1 Designing and Conducting Research With Online Interviews

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At its heart, research is research—regardless of methodology and methods. All research begins with a burning question, a sense of curiosity, and an openness to discovery. All research is conducted to serve a purpose, answer questions, or prove a hypothesis, and all use some combination of methods to find and analyze whatever information is needed to answer the question. Researchers have devised numerous ways to carry out these steps.

Qualitative interview research is unique because the researcher is the instrument for data collection. Qualitative interview research contrasts with quantitative approaches such as surveys, where a conscious effort is made to insert a validated and (ideally) objective instrument between the researcher and the research participants. Interview research is unique in its reliance on direct, usually immediate, interaction between the researcher and participant. The successful researcher draws on the best of human qualities when conducting an interview: trust, thoughtful questioning and perceptive probing, empathy and reflective listening.

To understand a piece of research and assess its credibility and potential contribution to knowledge in the field, we need to understand the researcher's motivations, purpose, and designs. We need to understand how the study was conducted so we can grasp the

implications of its conclusions. If the study was based on data collected through qualitative interviews, we also need to know who the participants were, and why and how they were chosen. We want to grasp the nature of the interaction between researcher and participant that allowed data to be collected or generated.

Studies using data collected through online interviews follow fundamental steps and thinking involved in any research as well as those involved more specifically with qualitative interview research, then add an important dimension—the technology. When the direct interaction between researcher and participant occurs through computer-mediated communications (CMCs), technology is more than a simple transactional medium. The human qualities so important to interview communications are experienced differently; the technology delimits the form of the communication in ways both subtle and obvious.

Some information and communications technologies (ICTs) allow for a full range of visual and verbal exchange. Some ICTs, such as videoconferencing, allow for an interview that closely resembles the natural back-and-forth of face-to-face communication, including verbal and nonverbal signals.

TYPES OF NONVERBAL COMMUNICATION

Types of nonverbal communication include:

- *Chronemic communication* describes the use of pacing and timing of speech and length of silence before response in conversation.
- *Paralinguistic* or *paralanguage communication* describes variations in volume, pitch, and quality of voice.
- *Kinesic communication* includes eye contact and gaze, facial expressions, body movements, gestures, and postures.
- *Proxemic communication* is the use of interpersonal space to communicate attitudes (Gordon, 1980; Guerrero et al., 1999; Kalman, Ravid, Raban, & Rafaeli, 2006).

Nonverbal signals can be noted during an interview, or categorized as part of the transcription process when reviewing a recorded interview.

Other ICTs allow for written text, with limited visual elements such as colored fonts or graphic emoticons. While text-only studies

do not allow researchers to observe participants' nonverbal signals, they allow participants with mobile devices to participate in interviews anytime, anywhere. Indeed, participants could converse with the researcher from the field or report live while experiencing an event related to the research phenomenon.

Still other ICTs allow participants to share real or imagined visual artifacts, images, or environments. Web conferencing tools allow researchers and participants to look at or generate visual images. In immersive multi-user visual environments (MUVEs), researchers and participants can navigate the virtual worlds or environments chosen or created by the researcher or the participant. Four main types of synchronous communications technologies are summarized in Figure 1.1. These communications options are further described in Table 1.1.

How do these varied styles of computer-mediated communication impact the quality or perception of the dialogue between researcher and participant? This is a question researchers are beginning to explore as they experiment with the use of ICTs and CMCs in scholarly research interviews. Each study conducted in this way provides us with an instructive exemplar for the opportunities and challenges this method offers contemporary researchers.

Figure 1.1 Four types of synchronous communication (Salmons, 2010).

Text Based	**Videoconference or Video Call**
• Communicate through typed words, limited use of images through emoticons or exchange of pictures. • Connect on phone, mobile device, or computer.	• Communicate through audio and video. • Connect in videoconference facility, computer, or mobile device.
Synchronous Communication Types for Online Interviews	
Multichannel Meeting	**Immersive 3-D Environment**
• Communicate through audio, video, text, and/or shared applications. • Connect by computer or mobile device.	• Communicate through audio or text, and visual exchange. • Connect by computer or mobile device.

Table 1.1 Communication Options for Preparation, Interviews, and Follow-Ups With Participants (Salmons, 2010)

	Text	Multichannel
Asynchronous Any Time	**E-mail:** Send and receive questions and answers. **Forum:** Post and respond to questions and answers in a secure online threaded discussion area. **Weblog (Blog):** Personal online journal where entries are posted chronologically. Microblogs allow for very short entries. Blogs can be text only or multichannel, with links to images or media. Viewing may be public or limited to a specified group of subscribers or friends. **Wiki:** Multiple authors add, remove, and edit questions and responses about the research phenomena on a user-generated website.	**Podcast or Vodcast:** Ask and answer questions by sending audio or video files. **Video:** Post, view, and respond to video clips. **Visual Exchange:** Post, view, and respond to photographs, charts and diagrams, and visual maps.
Synchronous Real Time	**Text Message:** Send and receive questions on mobile phone or handheld device. **Instant Message or Chat:** Post and respond to questions and answers on computer through a secure online website.	**Voice-Over Internet Protocol (VOIP):** Ask and answer questions using live audio. **Videoconferencing or Video Call:** See interview participants while conversing.

	Text	Multichannel
		Shared Applications: View and discuss documents, media, or examples. Log in together and use web-based software applications, research tools, or forms. Generate responses by writing, drawing, or diagramming ideas on whiteboard or in shared documents. Ask and respond to questions through the physical form and identity of an avatar you create to represent yourself. Experience immersive events or phenomena. View examples or demonstrations.

For the purpose of this book, *online interviews* or *e-interviews* refer to in-depth interviews conducted with CMCs. While any ICT can be used for online interviews, the focus here is on the kinds of communication technologies that enable real-time dialogue between researchers and participants.

Online interviews are used for primary *Internet-mediated research* (IMR), that is, they are used to gather original data via the Internet with the intention of subjecting them to analysis to provide new evidence in relation to a specific research question (Hewson, 2010). This stands in contrast to secondary Internet research, that is, the use of existing documents or information sources found online (Hewson, 2010). Scholarly online interviews are conducted in accordance with ethical research guidelines; verifiable research participants provide informed consent before participating in any interview.

DISSECTING ROLES IN IN-DEPTH INTERVIEWS

In-depth interviews involve interrelationships among the following (Salmons, 2010):

- The *interviewer,* regardless of interview style, is responsible for ethical, respectful inquiry and accurate collection of data relevant to the research purpose and questions. As a *researcher,* the interviewer places the interview exchange within a scholarly context.
- The *interviewee* responds honestly to questions or participates in discussion with the researcher to provide ideas or answers that offer insight into his or her perceptions, understandings, or experiences of personal, social, or organizational dimensions of the subject of the study. Depending on the nature and expectations of the research, they may also be called *subjects, respondents,* or *research participants.*
- The *research purpose* and *questions* serve as the framework and offer focus and boundaries to the interactions between researcher and interviewee.
- The *research environment* provides a context for the study. Depending on the nature of the study, the environment may be significant to the researcher's understanding of the interviewee. Cyberspace is the research milieu for online interviews.

Understanding E-Interview Research

To understand e-interview research, we need to pose many of the same questions we would ask about any study. Additionally, we need to inquire about the influences of the technology on research design, conduct, and ultimately on the study's conclusions and on generalizations the researcher offers. The use of the term *understand* is intentional here to encompass both evaluative and instructional purposes. We may look at an e-interview study as a prototype for an approach we want to use in our own research. We may examine the approach because we want to teach or learn about—or develop—interview research methods. Or, we may need to take an evaluative position and review a research proposal, thesis or dissertation, or article for potential publication. Working from any of these perspectives, we need to know what questions to ask.

EVALUATING QUALITATIVE RESEARCH

A qualitative research "quality" framework (Spencer, Ritchie, Lewis, & Dillon, 2002) was developed by a team from the National Centre for Social Research. Drawing on a review of the literature and existing frameworks, Spencer et al. identified four central principles (p. 7):

- ***Contributory*** in advancing wider knowledge or understanding about policy, practice, theory or a particular substantive field;
- ***Defensible in design*** by providing a research strategy that can address the evaluative questions posed;
- ***Rigorous in conduct*** through the systematic and transparent collection, analysis and interpretation of qualitative data;
- ***Credible in claim*** through offering well-founded and plausible arguments about the significance of the evidence generated.

This quality framework includes 18 key questions. Spencer et al. (2002) suggest beginning with assessment of the findings, then moving through different stages of the research process (design, sampling, data collection, analysis, and reporting). They suggest ending the appraisal by looking at research conduct (reflexivity and neutrality, ethics and auditability).

When we look at a study based on data collected with online interviews we want to know why and how the researcher made choices about the ICTs used for the interviews, and how the interviews were carried out. How did the participant respond to the process, as well as to the interview questions? Did the e-interviews proceed as planned or were adjustments needed—why or why not? What would another researcher need to know if choosing a similar approach? What types of data were collected, and were the data adequate and appropriate given the purpose of the study? Ultimately, did the data allow the researcher to construct an analysis and generate conclusions that achieved the purpose of the study?

THINKING ABOUT EMERGENT METHODS

Sharlene Nagy Hesse-Biber and Patricia Leavy observe that research methods exist to

> service research questions that advance our understanding of the social world or some aspect of it. Therefore, as the social world and

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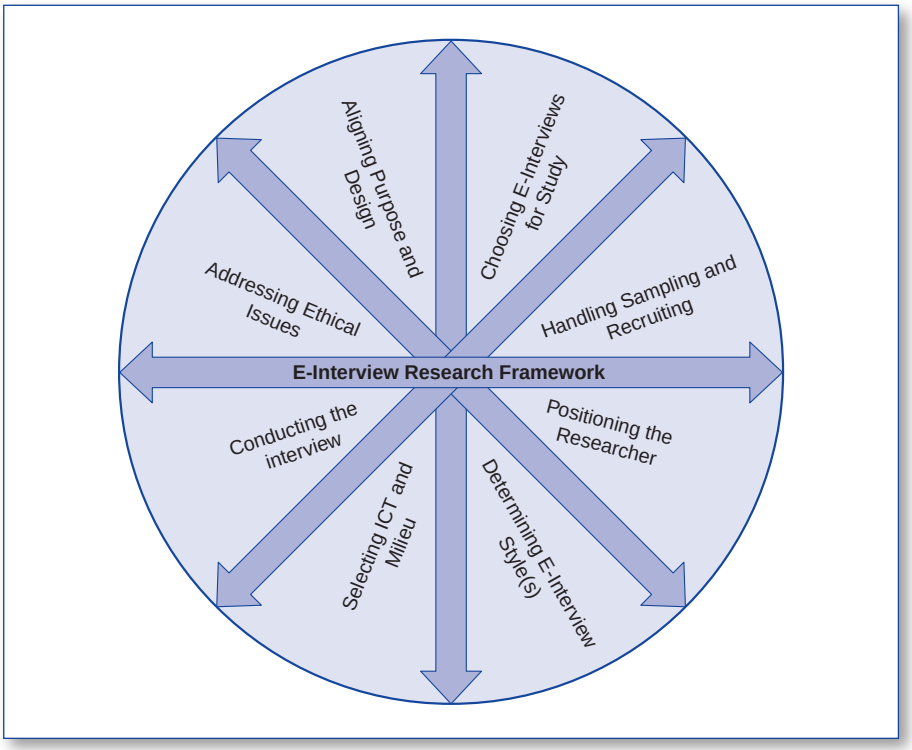
our understanding of it have progressed, so too has our repertoire of social research methods. . . . Sometimes the field of emergent methods is fueled not by new paradigmatic perspectives but through technological innovation that pushes on the boundaries of methodology. (Hesse-Biber & Leavy, 2010, pp. 1–2, 7)

Online interview research is an emergent method, so a widely accepted set of review questions does not currently exist. Jaccard and Jacoby suggest that when creating a new theoretical framework or model, a first step may involve "generating ideas about new explanatory constructs and the relationships between them or generating ideas about the mechanisms underlying the phenomena that you are trying to explain" (Jaccard & Jacoby, 2010, p. 39). The E-Interview Research Framework (see Figure 1.2) offers just such steps by

Figure 1.2 The E-Interview Research Framework for understanding e-interview research.



generating ideas and questions about key features of online interviews, relationships between those features, and the underlying mechanisms that make online interviews successful for generating rich, usable data.

The set of model questions proposed here is described as a *multidimensional framework*. The E-Interview Research Framework includes eight interrelated categories of key questions that can help a researcher think through the design of a study that uses data collected with online interviews. It is displayed as a circle to convey the sense that one angle alone will not provide the systems-level view we need to really understand the interrelated mechanisms of online interview research. Taken one by one, the "new" questions suggested here are not in and of themselves significant. But when considered together, they can provide a comprehensive picture of the study at hand, illustrate the context for the online interviews, and provide a springboard for discussion.

Each of the eight categories includes a set of questions and models important to the analysis of a study—whether one is designing original research or analyzing a study proposed or conducted by another researcher. The discussion of these categories begins with "Aligning Purpose and Design." While this may indeed be the first step, the circular nature of the E-Interview Research Framework suggests that once the other categories have been examined it may be necessary to return to the beginning and make sure all pieces of the design fit.

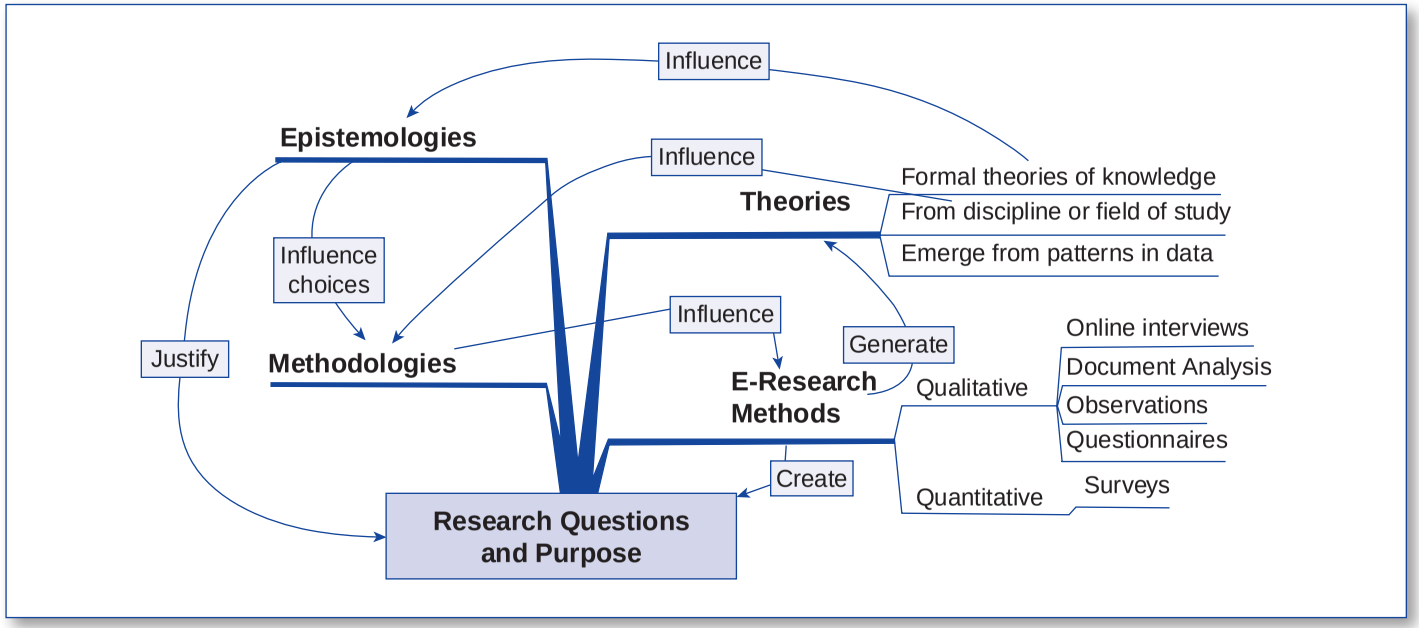
Aligning Purpose and Design

KEY QUESTIONS: ALIGNING PURPOSE & DESIGN

- Are research purpose, theories and epistemologies, methodologies, and methods clearly aligned?
- How will the data collected from e-interviews relate to theories? Does the researcher want to explore, prove, or generate theory?
- Does the researcher offer a compelling rationale for using e-interviews to achieve the research purpose?

Any study is strengthened by coherent discussion of research purpose, theories, methodologies, and methods (see Figure 1.3). By exploring the elements of the research design, we can gain some

Figure 1.3 Diagram of a research design map.



understanding of how the intended use of online data collection methods aligns with the overall purpose and theoretical framework of the study. Importantly, we can learn whether the researcher intends to explore or test extant theories or generate new theory. We can also ascertain whether the researcher is working within, or outside of, disciplinary approaches.

COMPONENTS OF RESEARCH DESIGN

Four interrelated elements of research design—epistemology, theory, methodology, and method are defined for our purposes as follows:

- ***Epistemology*** refers to the study of the nature of knowledge, or the study of how knowledge is justified;
- ***Theory*** refers to an explanation that is internally consistent, supportive of other theories, and gives new insights. An important characteristic of theory is that it is predictive.
- ***Methodology*** refers to the study of, and justification for, the methods used to conduct the research (Gray, 2009). Methodologies emerged from academic disciplines in the social and physical sciences and, although considerable cross-disciplinary exchange occurs, choices generally place the study into a disciplinary context.
- ***Method*** refers to the practical steps used to conduct the study (Anfara & Mertz, 2006; Carter & Little, 2007).

Understanding the alignment of key research elements—theory, epistemology, methodology, and methods—is important when trying to dissect any research design, and particularly essential for understanding online interview research. When operating online, greater clarity and precision is needed, since the potential for misunderstanding is arguably greater. Researchers and research participants need to know what is expected of them, why, and when. Both need to be sure that when a consent agreement is signed all parties are clear about the purpose of the study, the use of the data—and the parameters of the data collection. As readers or reviewers, we need to know the rationale for using online interview methods to determine whether and how the data collected accomplishes the purpose of the study.

Choosing E-Interviews as a Data Collection Method for the Study

KEY QUESTIONS: CHOOSING E-INTERVIEWS

- Does the researcher provide a compelling reason for using data collected from online interviews? Is the rationale aligned with methodologies, research purpose, and questions?
- Are online interviews chosen to investigate real-world phenomena?
- Are online interviews chosen to investigate online phenomena?

What is the researcher's motivation for conducting the interviews online? Some researchers want to study behaviors or phenomena that take place online by exploring them in the kind of setting where they occur. Patterns of technology use, modes of participation in online communities, or human–computer interaction can best be studied by using ICTs to conduct the interview. In such circumstances, the participant essentially selects the interview technology and the technology itself may be a part of the phenomenon under investigation.

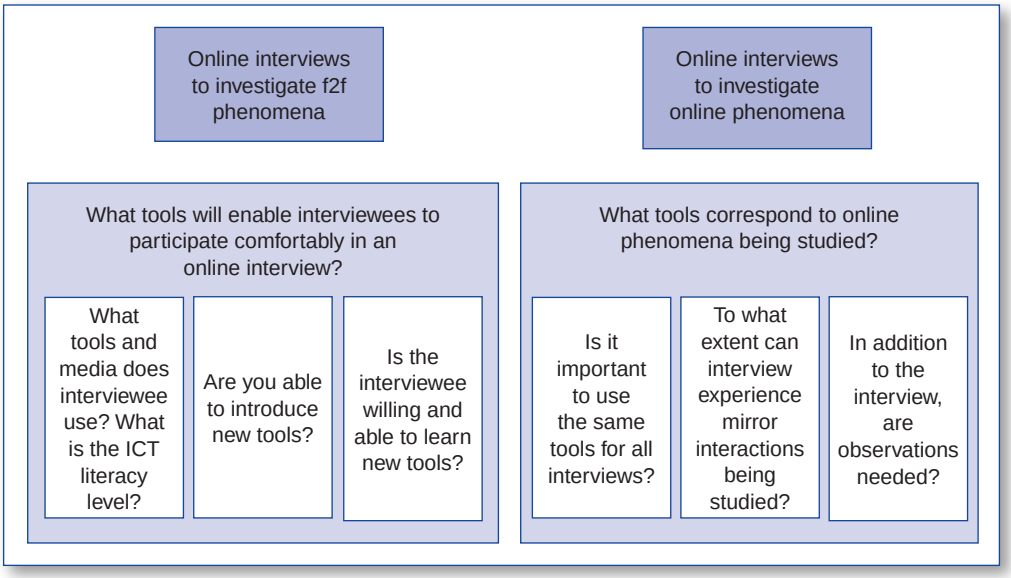
Computer-mediated communication also offers a way to discuss behaviors or phenomena unrelated to the Internet that occur offline. Technology is not part of the phenomenon under investigation. The researcher may decide to conduct interviews online because it is a convenient way to meet participants, because participants are geographically dispersed, or because they want to collect visual data not possible with a telephone interview. Technology may be selected by the researcher based on preferred kinds of data (visual, verbal, text) or by the participant based on familiarity, availability, or access.

Additional questions should be asked about the study, depending on the motivation for choosing e-interviews (see Figure 1.4).

In either use of online interviews—to study on- or offline behaviors—the researcher may prioritize intentions of the study and/or the needs of participants when making choices about whether to interview online and what ICT(s) to use. For example, a researcher who wants to use videoconferencing tools for the interview to enable both verbal and nonverbal communication could choose to screen out participants unwilling or unable to participate in a videoconference. Alternatively, the researcher could agree to meet the participant using a technology the researcher must learn to use, because the value of this participant's data outweighs the extra effort required for the researcher.

In addition to interviewing participants, the researcher may collect other qualitative or quantitative data through online observation

Figure 1.4 Additional questions about the choice of online interviews.



or participant observation, questionnaires, or surveys. If so, does the researcher explain how this data will be collected and how it will complement data collected from interviews?

By understanding the motivations and considerations for the choice of ICT, we can better grasp how the online interview data collection process and the types of data used align with other elements of the research design.

Handling Sampling and Recruiting

KEY QUESTIONS: HANDLING SAMPLING & RECRUITING

- What sampling approaches are appropriate given the purpose of the study and e-interview approach?
- How will the researcher assess whether the target population has access to the interview technology, and the capability and willingness to use it as a research participant?
- How can the researcher locate credible research participants? How will the researcher verify the identity and age (or other relevant criteria) of research participants recruited online?
- How will online recruitment be carried out?

Qualitative researchers often use what is broadly defined as purposive or purposeful sampling when selecting people to interview because the sample is intentionally selected according to the purpose of the study. The online interview researcher customizes purposive sampling depending on the motivations for conducting the interviews online, the selected ICT, and the target study population. Criterion sampling allows the researcher to specify the characteristics that serve as the basis for selection of research participants—important given the additional characteristics needed for a participant in an online interview. By stating criteria, the researcher also creates additional factors that can be independently verified from sources other than the research participant's own statements (Salmons, 2010, p. 106).

For researchers using online interviews to collect data, sampling criteria will to some extent include a reference to technology access and/or the specific ICT being used for the interview. Will participants need webcams? Headsets or microphones for using VOIP? Criteria may also specify the level of experience with the Internet-related phenomenon or behavior under investigation or the technology skills someone would need to participate in the interview.

Two options for locating credible research participants online are *nomination* and *existing sample frames*. The first relies on verification of identity by another person who knows the potential participant; the second relies on verification by membership in a group, organization, or reliable administrative list.

SAMPLE FRAMES IN ONLINE INTERVIEW RESEARCH (SALMONS, 2010)

Fundamental to the recruitment strategy is the choice of a sample frame. The term *sample frame* refers to a list or grouping of people from which the sample is selected.

There are two broad types of frames:

- ***Existing Sample Frames.*** Existing frames usually consist of records previously constructed for administrative purposes. They could include membership lists for organizations or associations or lists of students or program participants (Ritchie, Lewis, & Elam, 2003; Wilmot, 2008). In mixed methods studies where a quantitative research instrument is administered as the first step, the survey

sample can be used as a frame from which interview participants are selected for the qualitative stage of the study.

- ***Constructed or Generated Sample Frames.*** Where an existing frame or list is not available, researchers may have to create their own. In some cases, researchers can construct a frame from partially adequate or incomplete existing frames. Another way to construct a frame is by working through organizations that provide services to or represent a population of potential participants. Researchers can generate sample frames by approaching people in a particular organization, location, setting, or meeting. This method is best used to identify people who are willing to consider taking part in the study, seeking their permission to contact them privately to discuss the study in detail (Ritchie et al., 2003).

By understanding the sampling and recruiting plans, we can learn more about the individuals who will contribute data and determine whether choices made by the researcher best serve the purpose of the study.

Positioning the Researcher

KEY QUESTIONS: POSITIONING THE RESEARCHER

- Is the researcher positioned as an insider, as one of the actors in the case? Is the researcher looking at *emic* issues, revealed by actors in the case (Stake, 1995)?
- Is the researcher positioned as an outsider who brings questions in from outside the case, looking at *etic* issues (Stake, 1995)?
- Can the researcher's role be described as miner, traveler (Kvale, 2007; Kvale & Brinkman, 2009), or gardener (Salmons, 2010)?

At this point, we should understand the overall purpose and design of the research, the desired study population, and the researcher's motivation for conducting the study online. Now we are ready to explore whether the researcher's motivations are drawn from a need or gap identified by the researcher or whether the motivation originates in a personal connection to the phenomenon of research interest. The distinction between insider versus outsider is not unique to

online interview research. It is, however, a useful data point as we build our understanding of the design and conduct of a study. The position of the researcher can also be described in relationship to the data and attitude toward the process of collection.

RESEARCHERS AS INSIDERS OR OUTSIDERS

Linguist and anthropologist Kenneth Pike originated the terms *etic* and *emic* to describe the difference between native speakers' and outside researchers' ways of understanding languages (Franklin, 1996). Researchers from diverse disciplines have interpreted these concepts; Robert Stake (1995) applies them to case study research by describing etic issues as those that are the issues of the researcher or the larger research community outside the case and emic as the issues that emerge from the actors, the insiders within the case. VanDeVen describes the outside researcher as a "detached, impartial onlooker who gathers data" whereas an inside researcher is a "participant immersed in the actions and experiences within the system being studied" (VanDeVen, 2007, pp. 269–270).

Hesse-Biber and Leavy (2010) raise the insider/outsider question in the context of emergent methods and willingness to question disciplinary research techniques, ideas, concepts, and methods:

> How will I negotiate my research position—as an "insider," an "outsider," or both? If I conduct my research as an "outsider," will I be overly identifying with the other's perspective? If I conduct my research as an "insider," will I lose my ability to challenge my disciplinary perspective? (p. 4)

Hesse-Biber and Leavy (2010) also note that "to successfully negotiate insider and outsider status requires a highly reflexive process" (p. 4) since the researcher must balance the value of inserting his or her own insights about the phenomenon with the risk of biasing the study. In an e-interview situation, particularly where the participants were recruited online and are unknown to the researcher in any face-to-face context, the researcher's insider role may overpower the interview or overly influence the direction of the interview. On the other hand, the understanding gained from personal experience with the research phenomenon could make it easier to discuss sensitive issues.

While discussing a very different type of research—field research—Rosalind Edwards raises the issue of "social capital" that may apply to researchers entering an online "field."

> In order to carry out fieldwork especially, but also other aspects of the research process, researchers often need to cultivate and deploy social capital. . . . Social capital is said to work because it involves mutual collaboration and the expectation of reciprocity. . . . People do things for each other in the expectation and trust that, at some time, these actions will be repaid. This is an iterative view of the generation and maintenance of social capital. (Edwards, 2004, p. 4)

Just as insiders can use social capital and social/professional networks to gain entry into rural or ethnic communities and find people willing to participate in interviews, insiders may have an easier entrée into online communities. Within a community, insider status can help to build trust or rapport based on shared experiences or values. Sometimes the researcher may gain the advantages of an insider by partnering with an "insider assistant," a gatekeeper to the community who can negotiate access to the community and assist in recruiting participants. "If the request is coming through a known and trusted colleague, people are more likely to give it proper consideration than if it had arrived from a stranger, where it might be seen as just another form of junk mail (this may be especially likely to happen with 'cold' requests received via email" (King & Horrocks, 2010, p. 32). Insider assistants can also help by establishing credibility for the study and thereby encouraging honesty and commitment on the part of interviewees.

Some methodologies intrinsically rely on researcher as *insider,* such as participant observation or action research, or *outsider*, such as observation or document analysis. Interview research can be conducted from a full range of positions. Some insiders contribute data in the form of reflective journal entries or field notes to complement data collected from participants.

VanDeVen (2007) points out the complementarity of the knowledge gained from insider/outsider research, since the insider perspective may allow the researcher to provide a concrete grounding in the research problem in a particular context or situation. Research from an outside perspective, he notes, can provide empirical evidence of the scope of the problem.

I suggest that while the etic/outsider or emic/insider positions seem to be either/or, in many situations the researcher may have inside knowledge or experience without conducting the study from an exclusively emic stance. Researchers may be inspired to study a topic because they understand the issue or need from a personal, as well as a scholarly perspective. By using what phenomenological researchers call *bracketing* or *epoche*, researchers can take an etic perspective by

intentionally clearing their minds of preconceived notions and listening without prejudgment to each respective research participant's responses (Moustakas, 1994).

In online research, some degree of balance between etic and emic perspectives may be needed. At least some knowledge of the situation, culture, and type of experience being studied may help the researcher to develop rapport and trust with the virtual research participant. Insider status may help the researcher gain access to an online environment or community. At the same time, the researcher can bring broader understandings of the research problem into the study and devise thought-provoking or challenging interview questions. Whether inside, outside, or somewhere in the middle, the researcher needs to clearly state a position and provide a rationale for how that position serves the study (see Figure 1.5).

METAPHORICAL DESCRIPTIONS OF THE RESEARCHER'S POSITION

Another way to look at the relationship of the researcher to the study and the participants is through the metaphorical stances of the miner, traveler (Kvale, 2007; Kvale & Brinkman, 2009), or gardener (Salmons, 2010) (see Figure 1.6). The researcher who digs out facts and feelings from research subjects is characterized as a *miner*. The

Figure 1.5 Position of the researcher.

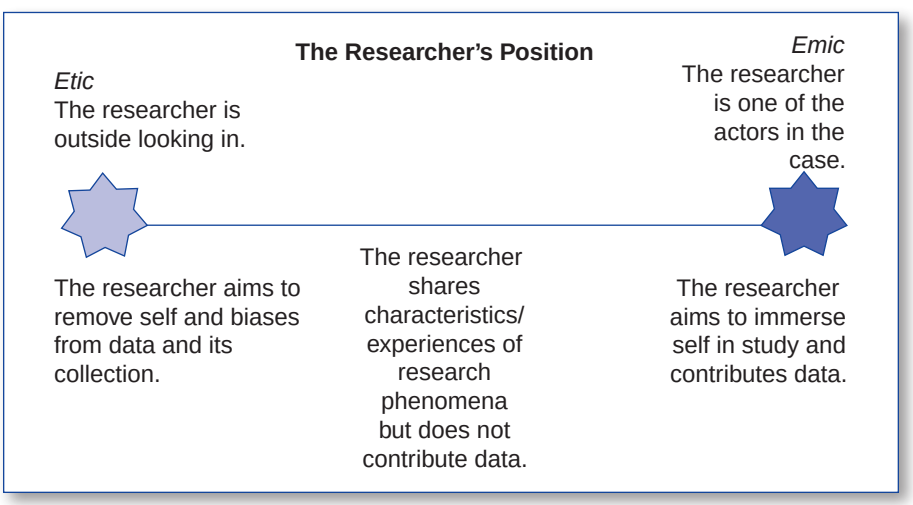
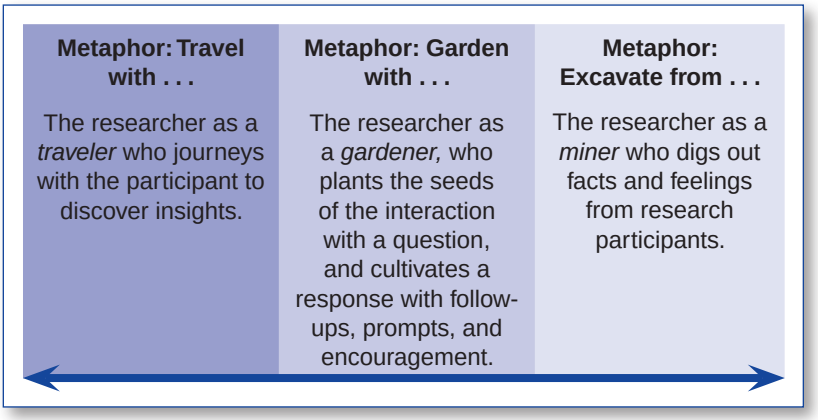


Figure 1.6 Role of the researcher.



researcher as a *traveler* is one who journeys with the participant. Most common interview practices lie between these two extremes. The metaphor of the *gardener* describes semi-structured interviews. The interviewer as gardener uses the question to plant a seed and follow-up questions to cultivate the growth of ideas and shared perceptions.

By understanding the etic or emic stance of the researcher and the intention to travel with, garden with, or excavate data from, we can learn more about the way the researcher relates to the phenomenon and potentially to the research participants.

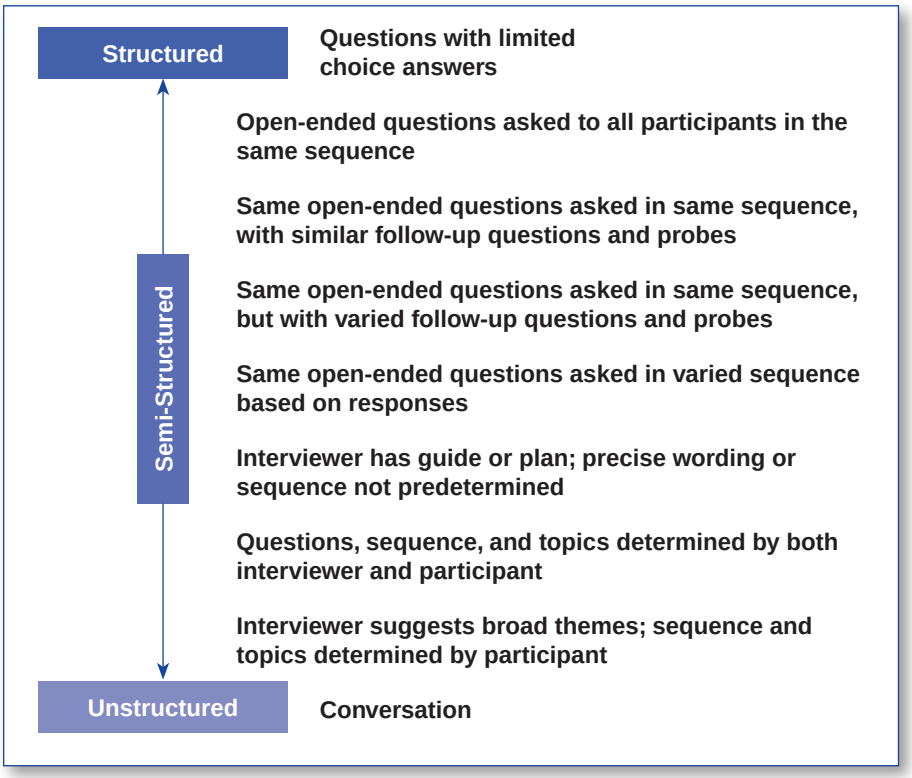
Determining E-Interview Style(s)

KEY QUESTIONS: DETERMINING E-INTERVIEW STYLE(S)

- Does the researcher plan to use *structured, semi-structured, unstructured*, or a combination of styles for the interviews?
- How does the researcher align ICT functions, features, and/or limitations with the selected e-interview style(s)?

Any interview researcher must decide whether a structured, unstructured, or semi-structured interview best achieves the purpose of the study. The e-interview researcher must also consider alignment of interview structure and questioning style with choice of technology (see Figure 1.7).

Figure 1.7 Level of interview structure (Salmons, 2010).



Structured interviews usually consist of the same questions posed in the same sequence to all participants. They may include closed-ended or limited-response questions or open-ended questions designed to elicit short narrative answers. Interview respondents do not have the option to redirect questions or embroider on responses. To prepare for structured interviews, the researcher determines the exact wording of all questions in advance. Because the role of the interviewer is meant to be as neutral as possible, the researcher may recruit and train others to implement the interview.

Semi-structured interviews balance the preplanned questions of a structured approach with the spontaneity and flexibility of the unstructured interview. The researcher prepares questions and/or discussion topics in advance and generates follow-up questions during the interview. *Unstructured* interviews are used to collect data through what is essentially a conversation between the researcher and participant.

Every ICT has opportunities and drawbacks for communications effectiveness, and each researcher must weigh how the pros and cons will enable or obstruct the research interview (see Figure 1.1 and Table 1.1). The choice of interview style is closely related to the choice of interview technology. Structured interviews can be conducted with almost any ICT; in general, a rich media technology is not needed since answers may be yes/no or simple statements. Semi-structured and unstructured interviews, however, require more careful thought. For example, text-only interviews may require careful planning to avoid the expectation of long written answers. That means at least some structure—and advance crafting of questions—is needed. If text-only ICTs are used for chatty, conversational unstructured interviews, the researcher will need to be prepared to respond quickly with follow-up or next questions to hold the participant's attention. The free-flowing, conversational characteristic of videoconferencing most closely compares with face-to-face dialogue, so it can be used with semi-structured or unstructured styles. The multichannel meeting space lends itself to semi- or unstructured interviews that use visual communication or collaboration, while immersive environments can offer a rich mix of visual navigation with sometimes limiting aspects of text-based communications (see the Typology of Online Visual Interview Methods in Table 1.2).

By understanding the level(s) of structure the researcher intends to use, we can learn more about the kind of preparation the researcher will need before the interview. We can also discern the kinds of ICTs that might best fit the communication needs of the interview.

Selecting Information and Communication Technology (ICT) and Milieu

KEY QUESTIONS: SELECTING ICT & MILIEU

- Will the interview use text based, audio, and/or visual communication options?
- Where will the interaction fall on the *Time-Response Continuum?*
- Will the interview setting be in a public or private online milieu?
- Is the choice of ICT aligned with research purpose, interview style, and access/preference of the research participants?

TIME RESPONSE AND COMMUNICATIONS

Researchers choose the interview technology and setting for a variety of reasons, including personal preferences, skills, or access by participants. Some researchers are looking at use or function of an ICT, so in essence the technology is itself the research phenomenon. The interview style and level of structure influence the choice of ICT for the interview. Key questions for understanding researchers' ICT choices relate to the alignment of research purpose with availability of visual, verbal, or text forms of exchange (see Table 1.1), the degree of immediacy possible between question and response, and/or the potential for visual communication or collaboration.

The terms *synchronous* and *asynchronous* have until recently seemed mutually exclusive. Either the technology allowed communication partners to converse in real time, or it did not. Now, many ICTs and patterns of usage allow for what we will call *near-synchronous* conversations. One party may post, text, or send a comment, update, or question and the receiving party may respond immediately, or soon. The message is typically brief and conversational. The sender expects the recipient to respond quickly, and engage in an extended kind of interchange.

On the other hand, technologies that are seemingly synchronous may indeed offer real-time exchange but not result in a focused dialogue. When we can see the other person face-to-face, it is obvious whether the other person is pondering the question, gathering his or her thoughts, or is distracted by household chores, children, mail, or other conversations. Online, we may not be able to see the other person, so we do not know whether he or she is contemplating an answer to our question, or is off doing other things and will return to the conversation at some point. Media Richness Theory (Daft & Lengel, 1986) prioritized the "rich" exchange across multiple channels with immediate back-and-forth responses between communication partners. Media Synchronicity Theory (MST) refined that concept by offering a definition for *synchronicity* that distinguishes high-quality, real-time communications from those exchanges that, while ostensibly synchronous, do not entail attentive participation in an in-depth, focused exchange or productive dialogue (Carlson & George, 2004; Dennis, Fuller, & Valacich, 2008). Dennis et al. observed that it is not simply the choice of ICT, but

> the *manner* in which individuals use media influences their communication performance (the development of shared understanding). Generally speaking, convergence processes benefit from the use of

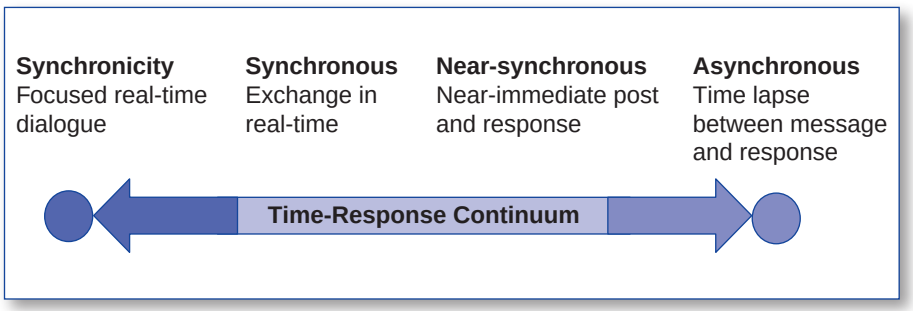
> media that facilitate *synchronicity*, the ability to support individuals working together at the same time with a shared pattern of coordinated behavior (p. 576).

Synchronicity refers to the successful convergence that, it can be argued, is beneficial to an interview process.

Researchers who select asynchronous methods (such as e-mail or posts to a discussion forum) report high-quality exchanges that result when participants have a chance to think about the response, or gain new experiences with the topic of the research, between questions (Hunt & McHale, 2007).

The Time-Response Continuum offers a way to categorize the level of immediacy and timing of response in a way that offers more subtle gradations than the prior synchronous/asynchronous dichotomy (see Figure 1.8).

Figure 1.8 Time-Response Continuum.



VISUAL NATURE OF ONLINE COMMUNICATION

KEY QUESTIONS: USING VISUAL METHODS & DATA

- If the interview technology has capacity for visual exchange, has the researcher acknowledged the visual nature of interview in the research design and planned for collection and analysis of visual data?
- Does the interview entail visual communication, elicitation, and/or collaboration? Will researcher and/or participant provide or generate visual images?
- Have permissions for use of visual data been included in the consent agreement?

The visual communication potential of a selected ICT is another consideration for researchers. Increasingly, technologies enable the researcher and participant to see each other, view, share, or create images. These possibilities add to the media richness of the interview, while raising a new set of questions.

Visual research methods can make use of these four types of enabling technologies to accomplish various tasks in the interview (see Table 1.2). Researchers and participants may use *visual communication* techniques to convey the question or represent the response. Visual communication describes the use of images to communicate abstract concepts, relationships between concepts or data, or examples of research phenomena. Using *visual elicitation*, the researcher

Table 1.2 Typology of Online Visual Interview Methods (Salmons, 2010)

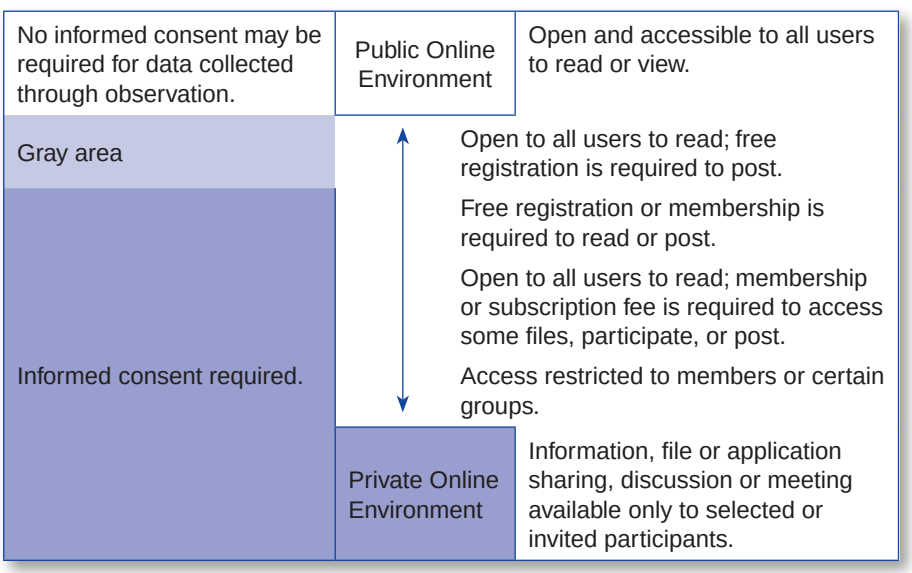
Researchers can do the following. . .	**. . . to achieve the following interactions with research participants:**
Transmit visual images. Image or media files, links to images posted on a server or website, or images captured in the moment are sent to the other party during the interview. ***View*** visual representation of phenomena together: Researchers can view photos, graphics, artifacts, or media during the interview. ***Navigate*** in a visual virtual environment. Observe and experience websites, software applications, or 3-D virtual environments. ***Generate*** visual images. Access shared tools that allow researchers and/or participants to create drawings, diagrams or visual maps, snapshots or videos.	***Visual communication*** describes the use of images to communicate abstract concepts, relationships between concepts or data, or examples of research phenomena. ***Visual elicitation*** refers specifically to the process of using visual stimuli to draw out a verbal or a visual response. The scenery or events in an immersive virtual environment navigated by researcher and participant, the images or media viewed together, or the graphic generated during the interview may stimulate response. ***Visual collaboration*** refers to a collaborative approach to either stimulate new thinking or create responses in relation to visual representations of the research phenomena. Researchers and participants can create, edit, or embellish images together during the interview.

can use visual stimulus to draw out a verbal or a visual response. Researcher and/or participant can generate new visual representations of the research phenomenon using *visual collaboration,* which refers to a collaborative approach to either stimulate new thinking or create responses in relation to visual representations of the research phenomena.

PUBLIC–PRIVATE SETTING

Finally, the decision about ICT may also relate to a choice of interview setting because the online interview must occur in some milieu. Each type of setting offers its own mix of visual communication, navigation, or collaboration and voice or text dialogue options the researcher can select or mix and match. At the same time, the virtual world, online platform, or community where researchers and participants communicate may be considered public, open to all, or private, accessible to owners or members. While the distinction between "public" and "private" is not universally agreed upon, the continuum illustrated in Figure 1.9 can provide a guideline: If participants register and pay to be involved in the activities occurring in the setting, they can be considered "private," while the open web

Figure 1.9 Consent in public or private online milieu.



accessible to all can be considered "public." Another way to look at the question is through the expectations of participants: when they post or converse, do they expect that they have shared privately with selected friends or publicly with everyone?

In public, or generally open spaces, researchers need to consider a number of factors such as potential interruptions and intellectual property or copyright issues. Additionally, if observations of the environment, artifacts, or images posted by participants; information included in profiles; and so on are to be used as data, informed consent or permissions will be required.

By understanding the features of possible ICTs and environments where they are used, we can determine which will enable the researcher to collect the visual, verbal, or text data needed from interviews. We can also discern potential ethical or informed consent issues related to the public or private virtual milieu.

Conducting the Interview

KEY QUESTIONS: CONDUCTING THE INTERVIEW

- Does the researcher have a plan for conducting the interview with either prepared questions or an interview guide?
- Does the researcher have a plan for the 4 interview stages: opening, questioning and guiding, closing, and following up?
- Does the researcher have a contingency plan in case there are technical difficulties?

How will the researcher bring together purpose and process when faced with the research participant? In this area of the framework, we are interested in whether the researcher has the skills and abilities to carry out the interview as planned. We also want to know what the researcher will do if the interview does not proceed as planned. With emergent methods generally, flexibility is of utmost importance.

> Emergent methods typically require the researcher to remain flexible and open to modifications. In fact, emergent methods are often discovered as a result of modifying more conventional research projects when traditional projects fail to "get at" the aspect of social life the researcher is interested in. (Hesse-Biber & Leavy, 2010, p. 3)

With any kind of CMC, the possibility for problems with connectivity, access, and software are present. The e-interview researcher needs a contingency plan that is understood by the research participant.

By understanding the researcher's rationale for the interview approach and plans for conducting the interview as well as back-up options, we can acquire experience and develop new knowledge and success strategies for e-interview methods. After the online interview research, we are interested in the reflexive process by which the researcher considers or reconsiders choices made.

Addressing Ethical Issues

KEY QUESTIONS: ADDRESSING ETHICAL ISSUES

- Has the researcher taken appropriate steps to protect human subjects, and where appropriate, their avatars or online representations?
- Has the researcher obtained proper informed consent?

Ethical issues abound in any interview research. In the case of online interview research, there are some particular considerations. Some are related to the possibility that the interview participant may unwittingly reveal more than was intended because online profiles or environments contain information not noted in the consent agreement.

Questions to ask about potential ethical risks in an e-interview study include the following (Salmons, 2010):

- Does the research involve observation or intrusion in situations where the subjects have a reasonable expectation of privacy? Would reasonable people be offended by such an intrusion? Can the research be redesigned to avoid the intrusion?
- Will the investigator(s) be collecting sensitive information about individuals? If so, have they made adequate provisions for protecting the confidentiality of the data through coding, destruction of identifying information, limiting access to the data, or whatever methods that may be appropriate to the study?
- Are the investigator's disclosures to subjects about confidentiality adequate? Should documentation of consent be waived to protect confidentiality? (Porter, 1993)

- Is it clear to the participant that there is no penalty for withdrawing from the research?
- Are safeguards in place to protect confidentiality of the participant?
- Can the researcher protect the data and ensure that it is not used for purposes other than those the participant consented to in the agreement?

Closing Thoughts

The E-Interview Research Framework can be used as a tool for planning and designing as well as dissecting and analyzing research that utilizes online interview data collection methods. This framework informs the editor's commentaries on each chapter throughout the book and serves as the basis for a metasynthesis of all 10 cases, presented in Chapter 12.

See the Appendix for suggested readings and resources on the software, methodologies, and methods discussed in this chapter.

Find More Materials on the Study Site! See the book website for additional ideas about understanding and assessing research designs, and resources for dissertation/thesis or review board committee members who need to evaluate student research proposals and theses or dissertations. Also on the book website, educators and instructional designers can find discussion and assignment ideas and sample syllabi.

References

Anfara, V. A., & Mertz, N. T. (Eds.). (2006). *Theoretical frameworks in qualitative research.* Thousand Oaks, CA: Sage.

Carlson, J. R., & George, J. F. (2004). Media appropriateness in the conduct and discovery of deceptive communication: The relative influence of richness and synchronicity. *Group Decision and Negotiation, 13*(2), 191–210.

Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research, 17*(10), 1316–1328.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science, 32*(5), 554–571.

Dennis, A. R., Fuller, R. M., & Valacich, J. S. (2008). Media, tasks, and communication processes: A theory of media synchronicity. *Management Information Systems Quarterly, 32*(4), 575–600.

Edwards, R. (2004). *Social capital in the field: Researchers' tales.* Retrieved from http://www.lsbu.ac.uk/families/workingpapers/familieswp10.pdf

Franklin, K. J. (1996). *K. L. Pike on etic vs. emic: A review and interview.* Retrieved February 25, 2011, from http://www.sil.org/klp/karlintv.htm

Gordon, R. L. (1980). *Interviewing: Strategy, techniques and tactics.* Homewood, IL: Dorsey.

Gray, D. (2009). *Doing research in the real world* (2nd ed.). London: Sage.

Guerrero, L. K., DeVito, J. A., & Hecht, M. L. (Eds.). (1999). The nonverbal communication reader: Classic and contemporary readings. Prospect Hills, IL: Waveland.

Hesse-Biber, S. N., & Leavy, P. (2010). Pushing on the methodological boundaries: The growing need for emergent methods within and across the disciplines. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 1–15). New York: Guilford.

Hewson, C. (2010). Internet-mediated research and its potential role in facilitating mixed methods research. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 543–570). New York: Guilford.

Hunt, N., & McHale, S. (2007). A practical guide to the email interview. *Qualitative Health Research, 17*(10), 1415–1421.

Jaccard, J., & Jacoby, J. (2010). *Theory construction and model-building skills: A practical guide for social scientists.* New York: Guilford.

Kalman, Y. M., Ravid, G., Raban, D. R., & Rafaeli, S. (2006). Pauses and response latencies: A chronemic analysis of asynchronous CMC. *Journal of Computer-Mediated Communication 12*(1), 1-23.

King, N., & Horrocks, C. (2010). *Interviews in qualitative research.* London: Sage.

Kvale, S. (2007). *Doing interviews.* Thousand Oaks, CA: Sage.

Kvale, S., & Brinkman, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: Sage.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA: Sage.

Porter, J. P. (1993). *Institutional Review Board guidebook.* Washington DC: U.S. Department of Health and Human Services, Office for Human Research Protections.

Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. In J. Ritchie & J. Lewis (Eds.), *Qualitative research practice: A guide for social science students and researchers* (pp. 77–109). London: Sage.

Salmons, J. E. (2010). *Online interviews in real time.* Thousand Oaks, CA: Sage.

Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (2002). Quality in qualitative evaluation: a framework for assessing research evidence. Retrieved March 17, 2004, from http://www.strategy.gov.uk/files/pdf/Quality_framework.pdf

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

VanDeVen, A. H. (2007). *Engaged scholarship.* Oxford, UK: Oxford University Press.

Wilmot, A. (2008). *Designing sampling strategies for qualitative social research.* Newport, UK: Office for National Statistics.