# Quality and Trustworthiness in Qualitative Research in Counseling Psychology

Susan L. Morrow University of Utah

This article examines concepts of the trustworthiness, or credibility, of qualitative research. Following a "researcher-as-instrument," or self-reflective, statement, the paradigmatic underpinnings of various criteria for judging the quality of qualitative research are explored, setting the stage for a discussion of more transcendent standards (those not associated with specific paradigms) for conducting quality research: social validity, subjectivity and reflexivity, adequacy of data, and adequacy of interpretation. Finally, current guidelines for writing and publishing qualitative research are reviewed, and strategies for conducting and writing qualitative research reports are suggested.

Qualitative research, ensuing from a variety of disciplines, paradigms, and epistemologies, embraces multiple standards of quality, known variously as *validity*, *credibility*, *rigor*, or *trustworthiness*. In addition to some standards that may be thought of as somewhat universal across disciplines and paradigms, the "goodness" (Morrow & Smith, 2000) of qualitative inquiry is assessed on the basis of the paradigmatic underpinnings of the research and the standards of the discipline. Thus, a grounded theory study or a consensual qualitative research investigation in counseling psychology that is rooted in a postpositivist or constructivist/interpretivist paradigm will look quite different from a critical ethnography in education; and the standards appropriate for evaluating these studies will vary accordingly.

I begin this article by addressing the paradigmatic underpinnings of trustworthiness or rigor in qualitative research. Next, I discuss central topics related to trustworthiness or validity that span paradigms and may be thought of as relevant across most research designs. I then provide an overview of guidelines that have been suggested for evaluating qualitative research, particularly in psychology. Finally, I offer recommendations for enhancing the quality of qualitative research in counseling psychology and suggest strategies for writing and publishing. First, however, in keeping with the standard of reflexivity as a way for researchers to inform their audiences about their perspectives as well as to manage their subjectivities, I describe my own assumptions about qualitative research methodology and quality.

### Horizons of Understanding

I borrow David Rennie's (1994) term horizons of understanding to frame my background, experience, and assumptions. I received my in-depth education in qualitative research methods as a doctoral-level student in the Counseling Psychology Program at Arizona State University, where I had the good fortune to be

Correspondence concerning this article should be addressed to Susan L. Morrow, Department of Educational Psychology, University of Utah, 1705 East Campus Center Drive, Room 327, Salt Lake City, UT 84112-9255. E-mail: morrow@ed.utah.edu

mentored by two qualitative methodologists and researchers in the College of Education, Mary Lee Smith and Carole Edelsky. Both served on the committee for my dissertation on survival and coping of women survivors of childhood sexual abuse (Morrow, 1992; Morrow & Smith, 1995), and I took extensive qualitative coursework under their tutelage. During my tenure at the University of Utah, I have conducted qualitative research on feminist therapy; on the career development of lesbian, gay, and bisexual individuals and women with HIV disease; and on the academic climate for graduate women of color. In addition, I have supervised numerous qualitative theses and dissertations and coauthored two chapters on qualitative methodology in the field (Morrow, Rakhsha, & Castañeda, 2001; Morrow & Smith, 2000).

Throughout my work as a qualitative methodologist and researcher, I have embraced the tensions between my radical feminist activist roots and my commitments to counseling psychology. Feminist qualitative research has provided a frame within which I am able to contribute to the discipline's emerging social-justice agenda (e.g., Goodman et al., 2004; Vera & Speight, 2003); yet, integrating a feminist critical perspective into a field that has been largely postpositivist has been no easy task. I continue to wrestle with my own latent postpositivist tendencies as well as my desire for credibility in my profession, at the same time yearning to throw caution to the winds and explore new venues with such outrageous names as "ethnographic fiction" (Tierney, 1993). I am planted rather firmly in a constructivist/interpretivist paradigm ontologically, with a powerfully critical feminist ideological axiology.

I see quality or validity in qualitative research as paradigm bound to a certain extent; that is, there are particular standards of trustworthiness that emerge from and are most congruent with particular paradigms. However, I also view certain qualities as indispensable regardless of the research paradigm, such as sufficiency of and immersion in the data, attention to subjectivity and reflexivity, adequacy of data, and issues related to interpretation and presentation. Thus, my recommendation to qualitative researchers is that we ground our research not only in the substantive theory base leading to the questions guiding the research but also firmly in the paradigm that is most appropriate to that research as well as in more transcendent criteria for trustworthiness (see Figure 1). Although it is beyond the scope of this article to address

#### Transcendent Criteria

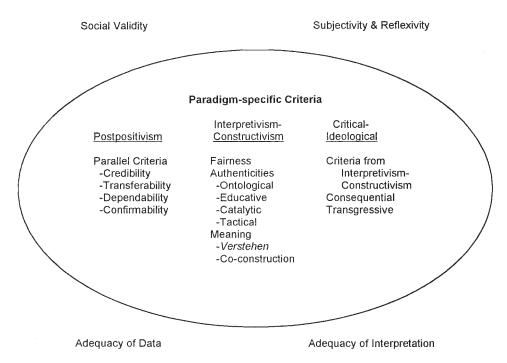


Figure 1. Paradigm-specific and transcendent trustworthiness criteria.

effective ways to ground the research in theory, to formulate the guiding questions, and to identify the appropriate paradigm, I refer the reader to Denzin and Lincoln (2000a), Marshall and Rossman (1999), Patton (2002), and Rossman and Rallis (2003) for more in-depth guidance. In the following sections, I first address paradigmatic criteria for trustworthiness and then those criteria that transcend paradigms.

# Paradigmatic Underpinnings of Goodness or Trustworthiness in Qualitative Research

Criteria for trustworthiness in qualitative research are closely tied to the paradigmatic underpinnings of the particular discipline in which a particular investigation is conducted. Although research in counseling psychology has in the past adhered to more postpositivist standards of rigor, given its evolving constructivist and social-justice foci, it is important to consider the full range of paradigmatic underpinnings of rigor or trustworthiness that may be appropriate for investigations in the field. In his review of 49 qualitative studies that appeared in the Journal of Counseling Psychology from 1989 through 2003, Ponterotto (2005) found that 9 were based in postpositivism, 21 in constructivism, and 19 in a hybrid of the two paradigms. On the basis of the four paradigms identified by Ponterotto (2005), in this section I review standards of goodness (Morrow & Smith, 2000) or trustworthiness (Lincoln & Guba, 2000) that correspond with various paradigms underpinning qualitative research. Because positivism is associated primarily with quantitative approaches to research, I address only postpositivist, constructivist/interpretivist, and postmodern/critical/ideological standards of trustworthiness here.

### Criteria for Trustworthiness in Postpositivist Qualitative Research

A postpositivist qualitative study logically attaches itself to standards of inquiry framed in conventional terms: "internal validity (isomorphism of findings with reality), external validity (generalizability), reliability (in the sense of stability), and objectivity (distanced and neutral observer)" (Guba & Lincoln, 1994, p. 114). Patton (2002) referred to these criteria as "traditional scientific research criteria" (p. 544) and included "objectivity of the inquirer (attempts to minimize bias), validity of the data, systematic rigor of fieldwork procedures, triangulation (consistency of findings across methods and data sources), reliability of codings and pattern analyses, correspondence of findings to reality, generalizability (external validity), strength of evidence supporting causal hypotheses, [and] contributions to theory" (p. 544).

Lincoln and Guba (2000) elaborated these benchmarks of rigor framed in conventional quantitative terms as "parallel criteria"—criteria that run parallel to validity and reliability criteria stemming from postpositivist quantitative methods of rigor. Lincoln (1995) referred to these as *extrinsic* criteria (having emerged from outside the qualitative genre). These parallel criteria are intended to very loosely achieve the same purposes as internal validity, external validity, reliability, and objectivity in quantitative research.

Thus, *credibility* in qualitative research is said to correspond to *internal validity* in quantitative approaches, *transferability* to *ex-*

ternal validity or generalizability, dependability to reliability, and confirmability to objectivity. These correspondences, however, should not be taken to mean that these parallel criteria accomplish exactly the same goals as their corresponding standards of rigor in quantitative research. Qualitative research leads to different kinds of knowledge claims than those resulting from the use of quantitative methods. For example, qualitative research is idiographic and emic (focusing on one or a very few individuals, finding categories of meaning from the individuals studied) as opposed to nomothetic and etic (focusing on standardized methods of obtaining knowledge from large samples of individuals, using categories taken from existing theory and operationalized by the researcher) (Morrow & Smith, 2000). It is important to note that although I categorize parallel criteria within a postpositivist paradigm, they have also been associated with constructivism.

According to parallel criteria (Lincoln & Guba, 2000), credibility (vs. internal validity) refers to the idea of internal consistency, where the core issue is "how we ensure rigor in the research process and how we communicate to others that we have done so" (Gasson, 2004, p. 95). Credibility can be achieved by prolonged engagement with participants; persistent observation in the field; the use of peer debriefers or peer researchers; negative case analysis; researcher reflexivity; and participant checks, validation, or coanalysis. It is also enhanced by a thorough description of source data and a fit between the data and the emerging analysis as well as by "thick descriptions" (Geertz, 1973, 1983). Thick descriptions, transcending research paradigms, involve detailed, rich descriptions not only of participants' experiences of phenomena but also of the contexts in which those experiences occur. The "thickness" of the descriptions relates to the multiple layers of culture and context in which the experiences are embedded. In addition, one must explain how sufficiency of data was assessed (e.g., data saturation, explained below).

The parallel criterion *transferability* (vs. external validity or generalizability) refers to the extent to which the reader is able to generalize the findings of a study to her or his own context and addresses the core issue of "how far a researcher may make claims for a general application of their [sic] theory" (Gasson, 2004, p. 98). This is achieved when the researcher provides sufficient information about the self (the researcher as instrument) and the research context, processes, participants, and researcher—participant relationships to enable the reader to decide how the findings may transfer. Given the usually small sample sizes and absence of statistical analyses, qualitative data cannot be said to be generalizable in the conventional sense; thus it is important in the presentation of the research not to imply that the findings can be generalized to other populations or settings.

The parallel criterion *dependability* (vs. reliability) deals with the core issue that "the way in which a study is conducted should be consistent across time, researchers, and analysis techniques" (Gasson, 2004, p. 94). Thus, the process through which findings are derived should be explicit and repeatable as much as possible. This is accomplished through carefully tracking the emerging research design and through keeping an audit trail, that is, a detailed chronology of research activities and processes; influences on the data collection and analysis; emerging themes, categories, or models; and analytic memos. The audit trail may then be examined by peer researchers, a student's advisor, or colleagues in the field.

Finally, confirmability (vs. objectivity) is based on the acknowledgment that research is never objective. It addresses the core issue that "findings should represent, as far as is (humanly) possible, the situation being researched rather than the beliefs, pet theories, or biases of the researcher" (Gasson, 2004, p. 93). It is based on the perspective that the integrity of findings lies in the data and that the researcher must adequately tie together the data, analytic processes, and findings in such a way that the reader is able to confirm the adequacy of the findings. Many of the procedures used to accomplish the goal of dependability are also applicable here, particularly accountability through an audit trail, and the management of subjectivity is essential.

Despite the long tradition of using parallel criteria, in particular to make qualitative research more acceptable to conventional audiences, this approach has been widely criticized. In particular, the application of parallel criteria outside the postpositivist frame creates logical inconsistencies. If we acknowledge multiple realities, how can we assure that those involved in the research are the "true" knowers? Sparkes (1998) suggested that member or participant checking should not be treated as validation or verification; rather, it should be viewed as an elaboration on the emerging findings and treated as additional data. Further, if the researcher is the instrument of the investigation, how is it possible to conceive of confirmability? Nevertheless, these criteria may be useful in communicating with postpositivist institutional review boards, grantors, and journal editors and reviewers who are not fully conversant with qualitative approaches. As counseling psychology continues to elaborate and develop its qualitative methods, I recommend simultaneously moving away from extrinsic parallel criteria and adopting intrinsic standards of trustworthiness that have emerged more directly from the qualitative endeavor. As long as qualitative researchers are apologetic for our unique frames of reference and standards of goodness, we perpetuate an attitude on the part of postpositivist researchers that we are not quite rigorous enough and that what we do is not "real science." Thus, criteria emerging from constructivist/interpretivist and critical/ideological paradigms, as well as standards emerging directly from the qualitative paradigm and including issues of social validity, should gain greater credibility.

# Criteria for Trustworthiness in Constructivist/ Constructionist/Interpretivist Research

The vast majority of qualitative studies in the *Journal of Counseling Psychology* have been either constructivist or a synthesis of constructivism and postpositivism. A range of criteria have been suggested to provide trustworthiness in constructivist research. Although parallel criteria have also been suggested as relevant to constructivist research (Guba & Lincoln, 1994), *authenticity criteria* (Guba & Lincoln, 1989), referred to by Lincoln (1995) as *intrinsic* criteria, appear to be more relevant. Authenticity criteria include fairness, ontological authenticity, educative authenticity, catalytic authenticity, and tactical authenticity, some of which overlap with critical paradigms. *Fairness* demands that different constructions be solicited and honored. In *ontological authenticity*, participants' individual constructions are improved, matured, expanded, and elaborated. *Educative authenticity* requires that participants' understandings of and appreciation for the constructions

of others be enhanced. *Catalytic authenticity* speaks to the extent to which action is stimulated.

Patton (2002) integrated constructivism and social constructionism, identifying standards of quality and credibility as acknowledging—and even embracing—subjectivity. Building on trustworthiness and authenticity criteria suggested by Lincoln and Guba (1986), Patton (2002) also identified dependability ("a systematic process systematically followed," p. 546) and triangulation ("capturing and respecting multiple perspectives," p. 546) as important components of quality. Further, researcher reflexivity provides an opportunity for the researcher to understand how her or his own experiences and understandings of the world affect the research process. Patton also emphasized the importance of praxis (the integration of theory and practice); verstehen, which implies enhanced and deep understanding; and particularity ("doing justice to the integrity of unique cases," p. 546). Finally, he stressed the importance of dialogue among various perspectives. Because constructivist/interpretivist paradigms share certain worldviews with postmodern, ideological, and critical theories, there is considerable overlap in standards of trustworthiness across paradigms.

Guba and Lincoln (1994) noted that "the issue of quality criteria in constructivism is . . . not well resolved, and further critique is needed" (p. 114). I would propose additional constructivist criteria as an attempt to expand our notion of interpretivist/constructivist criteria. These include (a) the extent to which participant meanings are understood deeply (*verstehen*; Ponterotto, 2005; Schwandt, 2000) and (b) the extent to which there is a mutual construction of meaning (and that construction is explicated) between and among researcher and participants, or coresearchers. Although the first has some relation to Guba and Lincoln's (1989) *ontological authenticity* and Patton's notion of *verstehen*, and the latter to Guba and Lincoln's *educative authenticity* and Patton's *dialogue*, I believe these two criteria go deeper and should be considered on their own

Understanding participant constructions of meaning depends on a number of factors, including context, culture, and rapport. Contextual grounding is essential for understanding the meanings that participants make of their experience. There is some danger in psychological research of focusing on intrapsychic and interpersonal variables to the exclusion of context. Thus, qualitative researchers can "recontextualize" their interview-based data by examining contextual issues that may impact the data. For example, I supplemented interview, focus-group, and art and journal data from participants (Morrow, 1992) with an examination of popular magazines to better understand the context and cultures in which the eldest and youngest participants in my study were sexually abused. Qualitative methods are particularly suited to examining individuals within their cultural frameworks (Morrow et al., 2001); however, this attention to culture does not happen automatically and must be clearly defined as a primary lens through which the researcher conducts her or his investigation. To a certain extent, rapport building is a natural process for counseling psychologists, who have been trained in active listening skills; the challenge for most qualitative interviewers who are also counselors or psychologists is to manage the slippery slope on which boundaries between research and therapy may be confused (Haverkamp, 2005). In addition, cross-cultural research or research with a population or an issue to which the investigator is an "outsider" demands preparation to enter the field in a credible manner.

# Criteria for Trustworthiness in Postmodern, Ideological, and Critical Research

In addition to the authenticity criteria and praxis described above, consequential validity assesses the success with which research achieves its goals of social and political change (Patton, 2002). Postmodern, ideological, and critical research focus on the historical situatedness of the research, the importance of the research in increasing consciousness about issues of power and oppression, and-for the ideological and critical perspectives in particular—the potential of the research to create change (Guba & Lincoln, 1994). Increasing consciousness involves identifying sources of inequality and representing the perspectives of those who have been silenced or disempowered. It also explores and makes visible who benefits from power and how power is exercised. Research participants are collaborators in the action/investigation, and researchers attend to the power issues and relationships between and among researcher and researched. Related to catalytic authenticity, ideological research "builds the capacity of those involved to take action" and "identifies potential changemaking strategies" (Patton, 2002, p. 545).

Within a feminist poststructural paradigm, Lather (1994) has criticized what she refers to as the "formulaic" approaches to validity characterized by postpositivism and even by many qualitative methodologists. She proposes, instead, "transgressive validity," in which the criteria for trustworthiness lie in the ability of the research to incite discourse and contribute to a more critical social science. She asks what validity might look like if it were truly open-ended and context sensitive. The criteria for trustworthiness in critical and related paradigms are considerably different from those that are more familiar in other paradigms. Although it is not likely that these criteria will stand alone in counseling psychology research, they are important considerations in multicultural, feminist, and social-justice-oriented research, which have become more and more central to our discipline. Qualitative researchers in counseling psychology whose work is based on a critical/ideological paradigm may well make use of a number of criteria across paradigms to achieve congruence with the traditions of the discipline while attending to the crucial standards that characterize critical/ideological research in other disciplines.

# Criteria for Trustworthiness Across Research Paradigms and Designs

In addition to identifying paradigm-based strategies to ensure the trustworthiness of an investigation, the qualitative investigator considers a number of particular concerns that emerge from the qualitative endeavor itself. Many of these concerns tend to span paradigms and exemplify more general areas of concern to qualitative researchers. Given the constraints of this forum, only a few are addressed, including social validity, subjectivity and reflexivity in qualitative research, adequacy of data, and adequacy of interpretation.

## Social Validity as a Standard of Trustworthiness

Wolf (1978) grappled with the issue of subjectivity in applied behavioral analysis over two decades ago when he applied social value criteria to his own behavioral research. In his tongue-in-

cheek account of his own process of coming to grips with "fuzzy subjective criteria," he wrote, "If you publish a measure of 'naturalness' today, why tomorrow we will begin seeing manuscripts about happiness, creativity, affection, trust, beauty, concern, satisfaction, fairness, joy, love, freedom, and dignity. Who knows where it will end?" (pp. 205–206). Not surprisingly, because of the principles underlying our discipline (e.g., prevention, psychology of work, diversity), counseling psychologists have been leaders in the field of positive psychology (e.g., Walsh, 2003) and social justice, lending further support to Wolf's notion of social validity.

## Subjectivity and Reflexivity in Qualitative Research

In direct contrast to quantitative research traditions, which view objectivity as a goal or, at a minimum, as an aspiration, qualitative researchers acknowledge that the very nature of the data we gather and the analytic processes in which we engage are grounded in subjectivity. Depending on the underlying paradigm, we may work to limit, control, or manage subjectivity—or we may embrace it and use it as data. It is, however, a mistake to equate qualitative research with subjectivity and quantitative approaches with objectivity (Scriven, 1972). All research is subject to researcher bias; qualitative and quantitative perspectives have their own ways of approaching subjectivity and are very much influenced by the paradigms guiding the research. Thus, postpositivist qualitative researchers may use strategies that are familiar to quantitative researchers, such as external auditors or frequency tallies, in order to minimize the bias of the researcher. Alternatively, interpretivists/constructivists and ideological/critical theorists are more likely to embrace the positioning of the researcher as co-constructor of meaning, as integral to the interpretation of the data, and as unapologetically political in purpose. Approaches to subjectivity have been referred to as "bracketing," "monitoring of self" (Peshkin, 1988, p. 20), or being "rigorously subjective" (Jackson, 1990, p. 154). In the absence of an articulated perspective on subjectivity, researchers leave themselves open to questions regarding whose perceptions are really being described in the findings. Qualitative researchers address a number of important issues to accomplish the goal of managing subjectivity, including making their implicit assumptions and biases overt to themselves and others, reflexivity, and representation.

One tradition that has become a standard in qualitative research is that of making one's implicit assumptions and biases overt to self and others. Phenomenologists have coined the term bracketing to describe the process of becoming aware of one's implicit assumptions and predispositions and setting them aside to avoid having them unduly influence the research (Husserl, 1931). This process assumes that it is possible to fully know oneself and one's presuppositions, which some would argue is impossible. However, qualitative researchers use particular strategies to unearth their previously unacknowledged assumptions. It is important to note that many factors may interfere with a fair collection and interpretation of data, including the researcher's emotional involvement with the topic of interest, presuppositions formed from reading the literature, and various aspects of interaction with research participants. Although it has been asserted that the researcher is least biased by avoiding an in-depth foray into the literature prior to investigating (Glaser & Strauss, 1967), I would argue that investigators always believe something about the phenomenon in question and that a greater grounding in the literature militates against bias by expanding the researcher's understanding of multiple ways of viewing the phenomenon.

Fine (1992) wrote of the importance of "positioning researchers as self-conscious, critical, and participatory analysts, engaged with but still distinct from our informants" (p. 220)—a daunting task (see also Haverkamp, 2005). In order to deal with biases and assumptions that come from their own life experiences or in interactions with research participants, which are often emotionladen, qualitative researchers attempt to approach their endeavor reflexively. Rennie (2004) defined reflexivity as "self-awareness and agency within that self-awareness" (p. 183). Reflexivity, or self-reflection, is carried out in a number of ways. One of the most valuable is for the researcher to keep a self-reflective journal from the inception to the completion of the investigation. In it, the investigator keeps an ongoing record of her or his experiences, reactions, and emerging awareness of any assumptions or biases that come to the fore. These emerging self-understandings can then be examined and set aside to a certain extent or consciously incorporated into the analysis, depending on the frame of the researcher. Another reflexive strategy is consulting with a research team or peer debriefers (Hill et al., 2005; Hill, Thompson, & Williams, 1997; Morrow & Smith, 2000), who serve as a mirror, reflecting the investigator's responses to the research process. They may also serve as devil's advocates, proposing alternative interpretations to those of the investigator. In addition, Rossman and Rallis (2003) recommended using the "community of practice" made up of knowledgeable colleagues to engage in "critical and sustained discussion" (p. 69).

Embedded in the conversation about subjectivity is the concept of representation. Referring to the "crisis of representation," Denzin and Lincoln (2000b) described a growing concern with reflexivity beginning in the mid-1980s. In particular, the crisis of representation deals with questions about whose reality is represented in the research. This "crisis" was of particular importance in that it addressed the impossibility of a dichotomous separation between researcher and researched and instead led to a greater comprehension of the complexities of fairly representing the experiences of participants and of seeing participants, rather than researchers, as the authorities on participants' lives. This concern continues to the present time and is particularly central in the perspectives of interpretivist/constructivist and critical/ideological scholars. Qualitative researchers use a number of strategies as they strive to fairly represent participants' realities, including, within the datagathering process, asking for clarification and delving ever more deeply into the meanings of participants, taking the stance of naïve inquirer. This is particularly important when the interviewer is an "insider" with respect to the culture being investigated or when she or he is very familiar with the phenomenon of inquiry. Another approach is to engage in participant checks. By this, I do not refer merely to sending transcripts to participants after the interview to check for accuracy (an impossible task at best, as memory has a way of changing over time, in part because the original interview served as a catalyst for change). Instead, the researcher has the responsibility to learn from the interviewee how well the researcher's interpretations reflect the interviewee's meanings. Focus groups can be a forum for researchers to present emerging data and receive correction, direction, and feedback.

These strategies for managing subjectivity can assist the investigator in achieving the goal of fairness, that is, representing participant viewpoints equitably and avoiding lopsided interpretations that represent the biases of the researcher or only a few participants. However, Heshusius (1994) rejected the subjectivity objectivity dichotomy as representing an "alienated mode of consciousness" (p. 15) that separates the knower from the known, and she questioned the logic of managing subjectivity and of a "methodology of subjectivity" (p. 16). Instead, she encouraged participatory consciousness—"the awareness of a deeper level of kinship between the knower and the known" (p. 16). In this kind of "connected knowing" (Belenky, Clinchy, Goldberger, & Tarule, 1986), emotion is seen as an integral part of the human relationship between the knower and the known, and "being with" the participant replaces mere observation. This type of full attention has been referred to as merging, being present, empathic relating, or "a holistic apprehension of reality as mutually evolving" (Heshusius, 1994, p. 20).

## Adequacy of Data

Frequently in counseling psychology research, concerns about adequacy of data have centered primarily on numbers of interview participants, as if sheer numbers are an assurance of the quality of the findings. In fact, numbers alone have little to do with the quality or adequacy of qualitative data. Erickson (1986) proposed five major types of evidentiary adequacy: (a) adequate amounts of evidence, (b) adequate variety in kinds of evidence, (c) interpretive status of evidence, (d) adequate disconfirming evidence, and (e) adequate discrepant case analysis.

Adequate amounts of evidence are not achieved by mere numbers, though sufficient numbers of research participants are important. The numbers considered in the literature vary dramatically, from Pollio, Henley, and Thompson's (1997) recommendation—"Although not a formal methodological rule, the situational diversity necessary for identifying thematic patterns is often provided by three to five interview transcripts" (p. 51)—to hundreds. Ultimately, however, in an interview-based study, numbers mean little. Patton (1990) recommended that "validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information-richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size" (p. 185). Playing the "numbers game" is often either an attempt to manage discomfort associated with the inevitable ambiguity of conducting qualitative research or the need to "fit" one's research into the traditional postpositivist standards of institutional review boards, doctoral committees, or journal review boards. I have found that, when necessary to predict sample size, the "magic number 12" is as good as any, though in my own research I tend toward a larger sample size—as many as 20 or 30 participants-for reasons described below. Typically, data are gathered to the point of redundancy, which means that no new information is forthcoming from new data (Lincoln & Guba, 1985). Ultimately, what is far more important than sample size are sampling procedures; quality, length, and depth of interview data; and variety of evidence.

Sampling procedures in qualitative research serve an entirely different purpose from those in quantitative studies. Qualitative sampling is always *purposeful*—that is, participants are deliber-

ately selected to provide the most information-rich data possible. It is also always criterion-based—that is, one always uses specific criteria (people who have experienced a particular phenomenon, age, demographics) based on the questions guiding the research. Beyond purposeful and criterion-based sampling, the specific sampling strategies depend on the purpose of the study as well as on the depth and breadth of information one wishes to obtain. Patton (1990) described numerous purposeful sampling strategies (and provided an excellent discussion of sampling and sample size) to use depending on whether the purpose of the study is to achieve maximum variation, homogeneity, or extreme cases (such as elite athletes or political figures), among others. Snowball or chain sampling is also a legitimate strategy as long as the strategy is purposeful and designed to identify good exemplars of the phenomenon under study. Random sampling has two potential uses in qualitative research. The first, which is virtually irrelevant to the quality of the investigation itself, is to achieve credibility with postpositivist audiences. Random purposeful sampling may also be used to reduce an unnecessarily large potential sample to one that is more manageable in a way that will promote fairness as described above. Overall, purposeful sampling is used to produce information-rich cases, and a combination of sampling strategies may be used to achieve this purpose.

It would be impossible to adequately cover in this article the issue of the quality, length, and depth of interview data. However, some basic principles are important to consider here. First, the interview strategy should be articulated. Will the format resemble a "conversation with a purpose" (Dexter, 1970, p. 136)? Will the interview be open-ended and flexible or standardized and structured? Allowing for changes in the interview schedule over time ensures an emergent design sensitive to the growing body of data. Kvale (1996) identified quality criteria for interviewing, including using short interview questions that glean correspondingly long answers; the importance of interpreting, verifying, and clarifying answers during the interview itself; and the resulting responses being spontaneous and rich. I find that very few open-ended questions are much more effective than a list of 20 questions. Basically, the more questions one asks, the more answers one will get; the fewer questions one asks, the more likely one is to elicit stories and deeper meanings from participants. Finally, Polkinghorne (2005) recommended multiple interviews with each participant to achieve depth and richness. Although this may not always be feasible, the principle of adequate data should prevail.

In order to achieve adequate variety in kinds of evidence, it is important to consider the full range of possibilities for types of evidence (Morrow & Smith, 2000) along with the use of multiple data sources. Many published studies in counseling psychology are based on only a single 45-90-minute interview. Even if one were to interview a sufficient number of participants to achieve saturation or redundancy, a single data source has its limitations. Thus, I recommend the use of multiple data sources—participant observation, field notes, interviews, focus groups, participant checks, site documents, artifacts, journals, electronic data—to achieve the goal of adequate variety. Some authors refer to multiple data sources as "triangulation," borrowing terminology from the quantitative genre. Although the purposes are similar across quantitative and qualitative paradigms, the procedures are somewhat different; thus the term triangulation can be confusing. I also find that the term *triangulation* inevitably brings to mind the number 3,

which is irrelevant to the consideration of variety of data. The more variety in the data sources one is able to obtain, the greater will be the richness, breadth, and depth of the data gathered.

Another reason to seek multiple data sources is to enhance the *interpretive status of the evidence*. This criterion is met in part by the complementarity of interviewing and other data sources such as observation. It is also important to ensure that one has sufficient time and intensity in the setting to warrant the interpretations that one will ultimately make. Even when an investigation is primarily interview based, preliminary immersion in the setting may help to ground the study in the culture and context of the participants. The "truth value" of the evidence is most critical and involves building sufficient trust and rapport with the participants that one is assured that the participants are telling the truth as they know it. Without adequate integration of data sources, a thorough understanding of the context and culture, and a high-quality relationship with the participants, the final interpretation of the evidence may be in doubt.

Two additional criteria leading to an assurance of adequate data are adequate disconfirming evidence and adequate discrepant case analysis. Each involves a deliberate and articulated search for disconfirmation and helps to combat the investigator's natural tendency to seek confirmation of her or his preliminary or emerging findings. Finding adequate disconfirming evidence consists of searching for potentially disconfirming data while in the setting, whereas providing adequate discrepant case analysis involves finding disconfirming instances of a phenomenon and comparing them with confirming instances in order to understand the complexities of the phenomenon. Through repeated comparisons, the investigator is able to revise key assertions or categories until they accurately reflect the experiences of participants.

# Adequacy of Interpretation

In addition to adequacy of data, the adequacy of interpretation during the process of data analysis, interpretation, and presentation is essential to round out the criteria for trustworthiness. Data analysis, interpretation, and writing are a continuous and interactive process, often leading the investigator back into the field for additional data. Thus, though I make recommendations for various stages in the interpretive process, separating them for clarity, they rightly should be seen as an integrated whole. In the data analysis phase, immersion in the data is essential. As with many aspects of qualitative methodology, it is difficult to define immersion precisely. Immersion in the data begins to take place during data gathering and transcription of interviews. It continues with repeated readings of transcripts, listening to tapes, and review of field notes and other data. These repeated forays into the data ultimately lead the investigator to a deep understanding of all that comprises the data corpus (body of data) and how its parts interrelate.

Next, an analytic framework should be articulated that will enable the investigator to systematically make meaning of or interpret the data. This framework should spring from the overall research design that has been selected at the beginning of the study (e.g., ethnography, grounded theory, consensual qualitative research, phenomenology, case study). It may involve the emergence of themes or a theoretical model or conceptual framework grounded in the data. Analytic memos (Strauss & Corbin, 1990)

are an indispensable tool to enhance the analytic process. These memos are a collection of hunches, interpretations, queries, and notes made by the researcher from the beginning to the end of the investigation that become part of the data corpus and are reviewed frequently for incorporation into the analysis.

Finally, the writing or other presentation of the findings should exemplify a balance between the investigator's interpretations and supporting quotations from participants. An overemphasis on the researcher's interpretations at the cost of participant quotes will leave the reader in doubt as to just where the interpretations came from; an excess of quotes will cause the reader to become lost in the morass of stories. Just as numbers contribute to the persuasive "power" of a quantitative investigation, the actual words of participants are essential to persuade the reader that the interpretations of the researcher are in fact grounded in the lived experiences of the participants. Although there are exceptions to the interpretation-quotation balance (such as ethnographic fiction and other postmodern presentations), this general guideline will contribute to the credibility of writing in qualitative research in counseling psychology. The writing should also be characterized by thick description and by clarity of presentation, and subheadings, tables, and figures should be used as needed to assist the reader in following the interpretation.

# Guidelines for Writing and Publishing Qualitative Research

The literature is replete with guidelines for writing and publishing qualitative research. Underlying all of them is the common assumption that certain characteristics of quality span the quantitative—qualitative continuum, such as "explicit scientific context and purpose, appropriate methods, respect for participants, specification of methods, appropriate discussion, clarity of presentation, and contribution of knowledge" (Elliott, Fischer, & Rennie, 1999, p. 220). Other characteristics include an up-to-date and accurate literature review, a conceptual framework and rationale for the study (Choudhuri, Glauser, & Peregoy, 2004; Ponterotto, 1994), as well as clear and well-articulated research questions. In this final section, I explore some of those guidelines, concluding with my own recommendations for writing and publishing qualitative research.

# Current Guidelines for Writing and Publishing Qualitative Research

In addition to recommendations that cross qualitative and quantitative approaches, specific emerging criteria for evaluating qualitative research have appeared both across disciplines as well as within psychology. Lincoln (1995) cautioned that scholars in fields that have accepted qualitative inquiry for a much longer period of time than we have in education (and more recently in psychology) have "moved beyond firm and fixed criteria" (p. 2), whereas fields that have more recently emerged from reliance on an exclusively postpositivist paradigm still adhere more closely to these traditional criteria. In a sense, the current article leaves me open to the accusation of "methodolatry" (Reicher, 2000). However, I see my stance in this article as representing more of a bridge—in the process of transformation even as I write—than a fixed position. It is telling that scholars writing about quality in conducting and

publishing qualitative research refer to these standards as "emerging criteria" (Lincoln, 1995) and "evolving guidelines" (Elliott et al., 1999).

Recent guidelines for publishing qualitative research in psychology (Gold, 1994) have identified some underlying problems in this endeavor. For example, the typical journal editor does not allot additional pages to a qualitative manuscript despite requirements within the qualitative genre that we prioritize thick description and illustrate our interpretation of findings with exemplars from the data. In addition, the field has not yet arrived at a state of common knowledge in which most readers will understand the research design on the basis of a few words' description—it takes a paragraph or more to describe the basic principles of conducting a grounded theory study to the average journal subscriber, whereas those same principles underlying a meta-analysis can be communicated with a phrase. Less familiar qualitative designs require even more description. Often the qualitative researcher is called upon to give a rationale for conducting a qualitative study and to educate the reader about its underpinnings. If all this were not enough, in this Special Issue of the Journal of Counseling Psychology, authors have been encouraged to declare the paradigmatic underpinnings of their research (Ponterotto, 2005) and to include a researcher-as-instrument statement. Thus, the student writing a qualitative thesis or dissertation has a unique opportunity to fully describe the study without undue concern about length. However, unless one decides to write up one's qualitative study as a book, careful pruning is required to produce a journal article that remains congruent with qualitative traditions while fitting the traditional journal format.

Choudhuri et al. (2004) proposed guidelines for writing a qualitative manuscript that included establishing the background for the study and providing information about how the approach provides for an *emic* (local and individual) perspective. They also suggested that the presentation describe the inductive approach used in the investigation and explain the recursive nature of the analysis. Although they advised that qualitative reports not follow the traditional journal article format of introduction, method, results, and discussion, I have found that adherence to the traditional format, with recommendations for modifications that I suggest in the Appendix, contributes to the intelligibility of the report, especially for those new to the genre.

After an exhaustive review of the literature on quality standards, Elliott et al. (1999) presented evolving guidelines for publishing qualitative research in psychology. In addition to general qualities for both quantitative and qualitative research, they identified publishability guidelines especially pertinent to qualitative research, including "(a) owning one's perspective, (b) situating the sample, (c) grounding in examples, (d) providing credibility checks, (e) coherence, (f) accomplishing general versus specific research tasks, and (g) resonating with readers" (p. 220). Their article is particularly helpful in that they provide examples of good and bad practice for each criterion. Owning one's perspective includes disclosing one's personal, theoretical, and methodological orientations, values, and assumptions that could affect the research. Situating the sample includes providing full information about the demographics and life circumstances of participants. Grounding in examples includes providing examples of data to support one's interpretations. Credibility checks may be conducted through direct contact with participants, through use of multiple data sources, through a research team or auditor, and by including verification (as well as disconfirmation) steps in the analysis. *Coherence* is achieved by illustrating—through text or models—not only themes or categories that emerged from the data but also the complex relationships among categories, including various levels of abstraction. Addressing limitations to generalization in a qualitative study can contribute to distinguishing between *general versus specific research tasks*. Finally, the investigator is able to *resonate with readers* by presenting material in such a way that the reader's appreciation and understanding of the phenomenon under investigation are clarified or expanded. These guidelines, along with the criteria for trustworthiness addressed throughout this article, are summarized in the Appendix.

# Guidelines for Enhancing Trustworthiness or Quality in Qualitative Research

Like the criteria and guidelines described in this article, my own interpretation of what is essential in conducting and publishing quality qualitative research is clearly emergent and in a state of flux. In the Appendix I have attempted to draw together the major components of trustworthiness as I see them into a format that can be used as a systematic reference for beginning qualitative researchers as well as evaluators of qualitative investigations. I have done so with some trepidation, as I am aware of the necessity of reducing the data of trustworthiness, that is, of restricting the full range of paradigms available to the qualitative researcher to provide the most useful information for scholars in psychology. My recommendations are brief and intended to supplement, not to replace, the criteria described in this article. That said, my recommendations are arranged in the Appendix according to the sections of a journal manuscript or a four-chapter dissertation. In addition to those recommendations, paradigm-specific as well as transcendent criteria (e.g., authenticity criteria, social validity, transgressive validity), where appropriate, should be used in the research and reflected in the research report. An audit trail should also be kept, an abbreviated version of which may be included as an appendix to a thesis or dissertation.

### Summary and Conclusions

In this overview of quality and trustworthiness in qualitative research, I have attempted to provide helpful guidelines to beginning qualitative researchers as well as continue a dialogue in the field concerning the criteria that experienced qualitative researchers in counseling psychology might agree are important to guide our work. I hope that journal editors, manuscript evaluators, and research committee members will find this synopsis a useful tool in their work. Above all, I view this article as a snapshot representative of a moment in time for qualitative researchers, for counseling psychology researchers, and in my own thinking.

### References

Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.

Choudhuri, D., Glauser, A., & Peregoy, J. (2004). Guidelines for writing a qualitative manuscript for the *Journal of Counseling & Development*. *Journal of Counseling & Development*, 82, 443–446.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000a). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

- Denzin, N. K., & Lincoln, Y. S. (2000b). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 1–28). Thousand Oaks, CA: Sage.
- Dexter, L. A. (1970). *Elite and specialized interviewing*. Evanston, IL: Northwestern University Press.
- Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, 38, 215–229.
- Erickson, F. (1986). Qualitative methods in research on teaching. In M. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 119–161). New York: Macmillan.
- Fine, M. (1992). *Disruptive voices: The possibilities of feminist research*. Ann Arbor: University of Michigan Press.
- Gasson, S. (2004). Rigor in grounded theory research: An interpretive perspective on generating theory from qualitative field studies. In M. E. Whitman & A. B. Woszczynski (Eds.), *The handbook of information* systems research (pp. 79–102). Hershey, PA: Idea Group.
- Geertz, C. (1973). The interpretation of cultures: Selected essays. New York: Basic Books.
- Geertz, C. (1983). Local knowledge: Further essays in interpretive anthropology. New York: Basic Books.
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. New York: Aldine.
- Gold, P. B. (1994, August). Preparing qualitative research for publication in counseling psychology journals. Paper presented at the 102nd Annual Convention of the American Psychological Association, Los Angeles, CA.
- Goodman, L. A., Liang, B., Helms, J. E., Latta, R. E., Sparks, E., & Weintraub, S. R. (2004). Training counseling psychologists as social justice agents: Feminist and multicultural principles in action. *The Counseling Psychologist*, 32, 793–837.
- Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Newbury Park, CA: Sage.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.
- Haverkamp, B. E. (2005). Ethical perspectives on qualitative research in applied psychology. *Journal of Counseling Psychology*, 52, 146–155.
- Heshusius, L. (1994). Freeing ourselves from objectivity: Managing subjectivity or turning toward a participatory mode of consciousness? *Educational Researcher*, 23(3), 15–22.
- Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal* of Counseling Psychology, 52, 196–205.
- Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psycholo*gist, 25, 517–572.
- Husserl, E. (1931). Ideas: General introduction to pure phenomenology (D. Carr, Trans.). Evanston, IL: Northwestern University Press.
- Jackson, P. W. (1990). Looking for trouble: On the place of the ordinary in educational studies. In E. W. Eisner & A. Peshkin (Eds.), *Qualitative* inquiry in education: The continuing debate. New York: Teachers College Press.
- Kvale, S. (1996). InterViews: An introduction to qualitative research interviewing. Thousand Oaks, CA: Sage.
- Lather, P. (1994). Fertile obsession: Validity after poststructuralism. In A. Gitlin (Ed.), Power and method: Political activism and educational research (pp. 36–60). New York: Routledge.
- Lincoln, Y. S. (1995, April). Emerging criteria for quality in qualitative and interpretive research. Keynote address presented at the annual

- meeting of the American Educational Research Association, San Francisco, CA
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. In D. D. Williams (Ed.), *Naturalistic evaluation* (pp. 73–84). San Francisco: Jossey-Bass.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The handbook of qualitative research* (2nd ed., pp. 163–188). Beverly Hills, CA: Sage.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Morrow, S. L. (1992). Voices: Constructions of survival and coping by women survivors of child sexual abuse. Unpublished doctoral dissertation, Arizona State University, Tempe.
- Morrow, S. L., Rakhsha, G., & Castañeda, C. L. (2001). Qualitative research methods for multicultural counseling. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (2nd ed., pp. 575–603). Thousand Oaks, CA: Sage.
- Morrow, S. L., & Smith, M. L. (1995). Constructions of survival and coping by women who have survived childhood sexual abuse. *Journal of Counseling Psychology*, 42, 24–33.
- Morrow, S. L., & Smith, M. L. (2000). Qualitative research for counseling psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of coun*seling psychology (3rd ed., pp. 199–230). New York: Wiley.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Patton, M. Q. (2002). Qualitative research and evaluation methods (3rd ed.). Thousand Oaks, CA: Sage.
- Peshkin, A. (1988). In search of subjectivity—One's own. Educational Researcher, 17(7), 17–21.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, 52, 137–145.
- Pollio, H., Henley, T., & Thompson, C. (1997). The phenomenology of everyday life. Cambridge, England: Cambridge University Press.
- Ponterotto, J. G. (1994, August). The editorial review of qualitative research in counseling psychology: Reflections and some recommendations. Paper presented at the 102nd Annual Convention of the American Psychological Association, Los Angeles, CA.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52, 126–136.
- Reicher, S. (2000). Against methodolatry: Some comments on Elliott, Fischer, and Rennie. *British Journal of Clinical Psychology*, 39, 1–6.
- Rennie, D. L. (1994). Clients' deference in therapy. *Journal of Counseling Psychology*, 41, 427–437.
- Rennie, D. L. (2004). Reflexivity and person-centered counseling. *Journal of Humanistic Psychology*, 44, 182–203.
- Rossman, G. B., & Rallis, S. F. (2003). Learning in the field: An introduction to qualitative research. Thousand Oaks, CA: Sage.
- Schwandt, T. A. (2000). Three epistemological stances for qualitative inquiry: Interpretivism, hermeneutics, and social constructionism. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 189–213). Thousand Oaks, CA: Sage.
- Scriven, M. (1972). Objectivity and subjectivity in educational research. In L. G. Thomas (Ed.), Philosophical redirection of educational research: The seventy-first yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press.
- Sparkes, A. C. (1998). Validity in qualitative inquiry and the problem of criteria: Implications for sport psychology. *The Sport Psychologist*, 12, 363–386.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.

- Tierney, W. G. (1993). The cedar closet: An examination of ethnographic fiction. International Journal of Qualitative Studies in Education, 6, 303–314.
- Vera, E. M., & Speight, S. L. (2003). Multicultural competence, social justice, and counseling psychology: Expanding our roles. *The Counseling Psychologist*, 31, 253–272.
- Walsh, W. B. (Ed.). (2003). Counseling psychology and optimal human functioning. Mahwah, NJ: Erlbaum.
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11, 203–214.

### Appendix

### Recommendations for Conducting and Writing Qualitative Research

#### Introduction

The general criteria for a qualitative introduction and literature review are similar to those for a quantitative study. However, a caveat and some additional points may be helpful:

- 1. Distinguish between the theory base for the developing topic (e.g., sociocognitive career theory), which appears in the introduction, and the philosophical assumptions or paradigm underlying the research (Ponterotto, 2005), which I place in the Method section. The former forms the underpinnings of the research question, the latter the underpinnings of the method. These converge in the statement of the purpose, rationale, or research questions.
- 2. Throughout the introduction, gradually build a case for conducting a qualitative investigation.
- 3. Qualitative research is guided by research questions rather than hypotheses. Qualitative research questions are basic questions regarding meaning and social interaction: How do people understand, construct, manage, and interpret their worlds (Gold, 1994)?

#### Method

My preferred format for the Method section follows APA style but with some additions and modifications. The particular order of the following subsections may vary according to preference.

- 1. Philosophical assumptions or paradigm(s) underpinning the research: These should be congruent with the research question(s) and guide the choice of research design and the conduct of the study. The research report should clearly identify the underlying paradigm(s); paradigm blends (e.g., a constructivist paradigm with feminist axiology) should be explained.
- 2. Research design (e.g., grounded theory, phenomenology, consensual qualitative research): Include intellectual heritage (anthropology, philosophy, symbolic interactionism, etc.; Gold, 1994) as well as basic underpinnings or principles of the design and any variations on the standard design.
- 3. Researcher-as-instrument statement: Describe your rationale for reflexivity; your experience with the topic or population of interest; your training and experience in qualitative methods; your approach to subjectivity; any assumptions, expectations, and biases you bring to the investigation; and how you have managed them (self-reflective journal, research team, etc.). Describe how reflexive processes affected the analysis. If conducting consensual qualitative research or other consensual research, describe how consensus was achieved and power managed among researchers.
- 4. Participants: Participants should be selected for information richness. The report should describe participant demographics, including the rationale for the sample size; sampling strategies; recruitment (including entry into the field, gatekeepers); and researcher roles and relationships.

- 5. Sources of data: This section should be a combined Instrumentation and Procedures section, with multiple data sources (e.g., interview, focus group, participant observation, field notes, physical evidence) arranged in order of importance, with the primary data source listed first.
  - a. In an interview-based study, a basic interviewing philosophy or approach congruent with the underlying paradigm should guide the choice of the type of interview and the conduct of the interview and should be included in the research report.
  - b. Interview questions should be global and few enough that indepth data, rather than superficial answers, result. Describe how individual interview and focus group questions were derived. Include the actual interview protocol or questions in the body of the report or in an appendix. Indicate the number and the length of the interviews (including range and mean length) as well as how data were recorded and transcribed.
  - c. Field notes taken from observation in the field or during and after interviews are essential to exploring and expressing the context of the study. They should include all the stuff of the senses (sight, sound, etc.) and should be included as a data source.
  - Explain in detail how each type of data was collected, using subheadings.
- 6. Data analysis: This material belongs in the Method section instead of its traditional placement in the Results. Include the steps in the analysis (e.g., in grounded theory, identify and explain each step of the coding and categorization). These steps should be more detailed when using designs that are unfamiliar to the audience; otherwise, a primary source for the design can be cited.
  - a. Describe data management procedures, how data sources were integrated into the data corpus, as well as the use of a particular approach to data management (e.g., cut-and-paste, computerassisted data analysis).
  - b. Immersion in the data involves multiple readings to the point that the investigator can move immediately to various locations in the data to compare and contrast one part of the data with others. The report should describe this immersion.
  - An analytic journal, including theoretical or analytic memos, should be kept in concert with the research process and described in the report.

- d. A search for discrepant findings or disconfirming evidence is essential to combat confirmatory bias and to avoid an overly simplistic interpretation of the data.
- Describe the process of using peer researchers or debriefers and how this process influenced the investigation.
- 7. Address standards of trustworthiness or rigor that have not been described elsewhere in the Method section but that will lend credibility to the study.

### Results

The Results section should contain only the products of the analysis. I recommend not combining Results and Discussion sections because of the potential for confusing data-based interpretations, which have been subject to intensive scrutiny by the researcher and others, with the researcher's own conclusions about the findings.

- 1. A rigorous analysis will lead easily to writing the results. There should be a continual interplay of data gathering, analysis and interpretation, and results.
- 2. Strive for an appropriate balance between the investigator's interpretive commentary and supporting evidence in the form of quotes from participants.

- 3. Strive for "thick descriptions"—descriptions that are both in-depth and contextually based.
- 4. Strive for complexity beyond a mere listing of themes or categories. A conceptual model or narrative should capture the relationships between and among parts of the analysis.

#### Discussion

This section should resemble the Discussion section of a quantitative study in many respects. Its differences from a quantitative Discussion section may be delineated in part by distinguishing what *not* to include. For example, the limitations of the study should not include characteristics of the qualitative method used, such as smaller sample size, unless the data were insufficient according to qualitative standards. A discussion of study limitations should not be an apology for characteristics of qualitative research that differ from quantitative approaches. In addition, a discussion of the implications of the findings for future research should reflect on both further qualitative investigations as well as how the findings might be used in a quantitative study to provide generalizable results.

Received October 20, 2004
Revision received December 13, 2004
Accepted December 16, 2004