

Qualitative Research in Organizational and Vocational Psychology, 1979–1999

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In this essay, qualitative research is shown to consist of a set of methods that fits very nicely with *some* of the research questions asked by organizational and vocational psychologists. Because many researchers want additional tools, interest in these qualitative techniques appears to be growing. Two metagoals of this article are (a) to bolster this growing interest and (b) to inspire readers of the *Journal of Vocational Behavior (JVB)* to learn more about these qualitative methods. In keeping with the spirit of *JVB*'s annual reviews, we describe the body of qualitative studies reported by organizational and vocational researchers. Because these techniques may be relatively new to many readers of *JVB*, exemplary studies and specific best practices are highlighted and recommended as possible templates for future research. In addition, substantive issues are identified and discussed. In the final section, lessons and conclusions are drawn. © 1999 Academic Press

In a special issue of *Administrative Science Quarterly (ASQ)* published over 20 years ago, Van Maanen (1979) argued compellingly for the unrealized value of conducting qualitative research and called on organizational scientists to utilize more of these kinds of strategies and techniques. In the years since that influential *ASQ* publication, organizational researchers have responded favorably to Van Maanen's call. Of particular interest to the readers of the *Journal of Vocational Behavior (JVB)*, numerous research articles that report qualitative methods have appeared in the literature on organizational and vocational psychology over these past 20 years.

Like in many academic disciplines, it is common, healthy, and timely for organizational and vocational psychologists to pause periodically and take stock of what they have been doing and where they are going. In keeping with the spirit of *JVB*'s annual review of selected topics, our charter and purpose are to assess how organizational and vocational psychologists have used qualitative research. Thus, this review focuses on *methods* rather than on a *substantive topic* (e.g., career choice). Because qualitative methods are relatively new to many organizational and vocational psychologists, we deliberately "cast a broad net" over our domain and knowingly risk being shallow. Moreover, we select the last 20 years

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(or approximately so) for our review because it conveniently fits with Van Maanen's (1979) influential call and with Denzin and Lincoln's (1998c, pp. 13–22) "third, fourth, and fifth movements" (i.e., historical phases) in qualitative research.

In our judgment, traditional and more recent topics studied by organizational and vocational psychologists are becoming increasingly complex. For example, career choices among college students are typically studied because such decisions are highly salient to individuals (e.g., the students themselves and their tuition-paying parents) and involve the commitment of substantial amounts of personal and financial resources. With the advent of "lifelong learning," the "knowledge worker," and new definitions for "career," the traditional topic of career choice likely requires new theory, processes, and outcome variables (Hall & Associates, 1996; Lee & Maurer, 1997). To achieve additional understanding across new and evolving topics, it can only behoove organizational and vocational psychologists to remain open to new strategies and techniques. Because qualitative methods are becoming increasingly common in other disciplines (e.g., anthropology, clinical psychology, management, and sociology), organizational and vocational psychologists might learn from this larger and collective experience and avoid misdirections. In addition, a secondary purpose of this review is to inspire organizational and vocational psychologists to seek opportunities to expand their thinking and research by learning about and possibly adopting qualitative methods.

Beyond our (seemingly unbounded) enthusiasm and idealism for qualitative research, several real-world constraints must be recognized. First, we could not review and include in this essay all published articles using qualitative methods over our 20-year period. Second, no attempt was made to be comprehensive across all journals in the basic disciplines of anthropology, psychology, and sociology, or in the applied disciplines of business, education, and public administration. Instead, we restricted our attention to the "major" journals in organizational and vocational psychology (e.g., *Academy of Management Journal*, *ASQ*, *JVB*). Third, we *initially* focused our attention on individuals (i.e., people), instead of on larger aggregates (e.g., firms or strategic business units). With that said, however, the distinction between micro and macro units of analysis quickly became blurred in our reading of the literature (e.g., business decisions made by *people* can be either a micro or a macro issue). Because we wanted to be inclusive (i.e., cast a broad net), we opted to include articles when ambiguities arose about whether a study is micro/psychological or macro/sociological. Thus, we included studies that assessed individual human behavior regardless of context (e.g., *people* making decisions within the context of strategic business units), but we excluded studies that focused only on macro units (e.g., actions taken by strategic business units without an analysis of the decision-making *people* themselves).

When conducting qualitative research, a virtual requirement of the method is that authors identify up front their particular biases. Following that spirit, we

fully acknowledge that we are schooled in the traditions of logical positivism, which is likely most common to the vast majority of *JVB* readers. Indeed, Lee has published statistically oriented articles on survival analysis (Morita, Lee, & Mowday, 1989, 1993), Mitchell has published a highly influential methodological article on standards of reliability and validity in survey research (Mitchell, 1985), and Sablinski's original graduate training was in personnel psychology. Nevertheless, our current research agenda on voluntary turnover in organizations required us to expand beyond our traditional training. A few years ago, for example, we published a qualitative investigation (Lee, Mitchell, Wise, & Fireman, 1996) on our own theory of voluntary turnover (Lee & Mitchell, 1994). Moreover, we continue to learn about what is and how to conduct qualitative research (Lee, 1999). Thus, we approach this review having "practiced what we preach."

In sum, the spirit of what we wish to say is simple. We three traditional, quantitative, positivist, and survey- and experimentally oriented organizational and vocational researchers are always seeking *more* tools and methods to facilitate our research agenda.

WHAT IS AND WHEN TO USE QUALITATIVE RESEARCH

In *Using Qualitative Methods in Organizational Research*, Lee (1999) summarized the major characteristics and themes of qualitative research, as well as the situations when its application is most likely appropriate. We draw upon that source in this section. (For a broad, comprehensive, and excellent description of qualitative research, see Denzin & Lincoln, 1998a, 1998b, 1998c.)

Major characteristics. Although differing definitions exist, qualitative research appears to have four "defining" characteristics. First, qualitative research occurs in natural settings. In general, it should not be conducted in the laboratory, though Gersick (1989) is a marvelous exception. Second, qualitative data derive from the participants' perspective. In other words, the researcher should not impose a particular interpretation. Third, all qualitative research is flexible (i.e., reflexive), and qualitative designs can (and should) be readily changed to match the fluid and dynamic demands of the immediate research situation. In our view, this flexibility (or ambiguity) may most sharply differentiate qualitative methods from the more traditional, algorithmic, and rule-driven methods practiced by experimentally and survey-oriented psychologists. Moreover, it is this characteristic of reflexivity that likely causes problems among traditionalists. Fourth, qualitative instrumentation, observation methods, and modes of analyses are not standard, which may also run counter to the prevailing notions of control, reliability, and validity.

Major themes. Two themes may underlie these four major characteristics of qualitative research. First, qualitative research is a *process* of data reduction that simultaneously enhances the data's meaning. Second, these methods have little in the way of standardized instruments and procedures. Although this is a somewhat rough analogy, much of "generic" qualitative research can be viewed as analog-

gous to an informal *exploratory factor analysis*. Through a variety of qualitative techniques, for example, large amounts of qualitative data are subjectively evaluated (cf. intuitively correlated), simplified (cf. judgmentally combined into factors), and reconstituted (cf. subjectively rotated). If this is successful, the net result is greater understanding of the empirical evidence (cf. latent and causal traits are identified and defined).

Summarizing across these major characteristics and themes, Lee (1999, p. 38) concluded that qualitative research is *well* suited for the purposes of description, interpretation, and explanation. In particular, it can effectively address questions such as "What is occurring?" and "How is it occurring?" In contrast, qualitative research is *not well* suited for issues of prevalence, generalizability, and calibration. For example, it cannot effectively answer a question such as "How much—of whatever it is—is occurring?" Thus, the kinds of questions that are answered by qualitative and quantitative research methods differ. Perhaps needless to say, organizational and vocational psychologists should apply the method that best fits their theoretical question and analytical situation. In our judgment, qualitative methods simply offer additional and more specialized tools that seem likely to be useful for *some* of our research.

In the sections to follow, we first attempt to describe the body of research in organizational and vocational psychology that uses qualitative methods. It is important to recall that we focus on method rather than substantive content area. As a result, our description of this body of research is by necessity quite diverse. Moreover, the methodological boundaries between qualitative methods are often amorphous. Nevertheless, we impose *three* different views (cf. slices) in order to facilitate our description because *no* single view includes *all* of the studies reviewed for this essay. More specifically, this body is described from the vantages of (a) theoretical purpose, (b) research design, and (c) analytical techniques. Second, we discuss substantive method issues found in this body of qualitative research. More specifically, (a) the tensions in the purposes between qualitative and traditional research, (b) qualitative research design, and (c) data processing are considered. Finally, we draw lessons and conclusions from our qualitative description and review.

PURPOSES OF THE QUALITATIVE STUDY

One way to organize and describe the qualitative research reported by organizational and vocational psychologists is to examine the purposes of their studies. *Most* qualitative research strives to *generate, elaborate, or test* theories from organizational and vocational psychology. Theory generation occurs when the inquiry's design produces formal and testable research propositions. Theory elaboration occurs when preexisting conceptual ideas or a preliminary model drives the study's design. Typically, formal hypotheses are *not* present. Theory testing occurs when formal hypotheses or a formal theory determines the study's design. Table 1 shows the classification of our sampled qualitative studies into theory generation, elaboration, or testing. Rather than tersely summarize the

TABLE 1
Theoretical Purpose: Generation, Elaboration, or Testing

Theory generation	Theory elaboration	Theory testing
Adler & Adler (1988)	Barker (1993)	Barley (1990)
Allen, Poteet, & Burroughs (1997)	Bartunek (1984)	Campbell & Martinko (1998)
Boje (1991, 1995)	Burgelman (1994)	Claes & Ruiz-Quintanilla (1998)
Dutton & Dukerich (1991)	Loscocco (1997)	Gersick (1989)
Eisenhardt (1989)	Martin, Knopoff, & Beckman (1998)	Lee, Mitchell, Wise, & Fireman (1996)
Elsbach & Sutton (1992)	Perlow (1998)	Vaughan (1990)
Gersick (1988)	Pratt & Rafaeli (1997)	Yan & Gray (1994)
Golden-Biddle & Locke (1993)	Ross & Staw (1986)	
Greenwood, Hinings, & Brown (1994)	Rynes, Bretz, & Gerhart (1991)	
Human & Provan (1997)	Sutton & Hargadon (1996)	
Kilduff (1993)		
Sutton (1991)		
Van Maanen (1975)		
Zbaracki (1998)		

many studies listed in Table 1 (e.g., with a single paragraph describing each study), we believe it more informative to identify and review one *exemplary* study in a bit more depth.

Somewhat separate from the more common purposes of theory generation, elaboration, and testing, *critical theory* pursues a fourth and different purpose. It explicitly applies an overt political agenda to the research process. Critical theory is also described below.

Theory Generation

As an exemplar of theory generation, we elaborate upon Allen, Poteet, and Burroughs (1997). Allen et al. noted that, although substantial knowledge about the mentoree's experiences exists, limited information exists about the mentor's experience. Therefore, they conducted a qualitative study designed (a) to discover the mentor's reasons for mentoring (i.e., individual reasons, organizational factors that facilitate or inhibit mentoring, the mentoree's personal characteristics, and outcomes from mentoring) and (b) to generate research propositions about these reasons. Twenty-seven individuals who had served or were currently serving as informal mentors were identified and were intensively interviewed with a semistructured format.

These verbal interview data were transcribed into text and subjected to a six-step analysis (please recall our earlier analogy to an informal exploratory factor analysis). First, one of the researchers inspected the text and identified tentative "dimensions" that might underlie the longer transcribed comments. Second, another researcher was given the dimensions' names and recategorized

the textual comments into the dimensions. Third, these two researchers then reduced the data by collapsing across similar or redundant dimensions, and fourth, they reduced the dimensions still further by examining for "higher order factors" (p. 75). Fifth, the resulting reduced and higher order factors were examined as a complete set by a third researcher. Finally, a doctoral-level researcher, who was not associated with the study, recategorized the dimensions within the appropriate factor. Throughout this process Cohen's kappa statistic indexed the researchers' agreement.

Most important, Allen et al. (1997) induced eight researchable propositions from their data. For example, their Proposition 3 reads as follows:

Proposition 3. A felt sense of responsibility (norm of reciprocity) mediates the relationships between previous experience as a protégé and willingness to mentor others. (p. 84).

Theory Elaboration

As an exemplar of theory elaboration, we discuss Ross and Staw's (1986) case study. Ross and Staw noted that most of the empirical research on the escalation of an individual's commitment to an ongoing course of action fell into one of three types. These three experimental types were (a) simulated games that involved escalating circumstances (e.g., pretend auctions), (b) simulated games that involved entrapment (e.g., created contexts where subjects were likely to expend resources while working for a receding or elusive goal), and (c) student role plays (which were often conducted by Ross, Staw, and their associates). As a result, Ross and Staw judged that the experimental research had become too complex and too "detached" from their intended organizational contexts.

To simplify, reconnect, and redirect the theory and empirical research on escalating commitment, Ross and Staw (1986) summarized the evidence into four classes of variables or determinants of escalation. These determinants were (a) project, (b) psychological, (c) social, and (d) structural variables. In order to breathe new life and meaning (cf. ecological validity) into these classes of determinants, Ross and Staw applied these variables (i.e., looked for their application) to the case of Expo 86, which was a world exposition hosted in Vancouver, British Columbia, and organized and managed by their provincial government. In other words, they looked for real-world applications of the variables that they summarized (or deduced) from the existing body of theory and experimental data.

As their data sources, Ross and Staw (1986) examined newspaper articles, press releases, and official Expo 86 publications. For example, they read virtually all material that appeared in the *Vancouver Sun*, *Vancouver Province*, or *Toronto Globe and Mail* that included projected budget and attendance figures and direct quotes. In addition, they interviewed reporters and Expo 86 staff members. Because of the public availability of most financial data and the extensive press coverage of the people responsible, Ross and Staw asserted that these external sources lessen concerns about researchers' biases in their analyses.

By their application of the theorized determinants of escalating commitment to their data, Ross and Staw (1986) provided a richly descriptive essay that described the processes by which these variables unfolded during the Expo 86 saga. More important, however, they induced and offered a tentative three-phased general model of escalation process (p. 294).

Theory Testing

Deviating from the traditional psychological theories of voluntary turnover (e.g., Mobley, 1977) that build on the landmark ideas of March and Simon (1958), Lee and Mitchell (1994) proposed four alternative processes (called “decision paths”) of volitional quitting that derive from recent theory and research on cognitive decision making and social processes. They called their model the “unfolding model of voluntary turnover.” Because of its complexity and newness (cf. vague specification), Lee, Mitchell, and their associates believed that the initial empirical test of the unfolding model required a qualitative design. Therefore, Lee et al. (1996) applied Yin’s (1994) case study method (described below) to test seven formal hypotheses that were deduced from their turnover theory.

Their primary data derived from semistructured interviews of 44 former nurses. Each interview question and its general follow-up items were designed to assess a different portion of the unfolding model and to test the study’s seven hypotheses. In addition, surveys were mailed to interviewees immediately after their interviews were completed, and these quantitative data served as reliability and validity checks on the qualitative interview responses.

The survey data suggested at least some evidence for the reliability and construct validity of their interview data. Perhaps most importantly, Lee et al. (1996) reported that the leaving of each of the 44 nurses could be validly classified into one of their four decision paths (i.e., processes for leaving). In addition, the study’s seven formal hypotheses appeared to be corroborated by the data. Thus, Lee et al. concluded that their model received preliminary empirical support. (In a subsequent *quantitative replication*, additional empirical support for the unfolding model was found; Lee, Mitchell, Holtom, McDaniel, & Hill, in press.)

Contrary to popular stereotype, perhaps, qualitative research is *not* restricted to theory generation or elaboration, although that is certainly more common. Like quantitative research, qualitative methods can also lend themselves to theory testing. It is worth reiterating an earlier point. Qualitative research effectively addresses the issues of “what and how” psychological and sociological *processes* evolve over time; in contrast, quantitative research effectively addresses issues of “how much” (i.e., prevalence, generalizability, and calibration).

Critical Theory

One final purpose of qualitative research is to induce *radical change*. Most organizational and vocational psychologists are likely taught that the scientific

enterprise should be, as far as possible, "objective, dispassionate, and fair." Many qualitative researchers applaud this intention, yet they may also find it unrealistic. Instead, they believe the scientific process (and the empirical world itself) is in reality subjective, passionate, and inherently unfair. Critical theory (or the critical perspective) is a philosophical and an empirical orientation that takes this view even further. More specifically, it seeks to understand the world from a particular and an explicit *political* orientation (Jermier, 1998). It seeks to expose the status quo as systems imposed by the powerful on the powerless. Perhaps the most famous subset of critical theorists are Marxist psychologists and sociologists. From this "political domain," Lee (1999, p. 25) noted that current feminist researchers have had a meaningful impact on organizational and vocational psychologists.

As an exemplar of the feminist approach to critical theory, Martin, Knopoff, and Beckman (1998) studied how the feminist construct of "bounded emotionality" applied at the Body Shop International, which is a successful, large, and largely female-run cosmetic company. In traditional views (i.e., nonfeminist), emotions and emotional displays are marginalized in organizational life and, until recently, little studied. In contrast, feminist theory holds that emotions and emotional displays benefit individual and organizational well-being. More specifically, bounded emotionality encourages the expression of a wider range of emotions than that typically found in "traditional, normal, and nonfeminist" firms, while simultaneously stressing the importance of respecting and being sensitive to others' reactions.

In accordance to feminist research methods, Martin et al. (1998) first established mutual trust and understanding with the study's participants. After such relationships were solidified, Martin and associates next gathered data from archival materials, direct observations, participant observations, on-site structured interviews, informal conversations, and formal company lectures and seminars. Third, these data were analyzed with the grounded theory approach (described below). Finally, a detailed narrative was offered that richly described how bounded emotionality was enacted and maintained over time. Equally important, they described how bounded emotionality presented difficulties—sometimes severe—for many employees.

RESEARCH DESIGN

A second way to organize and describe the qualitative research reported by organizational and vocational psychologists is to examine their research designs. Such discussion often requires that studies be classified into types. In our judgment, our classification of types reflects how most qualitative authors depict their study's design. Nevertheless, such taxonomies are only simple heuristic devices that are useful for descriptive purposes. Below, we describe studies as case study research, ethnographies, and in-depth interviews. Simply put, however, our categories are *not* necessarily mutually exclusive. The methodological boundaries across categories are amorphous. For example, in-depth interviews

can certainly occur within a case study but are not restricted to case settings; similarly, ethnographies can occur within a case study but are also not limited to case settings; and in many cases, all three designs can be present in a serial order.

Case Study Research

Case study research has been widely applied by qualitative researchers. From the outset, it is critical to note that case study research *differs* from the much more widely known Harvard Business School case study method of instruction. On the one hand, both forms of case study have similarities. For example, both methods involve (a) time- and labor-intensive data gathering, (b) rich description of the general situation and specific topic under study, and (c) expanding the reader's understanding of the case itself. On the other hand, both forms of case study have differences as well. The first and, perhaps, key difference involves the role of theory. Like most social science inquiry, case study research *necessarily* seeks to generate, elaborate, or test theory. In contrast, the case study method of instruction involves *no* necessary theoretical implication; instead, it typically stops after an in-depth description. Second, case study research enhances understanding through theory development that can occur *within* an in-depth investigation of one case situation (i.e., $n = 1$) or *across* in-depth investigations of multiple cases (e.g., Lee et al.'s, 1996, $n = 44$ nurses). Often, moreover, case study research results in specific research propositions. In comparison, the case study method of instruction enhances understanding by a rich and deep description *within* a single specific case situation. Furthermore, specific research propositions are simply *not* part of the case method of instruction.

Yin (1994) offered an excellent and a comprehensive presentation of case study research, including discussion of design issues, data collection techniques, standards for reliability and validity, methods of analysis, and modes for case reports. In brief, a case can be persons, groups, or nonhuman objects (e.g., products). Case study research answers many of the questions typically asked in experimental settings. Unlike in experimentation, variables cannot (and should not) be tightly controlled and manipulated in case study research. Nevertheless, its in-depth nature, emphasis on situationally dependent process variables, and typically longitudinal designs lend themselves to some level of causal inference (Lee, 1999). For case study research, moreover, identifying a single exemplary study is quite easy. As indicated by Larsson and Lowendahl's (1996) review of the case study research applied in management inquiry, Eisenhardt (1989) has become "the classic" citation.

Eisenhardt (1989, p. 544) asked, "How are fast strategic business decisions made [by people]?" and "How does decision speed link to performance?" She answered these questions across eight similar cases, with each case representing a different microcomputer firm. In the logic of case study research, each case can be seen as a different experiment with seven replications. More specifically, the data from each case serve to confirm or disconfirm inferences drawn from the other cases. Her data consisted of (a) initial semistructured interviews with each

firm's chief executive officer (CEO), (b) subsequent semistructured interviews with every member of the top management team (including a second interview with the CEO), (c) questionnaires completed by each top management team member, and (d) secondary sources (i.e., industry reports, internal documents, informal observations of daily behaviors, and observations at strategy and staff meetings).

From the quantitative questionnaire and qualitative interview data, preliminary analysis began by constructing "decision stories" (e.g., unfolding time line depictions) by combining the accounts provided by the top management team members. Next, these data were analyzed by a grounded-theory-like process. More specifically, decision stories were examined for similarities and differences across pairs of cases. Third, the identified similarities and differences across *multiple* pairs of cases were inspected, and general and cross-case propositions were tentatively induced. In turn, the list of tentative propositions were then "tested" or compared for fit (cf. falsification or corroboration) in each original case. After many iterations of this process, a final list of propositions was reported and discussed.

In an independent assessment, Larsson and Lowendahl (1996, p. 6) judged the Eisenhardt (1989) study as "high" on authenticity (i.e., "the extent to which the case report conveys genuine field experiences"), plausibility (i.e., "the extent to which the case report makes intuitive sense to the reader"), and criticality (i.e., "the extent to which the readers are activated to re-examine their assumptions that underlie their work"). In our judgment, Eisenhardt (1989) is exemplary.

Ethnography

Perhaps the most widely known qualitative research design is ethnography. Here, the researcher spends a substantial amount of time and energy interacting within organizational or work settings. Lee (1999, pp. 89–99) identified four kinds of researcher involvement. At one end of a continuum, the research can be the "compete observer." He or she remains in the background and passively observes what others say and do and notes the context in which those actions occur. At the other end of the continuum, the researcher can be the "complete participant." Here, she or he becomes a full but *covert* organizational member. In particular, the complete participant hides his or her scientific intentions, role, and field note taking. In-between these two ends, the researcher might be the "participant–observer," who becomes a full organizational member and overtly conducts his or her scientific data-gathering role. Also between the two ends, the researcher might be the "observer–participant," who participates as a nonmember in organizational activities and overtly conducts her or his scientific data-gathering functions.

As an exemplar of an *observer–participant ethnography*, Barley (1990) investigated the following theorized linkage. First, new technology initially changes the *nonrelational* roles among individual organizational members. Second, these changes then alter their *relational* roles. In turn, these altered relational

roles rearrange the social networks connecting these people. Finally, the rearranged social networks serve to sustain or modify institutional structures.

Despite a substantial body of theory, the process by which new technology affects organization structure remains unclear. More specifically, hospital radiology departments have experienced tremendous technological changes in the last 40 years. Until the late 1960s, radiology relied on stable technology, namely, radiography and fluoroscopy. In 1971, the computed tomograph (CT) scanner was invented, and by 1980, it had diffused widely in community hospitals. In the 1980s, other technologies were invented (e.g., positron emission tomography, PET; magnetic resonance imaging, MRI; digital radiography and digital subtraction angiography, DSA). Structurally, radiology departments often remained officially undifferentiated across technologies, but in practice, new roles emerged. For example, the formerly ubiquitous "X-ray techs" were joined by "specials techs," "sonographers," and "CT techs." Thus, Barley studied how these changes in radiological technology changed the way people enacted their nonrelational and relational roles, which in turn determined a department's structure.

Barley (1990) became an observer-participant in two hospital radiology departments that were experiencing the larger national trend of adopting new technologies. Every day for approximately 1 year, Barley spent 6 to 8 hours collecting observer-participant data on nonrelational and relational roles. At the end of the observational portion of the study, sociometric surveys were administered and assessed (a) whether departmental social networks corroborated his observations, (b) whether these networks were structured in their anticipated/hypothesized forms, and (c) whether and how these social networks affected the work of the radiology departments. From the qualitative observer-participant data, a rich description of processes emerged. From the quantitative survey data, moreover, explicit calibrations of these richly described processes also emerged. When these qualitative and quantitative data were considered together, another exemplary methodological (and substantive) study was reported.

In-Depth Interviews

In their qualitative research applications, in-depth interviews are often applied because the study's underlying theory is too complex to quantify with traditional methods (e.g., Lee et al., 1996), too insufficiently developed (e.g., Loscocco, 1997), or too narrowly interpreted (e.g., Rynes, Bretz, & Gerhart, 1991). In other words, in-depth interviews often better fit the study's theoretical question and analytical situation than do more traditional experimental or survey designs.

In an exemplar of an interview-based inquiry, Rynes et al. (1991) conducted a process-oriented, longitudinal, and interview-based study. More specifically, they noted that early interview-based research on recruiters, recruiters' timing, and job search variables reported substantial effects on applicants' job choices. In contrast, they also noted that more recent cross-sectional survey research found minimal effects of recruitment activities on subsequent applicant job

choice. In their judgment, this apparent contradiction was likely due to the inadequacies of survey methods (cf. these results were method bound). In particular, cross-sectional survey designs were deemed to (a) be insensitive to the dynamic natures of recruitment and job choice, (b) restrict researchers to overly simplistic explanations, and (c) impose demand characteristics on survey respondents. Rynes et al. suggested that allowing job-seeking college students to describe *in their own words* their job search strategies and experiences over time was a more meaningful, descriptively richer, and probably more valid direction.

Rynes et al. (1991) interviewed 41 graduating seniors at two points in time. The first interview occurred in late January–early February, which was after 1–3 months of campus recruitment interviewing. The second interview occurred in late March and continued through early May, which allowed for substantial variation in job search behaviors and job offers received. In both interviews, a critical incidents format was followed, in which information was elicited about the individuals' reactions to specific companies and their decisions about these companies. In the first set of interviews, questions focused on how applicants formed their *initial* impressions of "fit" with a firm. In the second set of interviews, questions focused on the later recruitment phases (e.g., site visits and job choices) and on general impressions of the experienced recruitment practices. The interview data were tape-recorded, transcribed, and content analyzed for emergent themes. Finally, the coded data were statistically analyzed. In addition to the specific statistical findings, these authors' key message was that substantial insight about recruitment and job choice may need to come from in-depth probes of ongoing social and psychological processes as they unfold over time. Researchers who impose meanings and interpretations from predesigned questionnaires may produce misleading empirical results.

ANALYTIC DATA TECHNIQUES

A third way to organize and describe the qualitative research reported by organizational and vocational psychologists concentrates on analytic techniques. Typically, qualitative methodologists prefer *not* to separate issues of design from those of data analyses (e.g., Denzin & Lincoln, 1998a, 1998b, 1998c). Instead, qualitative methodologists most often recommend that design and analyses be described together. Only to facilitate our description, we separate them. In the analysis of qualitative data, the technique of "grounded theory" is, by far, most often applied. It is commonly used in all three of our types of qualitative designs (above), namely, case study research (e.g., Gersick, 1988, 1989), ethnographies (e.g., Sutton & Hargadon, 1996), and in-depth interviews (e.g., Dutton & Dukerich, 1991). A second technique, which is restricted to case study research, is "pattern matching" (e.g., Lee et al., 1996; Yan & Gray, 1994). In addition, hermeneutics techniques and text analysis (e.g., Boje, 1991; Kilduff, 1993) may be emerging as an important mode of data analysis. These techniques are described below.

Grounded Theory Approaches

By far, the most common method of qualitative data analysis is Glaser and Straus's (1967) "general method of grounded theory." In particular, applications of grounded theory *must* result in the generation or elaboration of explicit theory. Larsson and Lowendahl (1996) and Lee (1999) suggest some caution, however, to claims that grounded theory has been applied by organizational and vocational psychologists. They note that many published articles *appear* to use grounded theory, but few of these studies fully explain their application of the process. Locke (1996) interprets these ambiguous descriptions to mean, moreover, that while these articles purport to apply grounded theory, most simply do not. The ambiguity (or question) of whether grounded theory was indeed applied may be due, in part, to: (a) overly terse descriptions, (b) an overemphasis on one portion of the method and an underemphasis on another, or (c) an author's insufficient understanding. In short, it is often quite difficult to know and judge exactly what was done.

Recently, Strauss and Corbin (1998, pp. 159–162) offered an updated description (or the defining characteristics) for the general method of grounded theory. Like many forms of qualitative research, grounded theory should result in the creation of clear, explicit, and testable theory. Moreover, many different data collection techniques can be applied to grounded theory (e.g., interviews, observations, questionnaires, case study research). *Unlike* other qualitative methods, grounded theory involves an

explicit mandate to strive toward *verification* of its resulting hypotheses (statements of relationships between concepts). This is done *throughout the course* of a research project, rather than assuming that verification is possible only through follow-up quantitative research Conceptual density [is achieved] and refers to richness of conceptual development and relationships—which rests on great familiarity with associated data and are checked out *systematically with these data* [italics added] Besides the *constant* [italics added] making of comparisons, these include systematic asking of generative and concept-related questions, theoretical sampling, systematic coding of procedures, suggested guidelines for attaining conceptual (not merely descriptive) "density," variation, and conceptual integration.

In our reading of the literature on organizational and vocational psychology, *none* of the identified articles meet, in our judgment, the *complete* or "*pure*" spirit and intent of Strauss and Corbin's (1998) description for grounded theory. Many studies appear to follow a "grounded theory approach," however, because they contain one or more of the characteristics defined above or self-identify as applying the method. In our judgment, nonetheless, the single *most* exemplary study that closely approaches the "spirit" of grounded theory method is that of Sutton (1991).

Although "bits and pieces" of information had been reported in the literature, Sutton (1991, p. 246–247) described "how this [bill collector] organization tried to maintain norms about the emotions bill collectors ought to express to debtors,

given that such expressions were influenced simultaneously by collectors' (sometimes conflicting) inner feelings, especially feelings provided by debtors." His data sources consisted of (a) extensive interactions with a key respondent, (b) undergoing formal training as a bill collector, (c) working as a bill collector for 20 hours, (d) focus group interviews with bill collectors, (e) supervisors' interviews, (f) observing bill collectors work, and (g) examining written materials. From these data sources, general themes were identified by reviewing and summarizing information about possible controlling norms in an iterative fashion. More specifically, "I developed hunches about these norms, compared these ideas to new data from the site, and then used the new data to help decide whether to retain, revise, or discard these inferences" (p. 250). Thus, Sutton applied the criteria of: (a) data-based hypotheses, (b) verification of these hypotheses on subsequent data, (c) modification of ideas based on these new data, and (d) verification of the revised hypotheses on still new data (i.e., the method of constant comparisons).

Through a grounded theory approach, Sutton (1991) identified a general organizational norm about conveying urgency to debtors and five other norms about displays of emotion that were contingent on debtor's behaviors. These five norms were:

- (1) displaying warmth to extremely anxious debtors, (2) showing irritation, even anger, to indifferent debtors, (3) showing irritation, even anger to friendly debtors, (4) showing irritation, even anger, to sad debtors, and (5) remaining calm with angry debtors.

In addition, he identified six kinds of debtor behaviors that typically generated different inner emotions on the part of collectors. These patterns were:

- (1) mildly irritated and mildly anxious debtors elicited mild irritation, (2) extremely anxious debtors elicited warmth, possibly sympathy, (3) indifferent debtors elicited irritation, possibly anger, (4) friendly debtors elicited neutrality, possibly sympathy, (5) sad debtors elicited neutrality, possibly sympathy, and (6) angry debtors elicited irritation, possibly anger.

Finally, Sutton offered a very rich and "thick" description of how these norms, processes, and patterns were maintained through newcomers' selection, socialization, rewards, and punishments. In our judgment, Sutton (1991) is exemplary.

Pattern Matching in Case Study Research

Yin (1994) identified and discussed many possible analytic techniques for case study data. Although organizational and vocational psychologists most often analyze case data with the grounded theory approach, "pattern matching" is not uncommon. With this technique, formal hypotheses, an explicit theory, or a less formal conceptual model allows the *anticipation* of a particular *pattern* of variables, phenomena, or outcomes. These patterned data can occur within one case or across multiple cases. The pattern can be static or dynamic; it can vary

from simple to complex; and it can range from explicit to implicit. With less formal models, the anticipated pattern serves as a benchmark with which to interpret case data. With more formal hypotheses and theories, the anticipated pattern can serve to falsify or corroborate these *a priori* ideas.

As an exemplar of pattern matching involving a less formal model, Yan and Gray (1994) induced from existing research the preliminary conceptualizations that (a) bargaining power determines (b) management control, which determines, in turn, (c) the performance of joint ventures between the United States and China. Akin to Ross and Staw (1986) in their exemplary case study of Expo 86, Yan and Gray collected interview data from participants in four different joint ventures and examined their existing archival data. Then, they applied their constructs (i.e., looked for their application) in their four cases.

Because their study was designed to elaborate upon their preliminary conceptual ideas, moreover, they also applied a grounded theory logic and induced themes about the processes involved within and between their theorized constructs. Following the logic of case study research, each case constituted a replication of the other three. Thus, one case served as the initial empirical test for the preliminary model (i.e., bargaining power, management control, joint venture performance); based on these finding, the model was modified (e.g., elaborated upon). In turn, another case served as test data for the modified model. This process of test, modification, retest, and remodification is repeated across cases until a “final” model fits across the four cases. In Yan and Gray (1994; e.g., Fig. 2 on p. 1503), specific characteristics of the three initial constructs, moderator variables, contextual variables, and feedback loops were identified and specified.

As an example of pattern matching involving a more formal theory, Lee et al. (1996, described above) tested their unfolding model of voluntary turnover. According to their theory, employees quit organizations via four prototypical decision paths. Each path specifies a different set of characteristics and, most important, *when* each characteristic must be present or must be absent. Theoretically, every case of quitting should be classifiable into one (and only one) decision path based on a comparison between the theorized and the actual pattern of characteristics. Two outcomes become possible. First, those cases that exhibit every characteristic theorized as “must be present” and do not exhibit any characteristics theorized as “must be absent” are classifiable into a path and *corroborate* the unfolding model. Second, those cases that do not exhibit every characteristic theorized as “must be present” or exhibit any characteristics theorized as “must be absent” are not classifiable into a path and *falsify* the unfolding model. As noted above, Lee et al. (1996) reported that the leaving of each of the 44 nurses could be *validly* classified into one of their four decision paths.

Hermeneutics Techniques, the Interpretation of Text

Hermeneutics describes a family of techniques aimed at understanding overt or covert meanings embedded within *printed or oral text* by in-depth examination of the text *itself*. Although commonly found in linguistics and rhetorical studies,

text-based techniques are less frequently applied by organizational and vocational psychologists. We speculate, nevertheless, that these methods will likely become more prevalent in our journals. Below, we summarize an example applied to *printed* text and another example applied to *oral* text. Because of fewer applications and only our belief in its promising future use, we summarize more tersely than when our exemplars were described. (Lee, 1999, pp. 108–113, summarizes the additional techniques of “hermeneutic interpretation” of company documents, tracer studies, narratives, and life histories.)

Deconstruction of printed text. Deconstruction analyzes texts with the explicit intent of identifying and understanding how an author’s use of the text itself can systematically exclude “categories of thought and communication” (Kilduff, 1993, p. 15). Moreover, deconstruction can reveal how authors highlight a particular political rhetoric through careful exclusion, marginalization, and slanting of ideas. For example, Kilduff (1993) deconstructed March and Simon’s (1958) landmark book, *Organizations*, which may be one of the most influential publications in organizational and vocational psychology. First, five themes were identified and asserted to be embedded within *Organizations*, namely, (a) “the structure of presence and absence,” (b) “programming the body and programming the mind,” (c) “the organization as writing machine,” (d) “the unanticipated consequences of programmed organization,” and (e) “the ideology of programming.” Second, the text itself was examined for how it created tensions and meaning by the systematic inclusion and exclusion of ideas within each theme. For instance, Kilduff (1993, p. 21) offered the following summary of his deconstruction of the programming of the body and mind (Theme b, above).

What is important to the present discussion is the tension in *Organizations* between the denunciation and the celebration of the machine model of employee. MS [March & Simon] accuse their predecessors of treating the employee as a machine and fill the absence they claim to have found in the literature with an updated machine model. MS propose a programming that will be inscribed, not in the physical movements of the workers but in the workers’ cognitions, a programming directed not to the body but to the mind. Such programming will control not the physiological response, but the decision making process. By simultaneously denouncing and glorifying the employees as machine, MS succeed in building on the works of the predecessors they repeatedly condemn. Their own distinctive contribution, the emphasis they give to programmed cognition, is presented not as the direction application of scientific management to decision making, but as the arrival of scientific method to an area dominated by engineering techniques

By identifying and analyzing included and excluded ideas, deconstruction of text can reveal limits to purported “objectivity.”

Analysis of oral organizational stories. Boje (1991) examined how organizational members’ storytelling served to make sense of events, introduce change, and gain political advantages during conversations. From one office supply firm, he tape-recorded and transcribed the stories telling episodes of 7 executives and 23 managers, customers, and vendors. Following a grounded theory approach, he

induced, first, how the stories occurred within discourse (i.e., its mechanical structure within talk) and, second, how these stories were overtly and covertly used by different stakeholders to create meaning. More specifically, specific sequences of talk were analyzed for what was actually said (e.g., overt sentences), what was intended (e.g., context-dependent messages), and what was conveyed (e.g., context-dependent omissions). Although no formal propositions were offered, Boje demonstrates how the "deep structure" of a person's intentions might be accessed and studied through oral behavior. In a subsequent study, for instance, Boje (1995) investigated the stories told at Disneyland. He revealed the stories' plots and contexts, and the viewpoints of the storytellers themselves (e.g., managers, workers). Boje also showed how characterizations and meanings changed over time.

From a postmodern perspective, stories that emerge in ongoing interactions represent both the underlying normative order and its ideology. By capturing and analyzing these stories in their natural context, one can see how various widespread understandings evolve and are used by organizational participants. Storytelling can then be a window to the "deep structure" and inscriptions that guide people's actions.

BEST RESEARCH PRACTICES

Thus far, a *broad* view of qualitative research has been described. That is, we divided the landscape into various categories and presented at least one exemplar or example that represents that category. In this section, details about the application of these qualitative techniques and procedures themselves are presented. More specifically, we discuss the decisions that researchers must make about *how* data are collected and processed, and more important, we identify several best practices.

Data Collection Techniques

At the heart of qualitative research, the authentic voice of the study's participants must be represented. Four main techniques of data collection are typically used. In particular, two of these techniques are relatively passive, and the other two are more interactive and intrusive. In the first technique, investigators often observe the ongoing activities and record in field notes what they see, hear, and experience in a relatively passive and nonintrusive manner. Often, these tactics are used early during a qualitative study to acquaint the researcher with the site and its members (e.g., Martin et al., 1998, detailed above). Two variants of this technique are to take an organizational training course or to function as an actual employee. Van Maanen (1975), for example, completed a real police training program, and Sutton (1991, detailed above) actually collected overdue bills.

A second technique that is relatively passive and nonintrusive is to access archival records of past events or participants' perspectives on these past events. For example, Vaughan (1990) analyzed the U.S. Space Agency's *Challenger* disaster by using transcripts of testimonies, existing reports, speeches, and

minutes from meetings. For Expo 86, Ross and Staw (1986, detailed above) studied newspaper reports, and Dutton and Dukerich (1991) used newspaper reports and minutes from meetings to understand how the Port Authority of New York and New Jersey dealt with homeless people living in its public transportation facilities. At two hospitals, Barley (1990, detailed above) effectively used organizational charts, rules, and forms. Although "archival records" may not be a study's *main* source of data, they can effectively confirm, supplement, or elaborate upon one's more primary information.

The third data collection technique requires a more active and intrusive researcher. Interviews may be the most frequently used technique (e.g., Allen et al., 1997, detailed above). Its key characteristics include substantial variability in terms of duration, formality, number of people interviewed at one time, and how these data are recorded (e.g., field notes, audiotapes, videotapes). Because these interview-based exchanges often form the backbone of qualitative studies, it is critical that the qualitative researcher make prior decisions about the interviews' duration, formality, number of people interviewed at one time, and recording of data and about *how* she or he will explain these decisions during the peer review process.

Fourth, questionnaires also require a more active and intrusive researcher. Because they can reduce spontaneity, inhibit free-flowing speech, and constrain one's manner, survey data often provide supplemental information, similar to the archival records. Nevertheless, questionnaires can "orient" the respondent and get everyone "on the same page." For example, Campbell and Martinko (1998, detailed above) provide another best practice on using questionnaires in a supplemental way. They investigated the relationship between learned helplessness and empowerment. As one part of their study, interviewees were classified as empowered or helpless based on questionnaire data. Next, two individuals separately coded interview statements on attributions, affect, expectancies, and behaviors on 7-point scales for their level of "internal versus external," "stable versus unstable," "global versus specific," and "controllable versus uncontrollable." In turn, these ratings were then subjected to a multivariate analysis of variance.

Data Processing

After or during data collection, various techniques must be used to process these data. Two tasks immediately arise. First, usually massive amounts of qualitative information must be reduced to a manageable set, and second, judgments must be made about these data's content.

Data reduction. Many studies report something akin to "We read the notes for themes and placed them in categories. As new data were obtained, these categories were modified." As suggested above, this process of categorization is often very vaguely described. As a more specific alternative, a counting process might be applied to these data. In their study of mentors, for example, Allen et al. (1997, described above) videotaped their open-ended interviews. After some

initial categorizations, they simply counted the number of times categories were mentioned and statistically analyzed these counts. As a second alternative, content analysis might be applied that involves analyzing written transcripts (e.g., hermeneutics). In some incidences, sentence-by-sentence inspection and scoring occur. As another best practice, Dutton and Dukerich (1991) investigated how an organization's image and identity affected individuals' interpretations of how the Port Authority of New York and New Jersey, a regional transportation agency, dealt with homeless people residing in their facilities. As part of their study, they collected interview data, and, in turn,

Each interview was coded sentence by sentence onto a [pre-determined] theme list in order to document and evaluate the degree and breadth of support for particular themes across informants. After completing the theme-based coding process, we were able to evaluate the degree of support for each theme indicated by the number of theme-related points mentioned both within and across interviews. (p. 5240)

From these (and other) data, a case history from 1982 to 1989 was produced.

Finally, some researchers use scales to record and summarize their interview data (e.g., Campbell & Martinko, 1998). For example, Claes and Ruiz-Quintanilla (1998) applied Likert-type scales to score the interview responses from their sample of machine and office technology workers. Regardless of specific application, the extensive use of these kinds of procedures begins to border on what most researchers would classify as a traditional or quantitative study rather than a qualitative one.

Thematic content. Three processes are commonly applied to determine theme content. Because these processes are often poorly described, they are highlighted. First, the most frequently used process is to estimate or check on the *agreement* of the theme's content among two or more researchers. Usually, multiple opinions on the same data by different people are obtained. For example, Greenwood, Hinings, and Brown (1994) had three researchers agree on the meaning of interview data from employees exiting a particular business strategy. Rynes et al. (1991, detailed above) had two coders make judgments about the content in transcripts of interviews of people seeking jobs.

Instead of agreement across people, a second process is *triangulation*, and it attempts to show agreement among *different sources or types of data*. Greenwood et al. (1994), for example, submitted their themes and findings about a merger back to the company as a check on their coding judgments. Human and Provan (1997) developed their interview protocols in other companies and then applied them to their networks of manufacturing firms. Campbell and Martinko (1998) looked at the agreement between their questionnaire and their interview data.

Finally, some researchers focus on *salient events*. Rather than examine for agreement across opinions or data sources, researchers look for themes or events that dominate, stand out, or are crucial from individuals' stories or interviews. In

her study of team processes, for example, Gersick (1989) looked at “milestones,” and Lee et al. (1996) described precipitating events for turnover. In summary, numerous different data reduction techniques exist, and there are multiple ways to increase confidence in the reliability of the data interpretation through agreement, triangulation, or salient events.

Design Issues

Although reflexivity is a defining and an ideal characteristic, actual decisions must be made and enacted eventually during the course of a qualitative study. Typically, qualitative researchers collect data through some combination of participant observations, examination of archival records, in-depth interviews, and “small sample survey administrations.” In the following sections, discussion centers on design issues related to how the obtained empirical data are collected, but we narrowly focus on three specific tactical decisions, namely, theoretical saturation, obtrusiveness, and interview structure. In addition, because these issues are critical, we offer three corresponding best practices in some detail.

Theoretical saturation. At some point, a researcher must stop collecting data. From the grounded theory approach, a commonly reported decision heuristic is theoretical saturation. More specifically, qualitative data collection stops when the researcher judges that no or little additional learning would occur from more data. Intellectually, this judgment is straightforward; in practice, however, it can be potentially quite difficult. In particular, this decision is often and easily affected by real-world constraints, including, for example, researcher fatigue, a strong desire to move on to writing, and a looming tenure decision. Although every study’s situation and researcher’s circumstance differ, the onset of theoretical saturation might best be clarified by a “best practice” example.

In an ethnographic field study, Covaleski, Dirsmith, Heian, and Samuel (1998) studied how management by objectives and mentoring practiced by Big 6 public accounting firms served to merge the personal identities of auditors with that of the firm. These researchers conducted over 180 in-depth interviews *spanning a 15-year period* using a grounded theory approach. Their judgment that theoretical saturation was reached involved multiple sources of data, partial separation of data gathering from data interpretation, interviewees’ editing their own interview transcripts, member checks on the interviewer’s interpretation of these transcripts, strong attention to the interpretability of all field notes, daily diaries from all observers, and interviews of these observers in order to elicit their “lived” and ongoing interpretations. When these multiple data sources converged and no additional insights were being gleaned from the data, theoretical saturation was judged to have occurred. In our judgment, this study involved heroic efforts at quality control over the study’s data.

Obtrusiveness. Whether qualitative or traditional in design, data collection efforts are almost always obtrusive. That is, the interviewed, the observed, and/or the examined people are almost always *aware* that they are being monitored. In turn, that awareness likely alters their “natural” cognitions, emotions, and be-

haviors (cf. priming effects). In qualitative research, obtrusiveness is typically lessened—though it can never be completely resolved—by the participants' *trust* in the researcher. Typically, trust develops through long-term research relationships involving a great deal of interaction between the researcher and the researched. Ultimately, however, trust is manifested by the researcher's judgment that the phenomenon under study is occurring in a "natural" fashion (i.e., conceptually meaningful behavior that is *not* affected by the research process itself).

As a best practice, Perlow (1998) studied employees through a complete cycle of a computer product's development. In addition to collecting data from participant observations, employee and family interviews, and archival records over a long period of time, Perlow "shadowed" each one of her 17-member employee group. More specifically, she observed and recorded "everything they did." One person was shadowed for 3 days; 5 members were shadowed for 1 day each; and 11 persons were shadowed for one half of a day each. Through this long-term involvement and in-depth shadowing (in conjunction with the other data-gathering activities), Perlow appears to have successfully resolved the major problems from obtrusiveness.

Interview structure. In virtually every study that used interviews, a semistructured format was adopted, with some articles showing the interview questions in an appendix. Recognizing that every study's situation imposes different constraints, most studies, nevertheless, inadequately describe their procedures. It would be helpful to a reader (or reviewer) if the following were made explicit. (a) Why were the interviewees selected, and was there an actual or a *de facto* sampling plan? (b) Why was the interview unstructured, semistructured, or structured? (c) How many interviewers were there, and what steps were taken to indicate consistency among interviewers? (d) Did location (e.g., work, home, or other) and/or time of day affect the interviewee's responses?

As a best practice, Elsbach and Sutton (1992) studied how eight illegitimate acts by individual members of Earth First! and ACT UP (two radical environmental groups) can lead to the organization's subsequent legitimacy. As part of their data collection, they conducted semistructured interviews with at least one member of each organization who was (a) "a very active member engaged in a high degree of direct action," (b) "a very active member engaged in a low degree of direct action," (c) "a moderately active member engaged in a low degree of direct action." When more information was needed about these illegitimate actions, they asked interviewees for other persons to interview. In total, seven members of Earth First! and nine members of ACT UP were interviewed. Thus, they implemented (and explained) a *de facto* sampling plan, which included elements of a snowballing sampling strategy. Parenthetically, they stopped collecting data when the researchers began hearing the same information (i.e., theoretical saturation).

One underlying theme should be emphasized in summarizing this section on best research practices: Good qualitative research seeks disconfirmation. Sys-

tematically, inconsistencies and ambiguities are actively sought. Multiple raters, cases, comparison groups, and theme interpreters are used. There is a good faith effort to convince the reader (or peer reviewer) that the findings are consistent, credible, reliable, and valid. *The more that these techniques are used, the more convincing the research will be perceived to be.*

LESSONS AND CONCLUSIONS

In this article, qualitative research was shown to consist of a useful set of methods that fits nicely with *some* of the research questions asked by organizational and vocational psychologists. Because many researchers want additional tools, moreover, interest in these techniques appears to be growing. In keeping with the spirit of *JVB*'s annual review articles, we reviewed the body of qualitative studies reported by organizational and vocational researchers. Because these techniques may be relatively new to many readers of *JVB* and because we want to bolster this growing interest, exemplary studies and specific best practices were highlighted and recommended as possible templates for future research. In addition, substantive issues were presented and discussed. In this final section, we close with our observations about the tensions between qualitative and traditional research, methodological descriptions, and the scope of qualitative applications.

Tensions in the Purposes between Qualitative and Traditional Research

Without using the term, advocates often claim that qualitative methods are more ecologically valid than more traditional survey and experimental research (e.g., Lee, 1999). Recall that qualitative research is virtually defined as field based, from the perspective of the field's members, reflexive, and nonstandard. As a result, these researchers assert that these methods are more authentic (i.e., involving everyday, "real-life" phenomena; e.g., Golden-Biddle & Locke, 1993), realistic (i.e., "complete" cycles or sequences of behavior are studied; e.g., Pratt & Rafaeli, 1997), process oriented (e.g., Van Maanen, 1979), and broadly applicable than traditional experimental research (e.g., Larsson, 1993).

Although qualitative research has *very few opponents*, many traditional organizational and vocational psychologists (e.g., quantitative, positivist, and survey-experimentally oriented) likely hold more reserved judgments. In our experience, these reservations are based on three common perceptions. First, qualitative methods have too many unconscious biases operating. Although fully recognized in published articles (e.g., our earlier explanation of our own training and backgrounds), simply acknowledging these personal biases is often deemed as insufficient. Second, most articles reporting qualitative methods—even those published in our better journals—insufficiently describe *how* they conduct their applications. Most organizational and vocational researchers likely share the widely accepted standard that published articles should allow a reader to *replicate* figuratively or literally the reported studies. Simply put, qualitative methods are often described too tersely to allow their replication. Third, the net result of

these perceptions of too much bias and insufficient description is an overall judgment that qualitative methods *inherently* result in poor-quality research.

In our judgment, *both* positions—that advocating qualitative inquiry and that reserving judgment—are legitimate. Whereas *individual* assertions may be well founded (e.g., qualitative research is more authentic, but it is insufficiently described to allow replication), discussion of the *collective* assertions quickly becomes dysfunctional because each position derives from very different assumptions.

Lee (1999) suggests that the tensions between qualitative and traditional research derive from differing philosophies of science. At one extreme, some organizational and vocational psychologists hold a strict “natural science model.” They assume an empirical world with a single objective reality, and the research process should be to understand that world via valid scientific laws. Qualitative research does not easily fit with this world view. At the other extreme, a few qualitative researchers (e.g., radical postmodernists) hold a complete “subjectivist view of the world.” That is, they assume that there are as many “realities” as there are people. In the world of work, then, organizational members must engage in the *constant* social construction of reality, the research process must strive to understand the realities of each and every person, and ideas about valid scientific laws are misnomers. Thus, traditional research does not easily fit with this world view.

In general, traditional researchers may be more sympathetic with the former view, whereas qualitative researchers may be more comfortable with the latter view. Lee (1999, pp. 10–11) suggests, however, a middle ground between these two extreme views.

Most [organizational and vocational psychologists likely] accept that organizational members actively engage, at least to some extent, in the social construction of reality and sense making . . . By inference, multiple subjective realities can co-exist, and the desirability of qualitative research aimed at understanding these multiple realities is suggested . . . Simultaneously, most . . . researchers also accept that a vast amount of systematic regularity, though not complete uniformity, occurs within organizational contexts . . . It is this systematic regularity in employees’ behaviors, interpretations, and agreement on organizational processes that allows the evolution of dominant modes, larger organizational cultures, and a “strong, agreed-upon, taken-for-granted, and virtually singular organizational reality.” . . . Thus, I am advocating a middle position between (a) the assumptions of an objective reality . . . and (b) an ongoing and constant process of interpretation, sense making, and social construction of organizational settings.

Thus, qualitative and traditional research serve different functions, and our *earlier* point re-emerges. More specifically, the kinds of questions that are answered by qualitative and quantitative research methods differ. Qualitative research is *well* suited for the purposes of description, interpretation, and explanation, and it is *not well* suited for issues of prevalence, generalizability, and calibration. In contrast, traditional and quantitative research is *well* suited to questions of prevalence, generalizability, and calibration.

A Simple Standard for Methodological Description

From our reading of the literature, the number of published studies that used qualitative methods indicates a growing recognition of the potential value from these techniques. Prior to Van Maanen's (1979) call, for example, there were few qualitative articles in our literature; after his call, the rate of publication for qualitative studies has steadily grown. Although the number remains small in comparison to the volume of studies reporting traditional research designs, examination of the range of topics and specific questions found in qualitative research reports suggests that our current knowledge about organizational and vocational behavior should be enhanced with the increased application of qualitative techniques. With that said and our enthusiasm in check, however, we hasten to note that qualitative methods fit only a select set of our research questions. They are best suited to studying process issues, and they are not well suited for issues of prevalence or calibration. Nevertheless, qualitative applications are growing in number, and it may be timely to suggest a standard for methodological description.

The vast majority of our reviewed articles sought to generate or elaborate theory. Over the last 20 years, the mode of theory generation or elaboration has changed. Early on, most qualitative reports offered rich narrative essays that described a phenomenon of interest. In part because researchers were unfamiliar with how to write these articles, minimal attention was given to the description of methods. More recently, the method section of qualitative research reports has become more detailed, though far less than complete—again, in comparison to traditional research.

Earlier, we suggested that many researchers believe qualitative methods to be inherently inferior to traditional designs. This negative stereotype is likely to slow the application of qualitative research and relegate it to a second-class status (e.g., "It was applied because 'real' research couldn't be done yet.") In order to enhance application and bolster researchers' general confidence in these qualitative techniques, a standard for methodological description appears sorely needed. As such, we *propose* that qualitative researchers adopt the *conventional* and *widely accepted* ideal for methodological descriptions. Simply put, an article's description of its method must be sufficiently detailed to allow a reader (or our peer reviewers) to *replicate* that reported study either in a detailed hypothetical or in an actual manner. Although peer reviewers may not agree with one's interpretations or deductions, how these inferences were drawn must and should be clear.

The Scope of Qualitative Research

Also, the vast majority of our reviewed articles appeared to apply the grounded theory approach (recall Locke's, 1996, admonishment). Certainly, there is nothing wrong with its application, but we have concerns with its disproportionate use. More specifically, the risk arises that the term "qualitative research" will be

too narrowly defined and co-opted to mean only data reduction while simultaneously allowing induction of the data's underlying themes (i.e., "an informal exploratory factor analysis"). Therefore, we call for more breadth in application. In our judgment, more case study research that aims at theory testing should be conducted (e.g., Lee et al., 1996). Furthermore, we recommend that more ethnographies that do not necessarily restrict themselves to grounded theory (e.g., Barley, 1990) and more hermeneutic studies (e.g., Boje, 1991; Kilduff, 1993) be conducted. In short, there is more to qualitative research than factor analyses.

In closing, we wish to reiterate what we have said and/or have meant to say throughout this essay. First, we are *ebullient* about the potential value of qualitative applications. Second, we hope that *all* traditional, quantitative, positivist, and survey- and experimentally oriented researchers want and actively seek additional tools and methods to facilitate their research agendas. Third, we believe that qualitative methods and techniques can be *some* of the useful tools for organizational and vocational psychologists. As a final point, however, we need to posit some reservations as well. To date, qualitative methods remain relatively new to many organizational and vocational psychologists, and most articles in our field that use qualitative methods have appeared in the last 20 years. As a result, most of the theory that has been generated from these qualitative studies has not had the opportunity to "stand the test of time" or to undergo traditional quantitative testing and validation. Certainly, our field needs new theory, but it must be *good* theory. It must be valid and help us understand and predict organizational and vocational actions. *The next 20 years should speak to these issues.*

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