

Abuse and Disabuse of the Drug Metaphor in Psychotherapy Research: Hold on to the Baby as You Throw out the Bath

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Stiles and Shapiro (1994) argue that trivial correlations between process variables and treatment outcome point to inherent methodological limitations of correlational designs in process–outcome research. In coming to such a far-reaching (erroneous) conclusion, Stiles and Shapiro are throwing out the baby with the bath. Correlational designs are perfectly appropriate for testing process–outcome correlations if process measures are adequately conceptualized. Examples of case-specific measures of therapist responsiveness are reviewed to illustrate the power of correlational designs.

In a typical psychotherapy process–outcome study, an attempt is made to identify an active component (e.g., therapist empathy) and then to relate the frequency of that component with treatment outcome. Although there has been considerable research effort, the correlations between process components (particularly therapist variables) and therapy outcome, have been inconsistent and extremely disappointing. Many psychotherapy researchers have argued that such studies are methodologically misguided, clinically naive, and are therefore not helpful in illuminating how the therapist does influence the therapeutic process and its outcome (for a review, see Silberschatz, Curtis, Fretter, & Kelly, 1988). Stiles and Shapiro (1994) have argued that the problem with process–outcome research lies not in the measures or in how they are conceptualized but in the implicit, if not explicit, adherence to a research paradigm which they term *the drug metaphor*. According to this paradigm, the active ingredients in psychotherapy are therapist techniques and interventions, and the amount (dosage) of the active ingredients delivered should correlate with outcome. In their view, this paradigm is not appropriate for psychotherapy research (see Stiles & Shapiro, 1989); moreover, they conclude that the logic of correlational designs embedded in the drug metaphor is also poorly suited for psychotherapy research. Indeed, they warn that process–outcome correlations (whether positive, negative, or trivial) “cannot be trusted to reflect a process component’s contribution to outcome” (Stiles & Shapiro, 1994, p. 11) and that understanding the relationship between process and outcome “may be unanswerable within a conventional linear framework” (p. 15). In coming to such a far-reaching (and, in my view, erroneous) conclusion, Stiles and Shapiro are throwing out the baby with the bath. In my comments, I argue that existing statistical models, including correlational designs, are well suited for describing and empirically testing process–outcome relationships. Rather than looking for new

statistical or research paradigms, the field would be advanced by looking for new ways to conceptualize and measure how the therapist influences the patient’s therapeutic progress.

Why are Process–Outcome Correlations Typically Inconclusive?

Stiles and Shapiro (1994) emphasize that their negligible process–outcome correlations are “consistent with the generally disappointing, inconsistent yield of psychotherapy process–outcome comparisons” (p. 10). They then go on to make the case that such trivial correlations point to the inherent limitations of traditional correlational designs. I suggest a simpler, more parsimonious, and I believe more cogent explanation for these inconclusive results.

Trivial correlations such as those presented by Stiles and Shapiro are due to (a) inadequate conceptualization of how process components lead to therapeutic progress and (b) imprecise, overly global measures and methods of evaluating process components. In simply tallying the number of therapist questions, reflections, interpretations, and so forth, and using these frequency counts to predict outcome, Stiles and Shapiro have implicitly assumed that these therapist behaviors are generically good and that the more the therapist delivers, the better the outcome should be. Many psychotherapy researchers (Stiles and Shapiro among them—see, e.g., Stiles, Shapiro, & Elliott, 1986) have shown that such an assumption is simplistic and misleading. Clinical experience suggests that a particular therapist intervention may be helpful to a given patient at one point but irrelevant or even detrimental to that same patient at another point (Rice & Greenberg, 1984, p. 10). Similarly, patients who are matched on a host of variables (e.g., level of pathology, intelligence, age, motivation, etc.) may respond in opposite ways to the identical interpretation because the patients have different needs and goals for therapy. Studies that simply count the frequencies of various interventions (e.g., interpretations, questions, clarifications) fail to appraise the meaning or appropriateness of the interventions for a particular patient (and that patient’s specific needs), and thus the therapeutic effectiveness of the interventions cannot be adequately assessed. To determine the effectiveness of a therapist intervention, one must as-

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sess how well the intervention addresses the specific problems, needs, and goals of the particular patient at any given point in the therapy.

In earlier articles, Stiles and Shapiro (1989; Stiles et al., 1986) came to similar conclusions regarding the futility of assessing interventions without taking into account how they fit a particular patient's needs. They noted, for example, that null correlations between interventions and outcome cannot be interpreted because researchers typically overlook variation in client requirements and therapist responsiveness to those requirements (Stiles & Shapiro, 1989; p. 533; see also Stiles, 1988). They noted that correlational designs are appropriate for process–outcome research in which therapist responsiveness to client requirements is taken into account. “However, such measures [of client requirements and therapist responsiveness] are difficult to construct and have rarely been used” (Stiles & Shapiro, 1989, p. 534). I certainly agree that this type of case-specific research is both difficult and very laborious. However, such research has been going on for some time (e.g., Crits-Christoph, Cooper, & Luborsky, 1988; Rice & Greenberg, 1984; Silberschatz & Curtis, 1993; Silberschatz, Curtis, & Fretter, 1986), and the results are pertinent both to testing theories of psychotherapy as well as to the practice of psychotherapy.

Case-Specific, Correlational Research

The Mount Zion Psychotherapy Research Group has been working for over 20 years to develop and refine measures of client requirements and therapist responsiveness (for a review of some of this work, see Silberschatz et al., 1988; Silberschatz, Curtis, Sampson, & Weiss, 1991). Our research is based on a theory developed by Weiss (1986), which holds that patients suffer from pathogenic beliefs and that therapist interventions are helpful only to the extent that they disconfirm a patient's specific pathogenic belief. We have shown that, on the basis of early therapy sessions, trained judges can reliably formulate a person's therapy goals and the unconscious pathogenic beliefs that impede attainment of goals (this roughly corresponds to the concept of client requirements); moreover, judges can reliably rate the extent to which any given intervention disconfirms these beliefs and facilitates goal attainment (therapist responsiveness). In our process research, we have used repeated-measures, single-case designs to assess the relationship between therapist responsiveness and within-session improvement. We have consistently found significant correlations between ratings of the degree to which the therapist disconfirms the patient's pathogenic beliefs and immediate shifts in patient therapeutic progress (Silberschatz & Curtis, 1993; Silberschatz et al., 1991). Our research shows that patients do have predictable responses to therapist interventions and that these responses are determined to a significant degree by the appropriateness or suitability of the therapist's behavior to the patient's particular problems and needs. When a therapist's interventions are in accord with the patient's goals for therapy and disconfirm the pathogenic beliefs that have inhibited the patient's progress toward attaining these goals, the patient will show signs of immediate improvement, which, in turn, appear to contribute to outcome (Silberschatz & Curtis, 1993).

The Mount Zion Psychotherapy Research Group has used correlational methods primarily for intensive, single-case process studies. Research from the Penn Psychotherapy Research Group illustrates how a case-specific approach can be applied to a process–outcome correlational design. In their 1988 study based on the Core Conflictual Relationship Theme method, Crits-Christoph and his colleagues developed a reliable, case-specific measure of the accuracy of therapist interpretations. In a sample of 43 patients, they found substantial correlations between this therapist measure and treatment outcome. They also noted that general measures—such as the degree to which the therapist focused on affect or addressed maladaptive behaviors—did not correlate with outcome.

The results of the Mount Zion and Penn Psychotherapy Research Groups show that the problem of trivial or inconsistent process–outcome correlations are due to imprecise, general measures rather than to any inherent limitations of correlational statistics. I believe that if Stiles and Shapiro had included a sensitive, case-specific measure of therapist responsiveness in their study, their results might have closely resembled those reported by the Penn Group. The only conclusion that can be drawn from the Stiles and Shapiro study is that simply counting the frequency of therapist interpretations, reflections, or questions is not predictive of anything. When researchers pay attention to the kinds of interpretations or reflective comments that a therapist makes and how meaningful these comments are to the patient, then correlational techniques are useful in process–outcome research. Moreover, if therapist responsiveness to a particular patient's needs is conceptualized as an “active ingredient,” then I can see no problem with concluding that the more of this ingredient delivered, the better the outcome will be.

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Received July 12, 1993
 Revision received October 5, 1993
 Accepted October 12, 1993 ■



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