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The Pond You Fish In Determines the Fish You Catch: Exploring Strategies for Qualitative Data Collection

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Qualitative research has increased in popularity among social scientists. While substantial attention has been given to various methods of qualitative analysis, there is a need to focus on strategies for collecting diverse forms of qualitative data. In this article, the authors discuss four sources of qualitative data: participant observation, interviews, physical data, and electronic data. Although counseling psychology researchers often use interviewing, participant observation and physical and electronic data are also beneficial ways of collecting qualitative data that have been underutilized.

The word *collection* denotes a complex process. Collection presumes, as its beginning point, a need or a curiosity whose quality or magnitude is sufficient to prompt the individual to engage actively with the outside world. It is assumed that the collector has the capacity to identify the thing being sought, and that there are heuristics about what is worth gathering and keeping, and what is irrelevant. The act of collecting is inherently complex. However, there is something uniquely powerful about searching for and collecting things in the social world, for in this world, gathered “objects” are intentional. Those vanguards who take up the task of collecting things in the social world should be aware that the meanings ascribed to social objects (or by social beings) are not necessarily stable or objective. Meanings shift in accordance with the contexts in which we and the objects of our interest exist; meanings also shift in accordance with our motivations, with our histories, and with an array of situational conditions.

We use the African proverb “the pond you fish in determines the fish you can catch” as our title and as the grounding for our work because this proverb highlights the intentional nature of the data-collection process. This proverb reminds us that the contexts in which we conduct our work determine the outcomes that are produced (i.e., the substance and quality of what we yield) from any process of search and collection. In the case of qualitative research, the sources from which we draw and the tools that we employ in data collection determine the data that we produce, the meanings that we craft from those data, and the knowledge claims that we make.

In this article, we begin with a discussion of six factors with important implications for data collection: (a) the relationship between researcher and subjects of study, (b) sampling criteria, (c) insider versus outsider perspectives, (d) language and communication, (e) culture shock, and (f) ethical considerations. We then focus on four data-gathering methods in qualitative research that are applicable to the field of counseling psychology (i.e., participant observation, interviewing, and collecting physical and electronic data) and explore the ways that using these methods can help advance our understanding of psychological phenomena. Many of these data-gathering strategies have been historically associated with ethnography. While we do not wish to privilege ethnography above other methods, our attention to various strategies is based on the historical roots of qualitative research and the continued popularity of these methods in contemporary literature. In our literature review we found no published articles that specifically address both traditional and contemporary data-gathering strategies and how they are relevant to counseling psychology. This article’s purpose is to review qualitative data collection with the intention of encouraging more broad usage of diverse methods in counseling psychology research.

Relationships Among Researcher, Participants, and Communities of Study

As our title implies, any researcher’s success is dependent in part on his or her understanding of the community where the data are gathered. The terms *gaining entry*, *gaining access*, and *building rapport* are used in discussions of the complex and dynamic process of negotiating a research relationship when conducting qualitative studies (Maxwell, 1996). Although these terms are important in reminding us that qualitative research is a process, they are limited because they represent relationship building as a singular and isolated event or as a unidirectional process. Data gathering is a relational and reflexive process that is ongoing and that includes researcher and participant(s) as well as, in some instances, a host of ancillary individuals (Hall & Callery, 2001). Data gathering is *reflexive* in that it requires the researcher to engage in critical self-reflection. When conducting qualitative

research, counseling psychologists often discuss this reflexivity through their researcher stances. The researcher discusses his or her personal experiences and values and how they impact what he or she finds. The data-gathering process is *relational* in that it requires researchers to be cognizant that individuals, as well as artifacts, are embedded in social worlds (Hall & Callery, 2001). As such, when we speak of data collection as reflexive and relational, we are referencing the impact of “researcher-participant interactions on the construction of data and to power and trust relationships between researchers and participants” (Hall & Callery, 2001, p. 257).

Because data collection often happens through relationships (e.g., through relationships with interviewees and/or with knowledgeable informants), we must attend to the power dynamics that will influence the data we obtain and the interpretations we make. Hall and Callery (2001) warn that researchers have an obligation to “emphasize equity in power relationships with participants. Otherwise research results may reflect power imbalances whereby participants are unwilling to challenge investigators about the validity and relevance of their proposed analytic framework” (p. 266). Hall and Callery’s assertions about participants’ *unwillingness* to challenge researchers should also focus our gaze on the reality that in some instances, individuals may feel *unable* to challenge researchers because of the real or perceived, and direct or indirect control that the investigator wields over their lives. For example, many studies conducted in elementary and high schools in poor or under-resourced communities provide resources for students (e.g., special programs and services, funding, classroom materials) as incentives for participation. Parents who have concerns about the ethics, content, or direction of studies may be deliberately or unwittingly silenced by school officials or other parents who are concerned that the resources (e.g., supplies) and services (e.g., academic assistance, workshops) that the researchers provide will be removed if parents advocate for change in the research protocol. Furthermore, parents who wish to stop a study may be discouraged from doing so because they are unlikely to wage a winning battle against the considerable legal and financial resources of a research center or university.

In some circumstances, people may openly resist or tacitly subvert the data-collection process (e.g., they may refuse to participate or may manufacture experiences) as a way of highlighting their discomfort with the content or direction of the work (Fantuzzo, McWayne, & Bulotsky, 2003). Here, we point scholars to the cogency of Fantuzzo et al.’s (2003) assertion that informed consent does not necessarily reflect the community’s agreement with the content and the direction of the research process. Informed consent requires agreement between the researcher(s) and the individual participants, and one should not assume that the community sanctions the study. Fantuzzo et al. state, “The first step in establishing a partnership base for research is to connect with the ‘no’s’ of the participant community (i.e., partnering with

resistance)” (p. 21). In sum, they caution that the data-collection process (e.g., the questions that we ask, the contexts in which we conduct our research, and the approaches we employ) must be shaped as much by members of the community who support the work as by those who express resistance. Failure to incorporate the voices of these various segments of any community may lead to findings that are either erroneous or that reflect only the views and experiences of a subset of individuals. This issue is not unique to qualitative research given that subsets of a population may choose not to participate in a quantitative study (see Carter 2006a, 2006b [*TCP*, special issue, parts 1 & 2]).

Gaining entry and developing a successful research process depends on the quality of rapport between research and study participants. Harrington (2003) defines *entry* as the act of “gaining permission to start a study” (p. 599). Rapport is essential to gain and sustain entry and connotes the quality of the relationship between researcher and participant. Rapport is facilitated when researchers and informants share common goals—this is when participants understand the study’s purposes and agree to help in the research process and when the investigator learns about and accepts “the goals of the community” (DeWalt & DeWalt, 2002, p. 44). Both *entry* and *rapport* refer to the processes that are negotiated interactively and repeatedly by multiple participants throughout a given study.

Casting the Net: Sampling Criteria

Qualitative researchers invest in attracting participants who possess the most relevant characteristics to the study. Communities often are made up of disparate subgroups or individuals with similar and disparate perceptions of particular phenomena. Therefore, researchers must make thoughtful decisions regarding sampling (i.e., what participants or groups within a community to engage and the number of people to be included in the study). The number of participants needed in a study depends on a study’s purpose. If the researcher is attempting to identify themes and uses the criteria of “saturation” to determine when enough data have been collected, then he or she may select a larger number of participants than in an exploratory study that identifies general themes. For example, if the purpose is to understand the world as experienced by one specific person, then a single participant is sufficient. In interview studies, the number of participants tends to be around 15 ± 10 (Kvale, 1996). While phenomenological studies (i.e., those seeking to understand the meaning of lived experience for several individuals about a concept or phenomenon; Creswell, 1998; Creswell, Hanson, Clark, & Morales, 2007 [this issue]) involve in-depth interviews lasting as long as 2 hours (Polkinghorne, 1989) with approximately

3 to 10 participants (Dukes, 1984); grounded-theory studies (i.e., those seeking to generate or discover a theory that relates to a particular situation; Creswell, 1998; Creswell et al., 2007 [this issue]) should include 20 to 30 interviews (Creswell, 1998) that are usually less in depth. Determining the selection criteria and rationale for including participants in a qualitative study is an important initial step in conducting research. (For a more detailed discussion of sample size in relation to qualitative research, we refer the reader to Sandelowski, 1995.)

The literature (Miles & Huberman, 1994; Silverman, 2005; Haverkamp & Young, 2007 [this issue]) points out that qualitative samples often are *purposive* rather than random. That is, the selected sample is the one from which the most can be learned (Merriam, 2002; Polkinghorne, 2005). Miles and Huberman (1994) list 16 strategies for purposive sampling in qualitative inquiry including *homogenous sampling* (a sample with similar or shared characteristics, which focuses, reduces, simplifies, and helps to facilitate group interviewing); *convenience sampling* (a sample that is readily available and saves time, money, and effort but whose availability sometimes comes at the expense of diversity and credibility); and *critical case sampling* (a case that “proves” or exemplifies the main findings and “permits logical generalization and maximizes application of information to other cases” [p. 29]). In a study where interviews will be the chief data source the researcher may attempt to obtain random samples of participants or engage in purposive sampling based on particular participant characteristics (e.g., equal number of males and females and representation of race, ethnicity, and age).

Selection criteria in participant observation may also be determined by setting. For example, in ethnographic studies, the researcher may select a particular community for study. The researcher may consider issues of simplicity (e.g., single social situation), accessibility to the participants or site, unobtrusiveness, and permissibility (Spradley, 1980). DeWalt and DeWalt (2002) stress the importance of addressing “representativeness” in the participant-selection process. Here, they distinguish between judgment and opportunistic sampling. In judgment sampling, the investigator selects individuals based on a set of criteria (e.g., theory, past literature, expertise of informants, past fieldwork, and willingness of participants to share information). In opportunistic sampling, participant inclusion emerges from engaging with the community. That is, “the researcher participates in and observes events as they arise” (DeWalt & DeWalt, 2002, p. 104).

The researcher selects certain elements for observations and disregards others; therefore, data collection is not an objective process. Spradley and McCurdy (1972) argue that most distortions in studies of social behavior are created during the data-collection process: Researchers may collect data without considering cultural context or may use stereotypes to guide the selection

process. Early research on Asian Americans that led to the “model-minority myth” was often conducted solely on subgroups with longer histories in the United States and who voluntarily immigrated for better opportunities. Socioeconomic status often was determined by household income without considering that these Asian subgroups tended to live in households with extended family and multiple wage earners (Takaki, 1989). Generalizations regarding the model minority with high educational achievement and socioeconomic status proved faulty given the lack of understanding of the diversity of Asian American subgroups and inattention to historical context.

Insider Versus Outsider Perspectives

The researcher’s perspective is tied to his or her level of experience within the community under study. When researchers themselves are members of the community then the nature of their insider perspective provides them with insight into the intimate workings of the group under study. The challenges and benefits associated with the insider-outsider dichotomy have been the fodder for heated debates among qualitative researchers. In these debates, some scholars have insisted that outsider status is a necessary condition for establishing the kind of interpersonal distance that leads to “objectivity.” Other theorists have raised questions about the meaningfulness of the concept of objectivity and have challenged the assumption that outsider status is the best means through which to achieve social science aims. These theorists insist that insiders may have the advantage of being familiar with key customs and with vocabularies that may either facilitate or hinder access to communities (Suzuki, Ahluwalia, Mattis, & Quizon, 2005).

Although we appreciate the merits of scholars’ arguments in both camps, we caution researchers that, in keeping with the tenets of intersectionality theories (i.e., the complex overlap in identities such as race, ethnicity, class, and gender that help to create a more holistic view of people and how they understand their own self-construction; Crenshaw, 1995; Yeh & Inman, in press [*TCP*, special issue, part 4]), it may be myopic to see this debate in dichotomous terms. One need not be either an insider or an outsider; one may be both an insider and an outsider. Indeed, we must be mindful that people hold a multiplicity of identities (e.g., gender, class, sexuality, color, caste, and religion) that shape subjectivity and influence interpersonal dynamics. When considered in isolation, these identities may lend themselves to simplistic discourses about insider and outsider status. However, when considered in tandem, these identities remind us of the complex reality that we are always both insiders and outsiders. For example, an Indian American scholar conducting research in an Indian community may be an insider from the standpoint of ethnicity but may be an outsider from the standpoint of class identity and degree of acculturation if she is of a different class group and has a different

immigration status than the research participants (Ahluwalia, 2005). Similarities and differences in these identities may shape the data-collection process in profound ways.

Language and Communication

Language differences may lead to inaccurate analysis and interpretation of one's data. As such, Spradley (1979) recommends considering three principles in creating an ethnographic record: "the language identification principle," "the verbatim principle," and "the concrete principle." The language-identification principle centers on the notion that field notes must contain clear identifiers related to the speaker and to the language used. The "verbatim principle" posits that field notes should contain, to the degree possible, a verbatim record of what members of the community under study have shared. In particular, "native" terms (i.e., participants' language) and "observer" terms (i.e., researchers' language) should be identified and distinguished. Spradley (1980) warns, however, that simplifying the ethnographic record using "amalgamated language" (i.e., a merger of native and observer terms) often makes analysis more difficult because this amalgam tends to distort cultural meanings. The "concrete principle" indicates that researchers should write observations in descriptive language—without jargon. There is often a temptation to formulate and record interpretive statements based on the data. It is crucial that researchers preserve the elemental level of the data without generalizations, judgments, and interpretation so that others may audit the data trail and see how the researcher moved from observations and narratives to themes and interpretation. For example, a concrete description is, "The school counselor's door was closed, they were alone inside, and there were four students waiting." An interpretive statement is, "The counselor was unavailable to meet with students." The researcher must learn to alternate between the "concrete knowledge of description and the more abstract language of generalization" (Spradley, 1980, p. 69).

A Fish Out of Water: Culture Shock

When data collection calls for the researcher to become involved in a community, one of the major costs is culture shock (DeWalt & DeWalt, 2002). This is most often observed with respect to participant observation, but it can also be present in the other forms of data collection to varying degrees.

This term classically refers to the culmination of unease felt by the participant-observer as a result of not being able to successfully operate in a new cultural setting, getting all the cues wrong, dealing with not being able to anticipate proper behavior and dealing with behaviors of others that are relative to the home culture of the fieldworker, inappropriate, shocking, dirty, immoral, or just plain different, but are perfectly acceptable within the context of the community

in which the fieldworker finds herself. (DeWalt & DeWalt, 2002, p. 56)

Symptoms of researcher culture shock include anxiety, depression, anger, and frustration (DeWalt & DeWalt, 2002). Successful negotiation of culture shock depends on the researchers' willingness to acknowledge honestly his or her emotions and beliefs and to examine critically the ways that these emotions and beliefs are shaping the data collection and interpretation. It can be virtually impossible for researchers to negotiate culture shock alone. Culture shock is most often associated with outsiders entering a new community. Insiders, however, can also experience it as they enter a context that they assume will be familiar. In the role of researcher, insiders may be exposed to information of which they were unaware from their personal social location (e.g., gender, age, ethnicity, race, and socioeconomic status). As such, it is imperative that they seek individuals from both within and outside the observed group who can provide a balance of constructive confrontation and support.

Ethical Considerations

Several ethical challenges may arise in collecting qualitative data. Dilemmas may center on the conceptualization of the research questions, informed consent, confidentiality, and the collaborative relationship between researcher and participants. Qualitative researchers must be aware of the potential biases that may inform the questions they study: Who is included in the study? Whose voice does the research process privilege? Whose lives are observed as part of the research process? Whom does the research benefit? What does it mean for an individual to share or life story, particularly around painful events or risky information? How does the researcher give back to the individual or the community? (Suzuki, Prendes-Lintel, Wertlieb, & Stallings, 1999).

In addition, issues of informed consent may become cloudy as the qualitative process is often fluid and open. The data emerge and procedures may take on new directions as the information unfolds (e.g., interviews may move in novel directions based on what is shared, and observations may impact privacy). If the interview protocol (i.e., nature or order of questions) will change through the interview process, researchers should explicitly state this when obtaining institutional review board (IRB) approval. Thus, the researcher must determine the best way to obtain genuine informed consent from community members who agreed to participate based on information about the study presented at the beginning of the research process (Morrow & Smith, 2000; Morrow, 2007 [this issue]). It should be clear to participants that there will be a period of debriefing at the end of the interview. This will provide an opportunity for the participant to reflect on the interview process and to add information that he or she feels is important but that the interview questions may not have covered adequately. In addition, this may be a time when the researcher

may share with the participant more detailed information about the study and next steps in the research process.

We should also note that the researcher-participant relationship may be quite intimate given the level of sharing that may have occurred during the research process. There may be a pull to continue the relationships on the parts of both the participants and the researcher.

On finishing her study with other Indian American women, Ahluwalia (2005) stated, "I really could see some of these women as my friends." Thus, termination of the relationship may have a distressing impact on both parties (Morrow & Smith, 2000). Although Ahluwalia did not form friendships with her participants, some did contact her after the study's completion to discuss related topics.

Other dilemmas may arise regarding confidentiality and anonymity and general rights of participants. For example, in the data-gathering process, information may be revealed that is intimately tied to the participant, making him or her readily identifiable in the community if the information is published. Who makes determinations of what data will be included? Once the data are collected, some qualitative researchers, in the spirit of collaboration, may employ member checks where participants can review data (e.g., transcripts). If participants wish to have sections of material deleted, researchers must respect this decision even when they view something as important and salient to the overall research study.

Each of the preceding sections (i.e., relationships, sampling criteria, insider versus outsider perspectives, language and communication, culture shock, and ethics) represents complex issues to be addressed in the data-collection process. The following discussion highlights specific data-gathering methods, types of studies that use these strategies, key features, and strengths and limitations (see Table 1). Counseling psychologists have tended to rely on interviewing as the major form of data collection. We present three others including participant observation, the use of physical data, and the more contemporary method of using electronic data.

PARTICIPANT OBSERVATION

Participant observation represents the major approach to collecting data in naturalistic settings (DeWalt & DeWalt, 2002). The goals of the participant observer are "(1) to engage in activities appropriate to the situation, and (2) to observe the activities, people, and physical aspects of the situation" (Spradley, 1980, p. 54). Participant observers must carry out these goals as they attend to specific details of community life while approaching the situation with a "wide-angle lens taking in a much broader spectrum of

<i>Data Source</i>	<i>Type of Study</i>	<i>Key Features</i>	<i>Strengths</i>	<i>Limitations</i>
Participant observation	Biography Case study Ethnography	Participants Observers Community gatekeepers Observational protocol Observation records Field notes	Participants in natural context Immersion in community Prolonged engagement Multisensorial	Inappropriate generalization Immersion in community Primacy effects Recency effects Prolonged engagement Culture shock Going "native"
Interviews	Biography Case study Ethnography Grounded theory Phenomenology	Interviewer Participants Rapport Interview protocol Audiotapes Videotapes Transcriptions Debriefing>Type: Individual or focus groups	Participants' words In-depth information Research relationship In-person interview Telephone interview Focus groups	Small samples Oral data → written text Limited by questions you choose to ask Miss contextual cues Telephone interview: Miss nonverbal communication (may curtail or promote disclosure) Focus groups: Chaotic, participants hesitant to participate, feel pressured, can dominate the group
Physical data	Biography Case study Ethnography	Archival Records Documents Artifacts as data Artifacts as stimulus texts Visual data	Easy access if data obtained Low cost Historical account "Objective" data Representations of culture	Access difficulties What data are chosen Documents require interpretation
Electronic data	Biography Case study Ethnography Grounded theory Phenomenology	All types of data Synchronous and asynchronous data collection	Access to participants Anonymity may promote comfort and disclosure Accuracy of data	Relatively untested source of data Miss nonverbal cues May curtail disclosure; misunderstandings and misinterpretations Online sites can change

Types: E-mail, instant messages, listservs, usernets, newsgroups, bulletin boards, guest books, Web pages, chat rooms/online communities, interviews, surveys	Recruitment not limited by geography or setting	Accuracy of data unknown
Researcher log		Sampling bias (e.g., access to computers, knowledge of computers, and related demographics) Insecure form of communication Unique ethical concerns

information” (Spradley, 1980, p. 57). Participant observation involves several activities for the researcher related to data gathering including (a) having extensive contact with members of the community in context; (b) gaining an understanding of language and developing methods of communication; (c) participating in daily, routine, and special activities with members of the community; (d) interviewing and observing members of the community in various contexts; (e) recording observations and constructing field notes; and (f) conveying an understanding of both tacit and explicit information (DeWalt & DeWalt, 2002). In obtaining cultural knowledge, Spradley (1980) differentiates between *explicit knowledge* (i.e., conscious information that can be spoken about readily) and *tacit knowledge* (i.e., information that is not in immediate memory). Much of cultural knowledge remains at a tacit level and is often identified through the process of engagement between the participant and the researcher.

There is a continuum of levels of researcher participation (Spradley, 1980). At the minimal end are *nonparticipation* (i.e., only observation from outside the research setting) and *passive participation* (i.e., researcher is present but does not participate or interact). At the opposite end are those who are active participants engaging in activities to gain a greater understanding of cultural norms and mores. Complete participation occurs often when the researcher is already “an ordinary participant” (Spradley, 1980, p. 61) or a member of the community. Most studies fall somewhere in the middle of this continuum. For example, in her study on how women with severe work disabilities attributed meaning to their lives, experiences, and decisions, Moore (2005) engaged in prolonged observation and videotaped interviews with participants who were referred by counseling professionals and personal contacts.

Examples of participant-observation studies relevant to counseling psychology would be those that focus on understanding context with respect to a particular cultural group, community, or organizational system. In these studies, the researcher would enter the community and participate in activities relevant to the goals of the overall study (Morrow, 2007 [this issue]).

Angrosino (2005) notes that observation pertains to three levels of specificity—descriptive, focused, and selective. At the *descriptive level*, the researcher examines all details and takes a “childlike stance” (p. 732), which yields a great deal of data, some of which is irrelevant to the study. At the *focused level*, the researcher includes only material that is related to the key areas of the study. *Selective observation* entails an even greater level of attention to specific behaviors and activities.

At the inception of any study, researchers will likely take a broad-based approach to observations. Over time, however, observations should become more selective as questions evolve and as the researchers gain insights into the community culture (DeWalt & DeWalt, 2002). In addition to counting and describing behaviors, the observer should engage in “active listening,

and keeping a running mental stream of observation” (p. 73).

The advantages of observation are that the researcher is able to see behavior in a natural context providing greater opportunity to identify aspects of behavior that may not be obtained from simply interviewing (i.e., asking people questions about their perceptions of a particular phenomena). Observational work is also multisensorial (i.e., potentially includes what we see, hear, smell, etc.).

There are also limitations and “inherent biases in observation” (DeWalt & DeWalt, 2002, p. 79). One bias occurs when a researcher views a relatively rare occurrence as more “commonplace” than it actually is in real life. In addition, reports may reflect primacy and recency biases. *Primacy effects* refer to occurrences in which researchers give events and activities experienced early in the fieldwork process a more central role in the analysis and write-up. *Recency effects* occur when researchers view data gathered toward the end of the study as more salient. To reduce biases and to check the accuracy and the meanings of observations, the researcher may consider employing multiple investigators to observe the same phenomenon and then compare the obtained observational records (DeWalt & DeWalt, 2002). Discrepancies should be discussed and the criteria for resolution should be defined as part of the research process. Although observations are often formulated as descriptive narrative records, the researcher may opt to use numbers to quantify phenomena to increase the appearance of objectivity (DeWalt & DeWalt, 2002).

Examples of potential observational studies relevant to counseling psychology could include exploration of nonverbal behaviors in the counseling relationships, indigenous healing practices, and impact of environmental settings on social climate. The researcher attempts to establish a nonintrusive presence so that he or she can observe events in their natural environments.

CREATING THE ETHNOGRAPHIC RECORD

After each observation, the participant observer may use any of a variety of means (e.g., field notes, photographs, and artifacts) to create an ethnographic record. The ethnographic record includes a description of the social situation being examined including space (physical), actors, activity, objects (what is present), act (actions), event, time, goals, and feeling (Spradley, 1980). The ethnographic record should also include detailed documentation of the “data trail” (i.e., methodological notes that focus on decisions regarding methodology, the rationale behind choices, the process of observation, the circumstances of observations, and the method of recording).

Condensed field notes—for example, phrases, key words, and so on—are often written during field observations. Some refer to these condensed notes as “jot notes,” which are used to trigger memories that can be expanded on

later (DeWalt & DeWalt, 2002). In a recent work by Silverman (2005), he emphasizes the importance of detailed information and the inclusion of different types of field notes (i.e., short notes made at the time, expanded notes made later, a fieldwork journal to record ideas and problems that arise at each stage, and a record of tentative analysis and interpretation).

Alternatively, Spradley (1980) recommends using a diary or journal to record researchers' personal reflections regarding their experiences in the field—"ideas, fears, mistakes, confusions, breakthroughs, and problems that arise during fieldwork" (p. 71). Journal entries are made chronologically and serve to reveal the researcher's personal journey in relation to the process of fieldwork over time. Morrow and Smith (2000) refer to these as analytic and reflexive memos. Finally, some researchers create "metanotes," or analytic notes that document the process of analysis as well as overall reflections on the research process.

Ethnographic records also enable the researcher to address reliability issues. Indeed, the investigator may compare records written by multiple participant observers for consistency. Detailed records of the research process can also provide researchers with an index for assessing the validity of their processes and conclusions. This is parallel to the importance of providing detailed descriptions of procedures in quantitative studies (Carter, 2006a, 2006b [*TCP*, special issue, parts 1 & 2]). In sum, it enables other members of the research community to follow the data trail to document whether the record "truthfully represents the response of the observer" (DeWalt & DeWalt, 2002, p. 97). Equally important, the researcher's reflexive examination of his or her own emotions, decisions, and concerns can provide important insight into the factors that may promote or undermine the study's validity.

INTERVIEWING

Interviewing is one of the most important qualitative data-collection strategies and is a key source of data for biographies, phenomenological studies, grounded-theory studies, ethnographic studies, and case studies. Unlike participant observation, the qualitative research interview is a place where knowledge is constructed from the direct interactions between the interviewer (researcher) and the interviewee (participant; Kvale, 1996; Polkinghorne, 2005). The interview is not a reciprocal interaction of two equal partners; the interviewer guides the situations, topics of conversations, and directions of conversation. At the same time, the interview produces data that emphasize the interviewees' lived experiences from their points of view and that help glean an understanding of the meaning behind their experiences (Kvale, 1996).

There are numerous decisions that researchers must make prior to conducting the qualitative research interview that will ultimately determine the data that the researcher can yield. Decisions must be made regarding the structure, openness of purpose, exploration versus hypothesis testing, use of description versus interpretation, and intellectual versus emotional focus of the interview. Some interviews are highly structured (well organized and following a sequence of standard questions), while others are more open and do not have a predetermined sequence of questions (e.g., semistructured and unstructured interviews). The interviews can also differ in their emphasis on exploration or hypothesis testing and on description versus interpretation. That is, the researcher can use interviews to obtain descriptions of phenomena and can also clarify and interpret the descriptions during the interview. Researchers can also choose to approach the interview by engaging in a rational and logical conversation between the interviewer and the interviewee or to attempt to get emotional descriptions of or reactions to a particular phenomenon.

The researcher also must decide on the number of interviews required, the length of the interviews, and whether to tape and/or transcribe the interviews. Researchers should make these choices based on knowledge of the study's topic, the qualitative research design, the methodological options available, and their impact on the overall study including the relationships with participants (Kvale, 1996). A literature review revealed that most counseling psychology studies are both audiotaped and transcribed (e.g., Utsey, Gernat, & Hammar, 2005). Researchers should negotiate the use of recording devices with participants. However, researchers should remain cognizant that participants' levels of comfort with being recorded will depend on the sensitivity of the topic being discussed, the participants' concerns about confidentiality, and the larger historical concerns of (mis)trust and power between the groups being represented by researchers and participants.

Although the process of conducting a qualitative research interview varies from one study to another, researchers should follow several steps in collecting interview data for qualitative research. We outline these steps below: selecting the interview type, formulating the interview questions, conducting the interview, recording the interview, transcribing the interview, and debriefing the interviewees.

Selecting the Interview Type

Researchers can conduct interviews in person or via telephone and in small groups (e.g., focus groups) or individually. Researchers must decide what interview type is most practical and will produce the most useful information (Creswell, 1998). Most often, interviews are face-to-face. When the researcher does not have direct access to individuals, telephone interviews will be the best

option. However, this method carries certain disadvantages. In particular, the researcher is unable to see nonverbal communication and cannot use those nonverbal cues to guide the research. Furthermore, telephones (like computers) introduce a particular level of anonymity into the researcher-participant relationship. Therefore, researchers must be cognizant of the complex ways that anonymity promotes or curtails intimacy, honesty, and levels of disclosure.

Focus groups are preferred if the interaction among interviewees will produce useful information that otherwise could not be ascertained in individual interviews (Creswell, 1998): when interviewees are similar and cooperative with each other and when the time to collect information is limited (Krueger, 1994; Morgan, 1988; Stewart & Shamdasani, 1990). Because of the interaction between participants, focus groups elicit spontaneous and affectively rich statements that would otherwise be unavailable to the researcher in individual interviews (Fern, 2001; Jackson, 1998; Kvale, 1996). For example, to examine the reactions of White counselor trainees to hypothetical, provocative, cross-racial counseling and supervision dyads, Utsey et al. (2005) used focus-group interviews as an ideal method of observing the natural attitudes of their participants.

One of the disadvantages of focus groups is the tendency toward chaotic data collection (e.g., the inability to discern between the multiple voices on the recordings; Morgan, 1988). Assigning pseudonyms or numbers to each participant and having a research assistant record the first several words uttered by each interviewee may resolve this problem. Because some individuals are uncomfortable speaking up in groups, researchers must facilitate the group in such a way that all participants are encouraged to talk and one or a few individuals do not dominate conversations. Finally, persuasive and charismatic speakers can dictate a conversation's direction. It is the focus-group facilitator's responsibility to achieve the delicate balance between encouraging participants to talk and coercing or pressuring them to contribute to the conversation. As such, sophisticated and knowledgeable facilitators can create balance in the discussion by raising divergent view points (i.e., playing devil's advocate).

Formulating the Interview Questions

The purpose of the study will shape the content of any interview. To be able to pose significant questions that will obtain the information needed, knowledge of the phenomenon is required (Kvale, 1996). The researcher generally begins with introductory statements and what Spradley (1979) referred to as a "grand tour" question.

I want to understand the world from your point of view. I want to know what

you know in the way you know it. I want to understand the meaning of your experience, to walk in your shoes, to feel things as you feel them, to explain things as you explain them. Will you become my teacher and help me understand? (p. 34)

Other parts of the interview may include (a) introductory questions to help the participant feel more comfortable, (b) specific questions pertaining to the research topics, (c) closing questions asking the participant to add any information that he or she might feel is relevant, (d) a description of the next step in the research process (e.g., follow-up interviews, member checks, etc.), and (e) expression of thanks to the participant for his or her time and involvement in the study.

Generally, in exploratory studies (or in the exploratory phase of studies), researchers may benefit from using more open, less structured interview protocols. In these exploratory studies, the researcher may introduce an issue or a problem to be discussed, follow up on the interviewee's answers, and ask new questions about the topic from different perspectives based on the interviewee's previous answers. On the other hand, because studies designed to test hypotheses often require the comparison of interviews, it is important for researchers to use questions that are more similar and standardized in both their sequencing and their wording.

Most qualitative research interviews in counseling psychology employ semistructured rather than highly structured protocols (e.g., Constantine, Kindaichi, Okazaki, Gainor, & Baden, 2005; Downie & Robbins, 1998; Fuertes, Mueller, Chauhan, Walker, & Ladany, 2002; Kretchmar, Worsham, & Swenson, 2005; Sivis, McCrae, & Demir, 2005; Yeh et al., 2005). For example, in a study examining European American therapists' approach to counseling African American clients, Fuertes et al. (2002) formulated several open-ended questions centered on broad areas such as, "How did these European American therapists engage African American clients in counseling?" and "What problems or difficulties did they encounter in helping the client?" The semistructured interview is designed to cover a common set of themes but allows for changes in the sequencing of questions and the forms of questions, enabling the interviewer to follow up on the interviewees' answers. Semistructured interviews have the advantage of preserving a natural conversation flow; however, they introduce two challenges. First, researchers must be skilled in creating smooth transitions between topics. Second, because there is a certain amount of circularity in any conversation, researchers and facilitators must be vigilant about distinguishing among substantive references to a subject or theme that require elaboration, references that can be used as a promising bridge, and incidental references that can be ignored.

Conducting the Interview

It is also important to become familiar with the environment where the interviews are to be conducted and to become familiar with the local language, the daily routines, and the power structures (Kvale, 1996). On arriving at the interview site, the researcher should obtain consent from the participant. For the interviewee to feel comfortable divulging personal information, the interviewer must establish an atmosphere in which the participant feels safe enough to talk freely about his or her experiences and feelings (Kvale, 1996). In addition to being courteous and respectful, this includes actively listening to the interviewee and refraining from giving advice or attempting to counsel the interviewee. To achieve safety, the researcher should begin the interview by "breaking the ice" with broad questions and move slowly toward more specific and intimate ones.

During the interview, many situations may arise that will require sensitivity and decision making on the part of the researcher. Often, the act of discussing experiences evokes powerful emotions (e.g., sadness, shame, anger, etc.) in participants and/or for researchers. Sitting with participants as they traverse those emotions can be quite difficult. Researchers who feel overwhelmed by participants' emotions may respond by shutting down these emotions or by unwittingly working to exploit those emotions in the service of eliciting "rich" data. Researchers' relationship to the participants and their well-being must always take precedence over the integrity of the data-collection process. Researchers also must be mindful of the importance of staying "in role." Although it is essential to establish safety and support for participants in moments of emotional intensity, it is never appropriate for researchers to take up the role of therapist. Participants should be given the option of suspending or terminating the interview so that they can regain affective equilibrium. Participants who elect to continue with interviews during moments of emotional intensity should be reminded that they will receive a transcript of the interview and that they will have the choice during the transcript-review process to decide if they wish to exclude certain material.

The option to suspend recording also should be extended to participants who wish to make "off-the-record" statements. Researchers should be clear, however, that they cannot use off-the-record statements, no matter how rich, in the study. This assertion, while ethically obvious on the surface, can impose some important practical problems. We cannot pretend that we have not heard certain information, and we cannot always govern the impact that knowledge has on the way that we behave or on the choices that we make. In sum, off-the-record statements may shape how we hear information and how we interpret subsequent data. The ethical dilemmas introduced by this form of knowledge include situations in which off-the-record information

calls into question the authenticity or veracity of other pieces of our data. The question for the researcher is whether to include information that was obtained through the interview but that the researcher suspects or knows to be untrue based on off-the-record comments. For example, in the process of interviewing participants for a study, Mattis (2005) learned from off-the-record comments that data provided by two other interviewees were manufactured and untrue. Importantly, any effort to check the veracity of the information provided by participants would have required a break in confidentiality—an unacceptable option. In some instances, these kinds of revelations will raise questions about the balance between subjectively constructed truths and objective notions of truth, as well as debates about the distinction between positivist notions of singular truths and postmodern ideas about the multiplicity of truths. However, because the evidence regarding the lack of veracity of these two interviewees was compelling, and because it came spontaneously from several independent sources, she decided to err on the side of caution (i.e., not to use the potentially spurious data).

Transcribing the Interview

Most researchers will transcribe interviews, and it is important to realize that information and nuance is lost when oral data are transcribed into written text (Polkinghorne, 2005). The process of transcribing oral speech into written text also requires the researcher to make choices including whether to transcribe the statements verbatim or whether to edit them into a more formal or written style—and whether to include intonation, emotional expressions, and pauses and in how much detail (Kvale, 1996). Transcribers should be given written instructions, and if more than one transcriber is used for a single study, the researcher should ensure that they are using the same procedures. Researchers also should be careful to conduct posttranscription checks of the accuracy of the transcription process because transcribers are no less vulnerable to errors and biases than are researchers. Indeed, transcribers may be influenced by biases related to the population being interviewed and the topics being addressed. Indeed, individuals who hold strong, conservative religious beliefs may have difficulty transcribing interview content that is sexually explicit or that centers on topics about which they hold strong beliefs (e.g., abortion). When sensitive topics are being addressed, researchers should develop a clear plan for appraising transcribers of the nature of the study when appropriate. Researchers should also remind transcribers of the importance of honoring the commitment to confidentiality that the researchers made to the participants.

Debriefing the Interviewees

At the end of the interview, the interviewee may feel some anxiety, sadness, or tension because of the material discussed. The researcher should conclude the interview by thanking the participant and reviewing some of the main points covered in or learned from the interview and by inviting interviewees to provide additional comments. Researchers must make logistical and ethical decisions about what comprises the true close of an interview because, in some instances—after the interview has ended—interviewees will raise and elaborate on information that is rich and relevant to the study. Researchers should discuss whether this information should be recorded, and whether it should be examined as a part of the “true” interview, with the participant and should address this as an ethical concern. Although the researcher must be sure to be as clear and transparent as possible in designing the protocol that he or she submits to IRB, the researcher must also be aware that because of the nature of participants’ differing narrative styles, responses may venture outside the scope of the planned study. Finally, it would be helpful for the interviewer to set aside some time after the interview to reflect on and record what was learned from the interview, jotting down the emotional quality of the interview as well as comments about the interpersonal interaction.

PHYSICAL DATA

Physical data are an important source for qualitative research studies, as this form of data helps researchers to see what people manufacture and what they keep to represent themselves and their culture. Traditionally, historians and anthropologists have used physical data. Only recently have these data made their way into the “toolboxes” of other social scientists, including counseling psychologists.

Types of Physical Data

Researchers most often use physical data in biographies, ethnographies, and case studies (Creswell, 1998; Creswell et al., 2007 [this issue]), which include documents, records, and artifacts. These data are also referred to as mute evidence or material culture.

Documents and records. Social science researchers routinely use documents and records. For example, in Gentile’s (2006) collaborative psychoanalytic exploration of one woman’s struggle with bulimia, the author uses the participant’s diaries, interviews, and written response to the study in her

analysis. Records and documents differ in that the former include some type of formal or official transaction whereas the latter are created for personal reasons (Lincoln & Guba, 1985). Records, therefore, include driver's licenses, marriage certificates, contracts, and bank statements, whereas documents include letters, diaries, journals, and field notes (Hodder, 2000). Hodder explains that with physical data, access can be easy and low cost and can provide unique information to enable the researcher to gain historical insight. It may, however, be more challenging for researchers to gain access to records than to documents (e.g., government records). On the other hand, although both forms of texts require interpretation, documents may require more than records. All texts require some interpretation and have little meaning outside the context in which they were created. As such, researchers should have clear plans for discerning the meaning of these materials and for integrating these data with data from other sources. Furthermore, researchers must determine clear heuristics for addressing and resolving discrepancies that arise across various data sources.

Artifacts. Researchers may also use artifacts, including film, video, paintings, photographs, pottery, and electronic visual data, in qualitative studies (Harper, 1994, 2000). In fact, social science researchers have used mass-media representations, such as cartoons, when trying to grasp a common or shared understanding of a phenomenon (Giarelli & Tulman, 2003). For example, media representations and commercial imagery have historically been vehicles of societal promotion of racism (e.g., Faulkner, Litwack, Henderson, & Whitener, 2000). Visual data can be part of planned data collection or can unexpectedly arise when collecting other forms of data (e.g., interviews; Pink, 2001). In their classic ethnographic study, Bateson and Mead (1942) used the visual method of photography to analyze Balinese village life. The anthropologists studied Balinese culture for many years prior to taking photographs to record it. Bateson and Mead took 25,000 photographs, 759 of which they included in their book. They sorted the photos into cultural categories and included both photos and explanations in the book.

Researchers have also used visual data in "realist" traditions of ethnography (i.e., traditions in which researchers assumed that their interpretations were accurate reflections of reality rather than subjectively constructed perceptions; Harper, 1994). The movement away from the realist tradition has meant that photography is no longer necessarily conceived of as a "truth revealing mechanism" (Edwards, 1992, p. 4). Instead, it is understood as a mechanism that tells socially constructed stories at a particular time and place. There is an understanding that the researcher's subjectivity in using visual data (i.e., his or her perspectives, interests, intentions, etc.) shapes both what he or she deems worthy of being photographed and the structure

and interpretation of the photos themselves.

In addition to photographs, researchers have used other artifacts including drawings and video. For example, in her research on the ways that individuals understand their illnesses, Guillemin (2004) used participants' drawings as a research tool with adults. Guillemin's research included not only the participants' drawings but also their interpretations of the drawings and emphasized both the process and the product of this visual method. Similarly, Rich and Patashnick (2002) used the Video Intervention/Prevention Assessment (VIA) as a qualitative research method to investigate health conditions from patients' perspectives. The VIA technique uses visual illness narratives as part of the research process, including participants' video diaries of their experiences of living with and managing chronic medical conditions.

Although many researchers collect artifacts as data to be analyzed, researchers can also use artifacts as stimulus texts. There are three critical questions to consider when introducing physical data into an interview as a stimulus text:

- (1) How can we find stimulus texts that are fertile for the production and analysis of interview data?
- (2) How should we conceptualize and understand the use of the stimulus texts in interviews?
- (3) What kind of role can the stimulus texts take in the interviews? (Torrönen, 2002, p. 344)

Torrönen (2002) highlights that interviewers can use photos or film as devices to encourage participants to speak about a research topic. For example, in Suzuki's ongoing case study with an elderly Japanese American veteran, she used photos to stimulate his recollections of the Korean War.

In the collection of visual data, such as cartoons and photos, there are important issues to consider, including the quality of the image, the image reproduction, and the training of researchers engaged in collecting and coding the data (Giarelli & Tulman, 2003; Ponterotto & Grieger, in press [*TCP*, special issue, part 4]). We assert that there are three points to consider when using visual data in research: (a) the importance of establishing rapport with participants prior to eliciting or using visual data, (b) the necessity of having the participants provide a description or interpretation of the visual stimulus being viewed or the visual material that they have produced, and (c) the use of visual artifacts as an adjunct to other research methods (e.g., interviews).

Studies relevant to counseling psychology that could incorporate physical data include those addressing historical and contextual experiences of individuals from various cultural groups. For example, using artifacts in studies of immigrant and refugee adjustment can help in understanding how participants construct meaning of both their homeland and their adoptive country.

Making Physical Data Meaningful

Because physical data (e.g., texts, records, artifacts, photos) are, in fact, mute evidence and therefore cannot speak, texts, including records and documents, and artifacts must be subject to interpretive procedures prior to being analyzed. Hodder (2000) argues that the researcher not only analyzes physical data but also creates them by interpretive practices. Although physical data are visual, there must be a word-based interpretation or analysis of the data. Researchers must be aware that language always approximates but can never fully capture the complexity of people's emotions, beliefs, and experiences. The efforts to express in words these aspects of experience may be frustrating and difficult for researchers and for participants and may depend on many factors including education and experience.

Giarelli and Tulman (2003) discuss analyzing visual data, such as cartoons, through *traditional content analysis* (i.e., counting textual elements) and *interpretive content analysis* (i.e., identifying themes or ideas that could be counted or described). This process is particularly useful to gain a deeper interpretation of the complex messages and multiple meanings that may be embedded and derived from visual formats.

Researchers analyze physical data through spoken or written words. Therefore, validity or trustworthiness (see Morrow, 2005) is a major concern (and a common critique of the method). Artifacts such as drawings are seen as ambiguous and include subjective interpretations (Guillemin, 2004). Interpretations of physical data need to be understood as just that—participants' and/or researchers' making of meaning.

ELECTRONIC DATA

Each form of data described earlier in this article (e.g., interviews, observation, and physical data) can be collected electronically through the use of computers and, more specifically, the Internet. Electronic data include an array of sources such as e-mails, instant messages, listservs, usernet, newsgroups, bulletin boards, guest books, Web pages, chat rooms or online communities, individual interviews, and online surveys. Although there has been much discussion of using computers in qualitative data analysis (see Seale, 2005; Weitzman, 2000), few scholars have expounded on using computers in data collection.

Robinson (2001) discusses a number of asynchronous electronic data (i.e., sources on the World Wide Web, including Web pages, bulletin boards, and guest books). These applications are asynchronous because they do not change or are not updated on a moment-to-moment basis. These electronic formats have a number of advantages. In particular, the structure

of electronic data sources is flexible. For example, individuals and groups (e.g., companies) can create Web pages, which can include auditory and visual material and links. Researchers can use Web rings (i.e., groups of interrelated Web pages) to provide automatic links to other sites in the ring. Bulletin boards on Web pages can be used to display messages and to post replies, and users can use these frameworks to respond to individual postings and, in doing so, create a thread (Robinson, 2001). Researchers can design bulletin boards in a way that allows for access by all or by only authorized users, depending on the settings. In addition, guest books usually can be attached to Web pages so that regular as well as casual users can post messages (Robinson, 2001). Furthermore, for researchers who wish to analyze verbatim transcripts, Web pages along with guest books and bulletin boards can be printed out and saved for future review without the extraordinary costs typically associated with the transcription of audio and videotapes.

E-mail is another asynchronous medium, including usernet, newsgroups, and listservs, that distributes messages to all users who have signed up to receive the e-mails (Robinson, 2001). Hessler et al. (2003) conducted research on adolescent risk behavior where participants used e-mail as the data source to submit diary entries over the course of 8 to 10 weeks. This approach provided the researchers with extensive information on adolescents' lives. In addition, Shields (2003) used a Web-based survey with 450 students regarding their perceptions of their school experiences; in her reflections, she noted that in using this methodological approach, she obtained in-depth, affectively rich, creative, detailed responses to her survey questions—more so than in even her in-person interviews.

Synchronous ("real-time") electronic data sources include chat rooms and instant messaging (IM; Robinson, 2001). A chat room is an Internet site where two or more individuals can communicate in real time and where messages are transmitted immediately. Anyone in the chat room can read and respond to messages; however, these rooms are structured to include "lurkers" or "eavesdroppers" (i.e., individuals who do not respond but remain in the rooms; Robinson, 2001). Many times, researchers lurk rather than participate in these venues. IM can provide a simpler and less confusing alternative for researchers interested in dynamic information sharing. IM is not public and involves only the two individuals engaged in the conversation. Users are informed when another user is online and available. More recently, recording and retrieving conversations over chat rooms and IM have become possible through software programs, although it still is not as simple as with other Web-based media.

Researchers have used synchronous data-collection strategies with some measure of success. For example, after administering an initial survey,

O'Conner and Madge (2003) used virtual synchronous group interviews to conduct a market research study examining how and why a particular group used a Web site. To achieve a high level of immediacy, and a high level of engagement with the topic, they used a software conferencing technique that allowed for group interaction with little time for participants to consider their answers. The researchers gave participants an easily installed application, scheduled group interview times between two and four individuals, and eventually facilitated these interviews. Similarly, Franklin and Lowry (2001) used computer-mediated focus groups to explore faculty attitudes about using technology in the classroom. These groups were facilitated through networked computers.

Computer-mediated data collection is especially useful with particular populations (e.g., with participants who reside in remote locations and with participants for whom travel to a common research site would be arduous) and for particular topics (i.e., for topics where anonymity will likely promote disclosure). For example, Bowker and Tuffin (2004) conducted a longitudinal online interview study with persons with disabilities about their online experiences. In her study, Seymour (2001) also used computer-mediated research technologies to investigate how people with disabilities engage with and use computer technologies; Seymour used a threaded discussion, where the entire conversation was visible and, like e-mail, was asynchronous. These data-collection methods seemed particularly suitable for persons with disabilities in that it allowed them to participate at their own pace, time, and space. As noted with respect to other forms of data collection, it is important for researchers to keep logs or journals of what sites they visit, the times when they visit these sites, and what they find. Other areas of interest to counseling psychologists include studies examining the efficacy of Web-based psychoeducational materials (e.g., depression, anxiety, etc.) and of Web-based counseling and examining cultural spaces (e.g., chat rooms and listservs related to a particular ethnic group) on the Internet.

Several benefits are associated with the use of electronic data. First, the accuracy of data is a main advantage. Transcripts are created as the interview proceeds (O'Conner & Madge, 2003). Second, because of the Internet's reach, researchers can recruit participants in great numbers from a variety of geographic locations and settings (Robinson, 2001). Consequently, researchers may have access to unusually diverse samples (e.g., international audiences, homebound individuals, new mothers, etc.). Third, because of the anonymity of the Internet, participants may feel more comfortable discussing certain issues using electronic means of communication (Hessler et al., 2003; Robinson, 2001; Shields, 2003). For example, Robinson (2001) noted that caregivers' first-person Internet accounts of their experiences included some things that may have been difficult to reveal in a face-to-face interview, such

as their fears and anger. Importantly, the potential anonymity of electronic data also can decrease the perceived or real difference between the interviewer and the interviewee with regard to power and particular identities (e.g., race, gender, and ability status; Robinson, 2001).

In terms of drawbacks, misunderstandings and misinterpretations can occur more easily through online media than in person. First, researchers should also always back up any information from the Internet (e.g., narratives) because sites can expire, move, or be consolidated. Second, because it is a relatively new data source and little systematic research exists with regard to electronic data, researchers must exercise caution. Third, the subtle, visual cues that help to build rapport and contextualize conversation are missing in electronic interviewing (O'Connor & Madge, 2003). Fourth, the accuracy or appropriateness of some electronic data has little supervision and so is unknown. Fifth, there are sampling implications associated with using these techniques. Electronic data samples can become limited to those who can afford or have ready access to computers (e.g., high socioeconomic status) and to those who have developed ease in using computers (e.g., youth; O'Connor & Madge, 2003). Also, those who type slowly or do not type well may find it challenging to engage in an individual or group interview.

Finally, unique ethical issues of protecting human participants and informed consent (Robinson, 2001) can arise. E-mail is not a completely secure or confidential means of communication, and researchers should make clear to participants the risks associated with using e-mail. More specifically, although the researchers may see the information as anonymous, the participants may not see it this way and may desire more interaction with researchers (e.g., Hessler et al., 2003) than simply submitting information or may choose to forward information to unauthorized persons.

Markham (2005) describes the following ethical concerns when conducting Internet research: (a) participants may think publicly accessible discourse sites are private; (b) participants may have a writing style that is identifiable within their online community, so merely using a pseudonym would not guarantee anonymity; (c) the population being studied may change rapidly from one point in time to another (i.e., participants tend to be transient); (d) participants' ages are difficult to identify online; (e) vulnerable populations are difficult to identify online; and (f) informed consent is difficult to obtain from participants if they would like to remain anonymous. Researchers should consider two questions: "Are the data publicly available, or is there a gatekeeper (i.e., password protections) that controls access to the data? And is there an expectation of privacy in the context in which the data are shared?" (Robinson, 2001, p. 709).

Robinson (2001) suggests that researchers use "ethical common sense" (p. 712) when making decisions about whether to use data for research. For example, researchers should not use data without permission when there is

an assumption by the user that the data are not being recorded (e.g., chat room), or if the information can be damaging to the individual revealing it. On the other hand, if the information was posted in a public location (e.g., a bulletin board where no password is needed), then it is more likely to be exempt and, therefore, usable. As with other types of research, it is essential to follow the American Psychological Association (2002) ethical guidelines, and if there is any doubt, “the researcher should err on the side of justice, beneficence, respect for persons, and autonomy” (Robinson, 2001, p. 712).

OTHER TYPES OF DATA COLLECTION

Beyond the four data sources discussed earlier, there are other sources of qualitative data. Researchers commonly use open-ended questions on surveys, for example, as a part of qualitative data collection. In addition, experiential research methods are available for researchers who wish to access individuals' implicit knowledge and self-identities in a way that other methods cannot (Edgar, 1999). Edgar (1999) identifies one such innovative experiential method as *imagework* (also called “visualization,” “active imagination,” and “guided fantasy”). Imagework is an active process where the participant lets go of his or her mind's routine train of thoughts and images and engages a sequence of imagery that spontaneously arises from the unconscious. Often used by researchers in groups, this process includes three types or levels of imagework: introductory (first level; e.g., a response to a question), memory (second level; e.g., guiding participants into their recollection of earlier events), and spontaneous imagework (third level; e.g., having participants spontaneously journey into their imaginations). Having traversed these three levels of work, participants then describe the story of their imagework, analyze their own story using personal meanings, and then compare it with others'.

Stuhlmiller and Thorsen (1997) describe another related research method, *narrative picturing*. Narrative picturing is a two-phase process that involves private visualization, picturing, or image formation followed by verbal narration. The participant (or viewer) takes an active role in creating and viewing his or her pictures, which center on the phenomena of interest. This process can take the form of “moving picturing,” where the researcher is trying to capture a sequential progression or process. In moving picturing, researchers first ask the participants to picture the phenomenon and move from picture to picture and then to narrate the overall “movie” in its entirety. The process can also take the form of “snapshot picturing” whereby the researcher seeks to capture descriptions of specific experi-

ences. The researcher asks the participant to picture and then immediately narrate each picture related to the phenomenon until she or he is finished. Imagework and narrative picturing raise some specific ethical concerns, such as a possible unacceptable level of intrusiveness into the participant's life and power issues between the participant and the researcher (Edgar, 1999). One can argue, however, that these issues can arise with other qualitative methods as well to various degrees.

Both imagework and narrative picturing lend themselves well to counseling psychology research. For example, counseling psychologists can use imagework in research on mental health, whereby participants visualize a more positive future, describe it, analyze it, and then compare it with others' descriptions. Researchers can also use narrative picturing to study vocational counseling, whereby participants picture the process of their obtaining future work and then verbally describe this image.

MERGING SOURCES OF DATA

Researchers' use of multiple qualitative methods for data collection most often arises out of an interest in triangulation. Triangulation is the collecting of information from multiple sources using multiple methods (Denzin, 1970) to reduce the risk of drawing conclusions that reflect the systematic biases or limitations that result from attending to a single method or researcher (see Fielding & Fielding, 1986, for an in-depth discussion of triangulation as a validity-testing strategy). One could argue that by increasing the number of data sources in a study, researchers can gain a more complex and nuanced appreciation of a phenomenon of interest. For example, in a biographical study of an artist, one may conduct interviews with the participant, but if a diary and photographs were also part of the data, the understanding of this individual may be enhanced and/or changed.

Triangulation does not, however, always reduce bias. When there are problems with source and/or method variance (e.g., when all data come from a common source such as self-reports or from the same source such as visual data), bias may not be reduced. For example, a researcher may collect data from an artist—paintings, diary entries, and interviews—where the data are based on multiple methods but where they all are based on a common source (e.g., self-reports). Certainly, bias cannot be eliminated; however, by varying the sources of data on which a study is based, the researcher stands to create particularly rich views of any phenomenon.

CONCLUSION

We conclude in the way that we began—with the proverb that guided us: the pond that you fish in determines the fish that you will catch. The proverb, however simple on its surface, points us to the complex interplay between five elements of knowledge production: contexts, producers, processes, tools, and yield. The proverb reminds us that the interplay between these elements is not arbitrary. The five elements work in tandem to influence the data to which we have access.

Social scientists and cultural theorists have long asserted that knowledge production is an intentional process. As social beings, we live in worlds created from competing and complex arrays of narratives, artifacts, and symbols. As counseling psychologists, we do not simply observe these products. Instead, we are active agents in the production of meaning. We focus our gaze in particular places. We selectively attend to certain symbols to the exclusion of others. We raise specific questions and engage with particular people and institutions. Through the choices that we make, we create knowledge. Indeed, as Ingleby (1995) asserts, “Psychology produces its object . . . in the epistemological sense of providing a perceptual and conceptual grid whereby the object is rendered visible” (p. 113). That is, as counseling psychologists, we are neither cameras, passively capturing a snapshot of the social landscape, nor mirrors, reflecting back an objective reality. Instead, we are active agents seeking to learn about our world through each piece of data that we collect. In other words, the effectiveness of our scholarship depends on our willingness to draw on various forms of data (e.g., observational data, narratives, visual data, etc.). The complexity of what we learn as a field depends on our willingness to creatively weave those data into a tapestry of meanings that reflect the lived experience of those whose lives are being investigated.

This article serves, in part, as a primer—as a means for familiarizing readers with the process of gathering diverse forms of qualitative data. Qualitative research serves as a rich and dynamic means by which counseling psychologists can better understand individuals’ experiences and the meanings that they make of these experiences. Interviewing as a strategy for data collection is becoming increasingly popular and has contributed greatly to the field of counseling psychology. As counseling psychologists, however, it is imperative that we move beyond relying solely on interviews and incorporate other methods of data collection.

Counseling psychology will benefit from an expanded use of data-collection methods, including participant observation and physical and electronic data. Participant observation can help to immerse the researcher in a context or community where cultural knowledge is embedded in practice and not easily articulated. Similarly, physical data, such as photographs and paintings, can tell a visual story that will eventually be put into words. In addition, more contemporary forms of data collection may provide a bet-

ter understanding of underrepresented populations. For example, individuals with disabilities who are unable or less likely to leave their homes may be more readily accessed through electronic data collection (e.g., Internet). Some would also argue that electronic data allow for greater anonymity when studying issues that participants might find sensitive.

Furthermore, we encourage active participation with communities of study. To generate knowledge about communities that are underrepresented in the literature, we must pay closer attention to the process of establishing and maintaining genuine and collaborative relationships with participants. There is greater likelihood of gaining access to diverse forms of data (e.g., physical) if we establish these relationships first. In sum, we must never lose sight of the fact that the passion that drives us to raise questions, the communities where we do our work, and the tools that we use to gather our data ultimately shape (and are shaped by) what we understand about our world.

REFERENCES

- Ahluwalia, M. K. (2005). *Reflections on the borderlands of within-community research with Indian-American women*. Manuscript submitted for publication.
- American Psychological Association. (2002). *Ethical principles of psychologists and code of conduct*. Retrieved May 10, 2004, from <http://www.apa.org/ethics/code2002.html>
- Angrosino, M. V. (2005). Recontextualizing observation: Ethnography, pedagogy, and the prospects for a progressive political agenda. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 729-745). Thousand Oaks, CA: Sage.
- Bateson, G., & Mead, M. (1942). *Balinese character, a photographic analysis*. New York: New York Academy of Sciences.
- Bowker, N., & Tuffin, K. (2004). Using the online medium for discursive research about people with disabilities. *Social Science Computer Review*, 22, 228-241.
- Carter, R. T. (Ed.). (2006a). Special issue: Quantitative issues and analyses in counseling psychology: Part 1 [Special issue]. *The Counseling Psychologist*, 34(5), 595-731.
- Carter, R. T. (Ed.). (2006b). Quantitative issues and analyses in counseling psychology: Part 2 [Special issue]. *The Counseling Psychologist*, 34(6), 732-912.
- Constantine, M. G., Kindaichi, M., Okazaki, S., Gainor, K., & Baden, A. (2005). A qualitative investigation of the cultural adjustment experiences of Asian international college women. *Cultural Diversity and Ethnic Minority Psychology*, 11, 162-175.
- Crenshaw, K. (1995). Mapping the margins: Intersectionality, identity politics, and violence against women of color. In K. Crenshaw, N. Gotunda, G. Peller, & K. Thomas (Eds.), *Critical race theory: The key writings that formed the movement* (pp. 357-383). New York: New Press.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage.
- Creswell, J. W., Hanson, W. E., Clark, V. L. P., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, 35, 236-264.
- Denzin, N. K. (1970). *The research act*. Chicago: Aldine.
- DeWalt, K. M., & DeWalt, B. R. (2002). *Participant observation: A guide for fieldworkers*. New York: Altamira.

- Downie, M. S., & Robbins, S. B. (1998). Assessing the qualities of social relationships in clinical and nonclinical individuals. *Counseling Psychologist, 26*, 466-488.
- Dukes, S. (1984). Phenomenological methodology in the human sciences. *Journal of Religion and Health, 23*, 197-203.
- Edgar, I. R. (1999). The imagework method in health and social science research. *Qualitative Health Research, 9*, 198-211.
- Edwards, E. (Ed). (1992). *Anthropology and photography 1860-1920*. New Haven, CT: Yale University Press.
- Fantuzzo, J., McWayne, C., & Bulotsky, R. (2003). Forging strategic partnerships to advance mental health science and practice for vulnerable children. *School Psychology Review, 32*, 17-37.
- Faulkner, J., Litwack, L., Henderson, R., & Whitener, T. (2000). *Ethnic notions: Black images in the White mind*. Berkeley, CA: Berkeley Art Center.
- Fern, E. (2001). Focus group interviews. *Advances in Consumer Research, 10*, 121-126.
- Fielding, N., & Fielding, J. (1986). *Linking data*. Beverly Hills, CA: Sage.
- Franklin, K. K., & Lowry, C. (2001). Computer-mediated focus group sessions: Naturalistic Inquiry in a networked environment. *Qualitative Research, 1*, 169-184.
- Fuertes, J. N., Mueller, L. N., Chauhan, R. V., Walker, J. A., & Ladany, N. (2002). An investigation of European American therapists' approach to counseling African American clients. *The Counseling Psychologist, 30*, 763-788.
- Gentile, K. (2006). *Creating bodies in a text: A collaborative psychoanalytic exploration of time, space and resistance in one woman's diaries*. Hillsdale, NJ: Analytic Press.
- Giarelli, E., & Tulman, L. (2003). Methodological issues in the use of published cartoons as data. *Qualitative Health Research, 13*, 945-956.
- Guillemin, M. (2004). Understanding illness: Using drawings as a research method. *Qualitative Health Research, 14*, 272-289.
- Hall, W. A., & Callery, P. (2001). Enhancing the rigor of grounded theory: Incorporating reflexivity and relationality. *Qualitative Health Research, 11*, 592-625.
- Harper, D. (1994). On the authority of the image: Visual methods at the crossroads. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 403-412). Thousand Oaks, CA: Sage.
- Harper, D. (2000). Reimagining visual methods: Galileo to Neuromancer. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 717-732). Thousand Oaks, CA: Sage.
- Harrington, B. (2003). The social psychology of access in ethnographic research. *Journal of Contemporary Ethnography, 32*, 592-625.
- Haverkamp, B. E., & Young, R. A. (2007). Paradigms, purpose, and the role of the literature: Formulating a rationale for qualitative investigations. *The Counseling Psychologist, 35*, 265-294.
- Hessler, R. M., Downing, J., Beltz, C., Pelliccio, A., Powell, M., & Vale, W. (2003). Qualitative research on adolescent risk using e-mail: A methodological assessment. *Qualitative Sociology, 26*, 111-124.
- Hodder, I. (2000). The interpretation of documents and material culture. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 703-715). Thousand Oaks, CA: Sage.
- Ingelby, D. (1995). Problems in the study of the interplay between science and culture. In N. R. Goldberg & J. B. Veroff (Eds.), *The culture and psychology reader* (pp. 108-123). New York: New York University Press.
- Jackson, P. (1998). Focus group interviewing as a methodology. *Nurse Researcher, 6*, 72-84.
- Kretchmar, M. D., Worsham, N. L., & Swenson, N. (2005). Anna's story: A qualitative analysis of an at-risk mother's experience in an attachment-based foster care program.

- Attachment & Human Development*, 7, 31-49.
- Krueger, R. A. (1994). *Focus groups: A practical guide for applied research* (2nd ed.). Thousand Oaks, CA: Sage.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Markham, A. N. (2005). The methods, politics, and ethics of representation in online ethnography. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 793-820). Thousand Oaks, CA: Sage.
- Mattis, J. S. (2005). *Social production of altruism in a low income African community*. Manuscript under review.
- Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage.
- Merriam, S. B. (Ed.). (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Moore, D. L. (2005). Expanding the view: The lives of women with severe work disabilities in context. *Journal of Counseling and Development*, 83, 343-348.
- Morgan, D. L. (1988). *Focus groups as qualitative research*. Newbury Park, CA: Sage.
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, 52, 250-260.
- Morrow, S. L. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist*, 35, 209-235.
- Morrow, S. L., & Smith, M. L. (2000). Qualitative research for counseling psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 199-230). New York: John Wiley.
- O'Conner, H., & Madge, C. (2003). "Focus groups in cyberspace": Using the Internet for qualitative research. *Qualitative Market Research: An International Journal*, 6, 133-143.
- Pink, S. (2001). *Doing visual ethnography: Images, media and representation in research*. Thousand Oaks, CA: Sage.
- Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology* (pp. 41-60). New York: Plenum.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, 52, 137-145.
- Ponterotto, J. G., & Grieger, I. (in press). Effectively communicating qualitative research. *The Counseling Psychologist*, 35.
- Rich, M., & Patashnick, J. (2002). Narrative research with audiovisual data: Video intervention/prevention assessment (VIA) and NVivo. *International Journal of Social Research Methodology*, 5, 245-261.
- Robinson, K. M. (2001). Unsolicited narratives from the Internet: A rich source of qualitative data. *Qualitative Health Research*, 11, 706-714.
- Sandelowski, M. (1995). Focus on qualitative research: Sample size in qualitative research. *Research in Nursing and Health*, 18, 179-183.
- Seale, C. (2005). Using computers to analyse qualitative data. In D. Silverman (Ed.), *Doing qualitative research: A practical handbook* (2nd ed., pp. 188-208). London: Sage.
- Seymour, W. S. (2001). In the flesh or online? Exploring qualitative research methodologies. *Qualitative Research*, 1, 147-158.
- Shields, C. M. (2003). "Giving voice" to students: Using the Internet for data collection. *Qualitative Research*, 3, 397-414.

- Silverman, D. (2005). *Doing qualitative research: A practical handbook*. Thousand Oaks, CA: Sage.
- Sivis, R., McCrae, C. S., & Demir, A. (2005). Availability of mental health services for older adults: A cross-cultural comparison of the United States and Turkey. *Aging and Mental Health, 9*, 223-234.
- Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart & Winston.
- Spradley, J. P. (1980). *Participant observation*. New York: Holt, Rinehart & Winston.
- Spradley, J. P., & McCurdy, D. W. (1972). *The cultural experience: Ethnography in complex society*. Chicago: Science Research Associates.
- Stewart, D. W., & Shamdasani, P. N. (1990). *Focus groups: Theory and practice*. Newbury Park, CA: Sage.
- Stuhlmiller, C. M., & Thorsen, R. (1997). Narrative picturing: A new strategy for qualitative data collection. *Qualitative Health Research, 7*, 140-149.
- Suzuki, L. A., Ahluwalia, M. K., Mattis, J. S., & Quizon, C.A. (2005). Ethnography in counseling psychology research: Possibilities for application. *Journal of Counseling Psychology, 52*, 206-214.
- Suzuki, L. A., Prendes-Lintel, M., Wertlieb, L., & Stallings, A. (1999). Exploring multicultural issues using qualitative methods. In M. Kopapa & L. Suzuki (Eds.), *Using qualitative methods in psychology* (pp. 123-133). Thousand Oaks, CA: Sage.
- Takaki, R. (1989). *Strangers from a different shore: A history of Asian Americans*. Boston: Little, Brown.
- Torronen, J. (2002). Semiotic theory on qualitative interviewing using stimulus texts. *Qualitative Research, 2*, 343-362.
- Utsey, S. O., Gernat, C. A., & Hammar, L. (2005). Examining White counselor trainees' reactions to racial issues in counseling and supervision dyads. *The Counseling Psychology, 33*, 449-478.
- Weitzman, E. A. (2000). Software and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 803-820). Thousand Oaks, CA: Sage.
- Yeh, C. J., & Inman, A. G. (in press). Qualitative data analysis and interpretation in counseling psychology: Strategies in best practices. *The Counseling Psychologist, 35*.
- Yeh, C. J., Ma, P.-W., Madan-Bahel, A., Hunter, C. D., Sunna, J., Kim, A. B., et al. (2005). The cultural negotiations of Korean immigrant youth. *Journal of Counseling and Development, 83*, 172-182.