The Scientific Study of Counseling and Psychotherapy

A Unificationist View

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ABSTRACT: Three propositions underlying a unificationist view of research in counseling and clinical psychology are tentatively offered: (a) Psychotherapy research is science; (b) psychotherapy research is part of a unified attempt to understand human behavior; and (c) all scientific tools are acceptable in the effort to understand the process of psychotherapy. These propositions advocate the integration of basic and applied research, theory, and practice and of laboratory-experimental and field-correlational methods, and offer potential answers to questions concerning the practical value of basic research, "factfinding" research, laboratory studies, theory, and technological research. Last, the unificationist view suggests that (a) fuller development of the theoretical side of psychological science and (b) the integration of theory with research and application are needed in the scientific study of counseling and psychotherapy.

Although psychologists have been investigating the process of counseling and psychotherapy for many years, a number of critical methodological issues remain unresolved: Should research in counseling and clinical psychology be directly relevant to psychotherapy? Are findings obtained in other fields of psychology—such as social or developmental psychology—relevant to psychotherapy? Can studies conducted in laboratory settings have any bearing on psychotherapy? Should correlational findings based on nonexperimental designs be taken seriously? Are subjective conclusions reached during the course of psychotherapy scientifically sound data? What is the role of theory in guiding psychotherapy research?

These complex issues undoubtedly arise from a number of interrelated sources. However, Kuhn's (1962) approach to science suggests that these issues remain unanswered because psychologists disagree about the goals of science, psychology, and clinical and counseling (or, more simply, psychotherapy) research. We lack a disciplinary matrix, or paradigm (Kuhn, 1970)—a shared set of fundamental beliefs, exemplars, and symbolic generalizations. Therefore, disagreements about what makes for good research and what should be done to advance the field are inevitable.

Kuhn's concept of paradigm suggests that one path to the resolution of the current methodological and epistemological debate requires a careful and open examination of psychology's undergirding, if implicit, paradigmatic assumptions. As a first step toward this goal, we wish to nominate three propositions about psychotherapy. research and science as candidates for psychology's paradigm. The three potential shared beliefs are: (a) Psychotherapy research is science; (b) psychotherapy research is part of a larger effort aimed at understanding human behavior; and (c) all scientific tools are acceptable in the drive to better understand the process of psychotherapy. Although we strive to defend these three statements, it must be stressed that—in the logical and rhetorical sense-they remain propositions: statements or arguments that can be accepted, doubted, or rejected. Thus, we admit from the outset that these statements must be treated as propositions (conjectures, suppositions, or assumptions), rather than as taken-for-granted givens, axioms, or truths. After examining these three propositions, a number of contemporary questions concerning research in psychotherapy are then raised, and possible answers suggested by the three propositions are offered. Again, the issues involved are complex and highly debatable, and so our proposition-based conclusions should be viewed as stimulating suggestions rather than solutions to long-debated questions. Last, the three propositions are used to derive possible guidelines for improving psychological research.

Three Propositions

Psychotherapy Research Is Science

Philosophers of science often note that basic science is not the same thing as applied science (e.g., Bunge, 1974; Ziman, 1974). For example, Bunge (1974) emphasized their divergent goals; he noted that systematic knowledge is the essential goal of basic researchers, whereas the applied scientist seeks information that will increase knowledge while also proving itself to be relevant to some particular problem. Bunge also proposed that research questions originate from different sources in basic and applied research. The basic researcher, according to Bunge, is interested in investigating some puzzle or problem that is suggested by theory. He or she asks "Let's compare 'what is' with 'what should be' to see if the theory is adequate." In applied science, the research may spring from practical

concerns as much as from theoretically relevant hypotheses. In essence, the applied researcher asks "Let's understand the nature of this problem so we can do something to resolve it."

Although similar distinctions between basic and applied research have also been noted in the psychological literature (e.g., Azrin, 1977; Bevan, 1980; Fishman & Neigher, 1982; Morell, 1979), our first proposition suggests that basic and applied research are more similar than different, for both are science rather than technology. Both accept the long-term goal of increasing knowledge and understanding. Both involve relating observations back to theoretical constructs that provide the framework for interpreting data and generating predictions. Both insist that the test of theory lies in objective, empirical methods rather than logical claims or subjective feelings. Both involve a striving for consensus among members of the discipline concerning acceptable, unacceptable, and to-be-evaluated explanations of empirical observations.

Our first proposition states that psychotherapy research, although characterized by both basic and applied concerns, is science rather than "technology," "social engineering," or "developmental research." Problems relevant to the therapeutic process are the initial source of research questions, but these applied concerns are ultimately placed into a theoretical context, and the longterm goal of such research includes testing the adequacy of assumptions and hypotheses that make up the theory. The theory is therefore not solely used to develop some product, such as a diagnostic instrument that can be sold for profit, an intake procedure that will satisfy the needs of some treatment agency, or a cost-effective structured training workshop. Rather, the theory is examined by gathering information relevant to predictions derived from that theory. Furthermore, the adequacy of the theory-and the value of any products or practical, useful information that are obtained through psychotherapy research-must be determined by methods recognized as acceptable by other researchers in the field. With technological research, the employer is sometimes the only regulator of methods and evaluator of conclusions. Finally, psychotherapy research involves a free exchange of information and findings among researchers in the hope of finding answers to key questions with psychotherapeutic relevance. The consumers of the products created by researchers are not just clients or employers, but other researchers as well.

Psychotherapy Research Is Part of a Larger Effort to Understand Human Behavior

Just as our first proposition argued for the scientific unity of basic and applied research, our second proposition recommends the unification of psychotherapy research

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Correspondence concerning this article should be addressed to Donelson R. Forsyth or Stanley R. Strong, Department of Psychology, 901 West Franklin Street, Virginia Commonwealth University, Richmond, VA 23284. and other branches of psychology. Although the unique characteristics of psychotherapeutic settings pose special problems for researchers, the unification perspective argues that psychotherapy researchers and investigators in other areas of psychology share the superordinate goal of increasing our understanding of human behavior.

In contrast to a unificationist viewpoint, other investigators have advocated a dualistic approach to psychotherapy research. Due to their circumscribed interest in (a) the psychotherapy process and/or (b) problems related to psychological adjustment and functioning, proponents of dualism suggest that psychotherapy is so unique that its processes cannot be explained using principles of human behavior derived from other branches of psychology. One proponent of this view stated that, "as counseling researchers we are interested in developing principles of human behavior only inasmuch as they tap principles of counseling" (Gelso, 1979, p. 14). According to this perspective. Gelso stated that investigators must keep "actual counseling in central focus" (p. 14) with methodologies that closely approximate ongoing psychotherapy. To the staunch dualist, basing explanations of psychotherapeutic processes on theoretical propositions drawn from other areas of psychology (or on conclusions drawn from studies specifically designed to test psychotherapy-relevant theories but conducted in nontherapy settings) is misguided (cf. Garfield, 1979, 1980; Gibbs, 1979; see Bandura, 1978, for a discussion of the dualistic approach).

In arguing against dualism, the second proposition emphasizes the shared goal of psychological scientists: to develop and test generalizable principles of human behavior. If these "laws" of behavior make reference to specific settings, then the inevitable changes in these settings that take place over time and across situations undermine the generalizability of the laws themselves. For example, a proposition such as "Black clients respond best when given tangible rewards rather than verbal rewards" may fade in importance when racial differences in socialization and socioeconomic status are erased in 30 years time. However, the more general the statement—for example, "The impact of verbal rewards as reinforcers is directly related to socioeconomic background" (Zigler & Kanzer, 1962)—the more likely the hypothesis will stand the test of time. Similarly, a proposition such as "Gestalt group therapy is more effective than sensitivity training" seems trivial in a time when few therapists use unstructured group methods, but a more lawlike statement such as "Groups with centralized rather than decentralized communication networks stimulate more rapid member change" is less temporally limited.

Because researchers should strive to explain clients' actions in terms of general statements that hold across many situations and times, findings obtained in other branches of psychology that bear on these general statements are necessarily relevant in evaluating the adequacy of these propositions. For example, if a therapist suggests that behavior modification represents an effective means of dealing with social skills deficits, she or he can buttress

this argument by drawing on supporting evidence for operant conditioning obtained in experimental research settings. If, however, basic researchers discovered that the law of effect does not hold for the acquisition of social behaviors, then this finding would warn the therapist that the behavior modification of social skills may fail. Evidence concerning the adequacy of a general principle of human behavior should be drawn from all available sources, including both basic research and applied research within and outside clinical and counseling psychology. As Merton (1949) noted long ago, applied researchers cannot afford to adopt a myopic, single-discipline focus because practical problems often involve variables that do not fall within the scope of any particular subfield of psychology. From this perspective, psychotherapy research must draw on the findings of other fields to be successful.

All Scientific Tools Are Acceptable in the Effort to Understand the Process of Psychotherapy

Homans emphasized the importance of empirical evidence when judging sciences. To Homans (1967), "When the test of truth of a relationship lies finally in the data themselves, and the data are not wholly manufacturedwhen nature, however stretched out on the rack, still has a chance to say 'no!'—then the subject is a science" (p. 4). This viewpoint, although a simplification of science, nonetheless underscores the importance of some type of data in scientific research. In addition, the proposition also suggests that—like eclectic therapists who integrate many theories of psychological functioning when interacting with clients-psychological scientists must also remain eclectic by drawing on findings generated in fields other than their own. That is, researchers should use any and all scientific means possible to gather information concerning the theoretical system under investigation. Whether experimental, correlational, field, laboratory, role-play, or analog, no opportunity to further our understanding of psychotherapy should be bypassed. As Hilgard (1971) noted, in order to "satisfy the criteria of 'good science'" the researcher "must cover the whole spectrum of basic and applied science by doing sound (and conclusive) work all along the line" (p. 4).

Implications

The three propositions form the foundation for what can be termed a *unificationist* view of psychological science. To the unificationist, researchers working in the many and varied subfields of psychology are united in their professional identity (they are all scientists), their goals (they seek to extend our understanding of behavior), and their empirical outlook (they all strive to collect data relevant to the research questions at hand). In consequence, unificationism (which is an admittedly prescriptive viewpoint arguing how psychology *should be*) advocates the integration and synthesis of theory and research dealing with psychological topics. The position also offers potential answers to the currently debated methodological issues in psychotherapy research examined below.

Applied Versus Basic Science

Glasser (1982) and Sommer (1982) each commented on the problematic consequences of separating applied and basic research. According to Glasser, as early as 1900 John Dewey recommended unificationism in the study of learning; that is, linking theory and educational practice with each pursuit stimulating the other. However, for many decades experimental learning theorists worked on their own questions in psychology departments, whereas educational researchers examined practical problems from positions in education programs. Glasser suggested that the slow progress of educational psychology stemmed from this artificial separation and recommended integration under the rubric "instructional psychology."

Sommer (1982) focused on basic research gone awry in his analysis of historical trends in Prisoner's Dilemma (PD) research. As he noted, the laboratory simulations became further and further removed from the original questions concerning bargaining and negotiation. In consequence, "PD research has tended to be drawn from previous PD research, thus creating a hermetic laboratory system without the validity checks and enrichment of experimental conditions that could come from the study of actual cases" (Sommer, 1982, p. 531). Sommer therefore stated that "a blending of laboratory and field methods rather than an exclusive preoccupation with either will be of most value to both psychological science and to society" (p. 531).

Supporting Glasser and Sommer, the unificationist view suggests that psychotherapy research should be as basic as it is applied. Basic research provides the initial evidence concerning theoretical propositions and hence represents the first hurdle that any explanation of human action must pass. The second hurdle, however, is the successful application of the theory to psychotherapy. As in medicine, basic research should be inextricably linked with applied research to guard against the limitations of each pursuit. If too applied, research can become theoretically simplistic, situationally restricted, and technologically oriented. In contrast, basic researchers sometimes develop elaborate theoretical conceptualizations that have little relationship to reality or lose sight of the social value of their findings. As Lewin (1951) stated long ago, psychologists can reach their goal of helping others only if applied researchers make use of theories and basic researchers develop theories that can be applied to important social problems.

Fact Finding

Science is based on the accumulation of evidence and fact, but such an accumulation is not the only goal of science. Facts are used to spin theoretical systems or support existing frameworks, but because of their mutability and situational specificity, facts are of little long-lasting value in science. Unfortunately, many psychotherapy researchers consider themselves to be finders of facts, striving to answer such questions as: What impact does extensive eye contact have on client behavior? Is therapist

effectiveness related to client race? Does therapy X work better than therapy Y? Is an elevated score on a certain subscale of the Minnesota Multiphasic Personality Inventory (MMPI) an indicator of psychopathology? Are therapists' religious values related to their clinical style? Although all raise important issues, such studies cannot advance our understanding of psychotherapy unless the obtained findings are relevant to transituational statements dealing with behavior. Specific facts-or, as in this case, empirical findings-are not themselves generalizable, but the hypotheses they either support or disconfirm are. For example, the investigator who finds that therapists who maintain eye contact 60% of the time are more effective than therapists who maintain eye contact 30% of the time may be tempted to tell practitioners to maintain a good deal of eye contact. Unfortunately, the specifics of the setting-the attractiveness of the therapists, the type of clients, the content of the therapists' statements during eye contact-all limit the generalizability of the "fact" that high eye contact makes counselors and clinicians more effective. If, however, the researcher had been studying a higher order theoretical proposition-such as (a) the greater the client's trust in the therapist, the more effective the therapy, (b) ceteris paribus, eye contact implies honesty and openness, and therefore (c) eye contact will create greater client-therapist trust and facilitate therapy—then the study has implications beyond the obtained data. In this case the researcher would be scientifically justified in suggesting that therapists establish a deep level of trust with clients and that this trust can be created by appropriate nonverbal behaviors.

Although the three propositions advocate the development of higher order hypotheses to guide and summarize research, the researcher must always remember Hempel's (1966) requirement of testability: "the statements constituting a scientific explanation must be capable of empirical test" (p. 49). Seeking broad, generalizable explanations of behavior is a laudable goal, but these explanations must not be so general that they are untestable or so empirically bound that they are merely accidental generalizations (Goodman, 1973). The investigator must therefore strike a balance between generality and specificity in his or her theoretical thinking. (For a philosophical discussion of the difference between generalizable, lawlike statements and accidental generalizations see Goodman's [1973] theory of "projectability.")

The Generalizability Quandary

The question "Do laboratory findings have any relevance for understanding 'real' behavior?" has been a topic of recent debate in many areas of psychology (e.g., Berkowitz & Donnerstein, 1982; Bronfenbrenner, 1977; Dipboye & Flanagan, 1978; Gelso, 1979; Gibbs, 1979; Harré & Secord, 1972; Herrnstein, 1977; Jenkins, 1974; McCall, 1977; McGuire, 1973; Mook, 1983; Rakover, 1980). In terms of application to psychotherapy research, several discussants have suggested that laboratory studies that simulate psychotherapy or examine only one particular aspect of the psychotheraputic setting in detail are only

tangentially relevant to clinical and counseling practices (e.g., Gibbs, 1979; Goldman, 1978). They suggest that the nature of clinical and counseling psychology requires field studies conducted in real therapy settings, with real clients and real therapists, and that only findings that can be easily generalized to real-life psychotherapy are data worth discussing.

Although the issues are complex and defy any simple solution, the second and third propositions of a unificationist position advocate an empirical eclecticism that is inconsistent with the wholesale rejection of any research method or theory. To elaborate, a unificationist approach argues that the generalizability question (a) should be settled empirically and (b) may be a moot issue from an epistemological perspective. Focusing first on the empiricism argument, the third assumption suggests that the context must be thought of as only one more variable or dimension that must be interpreted within the larger theoretical scheme. Kazdin (1978) stated,

Research in psychotherapy and behavior therapy can differ from clinical application of treatment along several dimensions such as the target problem, the clients and the manner in which they are recruited, the therapists, the selection treatment, the client's set, and the setting in which treatment is conducted. (p. 684)

However, Kazdin argued that increasing the "similarity of an investigation to the clinical situation . . . does not necessarily argue for greater generality of the results" (p. 684). In essence, the importance of the setting must be established empirically (Bass & Firestone, 1980; Berkowitz & Donnerstein, 1982; Flanagan & Dipboye, 1980).

Second, as Mook (1983) and Rakover (1980) have noted recently, many laboratory studies certainly involve highly artificial situations. However, they may still be relevant to practical problems if they examine theoretical generalizations that are relevant to these applied problems (Stone, 1984). For example, say a therapist is asked to choose between two therapies. The first, therapy X, has never been applied to a clinical population, but in over two dozen laboratory studies the theory has perfectly predicted behavior change. Therapy Y, in contrast, has never been tested in the laboratory, but in one study conducted with clients at a Veterans Administration hospital several of the curative factors emphasized in the approach were positively correlated with improvement. Which therapy should be used?

To many psychotherapists, therapy Y may seem to be the more appropriate choice because it was supported by field research. However, what if the therapist's clients are verbally skilled female teenagers, and the subjects in the study of therapy Y were World War II combat veterans with only limited verbal abilities? In contrast, what if the laboratory studies examined the effects of dietary factors on behavior and found that the behavior the therapist wished to increase could be reliably obtained by modifying the client's diet?

The generalizability of a theory from one situation to another depends more on the theory than on the results that support it. Although therapy Y was corroborated in a field setting, if its theoretical structure cannot explain what effect gender, age, and verbal skill have on the therapy outcome, then it does not generalize to the new situation. If, however, therapy X is based on a physiological explanation of behavior that applies to a wide range of individuals, then its generalizability is far greater. In sum, generalizability is determined more by the structure of the theory—its scope, specificity, and universality—than by location of the supporting research.

The Value of Theory

Implicit in all three propositions making up the unificationist view is the belief that science depends upon theory as much as it depends upon data. Although the role of theory in psychotherapy research and practice has been questioned by some (e.g., Rogers, 1973; see Sarason, 1981; Strupp, 1975; Wachtel, 1980), theory provides the organizing framework for conceptualizing problems, organizing knowledge, and suggesting solutions. Supporting this view, when decision makers in mental health fields (federal and state administrators of psychological services programs) were asked "What makes research useful?" (Weiss & Weiss, 1981), the most frequently mentioned attribute was the theoretical conceptualization of the problem.

This implication contrasts sharply with the recommendation to avoid theory because it biases the researcher's observations. In contrast to this argument, a protheory perspective suggests that research is always guided by some assumptions and that theories are the means by which these assumptions can be clearly articulated and explicitly determined. According to Jacob (1977),

The scientific process does not consist simply in observing, in collecting data, and in deducing from them a theory. One can watch an object for years and never produce any observation of scientific interest. To produce a valuable observation, one has first to have an idea of what to observe, a preconception of what is possible. (p. 1161)

These theoretical propositions need not be the formal, elegant models once prescribed by deductive-nomological approaches to science (e.g., Hempel, 1966), but at minimum some theoretical ideas are required to structure our knowledge and provide direction for future efforts. According to Sidman (1960), "observations must be brought into some kind of order before they can be said to contribute to a science of behavior" (p. 12).

The Value of Information Obtained During Practice

Although we hold that basic and applied research share scientific unity, wholly problem-solving activities are best described as technology rather than science. Even though the distinction is not always clear, attempts to solve a specific problem in a specific situation without concern for increasing our general understanding of human behavior are more akin to technological research or social engineering than to science. Technological researchers may borrow the theories of science to guide their problem solving, but their efforts are not designed to test gener-

alizable propositions derived from these theories. Technological research may generate information that is useful in science—such as providing an indication of what variables are important in a given setting, stimulating research, or refining methodological tools and innovations—but the research is so problem and situation specific that generalizations to other settings are limited.

Another distinction between science and technology has been noted by Ziman (1974). Although he prefaced his analysis by stating that the two areas are "now so intimately mingled that the distinction can become rather pedantic" (p. 24), he pointed out that scientists strive for a "consensus of rational opinion over the widest possible field" (p. 11). Technology, Ziman continued, does not attempt to gain this consensus, for it is focused on solving a specific problem; it provides the "means to do a definite job—bridge this river, cure this disease, make better beer" (p. 23). In consequence, the technological researcher owes primary responsibility to his or her employer rather than peers.

Although the actual practice of psychotherapy may involve a "scientific attitude," it is not science per se. However, the close correspondence between science and practice cannot be overstated. For example, although a good theory of psychological adjustment may state that increases in factors A, B, and C will benefit clients with D, E, and F characteristics, technological research may be needed to determine the optimal levels of A, B, and C, techniques to use in varying these factors, and ways to assess D, E, and F. Few theories in psychology are so precise that they yield mathematical statements describing the magnitude of important variables, and so practitioners must be prepared to turn to situation-specific and client-specific research to obtain the precision they require.

Beyond the Three Propositions

The three propositions suggest that the scientific study of psychotherapy cannot succeed without an interweaving of theory and research. The widespread outcry over the apparent sterility and lack of relevance of research to practice (Goldman, 1976; 1978) as well as the current controversy over the generalizability of research results (Gelso, 1979; Osipow, Walsh, & Tosi, 1980; Strong, 1971) are inevitable consequences of inadequate attention to the role of theory in scientific endeavors. Graduate training in clinical and counseling psychology focuses on the technology of collecting and analyzing data, with a special emphasis on applying findings to therapy, whereas the vital and creative steps of generating transituational propositions from observed relationships are bypassed. The result is the reduction of the scientific study of psychotherapy to technological inquiry. Technicians are being trained rather than scientists, and the products of their situationally limited work are of little value to practitioners.

A solution to these limitations of training and research lies in more fully developing the theoretical side of psychological science and integrating research and theory. Although the logic and methods of science can be described in many ways (e.g., Hempel, 1966; Lakatos & Musgrave, 1970; Manicas & Secord, 1983; Platt, 1964; Popper, 1959), descriptions of the scientific inference process often make reference to the dual importance of theory construction and theory testing. Unfortunately, researchers tend to be so preoccupied with theory testing that they overlook the critical role played by theory construction. Granted, investigators are highly proficient in finding hypotheses to test, operationalizing concepts in the specific settings examined in the study, determining the statistical significance of the results, and even relating the evidence back to the initial hypotheses, but too often researchers fail to go the additional steps needed to develop strong, applicable theoretical systems. In consequence, very few theories capable of explaining psychotherapeutic processes possess many of the characteristics of good theories: simplicity, interpretability, usefulness, generality, testability, disconfirmability, and logical internal consistency.

As to integrating theory and research, how often do researchers conduct research programs that facilitate "strong inference" (Platt, 1964, p. 347) by devising alternative hypotheses, pitting rival hypotheses against one another in carefully designed studies, and refining the theory through the development of subhypotheses? Likewise, how many researchers follow the scientific steps recommended by Popper's "sophisticated methodological falsifictionism" (Lakatos & Musgrave, 1970; Popper, 1959) approach to science by focusing more on unexpected, disconfirming findings rather than on confirming evidence? Although we are often more gratified by supporting rather than disconfirming evidence, failures to corroborate hypotheses invite us to abandon our preconceived notions and creatively reconstruct our perspective to better account for observed relationships. Popper and other philosophers of science suggest that the greatest advances in science occur when researchers focus on unexpected irregularities in their data, seemingly trivial observations, and even subjective impressions that are inconsistent with the best theories they can construct. From these disconfirmations the scientist artfully reconstructs a broader, more all-encompasing system that not only accounts for findings that supported the previous theory but also explains the newly obtained disconfirming data. Granted, such research practices may require creativity, the abandonment of firmly held beliefs, a propensity toward risk taking, speculation, and commitment to goals of research, but the growth of knowledge requires theoretical refinements and revolutions as much as it requires empiricism.

At core, the major roadblock to advancement in the scientific study of psychotherapy is inadequate attention to discovery (McGuire, 1973; Wachtel, 1980). Concern for directly applicable research has short-circuited the scientific process and inhibited rather than encouraged the creative use of evidence from both field and laboratory settings. According to Stone (1984), this obsession with "relevance" has led to a "knee-jerk mentality" in research consumers who "automatically dismiss meaningful re-

search solely on artificiality grounds" (p. 108). Rather than focusing exclusively on application, we should also take care to generate theoretical statements that link together therapeutic and interpersonal variables. Instead of being concerned about how similar a specific time/space event of a study is to a specific time/space event of a study is to a specific time/space event of therapy, we should creatively reconstruct how the relations among events differ in various settings and induce transituational statements about these differences. Rather than limiting our focus to only therapeutic settings, we should generate theories of such wide scope that they apply to a host of interpersonal situations.

Psychotherapy will not be better understood by overvaluing generalizability of settings, but by the energetic application of the scientific model to generate a theory of biological, social, interpersonal, and psychological relationships that specifies how the dynamics of therapeutic and nontherapeutic settings differ (Sarason, 1981). In addition, increased effectiveness of psychotherapy will not come from direct application of research results to practice, but from the application of theory to practice (Shakow, 1976; Strupp, 1975). Events generated for research purposes are applications of theories to a specific time and place, just as psychotherapy is an application of a theory to a particular client with a particular therapist in a specific treatment location. Theories that explain psychotherapeutic outcomes must, in many ways, be capable of explaining outcomes in many other types of interpersonal settings.

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