Specific versus Placebo Effects in Biofeedback Training: A Critical Lay Perspective

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Recent interchanges on the question of how to evaluate biofeedback have been cast in terms of a researcher versus clinician dichotomy. This tends to make the arguments ad hominem and focuses attention on minutiae that are of limited general interest. Accordingly, one purpose of the present paper is to state the specific-effects approach to biofeedback evaluation from a critical lay, rather than a research, perspective. The logic of the specific-effects approach to treatment evaluation is first illustrated by a hypothetical example (the Minefield Parable), and it is then suggested that the approach is appropriate for the evaluation of any treatment, be it physical, psychological, or some complex combination. The other purpose of the paper is to further clarify the specific-effects position by responding to some difficulties that have been raised by critics of the position. Some of these difficulties are based on misrepresentations of the position, while others are genuine. However, even for the genuine difficulties, practical solutions are available. The paper concludes that the question of whether a particular class of treatments works is one that is properly raised by the intelligent consumer, and that, for the answer to that question, only the facts, based on adequately controlled clinical studies, will do.

Descriptor Key Words: biofeedback training versus biofeedback phenomenon; specific versus placebo effects; critical lay perspective; researcher versus clinician; treatment administration versus evaluation; clinical trials versus testimonials; contingency control in biofeedback evaluation; practical and ethical issues in evaluation; elimination of differential placebo effects in evaluation.

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Especially because my views on biofeedback represent a minority opinion in the Biofeedback Society of America (BSA), I appreciated BSA’s invitation to present those views at the San Francisco (1986) meetings, and I now accept with pleasure this journal’s invitation to elaborate, as well as have critically examined, those views in a more systematic manner than is possible in an oral, conference context.

The basis of my remarks was an earlier publication (Furedy, 1985), while the reactions of two prominent BSA members were based on a paper (Green & Shellenberger, 1986b) that was a comment on my earlier article. In addition, the conference paper also elicited comments during the discussion period of a later session ("Issues in self-regulation and learning: How do we know when self-regulation is learned in biofeedback training?")

It seems clear both to those who were present at the conference sessions and to those who have read the two papers (Furedy, 1985; Green & Shellenberger, 1986b) that there is a very strong difference in opinion on the relevant issues. One unfortunate (and perhaps unintended) aspect, however, is that the dispute has been cast as one between researchers and clinicians. I bear at least partial responsibility for this impression, because my paper (Furedy, 1985) could be interpreted as one addressed by a researcher to clinicians. Similarly, the recent interchange between Roberts (1985, 1986) and members of the BSA (Green & Shellenberger, 1986a; Norris, 1986) appears to be more focused on the researcher/clinician dichotomy rather than on the issues relevant to biofeedback itself.

There are at least two problems with such a researcher versus clinician sort of emphasis. The first problem is that the arguments tend to be ad hominem, which may be exciting for the participants, and even, perhaps, for the readers, but is nevertheless uninformative for all concerned. The second problem is that the arguments often involve minutiae that are not of general interest and hence do not concern the intelligent consumer.

In this connection it is important to recognize that we all are consumers rather than experts with regard to at least 99% of the treatments that are offered to us. Because there are so many treatments, even those who are expert researchers and/or clinicians with respect to one or two treatments are still in the nonexpert, consumer class with respect to the remaining treatments. But if expertise with respect to all treatments is impossible, it still seems appropriate and feasible to try to be an intelligent consumer when it comes to evaluating treatments about which we do not have expert, but only layman, knowledge.

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3In fact it was based on an invited oral paper to the meetings of the American Association of Biofeedback Clinicians.