack of a control group as they used previously reported results for the face-to-face comparisons. In a study on posttraumatic stress disorder (PTSD) Knaevelsrud and Maercker (2006) found high ratings of alliance, even if alliance was not a strong predictor of outcome (Knaevelsrud & Maercker, 2006). However in a subsequent report, the same authors found that alliance scores increased during treatment and that ratings of alliance at the end of treatment correlated with treatment outcome ($N = 41$) (Knaevelsrud & Maercker, 2007). Klein, Austin, et al. (2009) and Klein, Mitchell et al. (2009) studied the role of frequency of therapist e-mail contact in a trial on panic disorder. They found no differences in client alliance ratings between the intensive contact condition (average therapist time 308 min) versus the infrequent contact condition (average therapist time 205 min) (Klein, Austin et al., 2009). The authors concluded that the time spent with the therapist may not be a key variable when rating alliance. Overall, ratings of alliance were high, which the same researchers also found in another study on posttraumatic stress disorder (Klein, Mitchell, et al., 2009). Correlations with outcome were not reported.

In light of the previous findings which indicate that alliance can be formed in ICBT we wanted to investigate alliance ratings by clients who were research participants in three different ICBT programs. The first was a study on ICBT for depression (Vernmark et al., 2010) in which internet-delivered guided self-help was compared with e-mail therapy. Ratings of therapeutic alliance were collected from the participants between week 3 and 4 of the treatment. The second data set was from a controlled trial on ICBT for generalized anxiety disorder (GAD), in which guided ICBT was tested against a waiting-list control group (Paxling et al., 2011). Alliance ratings were collected during the third treatment week. The third data set was derived from a study on social anxiety disorder (SAD), in which ICBT was tested against a waiting-list control group who participated in an online discussion forum (Andersson, Carlbring, Furmark, & on behalf of the SOFIE Research Group, 2012). Alliance ratings were collected at the beginning of the fourth treatment week. We expected high ratings of alliance and investigated if ratings of alliance would be predictive of treatment outcome.

Sample I - depression

Background

Data were collected in association with a controlled study on ICBT for major depression (Vernmark et al., 2010). All participants were interviewed live, but self-report instruments including alliance ratings were collected via the internet. Treatment was provided on the internet and each participant had an online therapist who followed them for the full 8 week treatment period.

Method

Procedure

A total of 88 persons with a confirmed diagnosis of major depression (American Psychiatric Association, 2000) were included in the trial following recruitment via advertisement (Vernmark et al., 2010). More details regarding procedure and treatment outcome are provided in the original report. Here we report data for the treated participants who were asked to send in alliance ratings following the third treatment week. By then participants had been interviewed in a live structured interview (not conducted by the therapist), had started their treatment, and had been in contact with their online therapist at least three times when sending in homework assignments. The treatment provided was either e-mail therapy or guided self-help. Briefly, the e-mail therapy was tailored and did not use any prepared self-help texts (Vernmark et al., 2010). All e-mails were individually written for the unique client. The total average time spent by each therapist on the participant in the e-mail therapy was 509 min (SD = 176). Each therapist ($N = 6$) was identified with name and a picture on the study web page. The guided internet-based self-help consisted of text chapters dealing with CBT components such as behavioural activation and cognitive restructuring, and had been developed in a previous study (Andersson et al., 2005). Each therapist spent an average of 53 min per participant (SD = 28) for the whole self-help treatment. Homework assignments were given two both groups.

Participants

A total of 59 individuals were randomly allocated to either one of two treatments and the remaining 29 were on a waiting-list control group. Overall, dropout rate was low with 14% not attending the posttreatment interview. A total of 49 participants in the treatment groups completed the alliance measure, with five in each of the two treatment groups not responding to the questionnaire sent out by the study coordinator. There were 25 participants in the e-mail group and 24 in the guided self-help group. Mean age for the 49 participants was 38.9 years (SD = 13.5), and 75% were women. There were no differences between the two treatment groups in terms of age and gender.

Measures

Several symptom-related measures were included in the trial, but here we focus on the 21-item Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), which has established psychometric properties for online use (Carlbring, Brunt et al., 2007). This was the primary outcome measure in the trial (Vernmark et al., 2010). In the analyses we calculated residual gain scores, which handle measurement error of repeated administration of the instruments and the initial differences between individuals at pretreatment (Steketee & Chambless, 1992). The residual gain scores were calculated by the formula $z2 - (z1 * r1\,2)$ (Steketee & Chambless, 1992), where z2 is the Z-transformed posttreatment score and z1 the transformed pretreatment score, and r1 2 the Pearson correlation between pre- and post