

Preface

Martha Heineman Pieper

One of the exciting implications of the postpositivist, heuristic paradigm of scientific investigation is that it allows social and behavioral researchers and practitioners simultaneously to uphold their ideals of doing genuine science and to harness the robust possibilities of naturalistic research to study the full complexity of clinical practice.¹ The heuristic paradigm conceptualizes science broadly as a systematic inquiry into some aspect of reality that is communicated in a way that will allow an interested person to make an informed evaluation of the process of inquiry and its conclusions. The heuristic paradigm recognizes that not all scientists will be able to agree on the precise meaning of words such as *systematic*, *reality*, *communicated*, *informed*, and *evaluation* (Manicas & Secord, 1983).

Although naturalistic research has unique strengths and has as much scientific warrant as interventionist research, it has been overlooked and underutilized due to the positivist prejudices that have colored the thinking of social and behavioral researchers and practitioners since the 1950s. *Naturalistic research* entails the systematic study of clinical practice that is not intentionally altered for research purposes.² The contrast between naturalistic and interventionist research in no way implies the naive view that the subject can be studied apart from interactional researcher effects (LeCompte & Goetz, 1982). Rather, the categories of naturalistic and interventionist research refer only to the intentions and practices of the researcher. The interventionist researcher intentionally alters clinical practice for research purposes. In contrast, the naturalistic researcher is a practitioner who aims to minimize research intrusiveness into practice. The focus here is on research into clinical practice, which is why the researcher is referred to as a practitioner. In naturalistic research on an organization, a culture, or a subculture, the naturalistic researcher would be a member of the group under study—not an outsider. Research done by outsiders, no matter how skilled in minimizing research intrusiveness, is

always interventionist. Naturalistic research on treatment excludes methodologies that for research purposes dictate, for example, that the client take personality inventories or fill out questionnaires before and during the treatment process, that the treatment process should be artificially shortened or lengthened, or that the therapeutic relationship should be recorded by third-party observers or electronic recording devices. Data gathering in naturalistic research takes the form of anamnestic process recording.

The unwarranted and largely categorical dismissal of naturalistic methods by positivist researchers is fueled in part by a pervasive category mistake whereby issues of qualitative versus quantitative data and group versus single-organism designs have been conflated with the more fundamental distinction between naturalistic and interventionist research, with the result that this distinction has been obscured and neglected (Allen-Meares & Lane, 1990; Cook & Reichardt, 1979; Lincoln & Guba, 1985). Qualitative research frequently is equated erroneously with new (postpositivist) research paradigms, while quantitative research is used mistakenly as a synonym for the standard (positivist) research paradigm (Allen-Meares & Lane, 1990; Taylor & Bogdan, 1984). This conceptual error occurs when issues that pertain to data analysis are confused with issues that relate to data gathering. To illustrate, just as interventionist methods can produce qualitative data (an example is the videotape of a family therapy session), naturalistic designs can generate quantified data (for example, anamnestic process can be coded for the purpose of executing a chi-square test). Moreover, many single case designs, such as experimental designs and most change process designs, are deemed naturalistic, when they should be categorized as interventionist because they involve manipulations of the treatment process (Berlin, Mann, & Grossman, 1991; Bloom & Fischer, 1982; Davis & Reid, 1988).

I would emphasize that most authors mistakenly define naturalistic research to include interventionist strategies, such as research-driven data gathering by self-report instruments, personality inventories, electronic recording devices, and/or third-party observers (Lincoln & Guba, 1985). This mislabeling rests on the unrealistic notion that participants forget or adjust to research-determined interventions and behave as if they were not there. The fact that subjects do not complain or comment should not be taken to indicate that they are behaving exactly the way they would in the absence of research-determined instruments of observation or inquiry (Bronfenbrenner, 1979).

One consequence of the failure to consider the interventionist nature of electronic recording devices, third-party observers, questionnaires, research-motivated adjustments to the therapeutic process, etc., is that the ethical questions raised by research-motivated interventions are rarely if ever considered. By definition, research-motivated interventions introduce nontherapeutic motives and experiences into the treatment relationship and, therefore, always reduce the quality of the service being offered.³ An example is when limits are placed on client visits for the sole purpose of standardizing the treatment for research purposes. The lowering of treatment quality to serve research purposes should be done only after a careful consideration of ethical issues and a weighing of competing values, especially because

clients whose treatments are adversely affected are usually both desperate and disadvantaged, and lack the means to avoid research protocols by choosing among private service providers. Ethical issues are also raised by so-called unobtrusive measures, such as hidden cameras, which depend on deception and conflict with both humanistic and professional values. In contrast to interventionist research, naturalistic research raises neither ethical nor privacy issues, because the quality of service is not affected and deception is not an issue.

The position that the only incontrovertibly scientific way to study clinical process is by manipulating that process not only raises ethical questions, but also is conceptually flawed because of its unwarranted claim of privilege for its positivist ontology (theory of reality) and its positivist epistemology (theory of how to know that reality). The positivist view is that the researcher (or her or his electronic surrogates) but not the practitioner can make unbiased observations of events (facts), and that these observations can then serve to confirm or disconfirm theories. Beginning about 1950, the social work research literature repeatedly advocates empirical, atheoretical, and grounded research, and condemns naturalistic social work research, which is deemed old-fashioned, anecdotal, soft, and unscientific. This view reflects the misuse of the word *empirical* by social workers and other social and behavioral researchers, and it explains why positivist authors have mislabeled my position "anti-empiricist" (Glisson & Fischer, 1987, p. 51). The terms *empirical* and *empiricism* traditionally refer to knowledge arising from experience that originates extracranially. The positivists fallaciously apply these terms only to data collected in a manner compatible with the positivist paradigm. In fact, a comparison of theories, a recollected process recording, and a client's self-report are just as empirical as the data brought to us by a video camera. Contributing to the confusion is the conflation of a misleading definition of accuracy with the term empirical. Certain methods of data gathering, such as the electronic or third-party recording of a subject's words and gestures, are considered accurately to mirror reality and, therefore, to be free from subjectivity. Data that fit this erroneous definition of accuracy are assumed to exhaust the category of empirical. The problem, of course, is that accuracy is a construct that reflects a heuristic choice of data rather than an unalterable, one-to-one, uncontaminated correspondence with reality. Therefore, not only are there many viable types of accuracy, but the choice and pursuit of one kind of accuracy makes other kinds of accuracy more difficult or impossible to attain. For example, in order to obtain an accurate recording of the exact sequence and details of a client's speech and behavior, one sacrifices an accurate knowledge of what the client would say or do without the research intervention that introduces an electronic recording device or third-party observer. There is an ostrich-like quality to the definition of "unobtrusive" measures as data gathering that requires "observers to be inconspicuous in their observing role and to guard against disclosing to subjects the specific nature of the data collected" (Allen-Meares & Lane, 1990). Those who argue that clients soon "forget" about electronic devices or observers depreciate the intelligence of their participant/subjects and mistake compliance for habituation.⁴

In addition, the focus on a single type of accuracy blinds researchers to the biases introduced by their preferred methodologies. For example, references to tap-

ing or the presence of third-party observers are made only in passing, and the effects on clients of being subjected to numerous rating scales and to repeated evaluations of their treatments are dismissed or never mentioned. When clients do express concern about research intrusiveness into their treatment, positivist researchers do not take these concerns seriously. In a recent article, a client's anxiety about having her symptoms tape-recorded is dismissed as a psychopathological "dysfunctional assumption" that needs correcting (Berlin et al., 1991, p. 10).

Similarly, because positivist researchers are unaware that there are many different but equally useful types of accuracy, they dismiss other methodologies, such as anamnestic process recordings, as less accurate and, therefore, less desirable than their preferred methods of data gathering. The authors of the influential *Nonreactive Measures in the Social Sciences* depreciate humans as "low-fidelity observational instruments" (Webb, Campbell, Schwartz, Sechrest, & Grove, 1981, p. 241). Anamnestic recordings are dismissed as anecdotal, and data that are recorded or gathered through structured instruments are praised as objective.⁵ However, because in actuality each method of data gathering has its own strengths and limitations, a tape recorder or third-party observer is inherently no more able to render an accurate version of reality than the trained clinician. Clearly, tape recorders introduce bias.

Akin to the positivists' overly restrictive use of the construct of accuracy is their overvaluation of reliability, which is the precept that a practitioner-researcher's perceptions about a client or treatment process lack scientific value unless they can be correlated with another qualified person's perceptions about the same or a similar client or process (McVicker Hunt, 1959). I suggest that it is more meaningful to focus on credibility than on reliability. Reliable observations are not necessarily credible; no matter how many people tell us they saw the same flying saucer, we are unlikely to find them credible. Clinical credibility—our conviction of the scientific value, i.e., fundamental correctness, of the practitioner-researcher's interventions and theoretical understanding—can rest on the comprehensive, detailed, well-conceptualized presentation by a single practitioner of her or his conduct and understanding of a specific treatment process.

Researchers who confuse reliability and credibility tend to adopt the absurd position that it is acceptable to trust clients' lives and well-being to trained practitioners but that the judgments of these same practitioners about their clients lack scientific merit. Because it has been amply demonstrated that there are no truly neutral measures—that all methods of gathering data introduce their own biases—we are free to reintroduce, that is, to depend on, the practitioner's informed judgment. In fact, an experienced clinician's understanding of her or his treatment process will contribute meanings that will be absent from the observations and conclusions of a researcher/observer who has no prior knowledge of the client, and who has a professional identity that is antithetical to the development of therapeutic involvement with the client. If experience and involvement count for something in real-life clinical situations, they should also be worthwhile in research situations.

In addition to the conceptual difficulties with portraying the researcher as a passive recorder of unproblematic data, there is the practical consequence that this

depiction of the researcher is antithetical to the erstwhile role of the researcher as the handmaiden of social change, and it is largely responsible for the split in social work and the other social and behavioral sciences between advocate and researcher. The positivist researcher belittles the advocate for being too involved with her/his clients and, thereby, for falling prey to an unscientific subjectivity. Once researchers recognize that the ideal of the value-free, atheoretical, neutral researcher both is an impossible fiction and also exalts only one of many competing values, researchers are free to ally themselves with advocates and unapologetically to gather facts with the aim of supporting and furthering the traditional humanistic concerns of social work and the other social and behavioral sciences.

Finally, I would like to take this opportunity to address one of the most frequent misunderstandings of the heuristic paradigm, namely that by adopting the position that no single methodology is inherently superior to any other at producing useful, scientific knowledge, the heuristic paradigm endorses relativism, which is a type of epistemological skepticism. Relativists argue that the untenability of the claim of superiority for any one methodology results from the impossibility of a well-founded conviction that a mind-independent reality exists. Consequently, relativists abandon the pursuit of knowledge that reflects or corresponds to reality and instead aim at explanatory coherence. An example is the increasingly popular use of narrative coherence as a therapeutic tool. Advocates of a focus on narrative structures believe that the client lacks and needs a coherent self-narrative, and that the curative element is the coherence of the narrative, not the knowledge of the primary causes of the client's psychological dynamics, which they believe to be unattainable. In contrast, the heuristic paradigm's assertion that the positivist ontology and the positivist epistemology are heuristic choices rather than privileged objects of study and privileged ways of knowing is not synonymous with an endorsement of relativism. Both relativism and realism⁶ are heuristic choices and, as such, are encompassed within the heuristic paradigm, although they neither define nor exhaust it.

Although the heuristic paradigm does encompass any ontology whose adherents are engaged in doing science, as I have made clear elsewhere (see, for example, Heineman Pieper, 1987, in Chapter 3), my own preferred ontology is a qualified realism. That is, I adopt the position that external reality exists and can be known, even though this knowledge will always be partial, imperfect, and colored to some extent by the researcher's heuristics (Bhaskar, 1989).

In summary, if social work and the other social and behavioral sciences adopt the heuristic paradigm, researchers will cease the single-minded pursuit of the chimerical goal of neutral, value-free science, and will be able to integrate the more attainable values of the recognition and regulation of bias with their traditional humanistic values (e.g., respect for the client's self-experience, sensitivity to gender and racial discrimination, and concern with social injustice) into their scientific activities.

Further, both the effort of critiquing the positivist claim for the superiority of interventionist research and the concomitant argument for the scientific standing of naturalistic social and behavioral research are matters of great concern, because for

so many years unwarranted positivist strictures have limited the range of data that are considered legitimate, which in turn restricts social and behavioral researchers' ability to study clinical practice in all its complexity and to be effective advocates for social reform. To illustrate, one researcher makes the frightening assertion that, "If you cannot measure the client's problem, it does not exist" (Hudson, 1978, p. 65).

Naturalistic research is just as scientifically respectable and able to produce legitimate, helpful, relevant, generalizable knowledge as interventionist research. If the social and behavioral sciences were to embrace the heuristic paradigm, one significant consequence would be that research-motivated interventions in clinical services, such as the introduction of third-party observers, electronic recording devices, and client instruments, would no longer be misperceived as nonreactive and unobtrusive. These service manipulations would cease to be implemented unthinkingly, but would have to be justified both in relation to their potential to contribute significantly to the research being undertaken, and also in terms of the negative effects they may have on a particular service modality and the degree of their compatibility with the broad spectrum of professional values.

Some of the advantages of naturalistic clinical research are that the values of putting the client's interest first and of doing no harm are respected, that treatment is studied in an undisturbed form from an experience-near perspective, and that the practitioner's trained understanding and assessment of the treatment process are highlighted. The resurrection of naturalistic research will encourage practitioners to leave the sidelines and to participate comfortably in relevant, significant, helpful, humanistic, *science* (Sherman, 1987). Practitioners, who for the last forty years have unjustly been made to feel that their experienced and educated judgments are unscientific and, therefore, unimportant, can join the effort to devise creative and productive ways to study and shed light on the complex, multifactorial, overdetermined problems that plague us all.*

NOTES

1. This Preface is abstracted and adapted from the Keynote Address at the Conference on Qualitative Methods in Social Work Practice Research, State University of New York at Albany, August 23, 1991. A full-length version of the address is published in E. Sherman and W. J. Reid (Eds.), *Qualitative Research in Social Work* (New York: Columbia University Press, 1994).

2. Naturalistic research is distinguished from *naturalism*, which is the philosophical notion that the human sciences can best be studied by the methods of the natural sciences (Bhaskar, 1989).

3. Sometimes authors confuse therapeutic and research aims and argue that research-motivated interventions are helpful to clients, but this argument is irrelevant to the ethical questions raised by the use of interventions that are introduced purely for research purposes. When a given practice theory prescribes ongoing testing or mechanical recording for diagnos-

**Editor's Note:* Because the Preface contains many ideas that are discussed further in the text, it may be helpful in integrating this material to read the Preface again after reading the text.

tic or therapeutic purposes (e.g., allowing clients to see themselves on videotape), then naturalistic research would obviously encompass use of the data produced by these therapeutically motivated instruments and recording devices. Complications arise, however, because some social work treatment modalities have been developed precisely because they were "researchable," and these models consider interventions therapeutic because they are research-driven (Reid, 1983; Reid & Epstein, 1972). For this reason, I would argue that research on these practice modalities is interventionist rather than naturalistic, even though the research imposes no additional data collection measures.

4. Even after he spent an entire school year in a California classroom, Philip Jackson noted that he remained enough of an outsider that when he happened to sneeze, members of the class turned around, whereas the sneezes of teacher and students went unremarked (1990).

5. Kazdin typifies the positivist approach to anamnestic process. He concludes that "scientific inferences are difficult if not impossible to draw from anecdotal information. Indeed, it is the anecdotal information that is the problem rather than the fact that an individual case is studied" (1981, p. 185).

6. Realism is the view that there are sound grounds for positing a mind-independent reality, which is amenable to study.

REFERENCES

- Allen-Meares, P., & Lane, B. (1990). Social work practice: Integrating qualitative and quantitative data collection techniques. *Social Work, 35*, 452-458.
- Berlin, S., Mann, K., & Grossman, S. (1991). Task analysis of cognitive therapy for depression. *Social Work Research and Abstracts, 27*, 3-11.
- Bhaskar, R. (1989). *The possibility of naturalism: A philosophical critique of contemporary human sciences* (2nd ed.). New York: Harvester Wheatsheaf.
- Bhaskar, R. (1991). *Philosophy and the idea of freedom*. Oxford: Basil Blackwell.
- Bloom, M., & Fischer, J. (1982). *Evaluating practice: Guidelines for the accountable professional*. Englewood Cliffs, NJ: Prentice-Hall.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Cook, T., & Reichardt, C. (1979). *Qualitative and quantitative methods in evaluation research*. Beverly Hills, CA: Sage.
- Davis, I., & Reid, W. J. (1988). Event analysis in clinical practice and process research. *Social Casework, 69*, 298-306.
- Gergen, K. J. (1986). Correspondence versus autonomy in the language of understanding human action. In D. W. Fiske & R. A. Shweder (Eds.), *Metatheory in social science* (pp. 136-162). Chicago: University of Chicago Press.
- Glisson, C., & Fischer, J. (1987). Statistical training for social workers. *Journal of Social Work Education, 23*, 50-58.
- Hudson, W. (1978). First axioms of treatment. *Social Work, 23*, 65-66, 518-519.
- Jackson, P. (1990). *Life in classrooms*. New York: Teacher's College Press.
- Kazdin, A. (1981). Drawing valid inferences from case studies. *Journal of Consulting and Clinical Psychology, 49*, 183-192.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of Educational Research, 52*, 31-60.
- Leplin, J. (Ed.). (1984). *Scientific realism*. Berkeley: University of California Press.

- Lincoln, Y. S. (1990). The making of a constructivist: A remembrance of transformations past. In E. Guba (Ed.), *The paradigm dialog*. Newbury Park: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park: Sage.
- Manicas, P. T., & Secord, P. F. (1983). Implications for psychology of the new philosophy of science. *American Psychologist*, 38, 399-413.
- McVicker Hunt, J. (1959). On the judgment of social workers as a source of information in social work research. In A. Shyne (Ed.), *Use of judgments as data in social work research* (pp. 38-54). New York: National Association of Social Workers.
- Phillips, D. L. (1990). Postpositivistic science: Myths and realities. In E. Guba (Ed.), *The paradigm dialog*. Newbury Park, CA: Sage.
- Reid, W. J. (1983). Developing intervention methods through experimental designs. In A. Rosenblatt & D. Waldfogel (Eds.), *Handbook of clinical social work*. San Francisco: Jossey-Bass.
- Reid, W. J., & Epstein, L. (1972). *Task-centered casework*. New York: Columbia University Press.
- Sherman, E. (1987). Hermeneutics, human science, and social work. *Social Thought*, 13, 34-41.
- Taylor, S. J., & Bogdan, R. (1984). *Introduction to qualitative research methods: The search for meanings* (2nd ed.). New York: Wiley.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., Sechrest, L., & Grove, J. B. (1981). *Nonreactive measures in the social sciences* (2nd ed.). Boston: Houghton Mifflin.
- Wimsatt, W. C. (1987). False models as means to truer theories. In M. H. Nitecki & A. Hoffman (Eds.), *Neutral models in biology* (pp. 23-55). New York: Oxford University Press.

DISCUSSION QUESTIONS

1. How does Heineman Pieper conceptualize science, and what allowance does she make for different points of view about her definition of science?
2. How is Bhaskar's definition of naturalism different from naturalistic research?
3. When Heineman Pieper conceptualizes naturalistic and interventionist research, she makes an original and extremely important distinction between two types of social and behavioral research.
 - a. What is naturalistic research?
 - b. What is interventionist research?
 - c. Why is that distinction important to social and behavioral researchers?
4. What common psychotherapy research strategies are *not* included in the category of naturalistic research?
5. Summarize the distinctions Heineman Pieper makes between accuracy, credibility, and reliability.
6. Many researchers say that tape recorders are naturalistic research. What is Heineman Pieper's argument that they are interventionist?
7. In naturalistic research, who can be the researcher? What are some implications of the decision about who is the researcher?