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EDITORIAL: THE PROBLEM WITH EVIDENCE-BASED PRACTICE

The basic aim of science is theory. Perhaps less cryptically, the basic aim of science is to explain natural phenomena. (Kerlinger, 1986, p. 8)

Within many helping professions, there is a powerful movement at present toward evidence-based practice as a process, and relying on evidence-based practices as interventions. Overall, this movement reflects a real advance in terms of helping people and society, and is highly congruent with the goals and values of Behaviorists for Social Responsibility, and of most behavior and cultural analysts. There is at least one significant issue with this thrust, however, that requires attention. On numerous recent occasions, I have heard helping professionals suggest that there is no need to continue to teach, nor construct, theory. The grounds for this is that the proper professional course at present is seen as simply searching the literature for the best supported alternatives for addressing a clinical or community problem, consulting with the client or client group about the findings of that search, deciding together what steps to take, monitoring the outcomes, and adjusting as guided by the data. This process is often effective, and certainly better than many of the alternative approaches that have often been used. The approach is clearly tremendously important to ensuring the right to effective treatment, for example in autism. The argument against theory may also appear to be consistent with some of B. F. Skinner's writings related to methods and theories (e.g., 1950, 1988), although I believe a persuasive argument can be made that this is to a significant extent a misinterpretation of Skinner's statements, which recognized the possible utility of formal models of data "yield[ing] greater generality than any assemblage of facts" (1988, p. 101).

Using behavioral methods in routinized ways in practice settings can be professional, but doing so is not analytic nor is it science; such procedures do not provide explanations of phenomena. Similarly, complex multivariate analyses that do not emerge from conceptual models nor contribute to explaining and influencing phenomena contribute only marginally to science except in the most ad hoc of ways. Empirical work without conceptual grounding risks becoming "thin and uninteresting" (Mills, 1959, p. 205); too much of such conceptually thin scholarship contributed to the challenging situation in which contemporary sociology finds itself, and in which behavior analysis does not want to find itself.

Theory continues to be needed in both behavior analysis and cultural analysis, and our students continue to need to learn theory if they are to do scientific research or scientific practice. (The recent shift to "evidence-informed" practice does not resolve this issue.) The development of new, more powerful, and less coercive intervention strategies nearly always emerges from rigorous conceptual and theoretical analyses. Examples include the development of functional communication, procedures grounded in the

matching law (particularly drawing on McDowell's [1988] interpretations), and approaches to teaching language grounded in Skinner's conceptual analyses in *Verbal Behavior* (1957). Loss of theoretical and conceptual sophistication among behavior and cultural analysts is likely to substantially slow the development of more effective and less costly intervention strategies. Behavior analysts who understand the *importance of analysis* for identifying powerful establishing and abolishing operations, of the possibility of reinforcing behavior that appears unrelated to the issue of concern, or of emphasizing manding before tacting, and of many advances yet to be made, continue to be needed.

The need for theory at the cultural level, despite the controversies it sometimes produces among us (see, for example, Volume 15, No. 1 of this journal), is perhaps even greater. We do not yet know, for example, to what extent relational frame theory will be of benefit for improving society, nor whether conceptual analyses of networks of interlocking contingencies will produce new strategies for reducing collective violence—but we need to know. In cultural analysis, not only is there a need for both the conceptual models and analytic tools needed by behavior analysts, there is also the challenge of finding ways to explain and perhaps ultimately to influence phenomena that are very large or currently inaccessible, in which “we cannot manipulate variables or observe effects as we should like to” (Skinner, 1988, p. 102) at this point. This is precisely the current situation in many areas of cultural analysis, in which the kinds of hypothetico-deductive methods Skinner described for studying such inaccessible phenomena are needed—methods that involve the construction and testing of theory. Evidence-based practice is necessary, but not sufficient.

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