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A Meta-Analytic Study of Self-Help Interventions for Anxiety Problems

Michiyo Hirai, Washington State University
George A. Clum, Virginia Polytechnic Institute and State University

The present study examined the effectiveness of self-help (SH) interventions for individuals with anxiety problems. Thirty-three studies, targeting a variety of anxiety disorders and problems, met criteria for inclusion with 1,582 clinical and subclinical participants. Self-help formats included books, audio/videotapes, and computer/Internet-based programs. The average effect sizes (Cohen's *d*s) comparing SH interventions to control groups for target symptoms were .62 at posttreatment and .51 at follow-up. When compared to therapist-directed interventions (TDIs), the average effect sizes (Cohen's ds) for target problems were −.42 at posttreatment and −.36 at follow-up. Format of SH materials, type of target disorder, presence of minimal therapist contact, and other study parameters were examined for their effect on treatment outcome. The results were discussed from the perspective of a stepped-care approach for anxiety problems.

AT ISSUE FOR MENTAL HEALTH professionals and third-party payers is how to provide cost-effective psychological treatment and allocate limited resources to patients. According to Haaga's (2000) summary, empirically validated psychological treatments have been provided to a limited number of people, suggesting that the extensive research on the effectiveness of these approaches has been largely ignored.

DuPont et al. (1996) reported that anxiety disorders were the most costly mental illness ($46.4 billion), accounting for 31.5% of total expenditures for mental illness. Gould, Otto, and Pollack (1995) estimated the cost of therapist-directed cognitive-behavioral treatment for panic disorder to be from $40 to $90 per session. In an attempt to reduce the cost and time investment by therapists and researchers and to supply effective treatment to people with psychological disorders, stepped-care models for psychological disorders have been proposed (e.g., Haaga, 2000; Newman, 2000; Wilson, Vitousek, & Loeb, 2000). In these models, an analysis is made to determine which individuals improve using the lowest-cost treatment, such as self-help (SH) approaches, and which require more intensive psychological interventions. One example of the viability of a stepped-care approach with anxiety disordered individuals was provided by Öst, Stridh, and Wolf (1998). These researchers examined four consecutive treatments for spider phobia, beginning with an SH manual followed by video, group, and individual therapy, where only individuals who did not improve were offered the next step. These authors reported clinically significant improvement at each stage. However, empirical evidence supportive of stepped-care approaches, including SH interventions, is sparse. Evaluating the effectiveness of SH approaches for anxiety disorders provides an opportunity to address this issue, as this approach has been evaluated more often than it has with other mental disorders. No quantitative review of this literature has been conducted since Marrs (1995) included anxiety problems in his general review of SH treatments. Twenty-five additional studies were identified for the present review and a meta-analytic approach was used.

Early estimates of the effect size (Cohen's *d*) for all SH interventions regardless of target problem has varied between .57 (Marrs, 1995) and .87

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Address correspondence to Michiyo Hirai, Department of Psychology, Washington State University, PO Box 644820, Pullman, WA 99164, USA; e-mail: hiraim@wsu.edu.

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(Gould & Clum, 1993), while effect sizes for anxiety problems varied between .91 (Marrs) and 1.11 for fear reduction (Gould & Clum). Both Gould and Clum (1993) and Marrs (1995) indicated that type of control group affected outcome. Marrs further indicated that type of disorder affected outcome, but for a more general group of disorders than anxiety disorders. Addressing the effect of treatment variables, Gould and Clum found that length of treatment was inversely related to effect size, while Marrs found that therapist contact increased treatment success for anxiety disorders. While not formally evaluated, Gould and Clum reported that compliance with therapy and SH treatments that combined written and audio/visual media were more effective. Neither of these reviews could determine whether study or treatment factors were related to outcome for the anxiety disordered subsample which, however, was examined in the present study.

The current study focused on the effectiveness of SH treatments for individuals with anxiety problems and disorders. It further examined the effects of a series of internal validity threats as well as the effects of specific intervention parameters on effect sizes. Several hypotheses were identified:

Hypothesis 1. Dropout rates would not differ between SH treatments and therapist-directed interventions (TDIs);

Hypothesis 2. SH treatments would yield moderate to strong effect sizes (Cohen's *d*s) compared to controls at both posttreatment and follow-up;

Hypothesis 3. Studies using wait-list controls would yield larger effect sizes than would studies using placebo controls;

Hypothesis 4. Studies comparing SH treatments to TDIs would yield lower effect sizes than studies comparing SH to controls; and

Hypothesis 5. SH treatments employing experimenter contact would yield higher effect sizes than interventions that did not employ such contact.

Method

SELECTION OF STUDIES

The present meta-analysis included studies that employed media-based interventions with minimal therapist contact. Media included books, manuals, audiotapes, videotapes, computer-assisted programs, Internet, or some combination. Minimal therapist contact was defined as therapist-initiated, nontherapeutic contact by phone, letter, e-mail, face-to-face, or combinations of these methods. Included studies employed adult populations, had at least one control group, employed random assignments to groups, and were either published in an English language journal or were unpublished dissertations. Control groups included no-treatment or wait-list (WL), placebo (PL), and symptom monitoring only (MN). Comparison groups were TDIs, including individual and group therapy. Excluded were studies that (a) employed media-based materials but offered participants no opportunity to practice using the materials (e.g., participants watched a treatment videotape, but no practice was required); (b) targeted state anxiety, such as fear associated with a scheduled surgery; (c) targeted a broadly defined sample of neurotic disorders, unless the study specifically targeted anxiety symptoms within the neurotic sample; (d) targeted not only anxiety disorders but also other disorders, such as dysthymia; (e) provided TDIs as part of the treatment protocols prior to the SH treatment phase; (f) used SH materials as supplements to conventional therapy; and (g) employed only measures whose psychometric properties were questionable (e.g., clinician's impression based solely on subjective judgment without using validated assessment materials). In order to focus the results on symptoms that were specifically targeted by the interventions, only target symptoms were included in this review.

Studies that met the above criteria were collected through the following procedures. First, a literature search was conducted through the on-line database of PsycInfo and Medline from 1960 through 2003 with 15 different key words and their combinations. Second, reference sections of the above-accessed studies and the above-referenced meta-analytic studies (Gould & Clum, 1993; Marrs, 1995) were examined. Two dissertations and seven published studies were excluded in the current study because of failure to meet the inclusion criteria.

SAMPLE

Of 60 identified studies, 33, including 2 reported in one publication, met the inclusion criteria. A total of 51 SH groups were found in the 33 studies. Among those, 17 SH groups completed follow-up assessments. Of these, 10 studies included comparisons only between SH interventions and WL controls, 9 included only comparisons of SH interventions and TDIs, 1 included an MN, and 13 included more than one type of control/comparison group, including WL, TDI, MN, assessment control (AS) and PL groups. Only one study used an AS control, which was categorized as WL for the current study. Because some studies