
Traditional Research and Psychotherapy Practice



Donald E. Polkinghorne

University of Southern California

Practitioners of psychotherapy hold different assumptions about the predictability and constancy of human actions than those required by the inferential logic employed in traditional research. Psychotherapy requires the use of judgment by therapists that goes beyond the direct application of generalized knowledge. Judgment is sensitive to the particular, contextual, and changing situation characteristic of therapy practice. Therapists' decisions about what to do and say are informed by, but go beyond, that which is available in their knowledge bases. Therapists' knowledge bases include their own, as well as vicarious, experiences. Therapists can parse traditional research into descriptive and inferential components, and by treating the descriptive component as vicarious experiences, they can incorporate it into their knowledge base. © 1999 John Wiley & Sons, Inc. *J Clin Psychol* 55: 1429–1440, 1999.

Practitioners expect from traditional psychotherapy research that it will help them make better decisions in their work with clients. This article is a reflection on how traditional research studies can be appropriated by clinicians so that the traditional studies can advance the effectiveness of what practitioners do in actual in-session psychotherapeutic work.

Before addressing the issue of the use of traditional research studies by psychotherapists, it is necessary to specify what kind of activity is meant in this article by the term *psychotherapy*. I distinguish psychotherapy as it has been traditionally practiced and other types of psychologically informed healing therapies (e.g., pharmacology and empirically supported therapies). Traditionally, psychotherapy has been concerned with deepening the client's self-understanding as the means for overcoming distressing symptoms. Under the press of the current method of funding mental-health care, it is suggested by some that psychologists move away from the traditional approach to psychotherapy. Instead, it is recommended that psychologists in the future treat client distress by administering

Correspondence concerning this article should be addressed to Donald E. Polkinghorne, Division of Counseling and Educational Psychology, WPH 5036, University of Southern California, University Park, Los Angeles, CA 90089; e-mail: polkingh@mizar.usc.edu.

drugs or a set of manualized validated psychological techniques (Crits-Christoph, Frank, Chambless, Brody, & Karp, 1995).

Whether psychologists should or will be permitted to employ pharmacological interventions is still a matter of debate. However, some psychologists have advocated that the treatment of choice for psychological distress should be the empirically supported manualized treatments. Symptom removal is held to result from the direct application of a set of techniques that research has shown to be effective for removing a specific distress (Chambless et al., 1996). In this mode of treatment, the traditional psychotherapeutic concern with client self-understanding is by passed. Woolfolk (1998) views the use of manualized treatments as a move away from traditional psychotherapy to a *psychotechnology*. Although manual-based treatment is often referred to as a type of psychotherapy, I believe its assumptions and practices are different enough from those of traditional psychotherapy that it should be seen as a different kind of intervention. Thus, in this article, the term *psychotherapy* will be used in a narrow sense to refer only to the traditional type of practice.

The purpose of the traditional practice of psychotherapy is the clarification and deepening of clients' understanding of their selves. Through increases in self-understanding, clients are empowered to gain control of their lives so that they more readily may advance their purposes and achieve their goals. Because symptoms are held to be a function of distorted and defensive misunderstandings of one's self, as self-understanding increases, clients have less need to maintain the thoughts and behaviors that produce their distressing symptoms. Psychotherapy works by clarifying, explicating, and broadening the client's understanding of the conflicts, concerns, and choices in their lives.

Knowledge and the Practice of Psychotherapy

Psychotherapy makes different assumptions about the constancy of human activity than does traditional research. Aristotle's three-fold distinction of spheres of human activity—*theorizing, practicing, and producing artifacts*—is still a useful way to identify the kind of activity involved in doing psychotherapy. Theorizing is the domain of rigorous science and is concerned with demonstrations that yield certain knowledge. Practicing (*praxis*) is the domain of human action and is concerned with performances and accomplishments. Producing artifacts is the domain of making objects, such as pottery bowls and objects of art. Within this three-fold distinction, psychotherapy falls under the category of a practice. It is an activity in which therapists are engaged in dialogue with clients.

Performance in each of the three kinds of activity is governed by a specific kind of thinking. Theorizing uses the thought tools of epistemic knowing, such as formal logic and mathematics (along with observations). Practicing employs a type of thinking called practical understanding (*phronesis*) to guide actions toward intended personal goals. Producing artifacts uses a kind of thinking related to the design and construction of objects. Because decisions made in the practice of psychotherapy are appropriately the result of practical thinking, research findings need to be in a form that can be employed by practical thinking.

The achievement of authentic results in each of the three spheres of human activity depends on using the kind of thinking suitable to its achievement. In recent years, each of these kinds of thinking is under the threat of a universal technification of all thought and action. Heidegger (1967/1977) described technification as the ascendancy of values favoring scientific, bureaucratic, and technological solutions to human problems. He thought that the appearance of these values in Western culture was a threat to the unique possibilities inherent in human beings. When technification is substituted for epistemic think-

ing in theorizing, theoretical and research thinking is replaced by a simple set of algorithmic rules. When technification is substituted for practical thinking in choosing practical actions, practical thinking is exchanged for a set of social engineering instructions. When technification is used instead of design thinking to produce objects, the artistic and creative dimension of object production is lost.

Judgment and the Therapeutic Situation

Practical thinking is necessary to achieve a desired purpose in situations that are dynamic and fluid. In situations of this type, achievement of goals is not amenable to following simply a blueprint that lays out in advance what to do and the order in which it is to be done. Reaching goals in dynamic situations requires continuous judgments about which actions will move the therapeutic process forward. Human judgment has been the subject of extensive study in the last several decades. Tversky and Kahneman (1974) have spearheaded these studies. Several edited collections about human judgment have appeared (Arkes & Hammond, 1986; Kahneman, Slovic, & Tversky, 1982; Turk & Salovey, 1988;), as well as a texts about the psychology of judgment and decision making (Garb, 1998; Plous, 1993). The cumulative thrust of these studies on judgment is that, compared to statistical predictions, humans are poor and even irrational decision-makers. However, Lopes (1991), who was himself a participant in the research program studying human judgment, maintains that the logic of the original experiments on judgment performed by Kahneman and coworkers was ambiguous and the implications of the experiments misrepresented. The review of the human judgment versus statistical literature is beyond the scope of this article. My position concurs with Holt's (1988) observation that "judgment is an inevitable as well as desirable and necessary, albeit humanly frail, process, hence one that should be studied and improved, not merely condemned for its errors" (p. 233).

The Tversky and Kahneman studies investigated "formal" or "academic" thinking (Scribner, 1986). Other scholars (Chaiklin & Lave, 1993; Lave, 1988; Midgley, 1989; Sternberg, 1990; Sternberg & Wagner, 1986) have distinguished between "formal" thinking and practical or situated thinking. They offer a counter balance to view that correct thinking should resemble the processes of formal logic and mathematics. Therapists function in situations of uncertainty, and their judgments are directly related to the actions they undertake. Thus, studies of practical thinking are more relevant to therapists' decision making than Tversky's laboratory studies comparing the results of human thinking to statistical predictions. The scholarly interest in practical knowledge is reshaping the understanding of therapeutic judgment. Instead of focusing on judgments of diagnosis, studies of practical thinking are aimed at understanding judgment as it is expressed throughout the therapeutic course.

In achieving psychotherapeutic goals, therapists have to consider the changing nuances of a dynamic situation. In such a situation, practical thinking does not result in a certainty that a decision will be effective; instead it produces a loose anticipation about what effect an action might engender. Whether a chosen practical action brings about the consequence intended is not known until the client actually responds. Clinical judgments in the practice of psychotherapy are complicated by changes that occur during the development of a therapeutic encounter. Events outside the therapy setting, which occur in clients' families or jobs, affect the kind of responses therapists' actions bring about. In addition, the therapeutic situation has a historical dimension in which earlier acts and responses change the effect of the therapist's future actions. Clients change during the course of therapy as they deepen their connection with therapists and as they gain more self-

understanding. Thus, practical thinking needs to take into account how the therapeutic situation has changed over time and to include this knowledge in deciding what action is likely to move the therapy forward at any given point.

The therapist's knowledge reservoir, which contributes to judgments about what to do, is itself constantly being revised through the addition of knowledge about how clients responded to prior therapists' actions. Even if the responses move the therapeutic process away from its goal, the therapist has gained knowledge of what action did not work at that time in that situation. Thus, not only is the client undergoing changes throughout the therapeutic process, but the therapist's understanding of what to do is also undergoing change.

Practical thinking normally operates beneath the level of cognitive awareness (Lakoff & Johnson, 1999). It is an incredibly complex form of thought and works without noticeable effort. For example, what therapists say and do in response to clients' statements is usually not the product of conscious deliberation; it emanates, instead, directly from the understanding of the situation generated by practical understanding. Expert practitioners often are not able to explain how they decided what to do and report that their actions seemed to have occurred spontaneously (Benner, 1984). Generally, the process of practical thinking remains unnoticed if the activity they produce is successful in moving toward the therapeutic goal. When, however, practical thinking is not producing successful actions, some of its operations can be brought into awareness and reflected on (Schön, 1983). In reflection, the operations of practical thinking become more deliberate and methodical.

Within the fluid and dynamic therapeutic process, the characteristics of practical-thinking issues in judgments are provisional and exploratory rather than definitive and conclusive. Decisions are tentative and need to be altered or abandoned depending on the effects they produce. Practice activity proceeds through trial and error, constantly making adjustments that direct the progress toward a therapeutic goal. However, the therapist's decisions about what actions to undertake are not simply random productions; they are dependent on and influenced by the therapist's accumulated knowledge and understanding. Therapists consider what has worked in similar situations and weigh the possibility that it might be successful in the present situation. Expertise in clinical judgment is related to how often a therapist's conjectures about what to do leads to the desired result.

The Knowledge Base for Practical Thinking

A therapist's knowledge base from which his or her practical thinking draws information is multiple, intricate, and changing. Gendlin (1997) describes the organization of these linkages as one that exceeds "patterns (forms, concepts, definitions, categories, distinctions, rules, propositions, etc.)" (p. 3). The knowledge drawn on by therapists is not separate from their general knowledge about how to get along in the world and how to relate to others. Although the therapist's understanding of how to perform in a psychotherapeutic setting is denser than that of persons without training and experience in psychotherapy, it is still intricately interwoven with the rest of their knowledge. A therapist's knowledge base operates as a background that informs and shapes the conclusions of practical thinking about what to do during a therapeutic interchange.

The sources of background or practical knowledge for therapists are multiple and include information and conceptual networks transmitted by culture, experiential learning, and reflective insights. Therapists gather knowledge from their general culture, as well as from the specific culture of psychotherapy. Training in psychotherapy involves

acculturation into and the internalization of the values, wisdom, and know how that have been accumulated throughout the historical development of psychotherapeutic practice. The psychotherapeutic culture is transmitted through the study of selected texts and articles, through teachers, and through apprenticeships. The therapeutic culture, however, internally is not consistent and transmits diverse understandings of how to perform successful therapy. As therapists' gain more of their own experiences, these experiences come to dominate over the eternal sources of knowledge (Skovholt & Rønnestad, 1992).

As personal therapeutic experiences accumulate, therapists' knowledge bases become more divergent. Before therapists gain their own experiences, the content of their knowledge base is shared, to some extent, by other beginning therapists. However, as therapists add their own experiences to the mix in their knowledge base, it becomes more individualized and unique. Experiential knowledge sometimes conflicts with knowledge passed on by the psychotherapeutic culture. When parts of the knowledge base become too inconsistent with other parts, the base undergoes a restructuring to reduce its internal discrepancies. Connections once thought to hold between an intervention and client response are abandoned and replaced by different linkages among parts of the knowledge base.

Therapists' knowledge bases are not static but are in a continual flux. New information is being incorporated from life experiences, texts, and discussions with colleagues. Old information is moved out as it is found ineffective for determining successful actions. The production, development, and refinement of background understanding are consequences of the human capacity to learn. Therapists continue to modify their culturally transmitted knowledge through reading research and clinical texts, attending conferences, etc., through their own experiences with clients, and through reflection on the relationships among various elements of their knowledge basis.

How Knowledge Informs Practice

The practical knowledge base of a therapist contributes in two ways to his or her understanding of a therapeutic situation and to the judgments about what to do.

1. It brings order to therapists' experiential flux by providing organizational schemes. These schemes serve to recognize an experienced happening as a particular kind by noting that it can be understood as an instance of a category. The knowledge base is used to recognize a therapeutic situation as an instance of a general kind. The capacity to interpret an experience as a particular kind assists therapists' judgment by bringing to the fore patterns within the flow of experience. The knowledge base acts as a lens that converts the fuzziness of experience into various sharply focused categories. By showing an experience as an instance of a certain kind, categorization indicates that actions that have been successful in other instances of that kind are likely to be successful in the present instance. However, when background knowledge operates to bring into focus certain aspects of a situation, it causes other aspects to recede into the background and to become marginalized. For example, drawing into the foreground those aspects of a situation that are determinative of a DSM diagnostic category can place other aspects of a situation out of view.
2. Therapists' knowledge bases make remembered experiences available to their practical thinking. The reservoir of remembered experiences is not limited to a therapist's own work, but also includes experiences gained vicariously from the clinical literature, discussions with colleagues, and traditional research reports. Recollections provide a therapist with an array of experiences that have been tried

in the past in similar situations, as well as information about which interventions worked and which did not work. Remembrances inform therapists about possible strategies and actions that can be undertaken in a present therapeutic situation. In addition, the diversity within the remembered experiences serves to curb the influence of organizing schemes by presenting experiences as only similar to and not the same as other instances of their identified kind.

Therapeutic judgment makes use of both functions of the practical knowledge base. However, a knowledge base does not provide sufficient understanding of a therapeutic situation to determine which action will be effective. The complexity and uniqueness of therapeutic situations outstrips the understanding available from background knowledge. The therapist is led only so far by practical knowledge and must venture beyond it into areas of incertitude. The practical knowledge base does not determine what is to be done in a specific situation but provides the background understanding within which therapists exercise judgment about how to act.

A therapist's body of practical knowledge can be viewed as an *apperceptive mass*, a phrase used by Herbart (see Dunkel, 1967). Herbart, who wrote in the early 19th century, understood *apperception* as a cognitive function through which various divergent ideas are assimilated and *mass* as the total of organizing concepts held by a person. Herbart held that a person's apperceptive mass was not static, but that it could be increased through education. As a person's apperceptive mass increased, awareness of subtle distinctions among objects once experienced as if they were identical is increased; for example, two people watching a football game—one who has little knowledge about football (a small apperceptive mass) and the other who studied to be a coach (a large apperceptive mass). The second one has a vast reservoir of distinguishing concepts about the intricacies of the football game. The experiences of the two will differ considerably. The first person will experience only rudiments of players moving up and down the field, while the second will experience nuances of differences in the execution of blocking, tackling, running, and passing. The second person's experience, because of its more finely grained experiences, will be able to appreciate the strategic decisions coaches make and guess what might be the opponent's response to certain plays.

Herbart proposed that the aim of education should be to rework and increase a person's given apperceptive mass. The purpose of the psychotherapist's training can be conceived in the development of an apperceptive mass that is sufficiently dense in the area of therapy to understand the shades of differences among therapeutic situations. Dense background knowledge of psychotherapy grants therapists experiences that are more nuanced and that include more finely tuned distinctions. Practical thinking, then, can make use of these just-noticeable differences in therapy situations to make decisions that are more likely to succeed in a particular situation. Therapists' own experiences contribute to increases in their apperceptive mass. Clients who do not quite fit into their available background categories can be the source of new categories.

Psychotherapy is a practicing activity in which therapists judge what to do by using what is available in their practice knowledge. The denser and broader their background knowledge, the more likely they are to make successful therapeutic decisions. It should be noted in passing that, even with the assistance of a dense practical knowledge, therapists differ in their ability to make successful judgments. Nevertheless, the ongoing increase in the conceptual and experiential features of one's practical knowledge about therapeutic work should be the aim of therapists. Although the primary source for a therapist's knowledge is his or her own experience, the next section will address how traditional research reports can provide an additional rich source of experientially gained knowledge. Tradi-

tional research reports can be interpreted in such a way that they can expand one's knowledge base beyond the limitation of personal experiences. However, in order to be incorporated in a therapeutic knowledge base, they need to be translated from statements about general knowledge into descriptions of particular therapeutic experiences. When translated into descriptions, research reports can be incorporated in and integrated with the rest of a therapist's knowledge base.

The Practical Use of Traditional Research

Two aspects of a therapist's knowledge base are networks of organizing concepts and collections of therapeutic experiences. Traditional research reports can contribute to both of these aspects. Variables described in research reports can be abstracted out to provide new organizing concepts that categorize therapeutic situations. Descriptions of what responses a study's actual participants made can be lifted out of research reports to provide therapists with additional experiential examples. In this way, traditional research reports can expand a therapist's collection of therapeutic experiences. The discussion in this article is limited to the use of traditional research reports to supplement a therapist's collection of his or her own experiences.

Traditional Research Reports as a Source of Vicarious Therapeutic Experiences

In many surveys, psychotherapists have reported that they make little use of traditional psychotherapy research in making judgments about what to do in psychotherapy situations. Instead, they rely on their own experiences, discussions with colleagues, and texts that report experiences of other clinicians. A reason for neglecting the vast collection of traditional research articles is that it includes assumptions about human behavior that are at odds with the assumptions of practitioners. However, by disconnecting the generalized knowledge claims from the reports of what was actually done in the study, the reports can be translated into descriptions of an intervention with a particular group of people at a specific time. By translating research reports into historical descriptions, they can be incorporated into and broaden the practical knowledge base of therapists.

The assumptions underlying traditional psychotherapy research have been adapted from the natural sciences. The properties of natural objects remain consistent and stable across contexts and over time. Because of their stability, knowledge of how objects were affected by certain conditions in the past provides knowledge of how they will be affected in the future under the same conditions. Traditional research presumes that there is sufficient stability and consistency across persons, situations, and time that one can infer how people, in general, will respond to the same type of intervention in the future. Thus, by determining how a representative selection of people has responded in the past to an intervention, one can know how other people will respond in the future.

It is this notion that traditional psychotherapy research can predict how people will respond to an intervention that lies beneath the distortion that psychotherapy is an applied technology rather than a practice. If one already knows how people, on the average, will respond to therapists' actions to achieve the desired response, one simply has to carry out the identified actions. What makes psychotherapy a practice rather than a technology is the uncertainty of how a particular client will respond to a therapist's actions (Holt, 1988). Because the actions people choose to carry out are influenced by their personal histories, their present contexts, and their imagined futures, therapists' decisions about what to do have to wait until clients respond to the prior actions.

The view that assumptions, which hold in the physical realm, do not necessarily hold for the human realm is based on the notion of emergence (Margolis, 1986). Emergence refers to the idea that as organizational complexity is increased in entities, it is possible for new properties to appear which were not present in the less-complex forms (Miller, 1978). In many cases, the emerged novel and innovative characteristics could not have been predicted from knowledge of the less-complex levels. Thus, explanations of the actions of the more-complex levels cannot be reduced to the characteristics of the less-complex levels. In discussions of the unique attributes of human beings, distinctions are often made among three supra-levels of organization—the physical realm, the biological realm, and the human realm.

In the physical realm, because of the spatial and temporal consistency of its relationships, it is possible to develop knowledge statements that are general and universal. One can have foreknowledge of what the relationship will be in the future (prediction), as well as knowledge of what they had been in the past (explanation).

In the biological realm, entities possess the emerged attributes of context sensitivity and developmental change. These entities need to be studied as systemic wholes rather than analyzed as isolated parts. Study of biological entities requires researchers to focus their attention on the relationships that hold within a systemic structure. Characteristics of a biological entity are influenced by and, in turn, influence the environmental system in which it is located. Because of the variability of internal and external environmental conditions, biological systems of the same kind do not necessarily respond in the same way. Thus, knowledge of responses in the biological realm cannot be universal (i.e., how each system will respond), but must be distributive (i.e., descriptions of the range and average of group responses).

Biological systems are not static; they undergo, over time, developmental changes in their structural characteristics. The rate and type of change a system undergoes are the result of genetic architecture and environmental interactions. Because of the changing nature of biological systems, they do not respond to the same stimulus in the same way throughout their development. Thus, two judges observing the same biological system responding to the same stimuli at different times may not observe the same response. Descriptions of biological systems require that statements differ from those employed to represent aspects of the physical realm. Knowledge statements about the biological realm need to recognize that variations in response occur throughout the developmental histories of biological systems. They also need to acknowledge that the studies based on aggregates do not show how an individual member of the aggregate will respond.

The emerged properties of the human realm include the capacity for conceptual thought and a discontinuity between environmental stimuli and bodily response. The idea that human beings possess emerged qualities has been recognized in writings that have been produced throughout the history of clinical practice of psychotherapy (Reisman, 1991). Because people's responses are based on their understanding of the meaning situations have for them, their behavior varies as their interpretations of situations change. Humans can design abstract strategies for achieving goals and anticipate the effect of a possible action and can judge whether to go through with the proposed action. They can conceptualize themselves as unique, continuous beings different from all others and as one who is the author of thoughts and director of actions. Humans have created a linguistic environment in which sounds and marks stand for ideas. They use this linguistic environment to manipulate and communicate their ideas. Because of the language environment, they can be influenced by the thoughts of others, as well as by the actions of others. Language allows them to be affected by cultural traditions. People develop typical ways of responding (traits and habits) that appear consistent over time (McCrae, 1992).

Nevertheless, people may not continue to act as they have in the past; instead, they may change their behavior as they alter their interpretation of conditions and contexts (Cantor & Zirkel, 1990). The emerged capacities of humans make the kind of predictions that are appropriate for the physical sciences inappropriate for understanding the actions of human beings.

Transforming Traditional Research Using Therapeutic Assumptions

The practice of psychotherapy takes place in the human realm. It is informed by the assumptions that humans have the capacity to take charge of their lives and the capacity to choose how they will act. Implicit in these assumptions is that the actions humans will carry out in a particular situation are uncertain (Kitchener & Brenner, 1990). This is the kind of situation in which decisions about how to act need to be informed by practical judgment rather than the direct application of the generalized knowledge produced by traditional research. In order that knowledge claims reported in traditional research publications be of use to therapists, they have to be transformed into a form of practical knowledge.

The transformation of traditional research is brought about by parsing it into its two components: (a) a descriptive component, and (b) an inferential component. The descriptive component consists of the description of the ways the actual participants in a study responded to an intervention. The inferential component makes claims about how people who were not participants in the research would respond.

To enlarge its knowledge claims from a sample to a population, traditional research employs the use of inferential statistical logic. To support their inferentially generated claims, traditional research makes two assumptions about human behavior: (a) there is a similarity in responses to interventions across individuals, and (b) there is a consistency of responsiveness over time within individuals. Psychotherapists, in their work with clients, operate with a different set of beliefs; namely, that different people can respond differently in the same situation and the same person, over time, can respond differently in similar situations.

Belief in the stability and consistency of human responses, when coupled with probability theory and the notion of normal distribution, leads to two traditional research claims: (a) one can know what holds for populations on the bases of samples, and (b) one can know what will hold in the future for people on the bases of examinations of past actions. To translate traditional research write ups into usable reports of therapeutic experiences, therapists have to sift through traditional research reports to find the claims to know something about people in general. Instead, the reports need to be read as descriptions about how people varied in a temporally and spatially located situation.

The assumption of traditional research about the distribution of human responses is drawn from the properties of biological aggregates. Biological properties of humans, such as weight, are distributed across populations, either normally or with skewing, and knowledge of the properties of a sample aggregate can be used to infer knowledge of the population aggregate. However, people's actions flow from the meanings they hold about themselves and about the situations they are in, and they are not necessarily distributed in the same way that biological characteristics are. Variation in meanings of situations is primarily a product of people's personal and social experiential histories. The imposition of aggregate properties on a collection of information about individual actions constrains findings by treating the individual actions as if they were merely distributed variations of a general type of response. Thus, therapists need to strip traditional research of its infer-

ential claims about populations, while at the same time acknowledging the experiential usefulness of the descriptions contained in traditional research reports.

The findings produced by traditional psychotherapy research do not include temporal limits. They imply that what was found out about human responses to a situation at the time the research was conducted will continue to hold for future responses in similar situations. This inference about future responses is not based (as are the generalization of findings described above) on assumptions about probability and normal distribution but on an assumption about the stability of human behavior over time. The practice of psychotherapy, however, is based on the assumption that people can and do change from how they have acted in the past. Thus, the incorporation of traditional research findings into therapists' experiential knowledge base requires that the findings be understood as descriptions of historical events.

When traditional research reports are interpreted as descriptions of historical events, they show up as depictions of how members of an examined group responded to an intervention at the time and place and with whom the research was carried out. Inferential claims about the continuity of the response in future situations should be suspended when translating traditional research reports into an experiential format. In translation, the report provides a description of what had happened, not claims about what will happen. In reformatting traditional research reports for inclusion in a practice knowledge base, the idea that the people in a study *might* respond differently in the future to a similar situation is attached. Therapists hold that human behavior is flexible and sensitive to context. Because people themselves undergo changes, their understanding of the same kind of situation varies over time. People's changing understanding is influenced by changes in their bodies (e.g., their biological development), changes in their self-understanding, changes in their social context, and changes in the meaning that was attributed to past life events and happenings. The changes in context lead to changes in responses to similar situations. When the stability and constancy assumptions are removed from traditional research reports, what remains is a description of a group of participants to a historically situated intervention. When research reports are translated into historical descriptions, their findings can become important additions to the experiential reservoir from which therapists draw in deciding what to do in an ongoing therapeutic dialogue.

Parsing traditional research studies to retain their descriptive statements while relinquishing their inferential statements makes them more consistent with therapists' beliefs that humans are agents who are capable of willful choices and innovative responses to environmental cues. In transforming the reports, therapists give up the assumed assurance that a particular action will produce the desired results with a particular client at a particular time. They gain access to a repository of an extensive number of examples of therapeutic interventions. These research-generated examples can supplement the limited number of examples produced in the therapist's own experiences. As research-reported descriptions are taken in and integrated into therapists' knowledge bases, the difference between their own experiences and the research-reported experiences begins to dissolve. The reported examples come to function in a way that is similar to the way a therapist's own experiences function.

In summary, psychotherapy assumes that human behavior is not fully determined by past events nor present environmental presses. People have the capacity to gain control over their behavior and to choose to act in ways that accomplish their personal goals. Because of the relative openness in the therapy setting, there is looseness in the link between the therapist's actions and client responses. It is the flexibility in the dynamic interaction between therapist and client that requires the use of practical judgment by therapists. Therapists are without assurances that if they make a particular intervention

clients will necessarily respond in an expected manner. Thus, psychotherapy cannot be reduced to technical application of generalized rules. The need for therapists to make judgments about what to do in situations that contain uncertainties makes it necessary that psychotherapy be guided by practical thinking. In deciding what actions they will undertake, practitioners draw understanding and information from a practical knowledge base. Expansion of one's practical knowledge base through incorporation of the descriptive component of traditional research increases the knowledge resources that therapists can consult in making their judgments. An expanded knowledge base serves to lead to action choices that are more likely to move the therapeutic process toward its goals.

References

- Arkes, H.R., & Hammond, K.R. (Eds.). (1986). *Judgment and decision making: An interdisciplinary reader*. Cambridge: Cambridge University Press.
- Benner, P. (1984). *From novice to expert*. Menlo Park, CA: Addison-Wesley.
- Cantor, N., & Zirkel, S. (1990). Personality, cognition, and purposive behavior. In L. Pervin (Ed.), *Handbook of personality theory and research* (pp. 135–164). New York: Guilford.
- Chaiklin, S., & Lave, J. (Eds.). (1993). *Understanding practice: Perspectives on activity and context*. Cambridge: Cambridge University Press.
- Chambless, D.L., Sanderson, W.C., Shoham, V., Johnson, S.B., Pope, K.S., Crits-Christoph, P., Baker, M., Johnson, B., Woody, S.R., Sue, S., Beutler, L., Williams, D.A., & McCurry, S. (1996). An update of empirically validated therapies. *The Clinical Psychologist*, 49(2), 5–18.
- Crits-Christoph, P., Frank, B., Chambless, D.L., Brody, C., & Karp, J.F. (1995). Training in empirically validated treatments: What are clinical psychology students learning. *Professional Psychology: Research and Practice*, 26(5), 514–522.
- Dunkel, H.B. (1967). Herbart, Johann Freidrich. In P. Edwards (Ed.), *The encyclopedia of philosophy* (vol. 3, pp. 481–484). New York: Macmillan.
- Garb, H.N. (1998). *Studying the clinician: Judgment research and psychological assessment*. Washington, DC: American Psychological Association.
- Gendlin, E.T. (1997). How philosophy cannot appeal to experience, and how it can. In D.M. Levin (Ed.), *Language beyond postmodernism: Saying and thinking in Gendlin's philosophy* (pp. 3–41). Evanston, IL: Northwestern University Press.
- Heidegger, M. (1977). *The question concerning technology and other essays* (W. Covert, Trans.). New York: Harper & Row. (Original work published 1967)
- Holt, R.R. (1988). Judgment, inference, and reasoning in clinical perspective. In D.C. Turk & P. Salovey (Eds.), *Reasoning, inference, and judgment in clinical psychology* (pp. 233–250). New York: Free Press.
- Kahneman, D., Slovic P., Tversky, A. (Eds.). (1982). *Judgment under uncertainty: Heuristics and biases*. Cambridge: Cambridge University Press.
- Kitchener, K.S., & Brenner, H.G. (1990). Wisdom and reflective judgment: Knowing in the face of uncertainty. In R.J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 212–229). Cambridge: Cambridge University Press.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. New York: Basic.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge: Cambridge University Press.
- Lopes, L.L. (1991). The rhetoric of irrationality. *Theory & Psychology* 1(1): 65–82.
- Margolis, J. (1986). *Pragmatism without foundations: Reconciling realism and relativism*. New York: Basil Blackwell.
- McCrae, R.R. (Ed.). (1992). *The five-factor model*. Durham, NC: Duke University Press.

- Midgley, M. (1989). *Wisdom, information, and wonder*. New York: Routledge.
- Miller, J.G. (1978). *Living systems*. New York: McGraw-Hill.
- Plous, S. (1993). *The psychology of judgment and decision making*. New York: McGraw-Hill.
- Reisman, J.M. (1991). *A history of clinical psychology*. (2nd ed.). New York: Hemisphere.
- Schön, D.A. (1983). *The reflective practitioner*. New York: Basic Books.
- Scribner, S. (1986). Thinking in action: Some characteristics of practical thought. In R.J. Sternberg & R.K. Wagner (Eds.), *Practical intelligence: Nature and origins of competence in the everyday world* (pp. 13–30). Cambridge: Cambridge University Press.
- Skovholt, T.M., & Rønnestad, M. H. (1992). *The evolving professional self: Stages and themes in therapist and counselor development*. New York: John Wiley & Sons.
- Sternberg, R.J. (Ed.). (1990). *Wisdom: Its nature, origins, and development*. Cambridge: Cambridge University Press.
- Sternberg, R.J., & Wagner, R.K. (Eds.). (1986). *Practical intelligence: Nature and origins of competence in the everyday world*. Cambridge: Cambridge University Press.
- Turk, D.C., & Salovey, P. (Eds.). (1988). *Reasoning, inference, and judgment in clinical psychology*. New York: Free Press.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 221, 453–458.
- Woolfolk, R.L. (1998). *The cure of souls: Science, values and psychotherapy*. San Francisco: Jossey-Bass.