
Hands-On Help: Computer-Aided Psychotherapy

by Isaac M. Marks, Kate Cavanagh, and Lina Gega. *Maudsley Monographs 49*, David AS, ed, Psychology Press, New York, NY, 2007, 273 pages, \$49.95 (hardcover).

When the ingenious Sumerian who invented writing first carved those cuneiform symbols in stone along the Tigris River some 6000 years ago, a skeptic standing nearby predicted with concerned countenance that people would soon stop talking to each other.

—Warner V. Slack, 2000¹

With this charming reflection from Warner Slack, who programmed the first computer to interview a patient in 1965, Isaac Marks and coauthors Kate Cavanagh and Lina Gega begin their welcome monograph on computer-aided psychotherapy. Slack's gentle irony bears witness that more than 40 years of experience and research on patient-computer interviews has not overcome all resistance to machines' performing clinician functions. Marks, Cavanagh, and Gega review the use of computer interviews at the extreme end of the clinician-patient spectrum—psychotherapy. When Weizenbaum experimented with Rogerian psychotherapy as a simulation model of computer-human interaction,² he was

horrified that some people took the idea of computer therapy seriously. It is now serious business indeed, and this book provides an excellent review of current research and the larger issues surrounding computer therapy.

One issue is the paucity of effective human psychotherapy. In our mind's eye, the ideal therapy might involve years with Freud. Poke-in-the-eye reality provides many patients 15 minutes of Warholian fame with primary care clinicians hard-pressed by ever growing nonclinical demands that distract from patient care. Even after cognitive-behavioral therapy (CBT) for obsessive-compulsive disorder (OCD) in adults and children has been proven more than twice as beneficial as FDA-approved pharmacotherapies,^{3,4} CBT is rarely available. Marks' inability to persuade enough therapists and training programs of the merits of CBT for OCD after more than 2 decades of trying led him and colleagues to develop BT STEPS, a computer-administered CBT for OCD. In a randomized controlled trial,⁵ that program was as effective as 12 hours of clinician-administered CBT for 64% of patients who did at least 2 exposure and ritual prevention sessions guided by the computer. Both of these therapies were significantly more effective than structured relaxation, the active behavioral control. While comparison of Yale-Brown Obsessive Compulsive Scale severity change scores is scientifically meaningful, patients receiving either BT STEPS or clinician-guided CBT were more pleased by a mean reduction in the time spent obsessing and ritualizing of 3.4 hours *every day* compared with 36 minutes for relaxation. BT STEPS and all other computer therapies that have been subjected to study are thoroughly reviewed in *Hands-On Help*.

Computer therapies offer truly standardized, measurement- and evidence-based care coupled with customization rivaling that of expert clinicians. Always available, computer therapies are most often used outside clinic office hours when therapists prefer not working but patients find convenient. Web-based and Interactive Voice Response systems that provide access to computers via touch-tone telephones don't require travel to a clinic and are often more comfortable for those who are anxious when seeing a clinician. The study of computer therapies is easier because of their perfectly standardized presentation of therapy components. When improvements are made, they are immediately available to subsequent users. Cost for these systems, once developed, can be substantially lower than that for human therapy. A role for computer therapy in stepped care is a logical extender of a scarce resource and has been shown to multiply clinician effectiveness. Given these potential advantages, how well computer therapies work is the subject of the authors' close scrutiny.

The authors found 97 computer therapy systems that had been tested in 175 studies including 103 randomized controlled trials. Chapters cover computer therapies for phobic/panic disorder; OCD and posttraumatic stress disorder; generalized anxiety disorder and emotional problems; depression; eating problems; substance abuse;

miscellaneous adult problems (pain, tinnitus distress, insomnia, sexual problems, and schizophrenia); and problems in children and teenagers. A consummate Synthesis chapter addresses mental health problems computer therapy has helped, screening suitability for computer therapy, human support of computer therapy users, time users spend on computer therapy as well as their age and education, live therapists versus computer therapy, cost and cost-effectiveness, and computer therapy's place in health care provision.

Poignantly, the authors describe the arduous path from innovation to implementation. Validation is far easier than marketing and persuading payers of computer therapy value. By contrast, cognizant clinicians know that the use of non-human devices is not inhumane. Well-validated computer therapies are beginning to assume their appropriate role, complementing and supplementing the care clinicians provide.

Augmenting thorough reviews, which include tables presenting main features of therapies for each disorder, are introductory chapter summaries and brief boxed conclusions about each study. Read first, these accurate and elegant synopses save time while guiding readers to fuller expositions on topics of interest.

Unusually clear, concisely written yet comprehensive, *Hands-On Help* is a bellwether for those wanting to understand what has been accomplished with computer therapy as well as challenges ahead and probable paths through and around them.

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