

Introduction to White Paper Series—Guest Editorial

Biofeedback and neurofeedback seem to offer the kind of *evidence-based practice* that the health care establishment is demanding (Geyman, Devon, & Ramsey, 2000; Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). Evidence-based practice involves a systematic process for using the best evidence, preferably research findings, to guide delivery of health services. Levels of evidence range from case reports to observational studies to randomized clinical trials. From the beginning biofeedback developed as a research-based approach emerging directly from laboratory research on psychophysiology and behavior therapy. The ties of biofeedback/neurofeedback to the biomedical paradigm and to research are stronger than is the case for many other behavioral interventions. The standards for assessing efficacy, however, have become more rigorous over the decades, and biofeedback has encountered criticism for inconsistency and gaps in its outcomes research. Even some of the best accepted individual applications, such as ADHD and headache, have been challenged (Moss & Gunkelman, 2002). The risk is that—in the movement toward evidence-based medicine and “best practices” standards—biofeedback will be behind unless the field better validates and rates its own treatment protocols.

The Association for Applied Psychophysiology and Biofeedback (AAPB) has undertaken a series of steps to address this challenge. In 2001, the two professional associations in this practice area, the Association for Applied Psychophysiology and Biofeedback (AAPB) and the International Society for Neuronal Regulation (ISNR) together commissioned a Task Force to develop an official template for research methodology to measure clinical efficacy. That Task Force published standards for five levels of efficacy in this journal (LaVaque et al., 2002).

In 2004, AAPB published a review of the clinical efficacy of biofeedback and neurofeedback (Yucha & Gilbert, 2004; Moss & Kirk, 2004). That document applied the new template established by the Task Force on research methodology to the available literature, and rated 40 disorders on the efficacy level system, from one (not empirically supported) to five (efficacious and specific). The new efficacy volume highlights areas in which the biofeedback and neurofeedback applications may be clinically effective, yet the systematic efficacy research remains weak or nonexistent.

The next step for AAPB, acting in conjunction with ISNR, will be the publication of a series of more comprehensive white papers, each dedicated to a single application of biofeedback and neurofeedback. The following paper by Palsson et al. inaugurates this new series. Each paper will review current outcome studies for a single disorder, or group of disorders. Each will rate biofeedback/neurofeedback efficacy using the AAPB/ISNR methodology template and today’s prevailing scholarly standards. Each will be published individually in a scholarly journal and in bound form as part of a collection. Each white paper

must be approved by the Series Editors, the AAPB Board, and the journal publishing the paper. Each neurofeedback paper must be approved by the ISNR Board as well. The papers become official association documents, giving the papers more credibility for governmental regulatory agencies, third party payers, and health care providers.

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