
Research in Constructivist Frameworks Using Ethnographic Techniques

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ABSTRACT

This article discusses the undertaking of research using a constructivist philosophical framework and ethnographic techniques, which can include individual interviews, focus groups, observation, and questionnaires. It begins with a broad overview of social sciences research philosophy, discussing both positivism and interpretivism, before moving on to focus on the constructivist paradigm, which comes under the interpretivist umbrella. The section on ethnography follows and includes sampling, data collection techniques, and data analysis. Examples from the author's work are used to illustrate both philosophy and method. They are from the author's studies of the information-seeking behavior of, firstly, women with breast cancer and, secondly, online investors.

INTRODUCTION

This article discusses not only a research method, ethnography, and the techniques that are commonly associated with it but also the philosophical framework in which the method can be situated. It begins with a broad overview of social sciences research philosophy and moves on to discuss the constructivist paradigm specifically before detailing ethnographic method and techniques and providing examples from the author's work.

PHILOSOPHICAL TRADITIONS OF RESEARCH IN THE SOCIAL SCIENCES

In the broader context of research theory in the social sciences, there are two major philosophical traditions—positivist and interpretivist (sometimes

written as “interpretive”).¹ In a nutshell, these two traditions are based on different assumptions about the nature of reality. Positivists consider that, as in the field of science, knowledge can only be based on what can be observed and experienced. Key positivist tenets are therefore “measurement” and “objectivity,” resulting in a focus on quantitative data. The associated style of reasoning is “deductive,” where the argument moves from general principles to particular instances. Positivist research usually begins with theories and models, defines variables for study, and predicts their relationships through framing hypotheses that are then tested. Generalizations are eventually made. Common research methods are “experimental design,” with its emphasis on cause and effect, and “survey,” which must be carried out according to scientific principles. “Validity” and “reliability” are key constructs for positivist researchers. (Powell, 1997, pp. 37–42 discusses these concepts).

On the other hand the interpretivist philosophy, where the constructivist paradigm fits, takes a different view of reality. Interpretivism is a broad term that encompasses a number of different paradigms, all concerned with the meanings and experiences of human beings. Since the central tenet of interpretivism is that people are constantly involved in interpreting their ever-changing world, researchers who are interpretivists believe that the social world is constructed by people and is therefore different from the world of nature (Williamson, 2002a). They favor “naturalistic inquiry” (where field work usually takes place in a natural setting), embrace an inductive style of reasoning, and emphasize qualitative data. It is the use of constructivist frameworks that is discussed in this article.

There are good reasons for using the terms “positivist” and “interpretivist” for describing researchers who subscribe to the two distinctly different ways of viewing the nature of reality. One arises because of the ways in which some key research theorists, such as Denzin and Lincoln (2003), discuss the field of “qualitative research.” While they emphasize its interpretive nature and would include the interpretivist paradigms and methods, theirs is a broad, historical conceptualization and is not synonymous with interpretivist research. They say that “qualitative research is a field of inquiry in its own right,” crosscutting “disciplines, fields, and subject matters” (p. 3). Another comment is that, historically, it is surrounded by “a complex, interconnected family of terms, concepts, and assumptions . . . [that] include the traditions associated with foundationalism, positivism, postfoundationalism, postpositivism, poststructuralism, and the many qualitative research perspectives, and/or methods, connected to cultural and interpretive studies” (p. 3).

This means that the term “qualitative research,” on its own, does not provide an indication of the ontological view of the researcher. This is not to disregard the existence of those who postulate that there are some aspects of life, although not all, that are measurable, at least at a particular point in time, and who favor the use of mixed methods. In this case, too, the philosophical underpinnings of research should not be ignored. As Greene

and Caracelli say, “there is merit in different paradigmatic traditions in that each has something valuable to offer to our understanding of our complex social world. If such differences are not attended to in practice, then the full potential of mixed methods inquiry will remain unfulfilled” (2003, p. 107).

CONSTRUCTIVIST FRAMEWORKS

“Constructivism,” one of several interpretivist paradigms, is concerned with the ways in which people construct their worlds. Constructivist researchers investigate constructions or meanings about broad concepts such as cultural values, or more specific issues or ideas, such as the possible ingredients of the dynamic, creative public library of the future and how to create it. There are two major constructivist approaches—one focusing on individual, personal constructions and the other on shared meanings that could be said to reflect social constructions.

In the case of personal construct theory, a key proponent was Kelly (1955), who believed people make sense of their world on an individual basis, that is, personally construct reality. Some later cognitive researchers in the information-seeking field are theoretically closest to this form of constructivism. They moved beyond study of external, observable behavior to try to understand individuals from their own points of view. For example, Dervin and Nilan emphasized the importance of individuality, arguing that “the seeming complexity of individuality can be addressed . . . in a completely satisfactory manner which fulfils every reasonable demand of scientific investigation” (1986, p. 16). Dervin herself noted that the individually focused construction of her well-known Sense-Making methodology has been the most common one among information researchers who have adopted it (Olsson, 2003).

The other major constructivist approach comes from social constructionists who place emphasis on people developing meanings for their activities together (that is, socially constructing reality), as analyzed in the famous book *The Social Construction of Reality* (Berger & Luckman, 1967). In the information-seeking field, the social constructionist approach came to the fore in the late 1990s as discussions of the limitations of the cognitive and “information transfer” approaches to research, dominant for so long, began to appear in the literature. Tuominen and Savolainen (1997) and Talja (1997) pointed out the advantages of social constructionism. They all favored discourse analysis because the “processual negotiation of meanings” (Tuominen & Savolainen, 1997, p. 82) through which social reality is built occurs through discourse. Although not claiming the label, one of the early social constructionist researchers in the field was Elfreda Chatman, whose work focused on the information-seeking behavior of different communities and groups in specific social environments, such as older women living alone in a retirement village (Chatman, 1991, 1992) and prisoners

(Chatman, 1999). According to Olsson (2003), Chatman's approach was heavily influenced by Berger and Luckman. Olsson himself used a social constructionist framework to explore how information behavior researchers construct the meaning and significance of the work of the author Brenda Dervin. He said that, in her more recent writings, "Dervin has sought to challenge the construction of Sense-Making as a theory solely concerned with individual problem-solving," placing emphasis on the "social/collective aspects of Sense-Making" (p. 32).

There is no reason why researchers cannot draw on more than one body of research theory to underpin their own research. Indeed, Bates (2002) suggested that the three major metatheories as discussed by Tuominen, Talja, and Savolainen (as cited by Bates)—"the information transfer" model (which, according to Bates, they equate with a classically scientific approach), the constructivist model, and the constructionist model—should not struggle for dominance, with each being superseded in its turn. "The very fact that we have at some point in human history, explored and learned much that is meaningful from these various metatheoretical perspectives should suggest that there may be a *valuable continuing role for all of them*" (Bates, 2002, p. 13; emphasis in original).

CONSTRUCTIVIST GROUNDED THEORY

A constructivist approach to grounded theory has now been developed. Charmaz (2003) says that, unlike the original grounded theory, first developed by Glaser and Strauss (1967), constructivist grounded theory is not "objectivist." It "recognises that the viewer creates the data and ensuing analysis through interaction with the viewed" (Charmaz, 2003, p. 273), and therefore the data do not provide a window on an objective reality. Thus, there is recognition that researchers' backgrounds will influence their interpretations of the data. They cannot avoid being influenced by "disciplinary emphases" and "perceptual proclivities" (Charmaz, 2003, p. 259). This means that, although every effort is made to look at "how 'variables' are grounded—given meaning and played out in subjects' lives" (Dawson & Prus, 1995 & Prus, 1996, as cited by Charmaz 2003, p. 273), there is acceptance that researchers shape their data collection and redirect their analysis as new issues emerge (p. 271).

ETHNOGRAPHY

Williamson's (2002a) book on research methods in the field of information management and systems includes two specific chapters about ethnography—one from a theoretical perspective (Saule, 2002) and another about ethnographic techniques (Bow, 2002). In the second of these chapters, Bow talked of ethnography as being most closely linked with participant observation. She compared Saule's definition of ethnography in the earlier, theoretical chapter with Minichiello, Aroni, Timewell, and Alexander's

(1990) definition of participant observation, pointing out how similar they are—with emphases on studying people in their everyday contexts, or by participating in social interactions with them with the goal of understanding them. According to Bow, there is no single way of undertaking an ethnography or doing participant observation, “although many texts read as though there is only one set procedure” (2002, p. 267). She further noted:

Participant observation is one of the most flexible techniques or set of techniques for doing research . . . [It] not only potentially combines a number of techniques, such as interviewing, focus groups, observation, and questionnaires, but also has the flexibility to emphasise some techniques over others, and to leave some techniques out altogether—depending on the requirements and constraints of the research itself, such as time, money and resources which are available. (Bow, 2002, p. 267)

It is important to emphasize that, as with all interpretivist research, ethnography is flexible in terms of research design with researchers seeking “to be totally open to the setting and subjects of their study” (Gorman & Clayton, 1997, p. 38). Although there is planning involved in that a literature search and review should be undertaken in order to understand the topic and research questions and a data collection plan should be developed, the research design tends to be nonlinear and iterative (meaning that the various elements in the research are interwoven, with the development of one influencing decisions about the others). For example, data analysis is undertaken throughout the project, not just in the concluding stage. There are now many “cutting edge” forms of ethnography (examples can be found in Denzin & Lincoln, 2005).

Sampling

Qualitative (interpretive) research depends on small samples that are purposively or purposefully selected. Patton observed that “the logic and power of purposeful sampling lies in selecting *information-rich cases* for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of research; thus the term *purposeful sampling*” (1990, p. 169).

As this quotation implies, purposive samples are also often premised on the concept of “theoretical sampling” as discussed by Glaser and Strauss (1967). Theoretical sampling means selecting subjects who represent the important characteristics that researchers consider of interest to the study. With this approach there is no compunction to sample multiple cases that do not extend or modify emerging theory (Pidgeon & Henwood, 1996).

Data Collection Instruments

As mentioned above, there is a range of ethnographic data collection instruments from which to choose. The interview technique is a frequent choice, most commonly using open-ended or semi-structured questions.

There is a great deal of advice about interviewing in the social sciences literature and also in the Williamson (2002b) chapter in her research methods book. If a semi-structured interview schedule is used, it should be piloted so that you can be sure that you will be collecting the kinds of data you need. Nevertheless, once again there is flexibility to adjust questions to encompass new perspectives, especially in the early stages of data collection.

With regard to other techniques, if observation is chosen, this should be formalized through the development of a schedule, or set of questions, to guide the observation. Articles in this issue of *Library Trends* give guidance on “observation.” The construction of a good questionnaire is a complex process, but there is much advice available in good-quality research methods texts, including in Williamson (2002b).

Data Analysis

Williamson and Bow (2002) provide considerable detail about how to code qualitative data. There are many sources that are helpful for learning about the process (for example, Miles & Huberman, 1994; Huberman & Miles, 2002; Silverman, 2001). Whether it is done manually or with a computer program, such as NVivo, the principles are the same, although there is no strict set of rules. The following are a few basic steps, which need to be supplemented with further reading:

1. Transcribe the data so that you have it in printed form.
2. Read through the data, making notes or memos about key points.
3. Categorize or label passages of data according to content so that identically labelled or categorized data can be retrieved as needed. Categories are made up of a short title, a definition if needed, and the data that relate to the category. Initially categories are usually broad and are subdivided to be more precise as the analysis progresses.
4. Conceptually organize the categories. This should start early in the process and continue throughout. It means thinking about the similarities, differences, and relationships among the categories, preferably representing this pictorially as recommended by Miles and Huberman (1994).
5. Develop themes in preparation for the writing up of the research findings.

EXAMPLES OF CONSTRUCTIVIST RESEARCH USING ETHNOGRAPHIC TECHNIQUES

This author draws on both personal and social construct theory for her research, believing that it is important to capture both shared and individual meanings—the consensus and the dissonance—about information seeking and use. She attempts to portray the multiple voices or perceptions about

the study's focal issues through the findings of her research reports, where quotes from participants are liberally included. Although she attempts to be fully open to the ideas and responses of her participants, she does not claim that her research findings are objective "truth" but rather a construction resulting from an interaction of the researcher and research participants in keeping with the Charmaz (2003) approach. In her studies she uses ethnographic techniques that are well suited to constructivist frameworks as they provide opportunities for researchers to try to elicit the perceptions, meanings, and experiences of participants and provide rich descriptions of them. As mentioned above, these techniques include interviews, either with individuals and/or in focus groups, questionnaires, observation, and examination of documents. In some studies (for example, McGregor & Williamson, 2005; Williamson, 1997), all or most of these techniques were used. With other studies, only one or two techniques have been used, in which case the study is discussed not as an ethnography but as a study using an ethnographic technique or techniques. As Saule said, "all of the frameworks within interpretivist ethnographies utilise triangulation" (2002, p. 184) since use of multiple techniques and theoretical constructs encourages validation of an ethnographic text. Where only one or two techniques are used, it is very important to use the literature to provide support for the findings.

This article now proceeds to a detailed description of two studies of information-seeking behavior, both using constructivist frameworks and ethnographic techniques. The first focused on information seeking for breast cancer using one ethnographic technique; the second focused on information seeking for online investment using two ethnographic techniques. Both of these studies are mentioned as examples of how Williamson (2005), in the recently published article in *Theories of Information Behavior: A Researcher's Guide*, expanded her original ecological model of human information behavior through research in constructivist frameworks.

EXAMPLE 1: INFORMATION SEEKING FOR BREAST CANCER

At the 2002 Information Seeking in Context conference, Williamson and Manaszewicz (2002) presented a paper about the first stage of a project called Breast Cancer Knowledge Online (BCKOnline), where the major goal was to provide quality, "tailored" breast cancer resources to meet the differentiated information needs of the breast cancer community.²

The researchers considered this first stage as a study in its own right and referred to it as the "Breast Cancer Information Needs and Seeking (BCINS) Study." The paper provided a critical overview of the research about breast cancer information needs; discussed the need for user-centered, contextual studies of the information needs of women with breast cancer; discussed the potential of the Internet to assist in meeting breast cancer information needs; and outlined the project's philosophy and method and key findings from the study. Included here are the philosophy and method, from a later

stage of the project, and a sample of findings focusing on just one theme—preferences for information format, content, and presentation.

Philosophy and Method

For the BCINS study, the researchers adopted an interpretivist/constructivist approach in an attempt to understand breast cancer patients' perceptions, values, beliefs, and the "meanings" they construct around the issue of information needs, information seeking, and knowledge integration. Both personal constructs or individual meanings (Kelly 1955) and social constructs or shared meanings (Berger & Luckman, 1967) were of interest in the research. Williamson and Manaszewicz (2002) took the view that, when people share the experience of a certain disease such as breast cancer within a particular society, it is likely that some shared meanings will emerge and that the patterns can be used to improve services such as information provision. The researchers therefore set out to discover the meanings that were shared by participants as well as those that were not (consensus and dissonance).

The first phase of the project, the user needs analysis, involved fifty-nine women who currently had breast cancer or had had it in the past. The sample was a purposive one, selected to represent various age groups, disease stages, time since diagnosis, educational levels, marital status, urban and rural locations, and ethnic backgrounds. The researchers recruited participants through breast cancer nurses in both the public and private sectors and through facilitators of health care centers and breast cancer support groups. In addition, a separate focus group of eleven breast care nurses was convened, and seven family members of women with breast cancer were interviewed.

A combination of individual interviews and focus groups was used, with the intention of minimizing the weaknesses and maximizing the strengths of these two different styles of interviewing (Williamson, 2002b). The strength of individual interviews, mostly used in the earlier stages of interviewing, is that they enable interviewers to gain confidence with their subject matter before needing to manage and coordinate the range of views that usually emerge in a focus group. Individual interviewees are also unaffected by the views of others and so the "band-wagon" effect, which can occur in focus groups, is not a problem. On the other hand, the interaction in focus groups can be powerful in stimulating ideas and fruitful discussion.

The focus groups were mainly based on individuals who had a particular cultural or contextual factor in common, such as ethnicity, rural residence, age group, or attendance at a particular support group, as advocated in the literature (see, for example, Krueger, 1994). The eleven breast care nurses all took part in the same focus group. All individual interviews and focus groups were undertaken using a semi-structured interview schedule with a predetermined list of very broad questions. With the permission of the participants, all interviews were audio-taped.

Of particular interest in the interviews was the information participants found most useful in the past; their preferred information formats; their overall impression of the quality of the information they have used; the extent to which they used the Internet to locate breast cancer information; and the gaps they perceived in information provision, which were very important given that the end product of the research is a portal leading to information that is tailored to specific needs and backgrounds of women with breast cancer (for example, geographic location, age, ethnicity, literacy level, and time of diagnosis). An overarching aim was to identify the groups of people and types of information that should be specifically targeted in an online resource.

The audiotapes of the interviews were transcribed by an experienced transcriptionist. Although the analysis did not constitute a grounded theory, it was influenced by the “constructivist grounded theory” approach of Charmaz, which “recognises that the viewer creates the data and ensuing analysis through interaction with the viewed” (2003, p. 273). While an attempt was made to represent all views in the analysis and presentations of findings, the researchers were aware that the analysis was affected by the fact that a “template” needed to be constructed so that it could be used to develop a portal to information “tailored” to the differentiated information needs of the breast cancer community. The analysis was a continuous process with the initial categories, determined after the first few interviews, being continually reassessed and expanded as more data were collected. There were many themes developed, including the one focusing on “preferences for information format, content, and presentation,” the findings for which are presented below. A matrix of demographic information was also developed.

Example of Findings: Preferences for Information Format, Content, and Presentation

With regard to all information sources, including the Internet, participants were asked about their preferences for breast cancer information format, content, and presentation. In many cases, women expressed strong preferences. Sometimes at the same time, as pointed out by Williamson and Manaszewicz (2002), they encapsulated dissatisfaction with the information currently available, both in terms of content and delivery mechanisms, confirming numerous studies focusing on information about breast cancer in the literature (for example, Fallowfield, 2001; Jenkins, Fallowfield, & Saul, 2001; Girgis, Boyes, Sanson-Fisher, & Burrows, 2000). As one participant said:

She gave me a whole wad of information. I was furious. It was basically a repeat of each other. It was extremely patronizing . . . but it didn't actually talk about what it was doing biochemically. I wanted the hard data . . . I wanted diagrams. For the first time last week I actually saw

what invasive (lobular) carcinoma looks like as opposed to a ductal or different type of cancer.

This participant was only one of the many who, supporting Bader and Strickman-Stein's (2003) finding, expressed a need for visual information. Another example comes from a younger participant whose answer, in response to a question about the improvements that can be made in information provision, was: "I think more visual, video stuff. Because if you see things as well as hear and read them you tend to recall stuff more. When I was on the chemotherapy my blood count dropped and I had to inject myself, but while I was at the hospital they showed me a video and . . . I found [it] helpful because it's visual."

Women also expressed needs for different types of information content. The woman quoted above, who was frustrated with the lack of detail and biochemical information contained in many of the resources she used, also said she would like different types of information content. Another participant who felt similarly said: "I don't want the throwaway type of article. I want the deep scientific type that I can take in." On the other hand, others felt they would like information to be "simplified," as expressed by this participant: "It needs to be simplified. It needs to be accessible because it's something that we need to know as much as doctors need to know. And if there is a way of translating it into layman's terms, I think we have a right to know."

As Williamson and Manaszewicz (2002) noted, these findings indicate the limitations of the approach of applying readability formulae (as occurs in the field of education) to patient information materials in order to assess their efficacy and relevance to the target audience. Several studies (Berland, et al., 2001; D'Alessandro, Kingsley, & Johnson-West, 2001; Beaver & Luker, 1997) assume that patient education materials should be aimed at the eighth grade level or below; however, according to D'Alessandro, Kingsley, and Johnson-West (2001), most patient education materials are still written at the tenth grade level or higher. As Williamson and Manaszewicz (2002) pointed out, in fact neither level is appropriate to all information seekers. For example, two of the participants quoted in this section would require a higher than tenth grade level for their information. They would not be alone given that, in May 2000, 30 percent of the Australian population had completed tertiary education (Australian Bureau of Statistics, 2001).

From this brief section of findings, you will notice the different voices of participants and their diverse views. These are not neatly categorized and packaged results as would emerge from the analysis of a self-administered questionnaire. Rather, they bring multiple layers and nuances reflecting the complexity of humans with their varied experiences and perceptions of issues that affect them. You will notice, too, the implications of the findings as drawn out by the researchers and the use of the literature to add confirmation or further debate to the discussion. As mentioned above, when the results are

not triangulated through the use of a number of research techniques, it is particularly important to use the literature in this role. These points will be reinforced in the next example.

EXAMPLE 2: INFORMATION SEEKING FOR ONLINE INVESTMENT

Kingsford Smith and Williamson (2004) reported the results of a small pilot study of information seeking by Australian online investors.³ It looked at the ways in which online investors seek financial information, as well as information about the online investing process itself. This pilot study underpinned an application for funding from the principal funding body of universities in Australia (the Australian Research Council). The researchers were successful with their application and a major study is now underway. In the interim, the pilot study is significant because little is known about how investors seek information without the advice of a professional advisor. As Kingsford Smith and Williamson (2004) pointed out, while once it was possible to infer that most investors would act on the advice of their advisors, how investors make investment decisions in nonadvisory, direct execution circumstances, which apply to online investing, is much more opaque. The findings of the research were positioned in relation to theory and empirical research from the generic field of community information-seeking behavior, including reference to the practices of those seeking information through the Internet, as frequently occurs with online investors. Since one of the researchers is a professor of law, and the end goal was to consider the implications of the findings for regulation of online investing, the findings were also set in the context of some important bodies of legal and economic thinking about information, price formation, and investment decision making in financial markets.

Philosophy and Method

The philosophy and method were very similar to those of the breast cancer project. One difference was that Kingford Smith and Williamson (2004) placed particular emphasis on social constructionist theory, which emphasizes the development of shared meanings through social processes involving people, language, and religion. Quoting Schwandt, who postulated that “we do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language, and so forth” (2000, p. 305), Kingsford Smith and Williamson pointed out the range of cultural influences, both macro and micro, on each individual and the common needs and understandings they are therefore likely to share. As in the breast cancer study, there was an interest in common, this time online investing, which meant that participants were again likely to have at least some shared perceptions of needs for information and elements of information-seeking behavior in common. The researchers therefore took the approach that the patterns that emerge from shared meanings can be

used to improve services such as information provision for online investing. Thus, the particular interest was in the shared meanings of participants, without ignoring those that were not shared—once again consensus and dissonance.

As a small pilot study, this project was well suited to the use of ethnographic techniques framed within the constructivist paradigm. One of the strengths of this approach is that it provides for exploring and generating ideas and, as a concomitant, the serendipitous findings it often elicits through its empirical research. In this case the framework allowed Kingsford Smith and Williamson (2004) to elicit rich-picture, in-depth perspectives from the small sample to which they were restricted for this particular study.

The sample was again a purposive one, selected to suit the needs of a small pilot study. It included representatives of two organizations that provide online investment services, E-Trade and COMMSEC, as well as the regulator, Australian Securities and Investments Commission, together with ten individual investors, selected to provide a mix of ages, genders, and socioeconomic and education levels along with some online investing experience. Kingsford Smith and Williamson's (2004) article, where further information about the sample can be found, focused on the findings from the individual investors.

With regard to data collection from the individual investors, two ethnographic techniques were used: individual interviews and a questionnaire to collect demographic data as well as additional information about investing and information-seeking behavior, collected in table format. In one part of the latter, participants listed all their Internet transactions and activities, including "information seeking," and rated the frequency thereof. The other part of the table asked investors what sources they used for financial information, again with frequency ratings. The sources of information and advice listed were information from broker's site/Internet discussion site; Internet execution with broker advice (Internet advisory); telephone execution with broker advice (telephone advisory); face-to-face advisory; newspapers/journals; printed literature from share brokers/financial experts; and information or advice from friends and acquaintances. The filling in of the table was assisted by the interviewers, who discussed each option with the interviewee, thus gleaning extra details and insights during the process. Then the semi-structured interview, lasting from one to one and a half hours, followed. It explored reasons for investing online or for continuing with traditional forms of investment, as well as in-depth discussion of information sources and their advantages and disadvantages.

The principles of the data analysis were the same as those for the BCINS project with, once again, constructivist grounded theory providing a major influence. In this case the full set of transcripts was read by both researchers, who compared their interpretations on a continuous basis. In relying on

interpretations from more than one researcher, Kingsford Smith and Williamson (2004) were seeking to acknowledge the role of constructivist researchers as the primary instruments in the research process (Marshall & Rossman, 1999) and to reflect on the effect of our own roles as they influenced the research process (Lincoln & Guba, 1985).

The quantitative data, which were collected through the questionnaire and table, were analyzed by the Statistical Package for the Social Sciences (SPSS), with the analysis involving only frequency counts, that is, the number of participants in each age group or the number who engaged in information seeking (together with the frequency of that activity).

Below are two related sections of findings—concerning personal sources of information and social intercommunication for online investing. As you will see, again there is an emphasis, as far as possible, on allowing participants to speak for themselves by using quotations to illustrate the views expressed.

Example of Findings: Personal Sources of Information for Online Investment

Participants were asked about their use of personal sources of information for their online investing activities. Early, foundational studies in the broad field of community information, where personal investing is encompassed, indicate that personal sources of information, such as family, friends, and acquaintances, are widely used for community information (see, for example, Warner, Murray, & Palmour, 1973; Williamson, 1978; Chen & Herson, 1982). In the legal field, Shiller and Pound's (1989) study of individual and institutional investors found that word of mouth contacts were important. The findings of our pilot study (Kingsford Smith & Williamson, 2004) provide further confirmation: all our participants talked with others who were also investors—ranging from family members to flat mates, friends, and work colleagues. A few investors described how they trusted and respected the investment prowess of members of their family. A couple of older investors particularly said they discussed investing with children, specifically the actual process of using the Internet for investing, where they relied on their children's greater familiarity with computers. On the other hand, one of the online investors said: "For a start I have no family members in Australia so most of my information comes from friends, acquaintances or old colleagues."

Several participants reported discussing investing with work colleagues whom they had discovered shared the interest and even using down time at work to carry out online transactions while chatting with colleagues. Nevertheless, some participants were quite clear that their trust was limited to one or two people whom they respected as knowledgeable: "It's probably my son would be the only one I trust because he has got pretty advanced skills as to how to access things. He is a pretty quick thinker. I don't think I would trust some of the other relatives who have not got quite the same

background.” And “I speak to Paul about it because quite often we’ll do it together. But he’s got different ideas and he’s more into the charts and I’m less into that. He’s got different ideas on what some stocks will do and sometimes we talk about it but we don’t really listen to each other that much. He’s the only other one I’d speak to.”

Finally, several investor interviewees acknowledged that information gained from friends and acquaintances was likely to be lacking in a significant respect. Investors were sensitive about talking about losses, and investor friends were also sensitive in probing them about losses. This means that information gained from these informal sources may be skewed in favor of good news and omit bad news. Asked what the reactions of friends were to the losses of the 2000 market crash, one investor echoed the comments of several others: “I think a lot of them just were silent. They really didn’t say much and I didn’t ask them. . . . If they had won a whole heap they would probably tell you.”

The findings about the significance of personal sources are reinforced in the next section, which examines an interesting way in which personal sources were involved in individuals’ investing activities.

SOCIAL INTERCOMMUNICATION AND INVESTMENT INFORMATION SEEKING

Despite the findings of the Shiller and Pound (1989) study, which had shown a considerable amount of interpersonal communication regarding information in the investing field, Kingsford Smith and Williamson (2004) were not prepared to find the level of social intercommunication encountered from the first interview. Despite the fact that very few reported using chat rooms or bulletin boards, there was a variety of social intercommunication. It ranged from casual conversations to regular semiformal meetings in pubs and coffee shops, to more formal discussion groups with a common interest in investing, and on to investor clubs in which members contributed to a common fund to learn from making actual investments. At the most structured, there are associations such as the Australian Shareholders Association, which conducts regular meetings with a formal agenda but has an opportunity for socializing afterwards, and the Securities Institute of Australia, which has a formal program of securities industry education and training. The Australian Stock Exchange also conducts seminars on issues of current interest to investors, which some of our investors reported attending.

One strong observation is the extent to which many investors see investing as a leisure activity. For example, one investor said: “The people that do it [online invest] every day, . . . a lot of them will basically communicate with their friends. They will be on the phone. It’s like playing a video game where everyone’s connected. So they ring each other ‘What are you doing?’”

They're networks. They go to seminars. They do all that sort of stuff." Another investor reported: "I see it as a bit of a hobby to fill in time."

This sense of investing as a hobby or leisure activity segued into the activity of attending informally organized social occasions in which investment trends are discussed and there is commonly a speaker who makes an informal presentation on a topic of current interest. Three of Kingsford Smith and Williamson's (2004) investors had recently, or still did, attend such occasions regularly, and several others reported having heard about them. As one said: "But there's quite a lot of seminars where you can go and the room is full. I've been to seminars and there's 40 or 50 people . . . the last time we met was at a pub . . . they have a few drinks . . . they have slides and they were talking about options trading . . . it's just a private group and they network with each other and if they meet someone new who's interested they say: 'Come along.'"

Another investor, who is female, reported that the shareholders' group she belonged to had been going about six years and was mainly male. She said: "People are very open and free about information I find. There is no covetousness very much. . . . One probably accumulates information by osmosis as much as anything. And so I think you always pick up some little thing."

Another investor who had actually convened one of these investors' social groups for a while described a family group that operated an investment club. She spoke of how the family "talk[s] about shares, and they put in so much and actually invest it. But that's purely for their family only."

Again, an investor reported a similar formation in an informal all male investor club: "We put up \$500 each and invest it and play with it in the investment club. . . . Its attitude is to trade in all the shares you normally wouldn't trade in and its idea is to discuss things that people might know about . . . It's mainly there for that purpose, learning." The investor described this activity as fun, even though the investment club was making a loss and had recently called on all members for a top-up in funds!

Despite this widespread social activity focusing on investment, there was also a variety of views about how influential (in the investor's own perception) the social intercommunication was on the investor's own investment decisions. One reaction from the day trader to the idea of investors' groups was: "No, definitely not. . . . I want to make it purely the charts [that] generate what I buy, not people at all." The female member of the mostly male investment group warned us: "I find it really interesting to listen and to take some ideas, just to weigh them up, but I wouldn't take it straight from there, no. I have done it once and I had my fingers burnt."

From these sections of findings from the online investment pilot project, you will notice that, as with the BCINS study, the picture of personal source use for online investment is built up through the voices of the

study participants. This was followed (in the article) by considerable discussion by the researchers about the implications of these findings. In this example there are fewer references to the literature than appeared in the breast cancer project, despite the earlier advocacy that the literature should be used for the triangulation of findings. The reason is that, in contrast to the topic of breast cancer, online investing research in relation to information seeking is very much in its infancy. In the latter study, though, a second technique was used—the questionnaire and table of investing and information-seeking practice—thus providing another source of data to add depth to the findings. Nevertheless, given the exploratory nature of the project, the findings can only be tentative and require further investigation, which indeed is happening.

CONCLUSION

As with any research method, the style of research described in this article has strengths and weaknesses. It is not suited to the investigation of all research questions, including those that depend on eliciting statistical data from large samples. The method is especially suited to the exploration of the “why” research questions—those requiring in-depth exploration. One disadvantage is that samples need to be small as the major techniques are time consuming and costly to use. Small samples appear unreliable to some critics. Generalizations beyond the sample are inadvisable without strong evidence from other studies and some would see this as another disadvantage. Nevertheless, it could be argued that generalizations are often tricky to make, even with positivist approaches. For example, even if the sample for a survey is randomly selected, supposedly meaning that generalizations can be made to a population, the response rate may be low, thus calling into question the representativeness of the sample where the participation of respondents has depended on self-selection.

Another disadvantage that would be perceived by positivists is the apparent discursiveness of the answers from participants, which often do not fit neatly into easily managed categories. Interpretivists would counter this second point by pointing out that, in positivist studies such as surveys, people’s views will often not fit neatly into the little boxes representing categories chosen by researchers.

The constructivist/ethnographic approach enables the meanings or perspectives of participants to be studied in depth and their particular words to be used to convey their meanings directly to the reader. Ways of thinking about issues, which may not have occurred to the researchers, are often revealed. Thus, the complexities of the real world have some chance of emerging.

NOTES

1. Other terms to describe these philosophies are "paradigms" and "epistemologies." Williamson (2002a) discusses the fluidity of terminology used in research. Case (2002, pp. 131–155) provides a useful discussion, highlighting the diversity and problems of terminology, as well as other issues of conceptualization of the research landscape.
2. This research was funded by an Australian Research Council Linkage Grant (2002–3) and a contribution from BreastCare Victoria, an initiative of the Victorian Department of Health and Human Services. The Breast Cancer Action Group Inc. (Victoria) was also an industry partner. Chief Investigators of the BCKOnline project were Professor Sue McKemmish, Head of the School of Information Management and Systems (SIMS), Monash University; Associate Professor Frada Burstein, SIMS; Associate Professor Julie Fisher, SIMS; Dr. Kirsty Williamson, SIMS; Ms. June Anderson, SIMS; and Ms. Sue Lockwood, the Breast Cancer Action Group Victoria (BCAG). Other personnel include Research Fellows Rosetta Manaszewicz (SIMS & BCAG) and Fiona Ross (SIMS); research students Pooja Malhotra, Jane Moon, and Chan Cheah; and programmer Sergio Viademonte.
3. The pilot study was funded by small grants from the Faculties of Law and the School of Information Studies at Monash University, Victoria, Australia. The major project, titled "One Day, We'll All Invest This Way! Regulating Online Investment," is funded by a three-year Australian Research Council Discovery Grant, with the Chief Investigators being Professor Dimity Kingsford Smith, now in the Faculty of Law at the University of NSW, Dr. Kirsty Williamson of the Monash University Caulfield Campus of Information Technology and the School of Information Studies at Charles Sturt University, and Professor Stephen Bottomley of the Law Faculty at the Australian National University.

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