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Therapist behaviours in internet-based cognitive behaviour therapy (ICBT) for depressive symptoms

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ABSTRACT

Internet-based cognitive behaviour therapy (ICBT) is efficacious for treating depression, with therapist guidance identified as important for favourable outcomes. We have limited knowledge, however, about the fundamental components of therapist guidance in ICBT. The purpose of this study was to systematically examine therapist messages sent to patients during the course of ICBT for depressive symptoms in order to identify common "therapist behaviours" and the extent to which these behaviours correlate with completion of modules and improvements in symptoms at post-treatment, one- and two-year follow-up. A total of 664 e-mails from 5 therapists to 42 patients were analysed using qualitative content analysis. The most frequent behaviour was *encouraging* that accounted for 31.5% of the total number of coded behaviours. This was followed by *affirming* (25.1%), *guiding* (22.2%) and *urging* (9.8%). Less frequently the therapists *clarified the internet treatment framework*, *informed about module content*, *emphasised the importance of patient responsibility*, *confronted* the patient and made *self-disclosures*. Six of the nine identified therapist behaviours correlated with module completion. Three behaviours correlated with symptom improvement. *Affirming* correlated significantly ($r = .42$, $p = .005$) with improvement in depressive symptoms at post-treatment and after two years ($r = .39$, $p = .014$). *Encouraging* was associated with outcome directly after treatment ($r = .52$, $p = .001$). *Self-disclosure* was correlated with improvement in depressive symptoms at post-treatment ($r = .44$, $p = .003$). The study contributes to a better understanding of therapist behaviours in ICBT for depressive symptoms. Future directions for research are discussed.

1. Introduction

A growing body of research has demonstrated that many psychological disorders can be treated effectively via the internet (Andersson et al., 2013a). Most often the internet interventions are based on cognitive behaviour therapy (CBT) and there is now substantial evidence for the efficacy of internet-based cognitive behaviour therapy (ICBT) for depression (Andersson et al., 2013b) and several anxiety disorders (Hedman et al., 2012). Although it is apparent that ICBT works, it is not well understood what accounts for treatment effectiveness (Andersson et al., 2009). There are several meta-analyses, however, showing that ICBT with therapist guidance results in larger symptom improvement compared to self-guided ICBT (Richards and Richardson, 2012, Baumeister et al., 2014). ICBT for depression, for example, has been found to be twice as effective when supported by a therapist compared to when it is completely self-guided (Andersson and Cuijpers, 2009). Johansson and Andersson (2012) found a strong association between the amount of support offered in ICBT and outcome. Titov (2011), however, found no significant differences in effect between low-intensity and high intensity support. Nevertheless, he found that effect sizes were larger for supported compared to self-guided interventions. Consistent with this quantitative research, in a qualitative study many participants expressed appreciation for therapist guidance and were surprised by the high quality of the relationship that developed with the therapist during online communication in ICBT (Beattie et al., 2009). Kelders et al. (2015) tested automated clinical feedback compared to human clinical feedback in ICBT for depression, and found

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that although results were similar at three-month-follow up, the group with human support showed a faster decline in symptoms.

Although clinical guidance appears important in ICBT, the fundamental components of this guidance are not transparent. In most studies demonstrating the efficacy of ICBT, for instance, the nature of the support/guidance offered by the therapist has not been consistently or clearly described. Moreover, there is very limited research examining which therapist behaviours are associated with a favourable outcome in ICBT.

In contrast to ICBT, there is considerably more research on therapist behaviours in face-to-face therapy. Multiple therapist behaviours have been identified as frequently occurring in face-to-face therapy, including positive therapist behaviours such as showing empathy, confronting the patient, making interpretations, self-disclosure, teaching, supporting, showing acceptance, affirming, validating and giving praise (Barber et al., 2013, Watson et al., 2012, Keijsers et al., 2000, Watzke et al., 2008, Orlinsky et al., 1994), but also negative behaviours, such as blaming the patient, criticizing and ignoring (Henry et al., 1986, Henry et al., 1990). In terms of improvement in symptoms, a number of therapist behaviours have been associated with favourable outcomes, such as showing empathy (Bohart et al., 2002), giving (mostly positive) feedback, offering validating or normalizing self-disclosures and repairing alliance ruptures (Norcross, 2010). In other studies and reviews, other behaviours have been associated with a favourable outcome (sometimes with somewhat overlapping categories) such as affirming, showing understanding (Henry et al., 1986, Henry et al., 1990) and making interpretations (Orlinsky et al., 1994). Other behaviours occur more often when the outcome is poor, such as blaming and belittling and giving advice (Henry et al., 1986, Henry et al., 1990).

In addition to research on the therapists' behaviour there has also been efforts to study therapist characteristics (Lambert and Barley, 2002), and in a large study by Wampold and Brown (2005) about 5% of the outcome variance in face-to-face therapy could be attributed to therapist factors. When it comes to ICBT, however, no therapist factors have yet been found to influence the reduction of depressive symptoms (Almlov et al., 2009) or anxiety (Almlov et al., 2011). Nevertheless, even if it is not that important who the therapist is in ICBT, it still might be important what (s)he does.

Therapist behaviours are likely to overlap to some extent with face-to-face therapy. However, some differences are likely given that the therapist role is different in ICBT compared to face-to-face therapy (Andersson and Titov, 2014), with the most obvious difference being that the therapist does less “teaching”, as this is embedded in the intervention. Specifically, the patient has the main responsibility for acquiring theoretical knowledge, often by reading, watching or listening to self-help material administered over the internet typically in the form of weekly modules. The nature of ICBT is described as shifting the therapist role towards a more supportive one, making prompts, giving individualised feedback on homework and answering questions (Andersson et al., 2008a, Andersson, 2014). Another notable difference is that the therapist and patient do not meet each other face-to-face and most communication involves written secure messages with no actual facial expressions or voice intonations accompanying the words (although sometimes these may be implied, for example, through use of symbols, capitals or bolding). Furthermore, the therapist is typically available on short notice in ICBT, and contact can be initiated by patients from their everyday context, in contrast, in face-to-face CBT the therapist is physically present for a short period of time once a week in her/his office which is obviously not the everyday context of the patients. Despite these differences, because patients tend to report high ratings of therapeutic alliance in ICBT trials (Andersson et al., 2012b), it is still reasonable to assume that there are therapist behaviours that are associated with outcome in ICBT.

To our knowledge, there are at least two published studies on therapist behaviours in ICBT. In a descriptive study of ICBT for bulimia nervosa, Sanchez-Ortiz et al. (2011) analysed the content of e-mails (N = 712) sent by therapists to patients ($n = 71$). They reported that 95.4% of the e-mails had at least one supportive comment, 14.7% contained at least one CBT comment, while 13.6% had at least one technical comment. They concluded that the communication from the therapist to the patient in ICBT is mainly supportive in content, with only a small amount of time required by therapists to provide email support. In a second study of ICBT for generalized anxiety disorder, Paxling et al. (2013) conducted a more detailed examination of therapist behaviours and also tested if the identified therapist behaviours were correlated with module completion or symptom improvement. They identified eight categories of therapist behaviours in 490 e-mails sent from 3 therapists to 44 patients. Therapist behaviours included task prompting, task reinforcement, alliance bolstering, deadline flexibility, psychoeducation, empathetic utterances, self-disclosure and self-efficacy shaping. While task reinforcement, task prompting, self-efficacy shaping and empathetic utterances were significantly correlated (positive correlation) with module completion, task reinforcement (positive correlation) and deadline flexibility (negative correlation) were correlated with outcome.

The aim of the current study was to expand on the existing literature and investigate written communication from therapists to patients in ICBT for depressive symptoms, and to test which behaviours, if any, were associated with module completion and symptom improvement.

2. Material and methods

2.1. Design

All e-mail messages sent from the e-therapists to the participants in the ICBT treatment group ($n = 42$) of a previously published randomised controlled trial (RCT) (Holländare et al., 2011) were analysed in the current study. The RCT sample consisted of 84 participants with partially remitted depression who were randomly assigned to either ICBT for depressive symptoms ($n = 42$) or to a control group ($n = 42$). In the ICBT group, therapist guidance was given through asynchronous e-mail communication, using a secure platform on the internet. In the present study, we began by using qualitative content analysis to identify categories of the therapists' behaviours. Next, we used a quantitative approach to examine correlations between the frequency of these behaviours and the outcome variables.

2.2. Participants and procedure

The sample comprised 42 participants (see Table 1) with partially remitted major depression, defined as a score of no less than 7 and no higher than 19 on the Montgomery-Åsberg Depression Rating Scale-Self rated (Svanborg and Asberg, 1994) at baseline. There were 36 women and 6 men; $M_{age} = 44.8$ years, $SD = 13.9$. The data consisted of 644 e-mail messages (comprising 100,380 words in total) sent from five therapists (25 to 35 years old; three females; two males) to these 42 patients during 10 weeks of treatment. An average message from a therapist comprised 155.86 words. The mean number of e-mail messages sent from the therapists to patients was 15.3 ($SD = 6.3$; range = 3 to 33). Three of the therapists were clinical psychologists and two were students at the Masters level at the end of their clinical training. All therapists were supervised by an experienced CBT-

Table 1
Patients' characteristics at baseline ($n = 42$).

Age, mean (SD; range)	44.8 (13.9; 22–77)
Female gender, no. (%)	36 (85.7)
Baseline antidepressant medication, no. (%)	18 (42.8)
Previous psychotherapy, no. (%)	28 (66.7)
Previous episodes of major depressive disorder, median	3
Montgomery Åsberg Depression Rating Scale–self rated, mean (SD)	15.0 (7.9)