



Data Collection

A typical reaction to thinking about qualitative data collection is to focus in on the actual types of data and the procedures for gathering them. Data collection, however, involves much more. It means anticipating ethical issues involved in gaining permissions, conducting a good qualitative sampling strategy, developing means for recording information, responding to issues as they arise in the field, and storing the data securely. Also, in the actual forms of data collection, researchers often opt for only conducting interviews and observations. As will be seen in this chapter, the array of qualitative sources of data are ever expanding, and we encourage researchers to use newer, innovative methods in addition to the standard interviews and observations. In addition, these new forms of data and the steps in the process of collecting qualitative data need to be sensitive to the outcomes expected for each of the five different approaches to qualitative research.

We find it useful to visualize the phases of data collection common to all approaches. A "circle" of interrelated activities best displays this process, a process of engaging in activities that include but go beyond collecting data. We begin this chapter by presenting this circle of activities, briefly introducing each activity. These activities are locating a site or an individual, gaining access and making rapport, sampling purposefully, collecting data, recording information, exploring field issues, and storing data. Then we explore how these activities differ in the five approaches to inquiry, and we end with a few summary comments about comparing the data collection activities across the five approaches.

Questions for Discussion

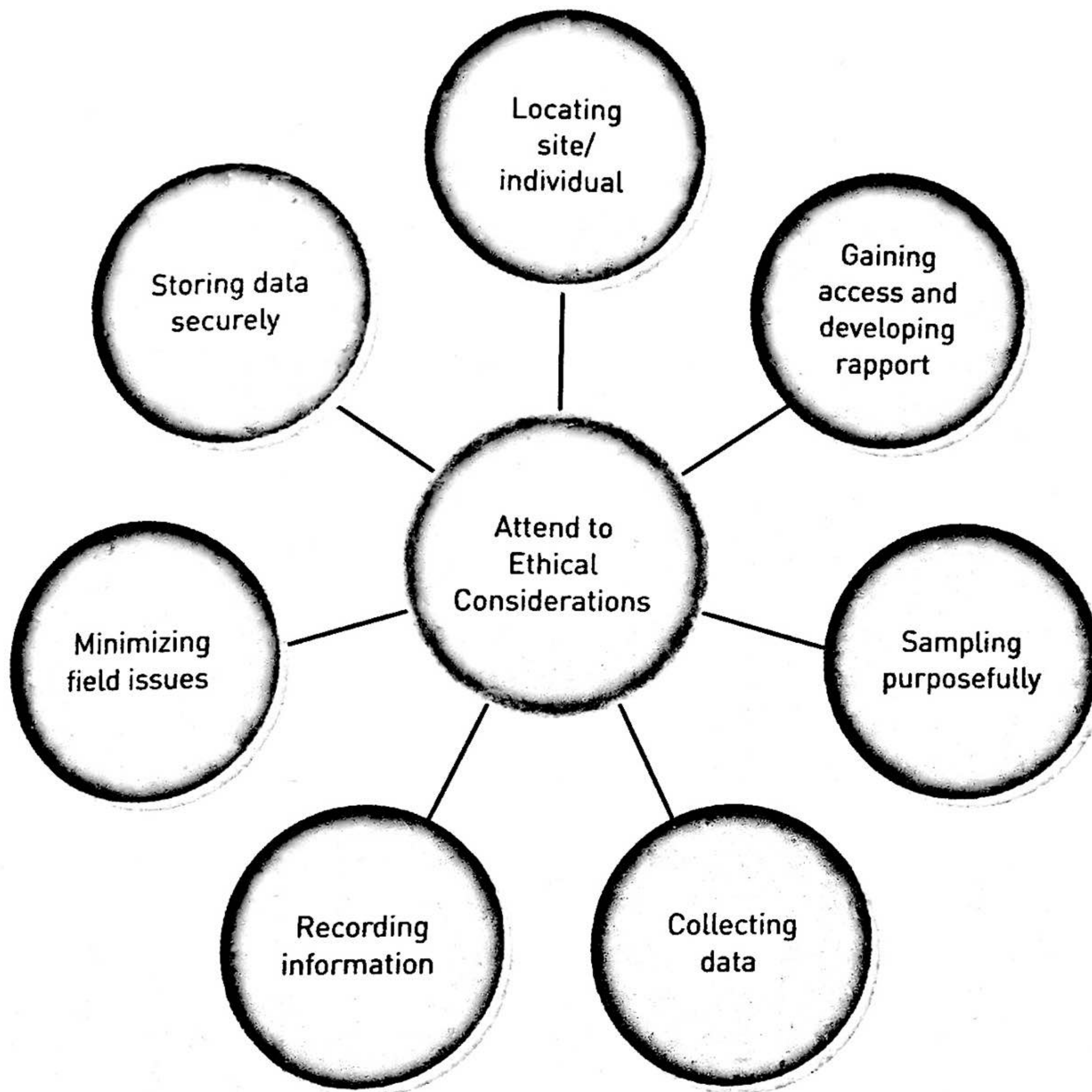
- What are the steps in the overall data collection process of qualitative research?
- What are the key ethical considerations when collecting data?
- How does a researcher find people or places to study?
- What are typical access and rapport issues?
- What decisions influence the selection of a purposeful sampling strategy?
- What type of information typically is collected?
- How is information recorded?
- What are common issues in collecting data?
- How is information typically stored?
- How are the five approaches both similar and different during data collection?

The Data Collection Circle

We visualize data collection as a series of interrelated activities aimed at gathering good information to answer emerging research questions. As shown in Figure 7.1, a qualitative researcher engages in a series of activities in the process of collecting data. Although we start with locating a site or an individual to study, an investigator may begin at another entry point in the circle. Most importantly, we want the researcher to consider the multiple activities often involved in collecting data—activities that extend beyond the typical reference point of conducting interviews or making observations. By placing ethics at the intersection of the data collection circle, we emphasize the need to attend to ethical considerations across the phases.

An important step in the process is to find people or places to study and to gain access to and establish rapport with participants so that they will provide good data. A closely interrelated step in the process involves determining a strategy for the ***purposeful sampling*** of individuals or sites. This is not a probability sample that will enable a researcher to determine statistical inferences to a population; rather, it is a purposeful sample that will intentionally sample a group of people that can best inform the researcher about the research problem under examination. Thus, the researcher needs to determine which type of purposeful sampling will be best to use.

Once the inquirer selects the sites or people, decisions need to be made about the most appropriate data collection approaches. Increasingly, a qualitative researcher has more choices regarding forms of data and modes of collection and recording—for example, the various types of interviews generate different interactions and subsequently influence the information recorded. Typically, the qualitative researcher will collect data from more than one source. To guide data collection, the researcher develops

FIGURE 7.1 Data Collection Activities

protocols for recording the information and needs to pilot the forms for recording the data, such as interview or observational protocols. Also, the researcher needs to anticipate issues of data collection, called field issues, which may be a problem, such as having inadequate data, needing to prematurely leave the field or site, or contributing to lost information. Finally, a qualitative researcher must decide how he or she will store data so that they can easily be found and protected from damage or loss.

We now turn to each of these seven data collection activities, and we address each for general procedures and within each approach to inquiry. As shown in Table 7.1, these activities are both different and similar across the five approaches to inquiry.

Ethical Considerations for Data Collection

Regardless of the approach to qualitative inquiry, a qualitative researcher faces many ethical issues that surface during data collection in the field and in analysis and

TABLE 7.1 • Data Collection Activities by Five Approaches

Data Collection Activity	Narrative	Phenomenology	Grounded Theory	Ethnography	Case Study
What is traditionally studied (sites or individuals)?	Single individual, accessible, and distinctive by their stories of experience	Multiple individuals who have experienced the phenomenon	Multiple individuals who have responded to an action or participated in a process about a central phenomenon	Members of a culture-sharing group or individuals representative of the group	A bounded system, such as a process, an activity, an event, a program, or multiple individuals
What are typical access and rapport procedures (access and rapport)?	Gaining permission from individuals, obtaining access to information in archives	Finding people who have experienced the phenomenon	Locating a homogeneous sample	Gaining access through the gatekeeper, gaining the confidence of informants	Gaining access through the gatekeeper, gaining the confidence of participants
How does one select a site or individuals to study (purposeful sampling strategies)?	Several strategies, depending on the person (e.g., convenient, politically important, typical, a critical case)	Finding individuals who have experienced the phenomenon, a "criterion" sample	Finding a homogeneous sample, a "theory-based" sample, a "theoretical" sample	Finding a cultural group to which one is a "stranger," a "representative" sample	Finding a "case" or "cases," an "atypical" case, or a "maximum variation" or "extreme" case
What type of information typically is collected (forms of data)?	Documents and archival material, open-ended interviews, subject journaling, participant observation, casual chatting; typically a single individual	Interviews with a range of people (e.g., 5 to 25)	Primarily interviews with 20 to 30 people to achieve detail in the theory	Participant observations, interviews, artifacts, and documents of a single culture-sharing group	Extensive forms, such as documents and records, interviews, observation, and physical artifacts for 1 to 4 cases
How is information recorded (recording information)?	Notes, interview protocol	Interviews, often multiple interviews with the same individuals	Interview protocol, field notes, memoing	Field notes, interview and observational protocols	Field notes, interview and observational protocols
What are common data collection issues (field issues)?	Access to materials, authenticity of account and materials	Bracketing one's experiences, logistics of interviewing	Interviewing issues (e.g., logistics, openness)	Field issues (e.g., reflexivity, reactivity, reciprocity, "going native," divulging private information, deception)	Interviewing and observing issues
How is information typically stored (storing data)?	File folders, digital files	Transcriptions, digital files	Transcriptions, digital files	Field notes, transcriptions, digital files	Field notes, transcriptions, digital files

dissemination of qualitative reports. In Chapter 3, we visited some of these issues, but ethical issues loom large in the data collection phase of qualitative research (see Table 3.2 for summary of ethical issues in qualitative research). Planning and conducting an ethical study means that the researcher considers and addresses all anticipated and emergent ethical issues in the study. Typically these ethical issues relate to three principles guiding ethical research: respect for persons (i.e., privacy and consent), concern for welfare (i.e., minimize harm and augment reciprocity), and justice (i.e., equitable treatment and enhance inclusivity). A researcher protects the anonymity of the participants, for example, by assigning numbers or aliases to individuals. To gain support from participants, a qualitative researcher conveys to them that they are participating in a study, explains the purpose of the study, and does not engage in **deception** about the nature of the study. What if the study is on a sensitive topic and the participants decline to be involved if they are aware of the topic? Another issue likely to develop is when participants share information off the record. Although in most instances this information is deleted from analysis by the researcher, the issue becomes problematic when the information, if reported, harms individuals. We are reminded of a researcher who studied incarcerated Native Americans and learned about a potential "breakout" during one of the interviews. This researcher concluded that it would be a breach of faith with the participants if she reported the matter, and she kept quiet. Fortunately, the breakout did not occur. Finally, we point to the increased focus on how we elicit and record information in appropriate ways for participants. In so doing, it is the responsibility of the researcher to become familiar with the research context and participants and to respect different knowledge systems and ways of interacting. Many excellent resources exist for situating research in diverse contexts and/or with marginalized populations (e.g., Chilisa, 2012; Clandinin et al., 2006; Stanfield, 2011).

Institutional Review Boards Prior to beginning data collection, a key activity involves the researcher seeking and obtaining the permission of institutional review boards (Creswell, 2012; Hatch, 2002; Sieber & Tolich, 2013). The purpose of this activity is to provide evidence to the review boards that our study design follows their guidelines for conducting ethical research. Most qualitative studies are exempt from a lengthy review (e.g., the expedited or full review), but studies involving individuals as minors (i.e., 18 years or under) or studies of high-risk, sensitive populations (e.g., HIV-positive individuals) require a thorough review; a process involving detailed, lengthy applications; and an extended time for review. The review process involves submitting a proposal that details the procedures in the project related to how selection, access, and permissions for site and individuals will be sought; how selection, sampling, and collection strategies for data will be implemented; and how recording, storage, and use of information will be managed. Table 7.2 summarizes the ethical issues by the data collection activities where each of these procedures will be further described.

TABLE 7.2 ● Examples of Ethical Issues and Details to Describe by Data Collection Activity

Data Collection Activity	Examples of Ethics Issues to Anticipate and Address	Examples of Details to Describe
The site or individual	Situations where site selection might raise power issues with researchers (e.g., research within own work context). Consider alternatives free of power concerns	Site or individual selection rationale and procedures
Access and rapport	Sites requiring local approvals for access. Identify additional review processes and gatekeeper for help Participants' informed of study procedures and their rights. Seek consent from appropriate individuals for participation Become familiar with research context and population. Find out about cultural, religious, gender, and other differences that need to be respected	Site access and permission rationale and procedures Individual consent procedures Rapport building rationale and procedures
Sampling strategy	Participants aware of why they are invited to participate with reference to the study purpose	Sample selection rationale and recruitment procedures
Forms of data	Situations where data collection might disrupt the site and be appropriate for the participants Consider how the researcher goes about eliciting information with participants, provides appropriate rewards for participating, and attends to opportunities for reciprocity	Data source selection rationale Data procedures
Recording procedures	Situations when recording might be intrusive and participants informed of measures taken for maintaining confidentiality	Data recording rationale and procedures
Field issues	Consider various issues as entry and access, appropriateness of data forms, and procedures for information collection	Varies
Data storage	Store data and materials in secure locations and be attentive to intended use of data	Data management procedures and use

The Site or Individual

We are often asked how a researcher locates a site or an individual to study, and our answer typically refers to the approach we have decided to use. In a narrative study, one needs to find one or more individuals to study—individuals who are accessible, willing to provide information, and distinctive for their accomplishments and ordinariness or who shed light on a specific phenomenon or issue being explored. Plummer (1983)

recommends two sources of individuals to study. The pragmatic approach is where individuals are met on a chance encounter, emerge from a wider study, or are volunteers. Alternatively, one might identify a "marginal person" who lives in conflicting cultures, a "great person" who impacts the age in which he or she lives, or an "ordinary person" who provides an example of a large population. An alternative perspective is available from Gergen (1994), who suggests that narratives "come into existence" (p. 280) not as a product of an individual but as a facet of relationships, as a part of culture, as reflected in social roles such as gender and age. Thus, to ask which individuals will participate is not to focus on the right question. Instead, narrative researchers need to focus on the stories to emerge, recognizing that all people have stories to tell. Yet Daiute (2014) suggests that sensemaking of the narratives begins with sampling relevant time and space dimensions. Also instructive in considering the individual in narrative research is to consider whether first-order or second-order narratives are the focus of inquiry (Elliott, 2005). In first-order narratives, individuals tell stories about themselves and their own experiences, while in second-order narratives, researchers construct a narrative about other people's experiences (e.g., biography) or present a collective story that represents the lives of many.

In a phenomenological study, the participants may be located at a single site, although they need not be. Most importantly, they must be individuals who have all experienced the phenomenon being explored and can articulate their lived experiences (van Manen, 2014). The more diverse the characteristics of the individuals, the more difficult it will be for the researcher to find common experiences, themes, and the overall essence of the experience for all participants. In a grounded theory study, the individuals may not be located at a single site; in fact, if they are dispersed, they can provide important contextual information useful in developing categories in the axial coding phase of research. They need to be individuals who have participated in the process or action the researcher is studying in the grounded theory study. For example, Creswell and Brown (1992) interviewed 32 department chairpersons located across the United States who had mentored faculty in their departments. In an ethnographic study, a single site, in which an intact culture-sharing group has developed shared values, beliefs, and assumptions, is often important (Fetterman, 2010). The researcher needs to identify a group (or an individual or individuals representative of a group) to study, preferably one to which the inquirer is a "stranger" (Agar, 1986) and can gain access. For a case study, the researcher needs to select a site or sites to study, such as programs, events, processes, activities, individuals, or several individuals. Although Stake (1995) refers to an individual as an appropriate "case," we turn to the narrative biographical approach or the life history approach in studying a single individual. However, the study of multiple individuals, each defined as a case and considered a collective case study, is acceptable practice.

A question that students often ask is whether they can study their own organization, place of work, or themselves. Such a study may raise issues of power and risk to the researcher, the participants, and the site. To study one's own workplace, for example, raises questions about whether good data can be collected when the act of data collection

may introduce a power imbalance between the researcher and the individuals being studied. Although studying one's own "backyard" is often convenient and eliminates many obstacles to collecting data, researchers can jeopardize their jobs if they report unfavorable data or if participants disclose private information that might negatively influence the organization or workplace. A hallmark of all good qualitative research is the report of multiple perspectives that range over the entire spectrum of perspectives (see the section in Chapter 3 on the characteristics of qualitative research). We are not alone in sounding this cautionary note about studying one's own organization or workplace. Glesne and Peshkin (1992) question research that examines "your own backyard—within your own institution or agency, or among friends or colleagues" (p. 21), and they suggest that such information is "dangerous knowledge" that is political and risky for an "inside" investigator. When it becomes important to study one's own organization or workplace, we typically recommend that multiple strategies of validation (see Chapter 10) be used to ensure that the account is accurate and insightful.

Studying yourself can be a different matter. As mentioned in Chapter 4, autoethnography provides an approach or method for studying yourself. Several helpful books are available on autoethnography that discuss how personal stories are blended with larger cultural issues (see Ellis, 2004; Muncey, 2010). Ellis's (1993) story of the experiences of her brother's sudden death illustrates the power of personal emotion and the use of cultural perspectives around one's own experiences. We recommend that individuals wanting to study themselves and their own experiences turn to autoethnography or biographical memoir for scholarly procedures in how to conduct their studies.

Access and Rapport

Qualitative research involves the study of a research site(s) and gaining permission to study the site in a way that will enable the easy collection of data. Gaining access to sites and individuals also involves several steps. Regardless of the approach to inquiry, permissions need to be sought from a human subjects review board, especially in the United States. This means obtaining approval from university or college institutional review boards as well as individuals at the research site—and in some cases from an organizational body such as a school board or hospital-based research review committee. Evidence of having gained approval should be stated in a research report or proposal (if applicable). For example, "The study was approved by the Institutional Review Board of The Ohio State University" (Harley et al., 2009, p. 99; see Appendix D) or "After approval from the university's Institutional Review Board and a city hospital's Human Subject Review Committee, persons who met inclusion criteria were approached and asked to participate" (Anderson & Spencer, 2002, p. 1340; see Appendix C).

As part of the review process application, researchers include examples of materials that will be used in their study. It is helpful to examine a sample consent form that participants need to review and sign in a qualitative study. An example is shown in Figure 7.2.

FIGURE 7.2 • Sample Human Subjects Consent-to-Participate Form

"Experiences in Learning Qualitative Research: A Qualitative Case Study"

Dear Participant,

The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that you are free to decide not to participate or to withdraw at any time without affecting your relationship with this department, the instructor, or the University of Nebraska–Lincoln.

The purpose of this study is to understand the process of learning qualitative research in a doctoral-level college course. The procedure will be a single, holistic case study design. At this stage in the research, process will be generally defined as perceptions of the course and making sense out of qualitative research at different phases in the course.

Data will be collected at three points—at the beginning of the course, at the midpoint, and at the end of the course. Data collection will involve documents (journal entries made by students and the instructor, student evaluations of the class and the research procedure), audiovisual material (a videotape of the class), interviews (transcripts of interviews between students), and classroom observation field notes (made by students and the instructor). Individuals involved in the data collection will be the instructor and the students in the class.

Do not hesitate to ask any questions about the study either before participating or during the time that you are participating. We would be happy to share our findings with you after the research is completed. However, your name will not be associated with the research findings in any way, and only the researchers will know your identity as a participant.

There are no known risks and/or discomforts associated with this study. The expected benefits associated with your participation are the information about the experiences in learning qualitative research, the opportunity to participate in a qualitative research study, and coauthorship for those students who participate in the detailed analysis of the data. If submitted for publication, a byline will indicate the participation of all students in the class.

Please sign your consent with full knowledge of the nature and purpose of the procedures. A copy of this consent form will be given to you to keep.

Date _____

Signature of Participant _____

John W. Creswell, PhD, University of Michigan, Principal Investigator

This consent form often requires that specific elements be included, such as the following:

- The right of participants to voluntarily withdraw from the study at any time
- The central purpose of the study and the procedures to be used in data collection
- The protection of the confidentiality of the respondents
- The known risks associated with participation in the study
- The expected benefits to accrue to the participants in the study
- The signature of the participant as well as the researcher

Gaining access also means finding individuals who can provide access to the research site and facilitate the collection of data. The permissions and building of rapport will differ depending on the type of qualitative approach being used and the participants

sought. For a narrative study, inquirers gain information from individuals by obtaining their permission to participate in the study. Study participants should be apprised of the motivation of the researcher for their selection, granted anonymity (if they desire it), and told by the researcher about the purpose of the study. This disclosure helps build rapport. Access to biographical documents and archives requires permission and, in some cases, travel—for example, libraries to access paper-based documents.

In a phenomenological study in which the sample includes individuals who have experienced the phenomenon, it is also important to obtain participants' written permission to be studied. In the Anderson and Spencer (2002; see Appendix C) study of the patients' images of AIDS, 58 men and women participated in the project at three sites dedicated to persons with HIV/AIDS: a hospital clinic, a long-term care facility, and a residence. These were all individuals with a diagnosis of AIDS, 18 years of age or older, able to communicate in English, and with a mini-mental state exam score above 22. In such a study, it was important to obtain permission to have access to the vulnerable individuals participating in the study.

In a grounded theory study, the participants need to provide permission to be studied, while the researcher should have established rapport with the participants so that they will disclose detailed perspectives about responding to an action or a process. The grounded theorist starts with a homogeneous sample and individuals who have commonly experienced the action or process. In the grounded theory study of physical activity participation, Harley and colleagues (2009; see Appendix D) met with contacts at two local African American sorority alumni associations to access meetings where recruitment could take place. In an ethnography, access typically begins with a "gatekeeper," an individual who is a member of or has insider status with a cultural group. This gatekeeper is the initial contact for the researcher and leads the researcher to other participants (Atkinson, 2015). An example of such a gatekeeper are the two young men who provided the initial access point to the group studied in the ethnography described by Mac an Ghaill and Haywood (2015; see Appendix E).

A gatekeeper can be especially important when seeking access to marginalized groups because of the trust, culture, and language concerns identified by Creswell (2016). Approaching this gatekeeper and the cultural system slowly is wise advice for "strangers" studying the culture. For both ethnographies and case studies, gatekeepers require information about the studies that often includes answers from the researchers to the following questions, as Bogdan and Biklen (1992) suggest:

- Why was the site chosen for study?
- What will be done at the site during the research study? How much time will be spent at the site by the researchers?
- Will the researcher's presence be disruptive?
- How will the results be reported?
- What will the gatekeeper, the participants, and the site gain from the study (reciprocity)?

Purposeful Sampling Strategy

Three considerations go into the purposeful sampling approach in qualitative research, and these considerations vary depending on the specific approach. They are the decision as to whom to select as participants (or sites) for the study, the specific type of sampling strategy, and the size of the sample to be studied.

Participants in the Sample In a narrative study, the researcher reflects more on whom to sample—the individual may be convenient to study because she or he is available; a politically important individual who attracts attention or is marginalized; or a typical, ordinary person. All of the individuals need to have stories to tell about their lived experiences. Inquirers may select several options, depending on whether the person is marginal, great, or ordinary (Plummer, 1983). The schoolgirls, who consented to participate and provided insightful information about gender-based violence, poverty, and HIV/AIDS (Simmonds, Roux, & ter Avest, 2015), were convenient to study but also provided a critical illustration of the types of challenges surrounding broader issues of gender within an African society. Ai Mei Zhang was a Chinese immigrant student in Canada who could inform an understanding of the ethnic identity through student, teacher, and parent narratives (Chan, 2010; see Appendix B).

We have found, however, a much more narrow range of sampling strategies for phenomenological studies. It is essential that all participants have experience of the phenomenon being studied. Criterion sampling works well when all individuals studied represent people who have experienced the phenomenon. In a grounded theory study, the researcher chooses participants who can contribute to the development of the theory. Corbin and Strauss (2015) refer to theoretical sampling, which is a process of sampling individuals that can contribute to building the opening and axial coding of the theory. This begins with selecting and studying a homogeneous sample of individuals (e.g., all women who have experienced childhood abuse) and then, after initially developing the theory, selecting and studying a heterogeneous sample (e.g., types of support groups other than women who have experienced childhood abuse). The rationale for studying this heterogeneous sample is to confirm or disconfirm the conditions, both contextual and intervening, under which the model holds.

In ethnography, once the investigator selects a site with a cultural group, the next decision is who and what will be studied. Thus, within-culture sampling proceeds, and several authors offer suggestions for this procedure. Fetterman (2010) recommends proceeding with the big net approach, where at first the researcher mingles with everyone. Ethnographers rely on their judgment to select members of the subculture or unit based on their research questions. They take advantage of opportunities (i.e., opportunistic sampling; Miles & Huberman, 1994) or establish criteria for studying select individuals (criterion sampling). The criteria for selecting who and what to study, according to Hammersley and Atkinson (1995), are based on gaining some perspective on chronological time in the social life of the group, people representative of the culture-sharing group in terms of demographics, and the contexts that lead to different forms of behavior.

In a case study, we prefer to select unusual cases in collective case studies and employ maximum variation as a sampling strategy to represent diverse cases and to fully describe multiple perspectives about the cases. Extreme and deviant cases may comprise a collective case study, such as the study of the unusual user experience of Silk Road, the virtual drug marketplace (Van Hout & Bingham, 2013).

Types of Sampling Strategies The concept of purposeful sampling is used in qualitative research. This means that the inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study. Decisions need to be made about who or what should be sampled, what form the sampling will take, and how many people or sites need to be sampled. Further, the researchers need to decide if the sampling will be consistent with the information within one of the five approaches to inquiry.

We will begin with some general remarks about sampling and then turn to sampling within each of the five approaches. The decision about who or what should be sampled can benefit from the conceptualization of Marshall and Rossman (2015), who provide an example of sampling four aspects: people, actions, events, and/or processes. They also note that sampling can change during a study and that researchers need to be flexible, but despite this, researchers need to plan ahead as much as possible for their sampling strategy. We like to think as well in terms of levels of sampling in qualitative research. Researchers can sample at the site level, at the event or process level, and at the participant level. In a good plan for a qualitative study, one or more of these levels might be present, and each one needs to be identified.

On the question of what form the sampling will take, we need to note that there are several qualitative sampling strategies available (see Table 7.3 for a list of possibilities). These strategies have names and definitions, and they can be described in research reports. Also, researchers might use one or more of the strategies in a single study. Looking down the list, **maximum variation sampling** is listed first because it is a popular approach in qualitative studies. This approach consists of determining in advance some criteria that differentiate the sites or participants and then selecting sites or participants that are quite different on the criteria. This approach is often selected because when a researcher maximizes differences at the beginning of the study, it increases the likelihood that the findings will reflect differences or different perspectives—an ideal in qualitative research. Other sampling strategies frequently used are critical cases, which provide specific information about a problem, and convenience cases, which represent sites or individuals from which the researcher can access and easily collect data.

Sample Size The size question is an equally important decision to sampling strategy in the data collection process. One general guideline for **sample size** in qualitative research is not only to study a few sites or individuals but also to collect extensive detail about each site or individual studied. The intent in qualitative research is not to generalize the information (except in some forms of case study research) but to elucidate the particular, the specific (Pinnegar & Daynes, 2007). Beyond these general suggestions, each of the five approaches to research raises specific sample size considerations. See also Guest, Namey, and Mitchell (2013) for their discussion of sampling considerations across data forms.

TABLE 7.3 • Typology of Sampling Strategies in Qualitative Inquiry

Type of Sampling	Purpose
Maximum variation	Documents diverse variations of individuals or sites based on specific characteristics
Homogeneous	Focuses, reduces, simplifies, and facilitates group interviewing
Critical case	Permits logical generalization and maximum application of information to other cases
Theory based	Elaborates on and examines a construct of a theory or the entire theory
Confirming and disconfirming cases	Elaborates on initial analysis, seeks exceptions, and looks for variation
Snowball or chain	Identifies cases of interest from people who know people who know what cases are information-rich
Extreme or deviant case	Learns from highly unusual manifestations of the phenomenon of interest
Typical case	Highlights what is normal or average
Intensity	Seeks information-rich cases that manifest the phenomenon intensely but not extremely
Politically important	Attracts desired attention or avoids attracting undesired attention
Random purposeful	Adds credibility to sample when potential purposeful sample is too large
Stratified purposeful	Illustrates subgroups and facilitates comparisons
Criterion	Seeks cases that meet some criterion; useful for quality assurance
Opportunistic	Follows new leads; taking advantage of the unexpected
Combination or mixed	Meets multiple interests and needs through triangulation, flexibility
Convenience	Saves time, money, and effort, but at the expense of information and credibility

Source: Miles and Huberman (1994, p. 28). Reprinted with permission from SAGE.

In narrative research, we have found many examples with one or two individuals, unless a larger pool of participants is used to develop a collective story (Huber & Whelan, 1999). In phenomenology, we have seen the number of participants range from 1 (Padilla, 2003) up to 325 (Polkinghorne, 1989). Dukes (1984) recommends studying 3 to 10 participants, and one phenomenology, Edwards (2006), studied 33 individuals. In grounded theory, we recommend including 20 to 30 individuals in order to develop a well-saturated theory, but this number may be much larger (Charmaz, 2014). In ethnography, we like well-defined studies of single culture-sharing groups, with numerous artifacts, interviews, and observations collected until the workings of the cultural group are clear. For case study research, we would not

include more than four or five case studies in a single study (Yin, 2014). This number should provide ample opportunity to identify themes of the cases as well as conduct cross-case theme analysis. Wolcott (2008a) has recommended that any case over 1 dilutes the level of detail that a researcher can provide.

Forms of Data

New forms of qualitative data continually emerge in the literature (see Creswell, 2012; Merriam & Tisdell, 2015; Warren & Xavia Karner, 2015), but all forms might be grouped into four basic types of information: interviews (ranging from one-on-one, in person interactions to group, web-based interactions), observations (ranging from nonparticipant to participant), documents (ranging from private to public), and audiovisual materials (ranging from photographs to participant-created artifacts). Over the years, a compendium with an evolving list of data types, as shown in Figure 7.3.

We organize the list into the four basic types, although some forms may not be easily placed into one category or the other. In recent years, new forms of data have emerged, such as journaling in narrative story writing, using e-mail messages, and observing through examining videos and photographs. Particularly noteworthy have been the emergence of procedures for qualitative research using visual, sound, and digital methods (Bauer & Gaskell, 2007; Mitchell, 2011). Common formats of computer-mediated data collection for qualitative research include virtual focus groups and web-based interviews via e-mail or text-based chat rooms, weblogs and life journals (such as open-ended diaries online), Internet message boards, and social media (Halfpenny & Procter, 2015; Markham & Baym, 2009; Warren & Xavia Karner, 2015). Some ethnographic researchers have conducted advanced qualitative studies online, collecting data through e-mail, chat room interactions, instant messaging, videoconferencing, and the images and sound of the websites (Garcia, Standlee, Bechkoff, & Cui, 2009). Qualitative data collection via web-based platforms has the advantages of cost and time efficiency in terms of reduced costs for travel and data transcription. It also provides participants with time and space flexibility that allows them more time to consider and respond to requests for information. Thus, they can provide a deeper reflection on the discussed topics and help to create a nonthreatening and comfortable environment, providing greater ease for participants discussing sensitive issues (Nicholas et al., 2010). More importantly, online data collection offers an alternative for hard-to-reach groups (due to practical constraints, disability, or language or communication barriers) who may be marginalized from qualitative research (James & Busher, 2009).

There are, however, increased ethical concerns with online data collection, such as participants' privacy protection, new power differentials, ownership of the data, authenticity, and trust in the data collected (James & Busher, 2009; Marshall & Rossman, 2015; Nicholas et al., 2010). This is particularly noteworthy when working with children such as the ethnographic study conducted by Jachyra, Atkinson, and Washiya (2015) with adolescent boys using social media. Moreover, web-based research brings new requirements to both participants and researchers. For instance, participants are

required to have some technical skills, access to the Internet, and necessary reading and writing proficiency. In using online information, researchers have to adapt to a new way of observation by watching texts on a screen, by strengthening their skills in interpreting textual data, and in improving online interview skills (Garcia et al., 2009; Nicholas et al., 2010).

Despite problems in innovative data collection such as these, we encourage individuals designing qualitative projects to include new and creative data collection methods that will encourage readers and editors to examine their studies. An illustrative example by van der Hoorn (2015) uses an arts-based research method (musical improvisation on a xylophone and/or glockenspiel) to access the participant's perception of their experience of managing a project. A follow-up interview asks participants to explain their improvisation and thus accessing their experience. Researchers need to consider visual ethnography (Marion & Crowder, 2013; Pink, 2001) or the possibilities of narrative research to include living stories, metaphorical visual narratives, and digital archives (see Clandinin, 2007). We like the technique of "photo elicitation" in which participants are shown pictures (their own or those taken by the researcher) and asked by the inquirer to discuss the contents of the pictures as in photovoice. Guell and Ogilvie (2015), for example, collected over 500 photos of pictures of commuting work journey from 19 participants in Cambridge, England.

The particular approach to research often directs a qualitative researcher's attention toward preferred approaches to data collection, although these preferred approaches cannot be seen as rigid guidelines. For a narrative study, Czarniawska (2004) mentions three ways to collect data for stories: recording spontaneous incidents of storytelling, eliciting stories through interviews, and asking for stories through such mediums as the Internet. Clandinin and Connelly (2000) suggest collecting field texts through a wide array of sources—autobiographies, journals, researcher field notes, letters, conversations, interviews, stories of families, documents, photographs, and personal-family-social artifacts. The conflicting stories of Ai Mei's ethnic identity were generated personal observations, interviews, field notes, and attendance at events (Chan, 2010; see Appendix B). For a phenomenological study, the process of collecting information involves primarily in-depth interviews (e.g., the discussion about the long interview in McCracken, 1988) with as many as 10 individuals. The important point is to describe the meaning of the phenomenon for a small number of individuals who have experienced it. Often multiple interviews are conducted with each of the research participants. This was the case for Anderson & Spencer (2002; see Appendix C) whose phenomenological study examined the "cognitive representations or images" of AIDS by patients involved 58 interviews conducted over 18 months. Besides interviewing and self-reflection, Polkinghorne (1989) advocates gathering information from depictions of the experience outside the context of the research projects, such as descriptions drawn from novelists, poets, painters, and choreographers. We recommend Lauterbach (1993), the study of wished-for babies from mothers, as an especially rich example of phenomenological research using diverse forms of data collection.

Interviews play a central role in the data collection in a grounded theory study. In one study, each interview with 33 academic chairpersons lasted approximately an hour

(Creswell & Brown, 1992). Other data forms besides interviewing, such as participant observation, researcher reflection or journaling (memoing), participant journaling, and focus groups, may be used to help develop the theory (Birks & Mills, 2015; Corbin & Strauss, 2015). Adolph, Kruchten, and Hall (2012) drew on interviews, participant observation, and documents to explain the process of software development. However, in our experience, these multiple data forms often play a secondary role to interviewing in grounded theory studies. In an ethnographic study, the investigator collects descriptions of behavior through observations, interviews, documents, and artifacts (Atkinson, 2015; Fetterman, 2010; Spradley, 1980), although observing and interviewing appear to be the most popular forms of ethnographic data collection. A detailed description of the core values of the straight edge (sXe) movement was generated from participating in the movement for 14 years and attending more than 250 music shows, interviewing 28 men and women, and gathering documents from sources such as newspaper stories, music lyrics, World Wide Web pages, and sXe magazines (Haenfler, 2004). Ethnography has the distinction among the five approaches, we believe, of advocating the use of quantitative surveys and tests and measures as part of data collection. For example, examine the wide array of forms of data in ethnography as advanced by LeCompte and Schensul (1999). They reviewed ethnographic data collection techniques of observation, tests and repeated measures, sample surveys, interviews, content analysis of secondary or visual data, elicitation methods, audiovisual information, spatial mapping, and network research.

Like ethnography, case study data collection involves a wide array of procedures as the researcher builds an in-depth picture of the case. We are reminded of the multiple forms of data collection recommended by Yin (2014) in his book about case studies. He referred to six forms: documents, archival records, interviews, direct observation, participant observation, and physical artifacts. To represent the extensive data collection involved in a campus gun incident case study, Asmussen and Creswell (1995) used a matrix of information of the four types of data (interviews, observations, documents, and audiovisual materials) in the columns and the specific forms of information (e.g., students at large, central administration) in the rows. The use of a matrix, which is especially applicable in an information-rich case study, might serve the inquirer equally well in all approaches of inquiry to convey the depth and multiple forms of data collection.

Of the four data collection forms in Figure 7.3, documents and audiovisual materials are typically used to supplement interviews and observations. Yet it is important to recognize the important historical and contextual information generated by a review of existing individual and organizational documents and artefacts (Prior, 2003). Bogdan and Biklen (2006) categorize existing data into three types: personal documents (i.e., individually produced websites, e-mails, blogs), official documents (i.e., organizationally produced websites, handbooks, reports), and popular culture documents (i.e., those that are publicly accessible photographs, magazines). To mitigate many of the challenges of reviewing documents and audiovisual materials, we recommend negotiating access to materials ahead of time, defining clear inclusion or

FIGURE 7.3 • A Spectrum of Data Collection Approaches in Qualitative Research

Interviews

- Conduct one-on-one interview in the same room, virtually via web-based or e-mail platforms.
- Conduct a focus group interview in the same room, virtually via web-based or e-mail platforms.

Observations

- Conduct an observation as a participant or as an observer.
- Conduct an observation shifting position from participant to observer (and vice versa).

Documents

- Keep a research journal during the study, or have a participant keep a journal or diary.
- Examine personal documents (e.g., letters, e-mails, private blogs).
- Analyze organizational documents (e.g., reports, strategic plans, charts, medical records).
- Analyze public documents (e.g., official memos, blogs, records, archival information).
- Examine autobiographies and biographies.

Audiovisual Materials

- Have participants take photographs or record videos (i.e., photo elicitation).
- Use video or film in a social situation or an individual.
- Examine photographs or videos.
- Examine website, tweets, Facebook messages.
- Collect sounds (e.g., musical sounds, a child's laughter, car horns honking).
- Gather phone or computer-based messages.
- Examine possessions or ritual objects.

Source: Adapted from Creswell (2016).

exclusion criteria based on the purpose for the data, and allocating adequate time for review and synthesis.

Interviewing and observing deserve special attention because they are frequently used in all five of the approaches to research. Entire books are available on these two topics (e.g., on interviewing: Brinkmann & Kvale, 2015; Rubin & Rubin, 2012; on observing: Angrosino, 2007; Bernard, 2011); thus, we highlight basic procedures that we recommend to prospective interviewers and observers.

Interviewing An interview is considered to be a social interaction based on a conversation (Rubin & Rubin, 2012; Warren & Xavia Karner, 2015). According to Brinkmann and Kvale (2015), an interview is where “knowledge is constructed in the interaction between the interviewer and the interviewee” (p. 4). The qualitative research interview is further

described as “attempts to understand the world from the subjects’ point of view, to unfold the meaning of their experience, to uncover their lived world” (p. 3). Who is interviewed and what questions are asked depends on the purpose for the study and research questions guiding the study. Interview questions are often the subquestions in the research study, phrased in a way that interviewees can understand. These might be seen as the core of the **interview protocol**, bounded on the front end by questions to invite the interviewee to open up and talk and located at the end by questions about “Whom should I talk to in order to learn more?” or comments thanking the participants for their time for the interview. It is not surprising given the complex skills necessary for conducting a good interview, that interviewing is often referred to as a “craft” that is developed through practice (Brinkmann & Kvale, 2015; Rubin & Rubin, 2012).

How the interactions take place depends on the choice of interview type of which there is great variety. A variation for a one-on-one interview is for both the interviewee and interviewer being physically located in the same room, talking face-to-face using technology, or talking over the phone. An alternative to talking is to interact in writing using text messaging or an online chat function. Focus groups are advantageous when the interaction among interviewees will likely yield the best information, when interviewees are similar and cooperative with each other, when time to collect information is limited, and when individuals interviewed one-on-one may be hesitant to provide information (Krueger & Casey, 2014; Morgan, 1997). Krueger and Casey (2014) discuss the use of focus groups on the Internet, including chat room focus groups and bulletin board groups. They discuss how to manage the Internet groups as well as how to develop questions for the groups. Stewart and Williams (2005) reviewed both synchronous (real-time) and asynchronous (non-real-time) applications of online focus groups for social research. They highlighted the advantages of new developments such as virtual reality applications because participants can be questioned over long periods of time, larger numbers can be managed, and more heated and open exchanges occur. Problems arise with online focus groups, such as obtaining complete informed consent, recruiting individuals to participate, and choosing times to convene given different international time zones. It is important to carefully weigh the drawbacks for some types with the benefits of increased access; for example, some forms lack visual communication, and most require individuals who are not hesitant to speak and share ideas or who are technology-savvy (James & Busher, 2009). The less articulate, shy interviewee may present the researcher with a challenge and less than adequate data. Regardless of interview mode, care must be taken to create an environment as comfortable as possible and, in group settings, to encourage all participants to talk and to monitor individuals who may dominate the conversation.

One might view interviewing as a series of steps in a procedure. Several authors have advanced the steps necessary in conducting qualitative interviews, such as Brinkmann and Kvale (2015) and Rubin and Rubin (2012). The Brinkmann and Kvale (2015) seven stages of an interview inquiry report a logical sequence of stages from thematizing the inquiry; to designing the study; to interviewing; to transcribing the interview;

to analyzing the data; to verifying the validity, to reliability, and generalizability of the findings; and finally to reporting the study. The seven steps described by Rubin and Rubin (2012), called the responsive interviewing model, are similar in scope to Brinkmann and Kvale (2015), but they view the sequence as not fixed, allowing the researcher to change questions asked, the sites chosen, and the situations to study. Both approaches to the stages of interviewing sweep across the many phases of research from deciding on a topic to the actual writing of the study. In the approach presented here, we focus on the data collection process in some detail, recognizing that this process is embedded within a larger sequence of research. The procedures for preparing and conducting interviews are summarized in Figure 7.4:

- *Determine the research questions that will be answered by interviews.* These questions are open-ended, general, and focused on understanding your central phenomenon in the study.
- *Identify interviewees who can best answer these questions based on one of the purposeful sampling procedures mentioned in the preceding discussion* (see Table 7.3).
- *Distinguish the type of interview by determining what mode is practical and what interactions will net the most useful information to answer research questions.* We recommend assessing the types available and deciding the best fit for the particular context.
- *Collect data using adequate recording procedures when conducting one-on-one or focus group interviews.* We recommend microphone equipment that is sensitive to the acoustics of the room from its location, such as the use of lapel microphones or headsets. We also recommend using more than one recording device placed at different locations in a group environment.
- *Design and use an interview protocol, or interview guide* (Brinkmann & Kvale, 2015). Use approximately five to seven open-ended questions and ample space between the questions to write responses to the interviewee's comments (see the sample protocol in Figure 7.5).
- *Refine the interview questions and the procedures through pilot testing.* In an ethnography of boat pilots aboard cargo vessels, Sampson (2004) used pilot testing to refine and develop research instruments, assess the degrees of observer bias, frame questions, collect background information, and adapt research procedures. In case study research, Yin (2014) recommends a pilot test to refine data collection plans and develop relevant lines of questions. These pilot cases are selected on the basis of convenience, access, and geographic proximity.
- *Locate a distraction-free place for conducting the interview.* Find, if possible, a physical setting where a private conversation can be held that lends itself to audiotaping.
- *Obtain consent from the interviewee to participate in the study by completing a consent form approved by the human relations review board.* At the beginning of the interview, review the purpose of the study, the amount of time that will be needed to complete the interview, their right to withdraw from the study, and plans for

using the results from the interview (offer a copy of the report or an abstract of it to the interviewee).

- *As an interviewer, follow good interview procedures.* Stay within the study boundaries you have reviewed, use the protocol to guide your questions, complete the interview within the time specified, be respectful and courteous, and offer few questions and advice. This last point is an important reminder of how a good interviewer is a good listener rather than a frequent speaker during an interview.
- *Decide transcription logistics ahead of time.* For example, what will be transcribed if needed? If software will be used, then how will it be checked? Decisions here need to be made about verbal cues and extraneous words and utterances (e.g., "hmmms"). Analysis will be limited if you don't include certain things.

Observing Observation is one of the key tools for collecting data in qualitative research. It is the act of noting a phenomenon in the field setting through the five senses of the observer, often with a note-taking instrument, and recording it for scientific purposes (Angrosino, 2007). The observations are based on the research purpose and questions. You

FIGURE 7.4 ● Procedures for Preparing and Conducting Interviews

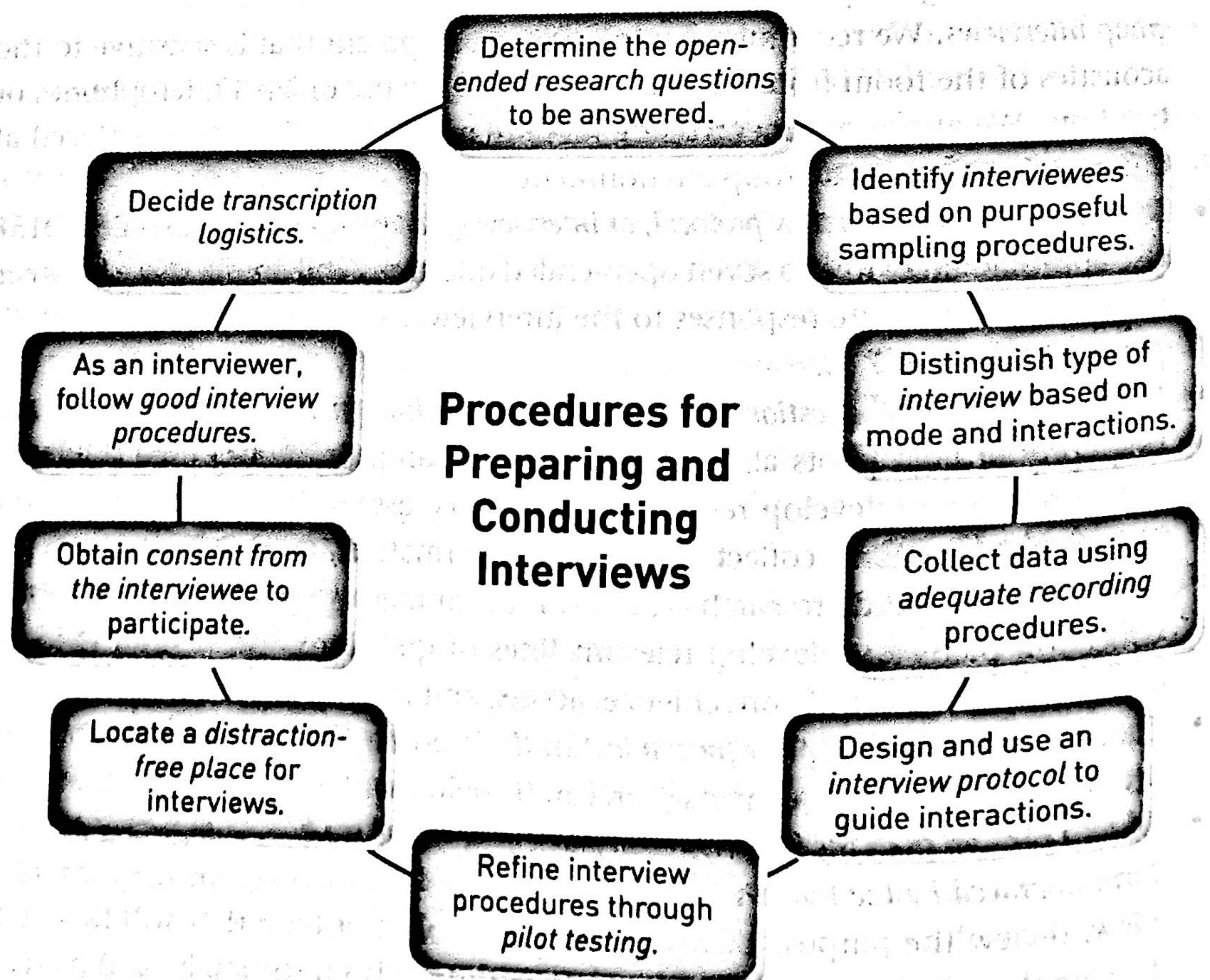


FIGURE 7.5 Interview Protocol or Guide

Interview Protocol Project: University Reaction to a Terrorist Incident

Time of interview:

Date:

Place:

Interviewer:

Interviewee:

Position of interviewee:

(Briefly describe the project)

Questions:

1. What has been your role in the incident?
2. What has happened since the event that you have been involved in?
3. What has been the impact on the university community of this incident?
4. What larger ramifications, if any, exist from the incident?
5. To whom should we talk to find out more about campus reaction to the incident?

Thank the individual for participating in this interview. Assure him or her of confidentiality of responses and potential future interviews.

may watch physical setting, participants, activities, interactions, conversations, and your own behaviors during the observation. Use your senses, including sight, sound, touch, smell, and taste. You should realize that writing down everything is impossible. Thus, you may start the observation broadly and then concentrate on research questions. To one degree or another, the observer is usually involved in that which he or she is observing.

The extent to which the observer is engaged in terms of participating and observing is usually distinguished into four observation *types*:

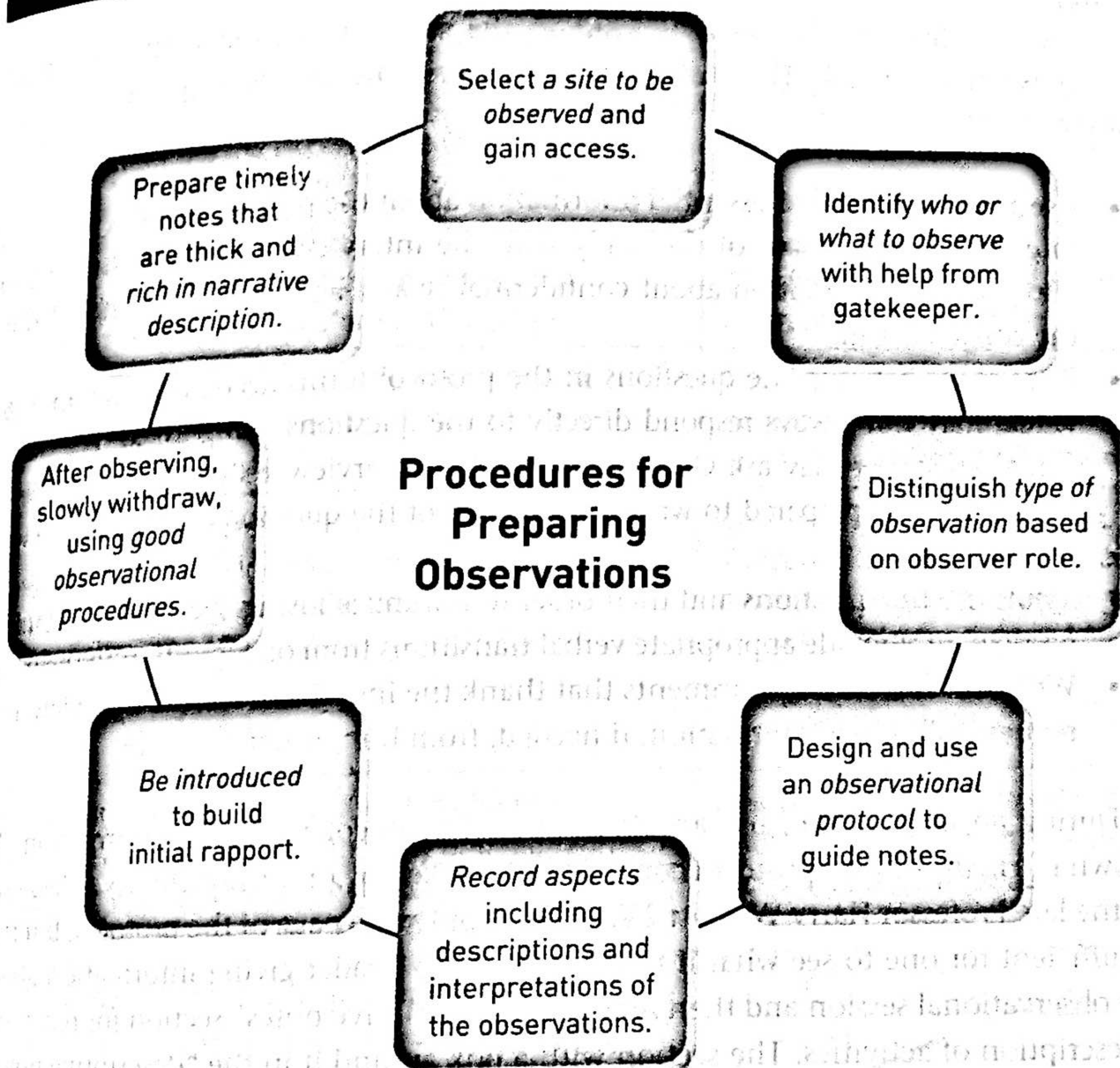
- **Complete participant.** The researcher is fully engaged with the people he or she is observing. This may help him or her establish greater rapport with the people being observed (Angrosino, 2007).
- **Participant as observer.** The researcher is participating in the activity at the site. The participant role is more salient than the researcher role. This may help the researcher gain insider views and subjective data. However, it may be distracting for the researcher to record data when he or she is integrated into the activity (Bogdewic, 1999).

- **Nonparticipant or observer as participant.** The researcher is an outsider of the group under study, watching and taking field notes from a distance. He or she can record data without direct involvement with activity or people (Bernard, 2011).
- **Complete observer.** The researcher is neither seen nor noticed by the people under study.

As a good qualitative observer, you may change your role during an observation, such as starting as a nonparticipant and then moving into the participant role, or vice versa. Participant observation, for example, offers possibilities for the researcher on a continuum from being a complete outsider to being a complete insider (Jorgensen, 1989). The approach of changing one's role from that of an outsider to that of an insider through the course of the ethnographic study is well documented in field research (Bernard, 2011; Jorgensen, 1989). Wolcott's (1994) study of the Principal Selection Committee illustrates an outsider perspective, as he observed and recorded events in the process of selecting a principal for a school without becoming an active participant in the committee's conversations and activities.

Observing in a setting is a special skill that requires addressing issues such as the potential deception of the people being interviewed, impression management, and the potential marginality of the researcher in a strange setting (Atkinson, 2015). Like interviewing, we also see observing as a series of procedural steps for preparing and conducting observations summarized in Figure 7.6:

- *Select a site to be observed.* Obtain the required permissions needed to gain access to the site.
- *At the site, identify who or what to observe, when, and for how long.* A gatekeeper helps in this process.
- *Distinguish type of observation based, initially, on a role to be assumed as an observer.* This role can range from that of a complete participant (going native) to that of a complete observer. We especially like the procedure of being an outsider initially, followed by becoming an insider over time.
- *Design and use an **observational protocol** as a method for recording notes in the field.* Include in this protocol both descriptive and reflective notes (i.e., notes about your experiences, hunches, and learnings). Make sure this is headed by the date, place, and time of observation (Angrosino, 2007).
- *Record aspects such as portraits of the participant, the physical setting, particular events and activities, and your own reactions* (Bogdan & Biklen, 1992). Describe what happened and also reflect on these aspects, including personal reflections, insights, ideas, confusions, hunches, initial interpretations, and breakthroughs.
- *Build initial rapport by having someone introduce you if you are an outsider, being passive and friendly, and starting with limited objectives in the first few sessions of observation.* The early observational sessions may be times in which to take few notes and simply observe.

FIGURE 7.6 Procedures for Preparing and Conducting Observations

- *As an observer, follow good observational procedures.* After observing, slowly withdraw from the site, thanking the participants and informing them of the use of the data and their accessibility to the study.
- *Prepare timely notes that are thick and rich in narrative description after the observation.* Give full description of the people and events under observation (Emerson, Fretz, & Shaw, 2011).

Recording Procedures

In discussing interviewing and observing procedures, we mention the use of a protocol, a predesigned form used to record information collected during an interview or observation. The interview protocol enables a person to take notes during the interview about the responses of the interviewee. It also helps a researcher organize thoughts on items such as headings, information about starting the interview, concluding ideas,

information on ending the interview, and thanking the respondent. In Figure 7.5, the authors provided the interview protocol used in the gunman case study (Asmussen & Creswell, 1995).

Besides the five open-ended questions in the study, this form contains several features we recommend. The instructions for using the interview protocol are as follows:

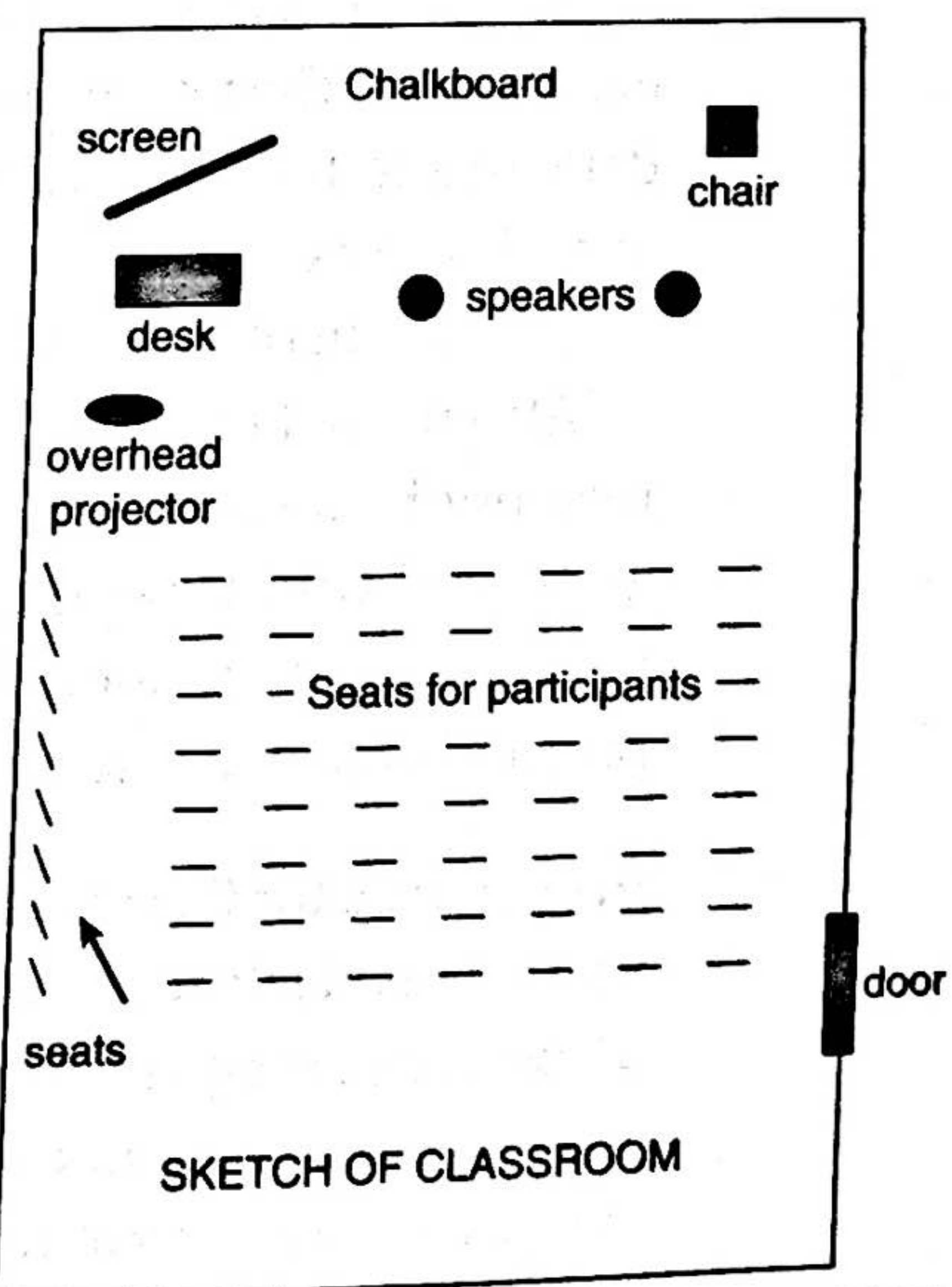
- Use a header to record essential information about the project and as a reminder to go over the purpose of the study with the interviewee. This heading might also include information about confidentiality and address aspects included in the consent form.
- Place space between the questions in the protocol form. Recognize that an individual may not always respond directly to the questions being asked. For example, a researcher may ask Question 2, but the interviewee's response may be to Question 4. Be prepared to write notes on all of the questions as the interviewee speaks.
- Memorize the questions and their order to minimize losing eye contact with the participant. Provide appropriate verbal transitions from one question to the next.
- Write out the closing comments that thank the individual for the interview and request follow-up information, if needed, from him or her.

During an observation, use an observational protocol to record information. As shown in Figure 7.7 this protocol contains notes taken by one a student on a class visit by the late Professor Harry Wolcott. We provide only one page of the protocol, but this is sufficient for one to see what it includes. It has a header giving information about the observational session and then includes a "descriptive notes" section for recording a description of activities. The section with a box around it in the "descriptive notes" column indicates the observer's attempt to summarize, in chronological fashion, the flow of activities in the classroom. This can be useful information for developing a chronology of the ways the activities unfolded during the class session. There is also a "reflective notes" section for notes about the process, reflections on activities, and summary conclusions about activities for later theme development. A line down the center of the page divides descriptive notes from reflective notes. A visual sketch of the setting and a label for it provide additional useful information.

Whether a researcher uses an observational or interview protocol, the essential process is recording information or, as Lofland and Lofland (1995) state, "logging data" (p. 66). This process involves recording information through various forms, such as observational field notes, interview write-ups, and documents as well as mapping, census taking, photographing, and sound recording. An informal process may occur in recording information comprising initial "jottings" (Emerson et al., 2011), daily logs or summaries, and descriptive summaries (for examples of field notes, see Marshall & Rossman, 2015; Sanjek, 1990). These forms of recording information are popular in narrative research, ethnographies, and case studies.

FIGURE 7.7 • San Francisco International Protocol

Length of Activity: 90 Minutes

Descriptive Notes	Reflective Notes
General: What are the experiences of graduate students as they learn qualitative research in the classroom?	
See classroom layout and comments about physical setting at the bottom of this page.	<i>Overhead with details: I wonder if the back of the room was able to read it.</i>
Approximately 5:17 p.m., Dr. Creswell enters the filled room, introduces Dr. Wolcott. Class members seem relieved.	Overhead projector not plugged in at the beginning of the class: I wonder if this was a distraction (when it took extra time to plug it in).
Dr. Creswell gives brief background of guest, concentrating on his international experiences; features a comment about the educational ethnography "The Man in the Principal's Office."	<i>Lateness of the arrival of Drs. Creswell and Wolcott: Students seemed a bit anxious. Maybe it had to do with the change in starting time to 5 p.m. (some may have had 6:30 classes or appointments to get to).</i>
Descriptive Notes	Reflective Notes
Dr. Wolcott begins by telling the class he now writes out educational ethnography and highlights this primary occupation by mentioning two books: <i>Transferring Qualitative Data</i> and <i>The Art of Fieldwork</i> .	<i>Drs. Creswell and Wolcott seem to have a good rapport between them, judging from many short exchanges that they had.</i>
While Dr. Wolcott begins his presentation by apologizing for his weary voice (due to talking all day, apparently), Dr. Creswell leaves the classroom to retrieve the guest's overhead transparencies. Seemed to be three parts to this activity: (1) the speaker's challenge to the class of detecting pure ethnographical methodologies, (2) the speaker's presentation of the "tree" that portrays various strategies and substrategies for qualitative research in education, and (3) the relaxed "elder statesman" fielding class questions, primarily about students' potential research projects and prior studies Dr. Wolcott had written.	 SKETCH OF CLASSROOM
The first question was "How do you look at qualitative research?" followed by "How does ethnography fit in?"	

Field Issues

Researchers engaged in studies within all five approaches face issues in the field when gathering data that need to be anticipated. During the past several years, the number of books and articles on field issues has expanded considerably as interpretive frameworks (see Chapter 2) have been widely discussed. Beginning researchers are often overwhelmed by the amount of time needed to collect qualitative data and the richness of the data encountered. As a practical recommendation, we suggest that beginners start with limited data collection and engage in a pilot project to gain some initial experiences (Sampson, 2004). This limited data collection might consist of one or two interviews or observations so that researchers can estimate the time needed to collect data.

One way to think about and anticipate the types of issues that may arise during data collection is to view the issues as they relate to several aspects of data collection, such as entry and organizational access, procedures for observations, dynamics between interviewer and interviewee, and availability of documents and audiovisual materials.

Entry and Organizational Access Gaining access to organizations, sites, and individuals to study has its own challenges. Convincing individuals to participate in the study, building trust and credibility at the field site, and getting people from a site to respond are all important access challenges. Factors related to considering the appropriateness of a site need to be considered as well (see Weis & Fine, 2000). For example, researchers may choose a site that is one in which they have a vested interest (e.g., employed at the site, a study of superiors or subordinates at the site) that would limit ability to develop diverse perspectives on coding data or developing themes. A researcher's own particular "stance" within the group may keep him or her from acknowledging all dimensions of the experiences. The researchers may hear or see something uncomfortable when they collect data. In addition, participants may be fearful that their issues will be exposed to people outside their community, and this may make them unwilling to accept the researcher's interpretation of the situation.

Also related to access is the issue of working with an institutional review board that may not be familiar with unstructured interviews in qualitative research and the risks associated with these interviews (Corbin & Morse, 2003). Weis and Fine (2000) raised the important question of whether the response of the institutional review board to a project influences the researcher's telling of the narrative story.

Procedures for Observations The types of challenges experienced during observations will closely relate to the role of the inquirer in observation, such as whether the researcher assumes a participant, nonparticipant, or middle-ground position. There are challenges as well with the mechanics of observing, such as remembering to take field notes, recording quotes accurately for inclusion in field notes, determining the best timing for moving from a nonparticipant to a participant (if this role change is desired), keeping from being overwhelmed at the site with information, and learning how to funnel the observations from the broad picture to a narrower one in time. Participant observation has attracted

several commentaries by writers (Ezeh, 2003; Labaree, 2002). Labaree (2002), who was a participant in an academic senate on a campus, notes the advantages of this role but also discusses the dilemmas of entering the field, disclosing oneself to the participants, sharing relationships with other individuals, and attempting to disengage from the site. Ezeh (2003), a Nigerian, studied the Orring, a little-known minority ethnic group in Nigeria. Although his initial contact with the group was supportive, the more the researcher became integrated into the host community, the more he experienced human relations problems, such as being accused of spying, pressured to be more generous in his material gifts, and suspected of trysts with women. Ezeh concluded that being of the same nationality was no guarantee of a lack of challenges at the site.

Dynamics Between Interviewer and Interviewee Challenges in qualitative interviewing often focus on the mechanics of conducting the interview. Roulston, deMarrais, and Lewis (2003) chronicle the challenges in interviewing by postgraduate students during a 15-day intensive course. These challenges related to unexpected participant behaviors and students' ability to create good instructions, phrase and negotiate questions, deal with sensitive issues, and develop transcriptions. Suoninen and Jokinen (2005), from the field of social work, ask whether the phrasing of our interview questions leads to subtle persuasive questions, responses, or explanations.

Undoubtedly, conducting interviews is taxing, especially for inexperienced researchers engaged in studies that require extensive interviewing, such as phenomenology, grounded theory, and case study research. Equipment issues loom large as a problem in interviewing, and both recording and transcribing equipment need to be organized in advance of the interview. The process of questioning during an interview (e.g., saying little, handling emotional outbursts, using icebreakers) includes problems that an interviewer must address. Many inexperienced researchers express surprise at the difficulty of conducting interviews and the lengthy process involved in transcribing audiotapes from the interviews. In addition, in phenomenological interviews, asking appropriate questions and relying on participants to discuss the meaning of their experiences require patience and skill on the part of the researcher.

Recent discussions about qualitative interviewing highlight the importance of reflecting about the relationship that exists between the interviewer and the interviewee (Brinkmann & Kvale, 2015; Nunkoosing, 2005; Weis & Fine, 2000). Brinkmann and Kvale (2015), for example, discuss the power asymmetry in which the research interview should not be regarded as a completely open and free dialogue between egalitarian partners. Instead, the nature of an interview sets up an unequal power dynamic between the interviewer and the interviewee. In this dynamic, the interview is "ruled" by the interviewer. The interview is dialogue that is conducted one-way, provides information for the researcher, is based on the researcher's agenda, leads to the researcher's interpretations, and contains "counter control" elements by the interviewee who withholds information. To correct for this asymmetry, Brinkmann and Kvale (2015) suggest more collaborative interviewing, where the researcher and the participant approach equality in questioning, interpreting, and reporting.

An extension to the discussion is provided by the reflections of Nunkoosing (2005) on the problems of power and resistance, distinguishing truth from authenticity, the impossibility of consent, and projection of the interviewers' own self (their status, race, culture, and gender). Weis and Fine (2000) raise additional questions for consideration: Are your interviewees able to articulate the forces that interrupt, suppress, or oppress them? Do they erase their history, approaches, and cultural identity? Do they choose not to expose their history or go on record about the difficult aspects of their lives? These questions and the points raised about the nature of the interviewer–interviewee relationship cannot be easily answered with pragmatic decisions that encompass all interview situations. They do, however, sensitize us to important challenges in qualitative interviewing that need to be anticipated.

A final issue is whether the researcher shares personal experiences with participants in an interview setting such as in a case study, a phenomenology, or an ethnography. This sharing minimizes the “bracketing” that is essential to construct the meaning of participants in a phenomenology and reduces information shared by participants in case studies and ethnographies.

Availability of Documents and Audiovisual Materials In document research, many issues involve locating materials, often at sites far away or assessing how publically these materials are, and obtaining permission to use the materials (Marshall & Rossman, 2015). For biographers, the primary form of data collection might be archival research from documents; some of these may be online. The increasing use and evolving forms of data generated by Internet-based technologies continue to raise important ethical considerations (Davidson & di Gregorio, 2011).

When researchers ask participants in a study to keep journals or to create audiovisual materials and documents during the process of research, additional field issues emerge. Journaling is a popular data collection process in case studies and narrative research. What instructions should be given to individuals prior to writing in their journals? Are all participants equally comfortable with journaling? Is it appropriate, for example, with small children who express themselves well verbally but have limited writing skills? The researcher also may have difficulty reading the handwriting of participants who journal. Recording on videotape raises issues for the qualitative researcher such as keeping disturbing room sounds to a minimum, deciding on the best location for the camera, and determining whether to provide close-up shots or distant shots.

Data Storage and Security We are surprised at how little attention is given in books and articles to managing data storage of qualitative data. The approach to storage will reflect the type of information collected, which varies by approach to inquiry. In writing a narrative life history, the researcher needs to develop a filing system for the “wad of handwritten notes or a tape” (Plummer, 1983, p. 98)—and more recently to digital recordings and files. Davidson’s (1996) suggestion about backing up information collected and noting changes made to the database is sound advice for all types of research studies. With extensive use of computers in qualitative research,

more attention will likely be given to how qualitative data are organized and stored, whether the data are field notes, transcripts, or rough jottings. With extremely large databases being used by some qualitative researchers, this aspect assumes major importance. In his discussion of data management, Lambert (2015) highlights the vast data available through the Understanding Society survey in the United Kingdom that were unwieldy without the use of digital-based storage methods. Specifically, he describes the data set as “involving repeated extended interviews with more than a hundred thousand responses, collecting detailed and extensive health and social information . . . [and as] one of several major government sponsored surveys of a similar scale” (Lambert, 2015, p. 105). Lambert concludes that the key challenges for e-research platforms is for researchers to employ new methods of data management in qualitative research that facilitate access and whose analysis has strong potential for societal implications.

Some principles about data storage and handling that are especially well suited for qualitative research include the following:

- Always develop backup copies of computer files (Davidson, 1996).
- Use high-quality tapes or recording devices for audio recording information during interviews. Also, make sure that the size of the tapes fits the transcriber’s machine.
- Develop a master list of types of information gathered.
- Protect the anonymity of participants by masking their names in the data, and if a master list is needed, be sure to store it separately.
- Develop a data collection matrix as a visual means of locating and identifying information for a study.

Five Approaches Compared

Returning again to Table 7.1, there are both differences and similarities among the activities of data collection for the five approaches to inquiry. Turning to differences, certain approaches seem more directed toward specific types of data collection than others. For case and narrative studies, the researcher uses multiple forms of data to build the in-depth case or the storied experiences. For grounded theory studies and phenomenological projects, inquirers rely primarily on interviews as data. Ethnographers highlight the importance of participant observation and interviews, but as noted earlier, they may use many different sources of information. Unquestionably, some mixing of forms occurs, but in general these patterns of collection by approach hold true. Case study writers employ multiple forms of data collection.

Second, the unit of analysis for data collection varies among the five approaches. Narrative researchers, phenomenologists, and ground theorists study individuals; case study researchers examine groups of individuals participating in an event or activity or an organization; and ethnographers study entire cultural systems or some subcultures of the systems.

Third, we found the amount of discussion about field issues to vary among the five approaches. Ethnographers have written extensively about field issues (e.g., Atkinson, 2015; Hammersley & Atkinson, 1995). This may reflect historical concerns about imbalanced power relationships, imposing objective, external standards on participants, and failures to be sensitive to marginalized groups. Narrative researchers are less specific about field issues, although their concerns have been voiced about how to conduct the interview (Elliott, 2005). Across all approaches, ethical issues are widely discussed.

Fourth, the approaches vary in their intrusiveness of data collection. Conducting interviews seems less intrusive in phenomenological projects and grounded theory studies than in the high level of access needed in personal narratives, the prolonged stays in the field in ethnographies, and the immersion into programs or events in case studies.

These differences do not lessen some important similarities that need to be observed. All qualitative studies sponsored by public institutions need to be approved by a human subjects review board, at least in the United States and in other countries. Also, the use of interviews and observations is central to many of the approaches. Furthermore, the recording devices, such as observational and interview protocols, can be similar regardless of approach (although specific questions on each protocol will reflect the language of the approach). Finally, the issue of data storage of information is closely related to the form of data collection, and the basic objective of researchers, regardless of approach, is to develop some management system for organized retrieval of information and secure storage. In Chapter 8, we build upon the data collection circle to examine the features of the data analysis spiral common to all approaches with the analyses and representations compared across the five approaches.

Chapter Check-In

1. Do you see the similarities and differences in how the authors describe the data collection activities within their published qualitative studies? Select two of the qualitative articles presented in Appendices B through F.
 - a. Begin with identifying evidence of the seven data collection activities (summarized in Figure 7.1) as they have been applied in each of the journal articles. Note which elements are easy and which are more difficult to identify.
 - b. Then compare the descriptions for each of the data collection activities across the articles. Note which elements are similar and which are different.

2. Can you identify evidence of integration between the study purpose and data being collected by the author(s)? Read qualitative journal articles that adopt different approaches across diverse fields, such as the narrative study of Ellis (1993), phenomenology of Lemay, Cashman, Elfenbein, and Felice (2010), grounded theory study of Komives, Owen, Longerbeam, Mainella, and Osteen (2005), ethnography of Trujillo (1992), and case study of Staples, Pugach, and Himes (2005).

- a. Begin by identifying the forms of data collected in the study. What rationales are presented for their use?
- b. Then review the study introduction, and note the research purpose (and research questions if present) and qualitative approach adopted.
- c. Next, assess to what extent the forms of data collection are appropriate for the approach and purpose for conducting the study. In brief, can the data collected address the articulated purpose? Why or why not?

Ellis, C. (1993). "There are survivors": Telling a story of sudden death. *The Sociological Quarterly*, 34, 711–730. doi:10.1111/j.1533-8525.1993.tb00114.x

Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 46(6), 593–611. doi:10.1353/csd.2005.0061

Lemay, C. A., Cashman, S. B., Elfenbein, D. S., & Felice, M. E. (2010). A qualitative study of the

meaning of fatherhood among young urban fathers. *Public Health Nursing*, 27(3), 221–231. doi:10.1111/j.1525-1446.2010.00847.x

Staples, A., Pugach, M. C., & Himes, D. J. (2005). Rethinking the technology integration challenge: Cases from three urban elementary schools. *Journal of Research on Technology in Education*, 37(3), 285–311. doi:10.1080/15391523.2005.10782438

Trujillo, N. (1992). Interpreting (the work and the talk of) baseball. *Western Journal of Communication*, 56, 350–371. doi:10.1353/csd.2005.0061

3. Can you begin to sketch the data collection circle for a qualitative study? Examine Figure 7.1 for the seven activities. Develop a matrix that describes data collection for all seven activities for your project. Provide detail in this matrix for each of the seven activities. Follow these steps:
- a. State the site and/or individuals that are the focus of your study and rationale for their choice in a couple of sentences.
 - b. Discuss the processes by which you will gain access and develop a rapport with individuals and/or gatekeepers (if applicable).
 - c. Present the strategy for purposeful sampling and rationale that reflects your approach to research.
 - d. Describe the forms of data you will collect, and provide a rationale for the appropriateness of their use referring to the approach you chose.
 - e. Outline the procedures you will develop for recording information.

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- f. Consider the issues that may emerge as you begin fieldwork. Present a plan for resolving each of them.
 - g. Apply the suggestions presented in this chapter for storing data securely, and draft the procedures you will follow.
 - h. Look across the descriptions of the activities within the data collection circle for any ethical issues that have not been attended to.
- 4. Can you apply your understandings to a practical experience in collecting data for your project?
 - 5. Design an interview or an observational protocol for your study. Conduct either an interview or an observation, and record the information on the protocol you have developed. After this experience, identify issues that posed challenges during this data collection.

Summary

In this chapter, we addressed several components of the data collection process. The researcher attends to ethical considerations across the activities in addition to locating a site or person to study; gaining access to and building rapport at the site or with the individual; sampling purposefully using one or more of the many approaches to sampling in qualitative research; collecting information through many forms, such as interviews, observations, documents, and audiovisual materials and newer forms emerging in the literature; establishing approaches for recording information such as the use of interview or observational protocols; anticipating and addressing field issues ranging from access to ethical concerns; and developing a system for storing and securely handling the databases. The five approaches to inquiry differ in the diversity of information collected, the unit of study being examined, the extent of field issues discussed in the literature, and the intrusiveness of the data collection effort. An essential aspect for researchers, regardless of approach, is the collection and management of data in an ethical manner. This typically involves gaining institutional approvals—and in some cases, organizational approvals—from review boards prior to beginning the research and then following the consent, recording, and storage protocols that are described in the application.

Further Readings

Several readings extend this brief overview introduction to data collection beginning with general resources and then by specific data forms. The list should not be considered exhaustive, and readers are encouraged to seek out additional readings in the end-of-book reference list.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson.

John W. Creswell introduces the steps of conducting qualitative research alongside those of conducting quantitative research. This approach can be especially helpful for the researcher who has some existing research expertise or experience and finds the discussions about sampling and data collection to be essential reading.

Chilisa, B. (2012). *Indigenous research methodologies*. Thousand Oaks, CA: Sage.

Bagele Chilisa describes diverse indigenous research methodologies and provides illustrative case studies from around the globe. She also provides practical guidance for researchers within indigenous contexts.

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research*. Thousand Oaks, CA: Sage.

Greg Guest, Emily Namey, and Marilyn Mitchell offer detailed procedures related to participant observation, in-depth interviews, and focus groups. In particular, we found their discussion of document analysis as well as sampling size across data forms to be helpful guidance.

Stanfield, J. H., II (Ed.) (2011). *Rethinking race and ethnicity in research methods*. Walnut Creek, CA: Left Coast Press.

In this work, John Stanfield draws on the personal and professional lives of contributing authors to highlight their uses of methods and the practical issues that emerged.

For Guidance Related to Interviewing

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Thousand Oaks, CA: Sage.

Svend Brinkmann and Steinar Kvale describe seven stages of an interview investigation to structure their comprehensive guidance for conducting interviews, which provide the organizing structure for the book.

James, N., & Busher, H. (2009). *Online interviewing*. Thousand Oaks, CA: Sage.

Nalita James and Hugh Busher discuss the methodological and epistemological challenges associated with computer-mediated interviews. Of particular note is the discussion about ethical considerations in conducting online interviews within a virtual environment.

Krueger, R. A., & Casey, M. A. (2014). *Focus groups: A practical guide for applied research* (5th ed.). Thousand Oaks, CA: Sage.

A good overview for planning and conducting focus groups, this new edition expands guidance on developing questions. Particularly useful is the discussion on moderating skills in different contexts (e.g., young participants, cross-cultural settings).

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: Sage.

Herbert Rubin and Irene Rubin describe their seven-step responsive interviewing approach. The writing is accessible and provides access to the lessons learned from their extensive interview experiences.

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For Discussions About Making Observations and Taking Field Notes

Angrosino, M. V. (2007). *Doing ethnographic and observational research*. Thousand Oaks, CA: Sage.

Michael Angrosino provides a comprehensive guide to the process of conducting ethnographic research. Of particular note is his discussion of ethical considerations and descriptions of a variety of data collection techniques for participant observer field researchers.

Bernard, H. R. (2011). *Research methods in anthropology: Qualitative and quantitative approaches* (5th ed.). Walnut Creek, CA: AltaMira.

In this comprehensive resource, Russ Bernard outlines procedures for sampling, collecting, and analyzing data. We find his guidance for observational procedures to be particularly helpful.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed.). Chicago, IL: University of Chicago Press.

Robert Emerson, Rachel Fretz, and Linda Shaw outline practical guidance for creating and interpreting field notes. Through embedding illustrative examples, they make accessible a difficult process to describe.

For Information About Issues and Use of Documents and Audiovisual Materials

Bauer, W. M., & Gaskell, G. D. (Eds.). (2007). *Qualitative research with text, image and sound: A practical handbook*. Thousand Oaks, CA: Sage.

Noteworthy within this handbook are chapters related to use of video, film, and photographs (Chapter 6) and analysis guidance of conversations (Chapter 11), images (Chapters 13 and 14), and music (Chapter 15).

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: Jossey-Bass.

This is a useful resource for designing, conducting, and reporting qualitative research. Of particular note is their description of documents including popular culture documents (e.g., cartoons, movies), visual (e.g., video, web-based media), physical material, and artifacts (e.g., tools, electronics).

Warren, C. A., & Xavia Karner, T. (2015). *Discovering qualitative methods: Ethnography, interviews, documents, and images* (3rd ed.). New York, NY: Oxford University Press.

Carol Warren and Tracey Xavia Karner describe the decisions and processes involved in sampling, collecting, and analyzing a variety of types of documents and images.