social situation. By helping us to learn more about the range of factors that bear on an issue, exploratory or in-depth interviews and unstructured observations are the first step in the process of data selection and reduction.

This chapter has provided readers with the tools needed to conduct in-depth, open-ended interviews for exploratory purposes in field settings. As we mentioned earlier, in-depth interviews challenge the researcher because they are unpredictable. But it is exactly their unpredictability that makes them an exciting tool for exploration in the early stages of a study, and also at the end of a study, when the first results appear and call for verification in the community. In the next chapter, we turn our attention to semistructured interviews, which focus on open-ended exploration of a much more narrow range of topics with a larger and more representative sample of respondents.

Reference:
See Book 5
for more detailed
instructions for
carrying out
recursive analysis of
qualitative data

7 ----

SEMISTRUCTURED INTERVIEWING

REASONS FOR CONDUCTING SEMISTRUCTURED INTERVIEWS

Semistructured interviews combine the flexibility of the unstructured, open-ended interview with the directionality and agenda of the survey instrument to produce focused, qualitative, textual data at the factor level. The questions on a semistructured interview guide are preformulated, but the answers to those questions are open-ended, they can be fully expanded at the discretion of the interviewer and the interviewee, and can be enhanced by probes.

Some researchers differentiate only between unstructured and semistructured interviews (cf. Fontana & Frey, 1994). Others recognize that semistructured interviews play an important role in the development of exploratory models and the preparation for more systematic forms of investigation (Weller, 1998). Johnson (1998) makes a useful distinction between exploratory and explanatory research, suggesting that "exploratory approaches are used to develop hypotheses and more generally to make probes for circumscription, description and interpretation of less well understood topics" (p. 139). In his way of approaching ethnographic research, "exploratory research can be the

Reasons for Conducting Semistructured Interviews

Constructing a Semistructured Interview Schedule

Analysis of Semistructured Interview Data

Semistructured Observations

Summary

Definition: Semistructured interviews consist of predetermined questions related to domains of interest. administered to a representative sample of respondents to confirm study domains, and identify factors, variables, and items or attributes of variables for analysis or use in a survey

Cross

Reference:

these terms

Refer to Table 2.1 in

book for a summary and examples of

Chapter 2 in this

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primary focus of a given design or just one of many components" (p. 139).

Exploratory research, which includes semistructured interviewing, provides the basis for survey and other forms of explanatory research that can test theoretical hunches or propositions (Boster & Johnson, 1989; Goldin, 1996; Koester, 1996; Koester, Booth, & Zhang, 1996).

In the schema we propose here, semistructured interviews are best suited for exploring and delineating factors and subfactors, whereas ethnographic surveys—which we address in Chapter 8 of this book—are designed to test theory by eliciting and associating quantitative information at the variable level.

Semistructured interviews are used to accomplish the following objectives:

- Further clarify the central domains and factors in the study
- Operationalize factors into variables
- Develop preliminary hypotheses
- Develop a qualitative base for the construction of an ethnographic survey

Clarifying the Central Domains and Factors in the Study

Formative ethnographic theory building and modeling are based on the identification of and hypothesized relationships among major independent and dependent domains. The initial identification of these domains comes from prior research related to the topic, informant knowledge, and researcher experience. Exploratory interviewing and observation provide new insights, as well as confirmation of domains and factors. Semistructured interviewing further confirms or disconfirms the validity of domains for the study and adds new domains as they arise.



EXAMPLE 7.1

CONFIRMING DOMAINS AND IDENTIFYING FACTORS

The primary domains in studies of AIDS risk in Mauritius and Sri Lanka are family, work, and peers (independent domains), and sex, knowledge, attitudes, and behavior (dependent domains). Semistructured interviews based on questions related to each of these domains provided important information regarding whether the list of domains needed expansion or reduction (it did not) and which factors identified within these domains were likely to be related to one another.

Operationalize Factors Into Variables

One of the primary objectives of semistructured interviewing is to identify the variables that are the constituent elements of the factors and subfactors within the domains in the formative model. To achieve this objective, questions in a semistructured interview are framed at the factor level. For example, in our study of exposure to AIDS risk in Mauritius, we were interested in the ways in which the domain "family" was associated with the domain "sexual risk." In in-depth interviews with a small number of female respondents, we asked about the domain of family. One important factor that emerged through these interviews was "discipline in the family." In a semistructured interview schedule administered to 90 young women, this factor was phrased as a question designed to elicit more information about family discipline: "Tell me about the ways in which discipline occurs in your family." The responses included discussion and negotiation, physical forms of discipline, restricting activity to the household, and several other categories. "Physical discipline" became a variable (see Tables 2.1, this book, and 8.1, Book 5) and the semistructured interviews produced the elements or attributes of the variable—an array of different "types of physical discipline."

Develop Preliminary Hypotheses

By the time researchers decide to use semistructured interviewing, they have already generated a series of hypotheses linking domains. Semistructured interview data can produce information that links factors and variables within and across domains. For example, some of the women who responded to the semistructured interviews administered in Mauritius reported that parental discipline became stricter once they entered the industrial workforce.

Hypothesis 1: Relationship between stricter parental discipline, an independent factor under the domain "family," and employment in the industrial sector

Respondents also said that the more they worked—for example, increasing hours of overtime—the greater the level of family discipline they encountered.

Hypothesis 2: Relationship between stricter discipline, a variable within the factor "family discipline," and more hours of work, a variable within the factor "employment in the industrial sector"

Develop a Qualitative Base for the Construction of the Ethnographic Survey

Semistructured interviewing establishes a firm qualitative foundation for the construction of an ethnographically informed survey (see Chapter 8) by creating the conceptual taxonomy of domains, factors, variables, and variable attributes that can be transformed into the items on a survey instrument. Doing so also establishes the coding system for both the text and survey data.

The first step in developing a semistructured interview guide involves working from the domain code categories identified in unstructured interviews and the observation phase of ethnographic research. These domains and categories form the basis for questions in the semistructured interview. The qualitative data resulting from responses to these questions are, then, the primary source for the variables that form the basis of the ethnographic survey.

In the Mauritius research, analysis of the "work" domain identified the following factors:

- Work impact on lifestyle
- Work impact on social and familial relationships
- Reasons for working in the EPZ
- Attitudes about work
- Nature of the work unit
- Relationships with men at work
- Relationships with women at work
- Travel to work
- Participation in industry or union social (after-work) activities
- Relationships with *supervisors*
- Health and family planning services at the work site

The researchers then formulated between one and five questions (more questions if it is believed that subfactors must be taken into account between factor and variable levels) for each of the work domain factors listed above.

CONSTRUCTING A SEMISTRUCTURED INTERVIEW SCHEDULE

Steps in Building the Questions for the Interview

The semistructured interview is built in the following way: The transcribed in-depth interviews and observational data obtained from the unstructured data collection observations are analyzed by domain. The domains yield factors that are identified because they appear repeatedly in the text data. The data do not provide enough information to know in advance exactly how important these factors are,

Cross
Reference:
See Book 5,
Chapter 5, for a
discussion of
identifying factors
from the "ground up"

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how widespread they are in the population, or what they mean. Semistructured interviews, however, will help to answer these questions. That is why such interviews are constructed around these factors or subfactors. Social science researchers have devoted considerable time and energy to describing ways of formulating good questions for different types of interviews (Babbie, 1995; Fink, 1995; Sudman & Bradburn, 1982). Semistructured interview questions are created following guidelines outlined in the following box.

Guidelines for the Construction of Good Semistructured Interview Questions

- Make sure that questions use terms and phrases that are understandable to respondents.
- Keep the length of the questions at a minimum; remember that probes play a key role and that subfactors and variables are further operationalized through probes.
- Use terminology appropriate to the respondents' command of language, cultural background, age, gender, level of knowledge, and any other relevant characteristics.
- Avoid questions that lead the respondent to answers or are biased.
- Avoid questions that make use of either a positive or a negative association; for example, "How similar are your views on birth control to those of Mother Teresa?" "What do you think of the Nazi-like practices of ethnic cleansing in the Kosovo Province of the former Yugoslavia?"
- Avoid double-barrelled questions that really are two questions in one; for example, "How often do you drink Coca-Cola and coffee?" or "When did you last attend a concert or a ballet performance?"
- Try to avoid negatively worded questions: for example, "Do you agree or disagree with the following statement: 'Teachers should not use language proficiency tests to group students for ability'?"
- Avoid asking people to rank order information in a semistructured interview unless it is absolutely necessary. Rank

orderings require complex instructions that informants frequently misunderstand.

- Avoid asking questions that require performing several tasks; for example, "From this list of 10 reading programs, first circle the names of the three reading programs you use most often, and then put an 'X' next to the name of the one you prefer."
- Do not ask questions that can be answered with a "yes" or "no" when what you really want is as lengthy a description as possible.
- Be sensitive to the cultural context or social meanings involved in the questions asked in the interview.

Ordering Questions in an Interview

Researchers need to consider how to order and sequence questions in both semistructured and structured interviews. In general, questions should be ordered as follows:

- Temporally: From earlier events to more recent events
- According to complexity: From simpler topics to more complex ones
- According to topics or domains: Group all questions on the same or similar topics together
- By level of abstraction within domains: From the most concrete to the most abstract issues
- In accordance with the threat level: From the least sensitive or threatening to the most sensitive or threatening; place the most sensitive topics last.

Some methodologists argue that researchers should warm up respondents by beginning with interesting but nonthreatening questions, and then follow with more challenging material. To that end, there is considerable disagreement as to what constitutes a threatening or sensitive question. In the United States, demographic questions typically are defined as nonthreatening; interviewers often begin by

TABLE 7.1

asking for this information. However, some kinds of demographic information, including age and income, can be very sensitive to many respondents. Furthermore, what is *not* sensitive in one culture may be extremely sensitive in another. In repressive societies, it can be dangerous to reveal information about ethnic or religious affiliation; where population controls are enforced, telling an interviewer how many children a family has can result in reprisals. In

ESSENTIAL ETHNOGRAPHIC METHODS

Other researchers argue that the most important information should be asked for first, so that if informants weary of the interview, the researcher has at least covered the most important issues before the informant stops talking.

yet other societies, revealing one's own name or the names

EXAMPLE 7.2

ADMINISTRATION OF A SEMISTRUCTURED INTERVIEW

In the Mauritius study, a total of 120 workers (90 women and 30 men) were selected to participate in semistructured interviews. Both men and women were divided evenly among the three ethno-religious groups: Indo-Hindu, Creole-Catholic, and Indo-Muslim. Researchers conducted interviews in the cafeterias of the five largest industries on the island. Personnel managers arranged for time off; the average length of time for the interview was 45 minutes.

of one's kinfolk is taboo.

Seven interviewers were trained in conducting interviews and recording fieldnotes, and they were given a set of instructions typical of most training materials:

- Explain the nature of the research and receive oral consent from participants.
- Ask the demographic questions first.
- Ask questions about work after the demographic questions.
- Avoid repetition by recording answers that interviewees give to questions you have not yet asked when they give them, even if the answer was included as a part of an earlier question.
- As much as possible, sequence the topics or domains of the semistructured interview guide so that they flow naturally with the conversation.
- Avoid getting too far away from the main study topics or domains.
- With the time allotment set at one hour, do not feel that all questions need to be asked; rather, emphasize those factors about which the respondent most wants to talk.

RESPONDENT'S OPINIONS ABOUT WORKING WOMEN PART II: 2.1 What is your opinion about working women in Mauritius? According to you, what type of work is better suited to women? 2.2 What major changes do you perceive in the lifestyle of working women of Mauritius? 2.3 What, in your view, is the basic difference in the lifestyle of a working woman and a 2.4 nonworking woman today? 2.5 How would you describe a working woman's relationship with (a) her family, (b) her boyfriend/husband, (c) a female friend? How does your family feel about your work? 2.6 **OUESTIONS ON RESPONDENT'S WORK** PART III: For what reasons did you take up employment? (probe reasons for working-for money 3.1 3.2 Did you have any previous work experience or training for your present job? What were you doing prior to taking up your present job? (probe reasons for quiting 3.3 previous job) What are your feelings about your work? 3.4 Please, could you describe to me one of your typical working days? 3.5 Do you work overtime? How often? What are your views concerning overtime? 3.6 3.7 Do you have "night shifts" in your present work? What are your views on night work? 3.8 How many people work in your section (of the factory), male and female? How much do you earn in a month? (Ask about mode of payment-i.e., paid on piece 3.9 rate, monthly, or weekly basis?) Could you tell me what positive/negative impacts your work has had on your life? 3.10

Work Sections of Semistructured Interview Schedule Used in Mauritius

Table 7.1 illustrates a section of the semistructured interview schedule used in the Mauritius study. The questions come from the "work" domain and relate to the dimensions of work (factors, subfactors) that arose in the in-depth or exploratory research phase.

ANALYSIS OF SEMISTRUCTURED INTERVIEW DATA

The text data generated by the semistructured interviews in Mauritius were entered into ETHNOGRAPH. We created code names for the domains, factors, subfactors, and associated codes. These codes were then applied to the data (some of which are illustrated in the italicized blocks below) and coded by domain ("work") and factor (WEFFECT, e.g.,

Definition:
ETHNOGRAPH
is a computerized
data management
and analysis
program specifically
designed for use by
ethnographers

SEMISTRUCTURED INTERVIEWING

the impact of work on lifestyle). Selected segments of text illustrate the variables that emerged for WEFFECT:

"Working has also helped her in being independent financially and helping her family out. From her working experience, she has met all kinds of people and she has encountered different problems or conflicts with them. Now she feels more comfortable in dealing with them"

Factor	Variable
_	Comfort and experience in dealing
Work Effect —	with a wide diversity of people
	Financial independence

"Now that she works, she finds it easier to make friends with boys . . ."

Factor Variable
Work Effect _____ Male friends

"She gets money and she now has a boyfriend in the factory itself. She says now she finds it more interesting to work. Especially that her boyfriend works in the same factory. Ooma says that now [that] she works, she feels free and is not stupid. She can talk with people and she feels she is happy."

Factor	Variable
Work Effect	Gaining Knowledge
Work Effect	Having Money
Work Effect	Boyfriend in factory
	Feels socially confident

"According to Faeza, women who work neglect their family. On the other side, the working women are financially independent. They can buy things and add to the needs of the house. She can dress well and buy clothes for herself. She is of the opinion that lifestyle of women has changed radically, and she thought that first noticeable change is independence. Long ago, non-working women stayed at home, they were housewives and knew only the four walls of their homes and their neighbors. Today, they are more free, self-sufficient, they have friends and are open-minded. The relationship of a working woman with her family is more open."

Factor	Subfactors and Variables
	More money
Work Effect —	Less involvement with family
	Independence
	More open relationship with family

"She considers it a positive impact that work has had on her life, the fact that she can have all the [material] things she wants."

Domain Factor
Work — Material possessions

A similar procedure was developed in the Sri Lanka study. Unstructured interviewing and observation had identified the following factors as part of the "family" domain:

- Mother
- Father
- Siblings
- Household composition
- Economics
- Material possessions
- Family relationships
- Shared family activities
- Parental discipline
- Family problems
- Extended family
- Middle East employment

Questions were formulated for each of these factors (as well as factors included in other domains in the formative theoretical model) and utilized to interview a total of 156 young adult males and females at the University of Peradeniya and in a low-income, urban community in Kandy.

Analysis of the segments coded as "family problems," a factor, revealed the following subfactors or variables:

"He studied up to year 9 at Punga Sanipadhara Vidyalaya [a public high school] in Kandy and he had to put a stop to his studies due to four deaths in the family within that year and as money problems in the family started increasing."

Family Problems — Death in the family Financial

"Her main reason for her sorrow is that another family is living with them. When I asked whether there are problems at home, she said that she doesn't like to live at home."

Family Problems — Crowding at home

"Due to terrorism, they have abandoned their lands and home and have come to live at a rented house. Her mother suffers from joint pains. Most of the members of the family are living in their house and the space is limited."

Family Problems — Health Problems
Residential Crowding

"Every Friday they fast (Viratham). Her parents are very strict on religious activities. They are very strict in selecting partners for their children. They do not allow her go to night parties. Sometimes, they refuse to allow visiting friends in the house. She obeys her parents very much. Restriction is important, and she feels her parents are doing their duty for the children. But sometimes, children have to break their rules in selecting a partner and like (meaning 'similar') things."

Family Problems ——— Breaking family rules around male-female partnerships

"My parents quarrel quite often, and they don't eat when they get any problem. I think understanding between father and mother is poor, and the financial situation brings these problems."

Family Problems — Financial problems Parental conflict

"They (her parents) had a lot of financial problems at home which led her mother to go to the Middle East to work as a housemaid."

Family Problems — Absent parent

"Her father is an alcoholic and comes home with his friends and drinks. He fights with the family when he's not given money he needs to drink."

Family Problems — Father's alcoholism — Family conflicts with father

"Talking about her family problems, she said her father won't take alcohol or eat pork. But most of the time, he is away from home. He is so busy that he gets little time to spend with the family. And also, her father's two younger sisters are widows. So according to their religion [Islam], it's the duty of an elder brother to look after them after their parents' death. So she tells that her father had to earn for all of them, and they have financial problems.

Family Problems — Father's limited time with family Financial problems Extended family's need for care

This analysis leads to a list of family problems, each of which could be treated as a variable, or an item or attribute of a variable.

- Financial problems
- Health problems
- Poor housing conditions (residential overcrowding)
- Problems related to care of extended family members
- Missing parents
- Alcohol and drug use
- Family conflicts
- Parent-daughter conflicts
- Male-female relations

These procedures for identifying variables and items or attributes should be followed with respect to all of the questions in each of the domains included in the semistructured interview schedule.

SEMISTRUCTURED OBSERVATIONS

Semistructured observation schedules are important in investigating behaviors that are observable by researchers but difficult to discuss, because people are not aware of them. Conducting observational research follows the same pattern as the collection of ethnographic data through interviewing—that is, it involves a continuum from

- Open ended and exploratory data collection (as described in Chapter 5 of this book), to
- More carefully defined and systematic but open ended data collection, to
- Structured observational schedules designed to quantify observations and test hypotheses using statistical analytical techniques

Observation schedules focus on observed behaviors. Semistructured observational schedules focus on observable behaviors that occur regularly. The objectives of semistructured observation are similar to those for interviewing:

(a) to identify factors associated with domains, (b) to identify variables associated with factors, and (c) to identify items or attributes of variables that can be recorded systematically by presence/absence or degree.

Physicians, epidemiologists, and medical social scientists have conducted semistructured observations to help them learn how mothers care for children with diarrhea or upper respiratory illnesses, or when they wish to understand dietary inputs by watching how people purchase, prepare, distribute, and eat food. Semistructured observation requires an observational protocol similar to that used in semistructured interviewing, in which the major domains and factors believed important in the study are listed and partially defined, but the observer is required to identify and record in detail the behaviors believed to be important. Semistructured observations also can be conducted in

schools and classrooms, where patterns of behavior tend to be somewhat regularized, and researchers can observe both pattern repetition and deviation. Deviation is important because one objective of research is to capture the range of variation in behavioral responses to the designated situation.

Several important points are important to keep in mind when conducting semistructured observations:

- Observations can be intrusive, especially in households or classrooms; semistructured (as well as structured) observations require regular presence and, often, the use of a visual recording device. It is necessary to establish good rapport with participants in the study before beginning semistructured observations in field settings.
- Observations of complex social interactions are difficult to do alone because a single observer may not be able to capture all of the activities going on among all of the participants in a large event or a classroom. For example, it may be impossible for observers to observe a classroom teacher using cooperative learning methods and, at the same time, observe small working groups of students involved in shared learning activities. To collect enough desired data, it may be necessary to conduct observations of this type with a colleague.
- Semistructured observations require as much thought, prior knowledge, and disaggregation of already gathered text data as other forms of data collection; researchers must prepare in advance.
- It goes without saying that behaviors to be observed must be observable; researchers in Mauritius and Sri Lanka could observe locations where young people met and could even observe certain expressions of affection in public settings such as parks and lovers lanes, but they could not observe intimate behaviors placing young women at risk for sexually transmitted infections. On the other hand, Allison Bingham, in a timelocation study of exposure to malaria in a malaria-endemic area, found that it was entirely possible (although potentially risky!) to time observations of farmers' exposure to malaria-carrying mosquitoes each evening as they walked home from their farmlands (Bingham, 1998).

Cross
Reference:
See Book 3,
Chapter 2, on the
use of audiovisual
recording techniques
for recording human
behavior in situ

SUMMARY

Semistructured interviews and observations can be an endpoint for qualitative data gathering. We begin our investigation with open-ended interviewing and observation, which has the lowest power of representation and the broadest range of exploratory potential. As we learn what to look for, we increase the power of representation and decrease the range of topics and subtopics that we can explore. Semistructured interviewing and observation offer us the most systematic opportunity for the collection of qualitative data. An ethnographic research project may end here with a report of exploratory or descriptive data, or it may continue on to transform qualitatively defined factors and variables into quantitative measures amenable to investigation using the techniques of survey research—systematic, structured, and standardized data collection; random sampling with a large sample size; and hypothesis testing through statistical analyses. In the next chapter, we use the same structures—formative theory and research model, domains, factors, and variables—to guide the construction of an ethnographic survey or self-administered questionnnaire.

8 -----

STRUCTURED
ETHNOGRAPHIC DATA
COLLECTION:
ETHNOGRAPHIC SURVEYS

THE ROLE OF STRUCTURED DATA COLLECTION

Ethnography attempts to understand social and cultural phenomena from the perspective of participants in the social setting under study. To do so, the approach builds conceptual models using qualitative techniques and then validates or tests them both qualitatively and quantitatively. Structured ethnographic data collection offers a way to transform exploratory and semistructured data into instruments that measure relationships among cultural domains and variables quantitatively and test their relationships with a representative sample of the population (see Babbie, 1995, pp. 51 and 55, for a diagram of this process).

In Chapters 5 and 6, we discussed the role of exploratory or unstructured data collection methods in uncovering critical ethnographic domains and factors. Chapter 7 reviews the important contribution of semistructured data collection methods, especially semistructured, open-ended interviewing, in enriching description and defining the range of variation in knowledge, attitudes, beliefs, behav-

The Role of Structured Data Collection

Defining Ethnographic Surveys

Steps in the Construction of the Ethnographic Survey

Administration of Ethnographic Interviews

Analysis of Quantitative Data

Integrating Qualitative and Quantitative Data

Summary