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Self-help treatment of anxiety disorders: A meta-analysis and meta-regression of effects and potential moderators

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ABSTRACT

Self-help treatments have the potential to increase the availability and affordability of evidence-based treatments for anxiety disorders. Although promising, previous research results are heterogeneous, indicating a need to identify factors that moderate treatment outcome. The present article reviews the literature on self-help treatment for anxiety disorders among adults, with a total sample of 56 articles with 82 comparisons. When self-help treatment was compared to wait-list or placebo, a meta-analysis indicated a moderate to large effect size ($g = 0.78$). When self-help treatment was compared to face-to-face treatment, results indicated a small effect that favored the latter ($g = -0.20$). When self-help was compared to wait-list or placebo, subgroup analyses indicated that self-help treatment format, primary anxiety diagnosis and procedures for recruitment of subjects were related to treatment outcome in bivariate analyses, but only recruitment procedures remained significant in a multiple meta-regression analysis. When self-help was compared to face-to-face treatment, a multiple meta-regression indicated that the type of comparison group, treatment format and gender were significantly related to outcome. We conclude that self-help is effective in the treatment of anxiety disorders, and should be offered as part of stepped care treatment models in community services. Implications of the results and future directions are discussed.

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Abbreviations: CBT, cognitive behavioral therapy; CMA2, comprehensive meta-analysis version 2; ES, effect size; FTF, face-to-face; GAD, generalized anxiety disorder; GSH, guided self-help; ITT, intention to treat; MIA, mixed anxiety disorders; MIA/D, mixed anxiety/depression; OCD, obsessive–compulsive disorder; PD, panic disorder; PSH, pure self-help; PTSD, post traumatic stress disorder; SP, social phobia; SPH, specific phobia; TAU, treatment as usual; WLP, waiting-list/placebo.

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1. Introduction

Anxiety disorders are the most prevalent group of mental health disorders, with an estimated lifetime prevalence of approximately 30% (Kessler, Berglund, et al., 2005; Kessler, Chiu, Demler, Merikangas, & Walters, 2005) and an estimated 12 month prevalence of approximately 20% (Kessler, Chiu, et al., 2005b). The effect of psychological treatment on anxiety disorders, Cognitive Behavioral Therapy (CBT) in particular, is documented in a number of randomized controlled clinical trials (RCT), systematic reviews, and meta-analyses (Bandelow, Seidler-Brandler, Becker, Wedekind, & Ruther, 2007; Butler, Chapman, Forman, & Beck, 2006; Cape, Whittington, Buszewicz, Wallace, & Underwood, 2010; Gould, Otto, & Pollack, 1995; Hofmann & Smits, 2008; Norton, 2007; Olatunji, Cisler, & Deacon, 2010; Öst, 2008; Tolin, 2010). However, the majority of individuals with anxiety symptoms and disorders never receive psychological treatment (Richards, Klein, & Carlbring, 2003). Some possible barriers to seeking treatment are a shortage of trained therapists, treatment costs, and embarrassment associated with help-seeking (Andersson et al., 2006). One way to increase the availability and affordability of psychological interventions is to use methods based on self-help.

Many different terms are used to classify self-help treatment interventions for psychological problems, such as self-help (Hirai & Clum, 2006), self-management (Barlow, Ellard, Hainsworth, Jones, & Fisher, 2005) and self-administered treatments (SATs) (Menchola, Arkowitz, & Burke, 2007). Self-help treatment has traditionally been offered through written manuals or books, often described as bibliotherapy (Marrs, 1995; Rosen, 1987). Over the last decade, however, a number of Internet and computer-based self-help treatment programs have been developed and tested in randomized controlled trials.

In this article, we will follow Cuijpers and Schuurmans' (2007) definition of self-help treatment as a standardized psychological treatment protocol comprising guidance for applying a generally accepted psychological treatment to a mental health problem. The self-help treatment protocol is typically composed of information, explanations, and exercises that are relevant for the actual problem and are distributed through media, such as written books, computer software or the Internet. The patients do the majority of the intervention on their own, with contact with a therapist being either non-existent or minimal and only facilitative or supportive in nature. In line with this definition of self-help treatment, studies of self-help treatment groups and self-help treatment as a supplement to ordinary face-to-face psychotherapy are not included in this review. Also, studies that replace in vivo exposure with virtual reality exposure in the treatment of anxiety disorders are sometimes referred to as self-help (Newman, Szkodny, Llera, & Przeworski, 2011). However, the majority of these studies include too much therapist involvement to fall under the definition of self-help used in this article, and these studies were therefore not included.

Results from reviews and meta-analyses indicate that self-help treatments have a moderate to large effect on the treatment of anxiety disorders compared to a waiting-list control group (Cuijpers et al., 2009; Gould & Clum, 1993; Hirai & Clum, 2006; Marrs, 1995; Reger & Gahm, 2009; Spek et al., 2007). Additionally, recent meta-analyses indicate no differences when computer-aided self-help treatments were compared to face-to-face psychotherapy (Cuijpers, Donker, van Straten, Li, & Andersson, 2010; Reger & Gahm, 2009). However, the most recent meta-analyses in this field have only included computer-based interventions (Cuijpers et al., 2009, 2010; Reger & Gahm, 2009; Spek et al., 2007), and one of them (Cuijpers et al., 2009) also included studies of primarily face-to-face therapist-lead interventions supported with computer programs, which are not in line with the present definition of self-help. In contrast to this, the present meta-analysis comprises studies using different media for delivering self-help. The last meta-analysis including different self-help treatment formats (Hirai & Clum, 2006), used both RCT studies and uncontrolled studies, whereas the present analysis only comprises RCT studies. Of the 56 included studies in the present meta-analysis, 29 (51.8%) are published after the 2006 analysis conducted by Hirai and Clum. Thus, it is necessary to update the status of self-help treatment with regard to anxiety disorders.

Previous reviews of self-help treatment for anxiety disorders indicate significant heterogeneity in findings, and some primary studies also indicate that the effect of self-help treatment for anxiety disorders is not uniformly positive (Mead et al., 2005). This highlights the necessity for identifying and understanding predictors and moderators that contribute to treatment outcome. Thus, one of the primary aims of this meta- analysis is to examine potential moderators through subgroup-analysis and meta-regression. This will hopefully yield increased knowledge that can be used for optimizing how to develop and deliver self-help, and to identify patients who are likely to benefit from this treatment.

One potential moderator that may influence the effectiveness of self-help treatment is the treatment format. Use of self-help books (bibliotherapy) have been the most common format of self-help treatment, but in the last 10–15 years an increasing amount of self-help programs is based on computer software or Internet. However, it has thus far not been sufficiently investigated whether the format used to deliver self-help is related to the outcome of treatment. This is an important point as the majority of the newer self-help treatments are computer-based, and implementation of computer-based programs might be associated with higher costs than e.g. bibliotherapy, and should thus be justified with other advantages.